DRAFT PROGRAM

ENVIRONMENTAL IMPACT REPORT

Washington Boulevard Transit Oriented Development Specific Plan Project

APPENDICES

Appendix A: Biological Resources

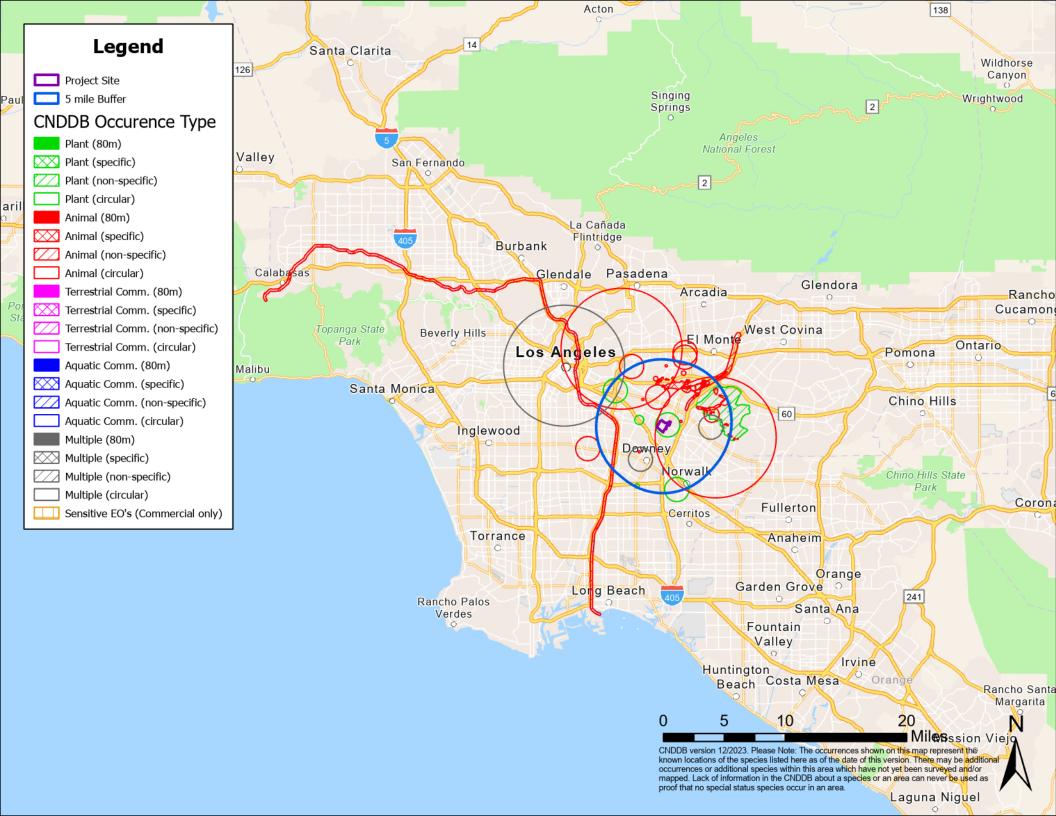
Appendix B: Cultural Resources

Appendix C: Mobility Assessment

Appendix D: NOP and Scoping Meeting Materials

January 2025

APPENDIX A – BIOLOGICAL RESOURCES



Special-Status Wildlife

<i>Scientific Name</i> Common Name	Status	Habitat	Observed On-site	Potential to Occur
Accipiter cooperii Cooper's hawk	Fed: None CA: WL	Generally found in forested areas up to 3,000 feet in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.	No	Low Foraging habitat is present within and surrounding the Project site. Marginal nesting opportunities present on site boundaries.
<i>Aimophila ruficeps</i> <i>canescens</i> southern California rufous-crowned sparrow	Fed: None CA: WL	Typically found between 3,000 and 6,000 feet in elevation. Breed in sparsely vegetated shrublands on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (Artemisia californica) but can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Anniella stebbinsi southern California legless lizard	Fed: None CA: SSC	Mostly found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. They live mostly underground, burrowing in the loose sandy soils.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Aquila chrysaetos golden eagle	Fed: None CA: FP/WL	Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Ardea alba great egret	Fed: None CA: None	Yearlong resident throughout California, except for the high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow- moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
<i>Ardea herodias</i> great blue heron	Fed: None CA: None	Fairly common all year throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains about foothills.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.

Scientific Name Common Name	Status	Habitat	Observed On-site	Potential to Occur
Arizona elegans occidentalis California glossy snake	Fed: None CA: SSC	Inhabits arid scrub, rocky washes, grassland, and chaparral. Appears in microhabitats of open areas and areas with soil loose enough for easy burrowing.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Artemisiospiza belli belli Bell's sage sparrow	Fed: None CA: WL	Occurs in chaparral dominated by fairly dense stands of chamise. Also found in coastal sage scrub in south of range.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Aspidoscelis hyperythra orangethroat whiptail	Fed: None CA: WL	Inhabits low-elevations coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats. Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Aspidoscelis tigris stejnegeri coastal whiptail	Fed: None CA: SSC	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
<i>Athene cunicularia</i> burrowing owl	Fed: None CA: SSC	Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Bassariscus astutus octavus southern California ringtail	Fed: None CA: None	Prefers rocky outcroppings, canyons, or talus slopes. Found generally in semi- arid country, deserts, chaparral, oak woodlands, pinyon pine woodlands, juniper woodlands and montane conifer forests.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Batrachoseps gabrieli San Gabriel slender salamander	Fed: None CA: None	Known from select localities in the San Gabriel Mountains and the Mt. Baldy area of Los Angeles County and the western end of the San Bernardino Mountains in San Bernardino Co., with an elevation range of 1,200- 5,085 feet. Occurs on talus slope surrounded by a variety of conifer and montane hardwood species, including bigcone spruce, pine, white fir, incense cedar, canyon live oak, black oak, and California laurel.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.

<i>Scientific Name</i> Common Name	Status	Habitat	Observed On-site	Potential to Occur
Bombus crotchii Crotch's bumble bee	Fed: None CA: None	Exclusive to coastal California east towards the Sierra-Cascade Crest; less common in western Nevada. Characterized as a dietary generalist, it shows favor towards milkweeds and is also commonly associated with dustymaidens, lupines, medics, phacelias, sages, and buckwheats.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Bombus pensylvanicus American bumble bee	Fed: None CA: None	Prefers farmlands, meadows, grasslands, and open fields. Nests below grass or underground. Feeds on pollen of a wide variety of flowering plants including vetches, clovers, goldenrods, and many crop species.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Buteo regalis ferruginous hawk	Fed: None CA: WL	Occurs primarily in open grasslands and fields, but may be found in sagebrush flats, desert scrub, low foothills, or along the edges of pinyon-juniper woodland. Feeds primarily on small mammals and typically found in agricultural or open fields.	No	Presumed Absent No suitable habitat is present within or adjacent to the Project site.
Calypte costae Costa's hummingbird	Fed: None CA: None	Found in desert and semi-desert, arid brushy foothills and chaparral habitats. Breeds in the Sonoran and Mojave Deserts. Departs desert heat moving into chaparral, scrub, and woodland habitats.	No	Presumed Absent There is no suitable habitat is present within or adjacent to the Project site.
Catostomus santaanae Santa Ana sucker	Fed: THR CA: None	Occur in the watersheds draining the San Gabriel and San Bernardino Mountains of southern California. Steams that Santa Ana Sucker inhabit are generally perennial streams with water ranging in depth from a few inches to several feet and with currents ranging from slight to swift.	No	Presumed Absent There is no suitable habitat is present within or adjacent to the Project site.
Chaetodipus fallax fallax northwestern San Diego pocket mouse	Fed: None CA: SSC	Occurs in desert and coastal habitats in southern California, Mexico, and northern Baja California, from sea level to at least 1,400 meters above msl. Found in a variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Requires low growing vegetation or rocky outcroppings, as well as sandy soils for burrowing.	No	Presumed Absent There is no suitable habitat is present within or adjacent to the Project site.
Chaetodipus fallax pallidus pallid San Diego pocket mouse	Fed: None CA: SSC	Lives in coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent scrub, pinyon-juniper woodlands, and annual grasslands. Prefers moderate canopy coverage of	No	Presumed Absent No suitable habitat is present within or adjacent to the Project site.

<i>Scientific Name</i> Common Name	Status	Habitat	Observed On-site	Potential to Occur
		arid shrubland or on or near rocky slopes and sandy areas.		
Cicindela tranquebarica viridissima greenest tiger beetle	Fed: None CA: None	Often occur at ground level and prefer areas of bare ground with very little vegetation. Most commonly seen in warm and sandy habitats in heaths, hillsides, and dunes. Seen regularly at Brownfield sites.	No	Presumed Absent There is no suitable habitat is present within or adjacent to the Project site.
<i>Circus hudsonius</i> northern harrier	Fed: None CA: SSC	Breeds in wide-open habitats ranging from Arctic tundra to prairie grasslands, fields, and marshes. Nests are concealed on the ground in grasses or wetland vegetation.	No	Presumed Absent There is no suitable habitat is present within or adjacent to the Project site.
Coleonyx variegatus abbotti San Diego banded gecko	Fed: None CA: SSC	Prefers rocky coastal sage and chaparral habitat with granite outcrops. Also occurs in dry, rocky riverbeds. Species avoids areas with a high intensity of artificial night lighting.	No	Presumed Absent There is no suitable habitat is present within or adjacent to the Project site.
Crotalus ruber red-diamond rattlesnake	Fed: None CA: SSC	It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red- diamond rattlesnake; however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Diadophis punctatus modestus San Bernardino ringneck snake	Fed: None CA: None	Common in open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Dipodomys merriami parvus San Bernardino kangaroo rat	Fed: END CA: CE/SSC	Primarily found in Riversidian alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May occur at lower densities in Riversidian upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to Riversidian alluvial fan sage scrub habitats. Tend to avoid rocky substrates and prefer sandy loam substrates for	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.

<i>Scientific Name</i> Common Name	Status	Habitat	Observed On-site	Potential to Occur
		digging of shallow burrows.		
Dipodomys simulans Dulzura kangaroo rat	Fed: None CA: None	Relatively common in chaparral, coastal sage scrub, Riversidean alluvial fan sage scrub, and peninsular juniper woodland habitats.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Elanus leucurus white-tailed kite	Fed: None CA: None	Common in savannas, open woodlands, marshes, desert grasslands, partially cleared lands, and cultivated fields. Tend to avoid heavily cleared or grazed areas. Breeds in lowland grasslands, agricultural wetlands, oak-woodland and savannah habitats.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Eremophila alpestris actia California horned lark	Fed: None CA: WL	Inhabits open ground, generally avoiding areas with trees or even bushes. May occur in a wide variety of areas that are sufficiently open such as short-grass prairies, extensive lawns such as on airports or golf courses, plowed fields, stubble fields, beaches lake flats, dry tundra of far north or high mountains.	No	Low Limited foraging habitat is present within and surrounding the Project site.
Eugnosta busckana Busk's gallmoth	Fed: None CA: None	Little is known about the habitat and distribution of this species.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
<i>Eumops perotis</i> <i>californicus</i> western mastiff bat	Fed: None CA: SSC	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least three meters below the entrance for flight. In California, it is most frequently encountered in broad open areas. Its foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
<i>Falco mexicanus</i> prairie falcon	Fed: None CA: WL	Commonly occur in arid and semiarid shrubland and grassland community types. Also occasionally found in open parklands within coniferous forests. During the breeding season, they are found commonly in foothills and mountains which provide cliffs and escarpments suitable for nest sites.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
<i>Falco peregrinus</i> <i>anatum</i> American peregrine falcon	Fed: DL CA: DL	Uncommon winter resident of the inland region of southern California. Active nesting sites are known along the coast north of Santa Barbara, in the Sierra Nevada, and in other mountains of northern California. Breeds mostly in	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.

<i>Scientific Name</i> Common Name	Status	Habitat	Observed On-site	Potential to Occur
		woodland, forest, and coastal habitats. Riparian areas and coastal and inland wetlands are important habitats yearlong, especially in nonbreeding seasons.		
Gila orcuttii arroyo chub	Fed: None CA: SSC	Warm streams of the Los Angeles Plain, which are typically muddy torrents during the winter, and clear quiet brooks in the summer, possibly drying up in places. They are found both in slow- moving and fast-moving sections, but generally deeper than 40 cm.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
<i>Icteria virens</i> yellow-breasted chat	Fed: None CA: SSC	Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. Breeding habitat must be dense to provide shade and concealment. It winters south the Central America.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Lanius Iudovicianus loggerhead shrike	Fed: None CA: SSC	Often found in broken woodlands, shrublands, and other habitats. Prefers open country with scattered perches for hunting, and fairly dense brush for nesting.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
<i>Lasiurus xanthinus</i> western yellow bat	Fed: None CA: SSC	Roosts in palm trees in foothill riparian, desert wash, and palm oasis habitats with access to water for foraging.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Lepus californicus bennettii San Diego black- tailed jackrabbit	Fed: None CA: None	Found in diverse habitats, but primarily is found in arid regions supporting shortgrass habitats. Openness of open scrub habitat is preferred over dense chaparral.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Microtus californicus mohavensis Mojave river vole	Fed: None CA: END	Prefers habitat that is moist, including meadows, freshwater marshes, and irrigated pastures in locations surrounding the Mojave River between elevations of 2,460 to 2,700 feet.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
<i>Neolarra alba</i> white cuckoo bee	Fed: None CA: None	Typically found where other bee species are common. Known as "cleptoparasites," cuckoo bees lay their eggs in cells provisioned by host bees. Live in urban areas, forests, and woodlands.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Neotoma lepida intermedia San Diego desert woodrat	Fed: None CA: SSC	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Prefers moderate to dense canopies, and especially rocky outcrops.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.

<i>Scientific Name</i> Common Name	Status	Habitat	Observed On-site	Potential to Occur
Nyctinomops femorosaccus pocketed free- tailed bat	Fed: None CA: SSC	Often found in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Oncorhynchus mykiss irideus pop. 10 steelhead – southern California DPS	Fed: END CA: CE	Found in permanent coastal streams from San Diego to the Smith River.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Pandion haliaetus osprey	Fed: None CA: WL	Found near both fresh and saltwater habitats. Prefers rivers, lakes, and coastlines where large numbers of fish are present. May be most common around major coastal estuaries and salt marshes, but also regular around reservoirs.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Perognathus longimembris brevinasus Los Angeles pocket mouse	Fed: None CA: SSC	Resides in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles Basin. Prefers open ground with fine sandy soils. May not dig extensive burrows, but instead will seek refuge under weeds and dead leaves instead.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Phrynosoma blainvillii coast horned lizard	Fed: None CA: SSC	Found in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (i.e., fire, floods, roads, grazing, fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Polioptila californica californica coastal California gnatcatcher	Fed: THR CA: SSC	Obligate resident of sage scrub habitats that are dominated by California sagebrush. This species generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. It prefers habitat with more low-growing vegetation.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Pyrocephalus rubinus vermilion	Fed: None CA: SSC	Occupies desert riparian habitat, particularly cottonwoods, willows, mesquite, and other large desert	No	Presumed Absent There is no suitable habitat present within or adjacent to the

<i>Scientific Name</i> Common Name	Status	Habitat	Observed On-site	Potential to Occur
flycatcher		riparian trees, in habitat adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas where it can forage.		Project site.
Rana muscosa southern mountain yellow- legged frog	Fed: END CA: END ;WL	Occurs in lower elevation habitats characterized by rocky streambeds and wet meadows, while higher elevation habitats include lakes, ponds, and streams. Occupy streams in narrow, rock-walled canyons. Often found along rock walls or vegetated banks and always within a few feet of the water.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Rhaphiomidas terminatus abdominalis Delhi Sands flower- loving fly	Fed: END CA: None	DSF habitat is limited to areas that include Delhi fine sand, an aeolian (wind- deposited) soil type. The highest density of DSF have been found in habitat that includes a variety of plants including California buckwheat, California croton, deerweed, and telegraph weed.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Rhinichthys osculus ssp. 3 Santa Ana speckled dace	Fed: None CA: SSC	Requires permanent flowing streams within summer water temperatures of 17 – 20 degrees Celsius. Inhabits shallow cobble and gravel riffles and small streams that flow through steep, rocky canyons with chaparral covered walls.	No	Presumed Absent No suitable habitat is present within or adjacent to the Project site.
Salvadora hexalepis virgultea coast patch-nosed snake	Fed: None CA: SSC	Inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains. Requires friable soils for burrowing.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Setophaga petechia yellow warbler	Fed: None CA: SSC	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
<i>Spinus lawrencei</i> Lawrence's goldfinch	Fed: None CA: None	Typical habitats include valley foothill hardwood, valley foothill hardwood- conifer, and, in southern California, desert riparian, palm oasis, pinyon- juniper, and lower montane habitats. Nearby herbaceous habitats often used for feeding. Open woodlands, chaparral, and weedy fields. Closely associated with oaks. Nests in open oak or other arid	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.

<i>Scientific Name</i> Common Name	Status	Habitat	Observed On-site	Potential to Occur
		woodland and chaparral near water.		
<i>Strix occidentalis</i> <i>occidentalis</i> California spotted owl	Fed: None CA: SSC	Breeds and roosts in forests and woodland with large old trees and snags, high basal areas of trees and snags, dense canopies, multiple canopy layers, and downed woody debris. Large old trees are key as they provide nest sites and cover from weather.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Taxidea taxus American badger	Fed: None CA: SSC	Primarily occupy grasslands, parklands, farms, tallgrass and shortgrass prairies, meadows, shrub-steppe communities and other treeless areas with sandy loam soils where it can dig more easily for its prey. Occasionally found in open chaparral (with less than 50% plant cover) and riparian zones.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
<i>Vireo bellii pusillus</i> least Bell's vireo	Fed: END CA: END	Primarily occupy Riverine riparian habitat that typically feature dense cover within 1 -2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Ambrosia monogyra singlewhorl burrobrush	Fed: None CA: None CNPS: 2B.2	Found in chaparral and woodland habitats in the Peninsular Ranges of Southern California and northern Baja California. Grows in washes and ravines in desert areas as well. Grows in sandy soils. Blooming period is August to November.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
Arenaria paludicola marsh sandwort	Fed: END CA: END CNPS: 1B.1	Grows mainly in wetlands and freshwater marshes in arid climates. The plant can grow in saturated acidic bog soils and soils that are sandy with a high organic content. Found at elevations ranging from 33 to 558 feet. Blooming period is from May to August.	No	Presumed Absent There is no suitable habitat present within the Project site. The Project site occurs outside of the known elevation range for this species.
Calochortus plummerae Plummer's mariposa-lily	Fed: None CA: None CNPS: 4.2	Found along the coast and inland hills in chaparral, coastal sage scrub, yellow pine forest, foothill woodland, and valley grassland plant communities. Prefers dry, rocky soils. Grows at elevations of up to 5,580 feet. Blooms from May to July.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.

<i>Scientific Name</i> Common Name	Status	Habitat	Observed On-site	Potential to Occur
Chloropyron maritimum ssp. maritimum salt marsh bird's- beak	Fed: END CA: END CNPS: 1B.2	Upper terraces and higher edges of coastal salt marshes where tidal inundation is periodic. Found at elevations ranging from 0 to 99 feet. Blooming period is from May to October.	No	Presumed Absent There is no suitable habitat present within the Project site. The Project site occurs outside of the known elevation range for this species.
Chorizanthe parryi var. parryi Parry's spineflower	Fed: None CA: None CNPS: 1B.1	Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet. Blooming period is from April to June.	No	Presumed Absent There is no suitable habitat present within the Project site.
<i>Chorizanthe xanti var. leucotheca</i> white-bracted spineflowe	Fed: None CA: None CNPS: 1B.2	Grows on sandy or gravelly soils within coastal scrub (alluvial fans), Mojavean desert scrub, pinyon and juniper woodland habitats. Found at elevations ranging from 984 to 3,937 feet. Blooming period is from April to June.	No	Presumed Absent The Project site occurs outside of this species' known elevation range.
Cryptantha incana Tulare cryptantha	Fed: None CA: None CNPS: 1B.3	Found in lower montane coniferous forests between 4,600 to 6,600 feet in elevation. Grows in open, gravelly, and rocky soils. Blooms from May to August.	No	Presumed Absent No suitable habitat is present within the Project site.
Dodecahema leptoceras slender-horned spineflower	Fed: END CA: END CNPS: 1B.1	Chaparral, coastal scrub (alluvial fan sage scrub). Flood deposited terraces and washes. Found at elevations ranging from 1,181 to 2,690 feet. Blooming period is from April to June.	No	Presumed Absent No suitable habitat is present within the Project site.
Eriastrum densifolium ssp. sanctorum Santa Ana River woollystar	Fed: END CA: END CNPS: 1B.1	Grows in sandy or gravelly soils within chaparral and coastal scrub habitat. Found at elevations ranging from 299 to 2,001 feet. Blooming period is from April to September.	No	Presumed Absent There is no suitable habitat present within the Project site.
Galium jepsonii Jepson's bedstraw	Fed: None CA: None CNPS: 4.3	Grows mainly in moist, shady habitats in hilly and mountainous areas, often within California chaparral and woodland ecoregions.	No	Presumed Absent There is no suitable habitat present within the Project site.
Galium johnstonii Johnston's bedstraw	Fed: None CA: None CNPS: 4.3	Grows in chaparral, lower montane coniferous forest, pinyon and juniper woodland, and riparian woodland communities. Blooms from May to July.	No	Presumed Absent There is no suitable habitat present within the Project site.
Horkelia cuneata var. puberula mesa horkelia	Fed: None CA: None CNPS: 1B.1	Occurs on sandy or gravelly soils in chaparral, woodlands, and coastal scrub plant communities. Found at elevations ranging from 230 to 2,657 feet. Blooming period is from February to September.	No	Presumed Absent There is no suitable habitat present within the Project site.
Juglans californica	Fed: None	Found in chaparral, cismontane	No	Presumed Absent

<i>Scientific Name</i> Common Name	Status	Habitat	Observed On-site	Potential to Occur
southern California black walnut	CA: None CNPS: 4.2	woodland, coastal scrub, and riparian woodland habitats. Found at elevations ranging from 164 to 2,953 feet. Blooming period is from March to August.		There is no suitable habitat present within the Project site.
Lepidium virginicum var. robinsonii Robinson's pepper-grass	Fed: None CA: None CNPS: 4.3	Dry soils on chaparral and coastal sage scrub. Found at elevations ranging from 3 to 2,904 feet. Blooming period is from January to July.	No	Presumed Absent There is no suitable habitat present within the Project site.
<i>Lilium humboldtii</i> <i>ssp. ocellatum</i> ocellated Humboldt lily	Fed: None CA: None CNPS: 4.2	Found in openings within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland habitats. Found at elevations ranging from 98 to 5,906 feet in elevation. Blooming period is from March to August.	No	Presumed Absent There is no suitable habitat present within the Project site.
<i>Lilium parryi</i> lemon lily	Fed: None CA: None CNPS: 1B.2	Occurs in lower montane coniferous forest, meadows and seeps, riparian forest, and upper montane coniferous forest habitats. Generally, occurs in wet, mountainous terrain; forested areas; on the shady edges of streams; or in open, boggy meadows and seeps. Found at elevations ranging from 4,003 to 9,006 feet above msl. Blooming period is from July to August.	No	Presumed Absent There is no suitable habitat present within or adjacent to the Project site.
<i>Lycium parishii</i> Parish's desert- thorn	Fed: None CA: None CNPS: 2B.3	Habitats include coastal scrub and Sonoran Desert scrub. Found at elevations ranging from 443 to 3,281 feet. Blooming period is from March to April.	No	Presumed Absent There is no suitable habitat present within the Project site.
Malacothamnus parishii Parish's bush- mallow	Fed: None CA: None CNPS: 1A	Grows in chaparral and coastal scrub habitats. Found at elevations ranging from 1,001 to 1,493 feet. Blooming period is from June to July.	No	Presumed Absent There is no suitable habitat present within the Project site. The Project site occurs outside of the known elevation range for this species.
<i>Monardella pringlei</i> Pringle's monardella	Fed: None CA: None CNPS: 1A	Prefers sandy soils within coastal scrub habitat. Found at elevations ranging from 984 to 1,312 feet. Blooming period is from May to June.	No	Presumed Absent There is no suitable habitat present within the Project site. The Project site occurs outside of the known elevation range for this species.
Monardella Saxicola rock monardella	Fed: None CA: None CNPS: 4.2	Found in yellow pine forest and chaparral communities. Grows in rocky and serpentinite soils, blooming time is May to August.	No	Presumed Absent No suitable habitat is present within the Project site.
Opuntia basilaris	Fed: None	Habitats include chaparral, Joshua tree	No	Presumed Absent

<i>Scientific Name</i> Common Name	Status	Habitat	Observed On-site	Potential to Occur
var. brachyclada short-joint beavertail	CA: None CNPS: 1B.2	woodland, Mojavean desert scrub, pinyon and juniper woodlands. Found at elevations ranging from 1,394 to 5,906 feet. Blooming period is from April to August.		No suitable habitat is present within the Project site.
Quercus durata var. gabrielensis San Gabriel oak	Fed: None CA: None CNPS: 4.2	Grows between 1,500 and 4,500 feet in elevation. Found in chaparral slopes and ridges, and in oak woodlands in granitic soils.	No	Presumed Absent No suitable habitat is present within the Project site.
Senecio aphanactis chaparral ragwort	Fed: None CA: None CNPS: 2B.2	Found in sometimes alkaline soils in chaparral, cismontane woodland, and coastal scrub. Found at elevations ranging from 425 to 2,165 feet. Blooming period is from January to April.	No	Presumed Absent There is no suitable habitat present within the Project site.
Senecio astephanus San Gabriel ragwort	Fed: None CA: None CNPS: 4.3	Found only in the rocky slopes of the Transverse Ranges and adjacent Coast Ranges of California. Blooms from March to May.	No	Presumed Absent There is no suitable habitat present within the Project site.
Sphenopholis obtusata prairie wedge grass	Fed: None CA: None CNPS: 2B.2	Prefers cismontane woodland, meadows, and seeps. Found at elevations ranging from 984 to 6,562 feet. Blooming period is from April to July.	No	Presumed Absent There is no suitable habitat present within the Project site.
<i>Streptanthus</i> <i>bernardinus</i> Laguna Mountains jewelflower	Fed: None CA: None CNPS: 4.3	Grows in chaparral and lower montane coniferous forest on clay or decomposed granite soils. It is sometimes found in disturbed areas such as streamsides or roadcuts. From 4,724 to 8,202 feet in elevation. Blooming period is from May to August.	No	Presumed Absent There is no suitable habitat present within the Project site.
<i>Symphyotrichum</i> <i>defoliatum</i> San Bernardino aster	Fed: None CA: None CNPS: 1B.2	Grows in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic). Can be found growing near ditches, streams, and springs within these habitats. Found at elevations ranging from 7 to 6,693 feet. Blooming period is from July to November.	No	Presumed Absent There is no suitable habitat present within the Project site.
Riversidian Alluvial Fan Sage Scrub	CDFW Sensitive Habitat	Occur within broad washes of sandy alluvial drainages that carry rainfall runoff sporadically in winter and spring but remain relatively dry through the remainder of the year. Is restricted to drainages and floodplains with very sandy substrates that have a dearth of decomposed plant material. These areas do not develop into riparian woodland or	No	Absent. This plant community was not observed on-site.

<i>Scientific Name</i> Common Name	Status	Habitat	Observed On-site	Potential to Occur
		scrub due to the limited water resources and scouring by occasional floods.		
Southern Riparian Forest Habitat		Comprised of winter-deciduous trees that require water near the soil surface. Primarily composed of Willow cottonwood (<i>Populus</i> sp.) and western sycamore (<i>Platanus racemosa</i>). Associated understory species include mule fat (<i>Baccharis salicifolia</i>), stinging nettle (<i>Urtica dioica ssp. holosericea</i>), and wild grape (<i>Vitis girdiana</i>). Found in moist canyons and drainage bottoms.	No	Absent. This plant community was not observed on-site.
Southern Sycamore Alder Riparian Woodland	CDFW Sensitive Habitat	Occurs below 2,000 meters in elevation, sycamore and alder often occur along seasonally flooded banks; cottonwoods and willows are also often present. Poison oak, mugwort, elderberry and wild raspberry may be present in understory.	No	Absent. This plant community was not observed on-site.
USFWS - Federal END - Federal endangered THR - Federal Threatened Candidate END - Under Review CDFW - California END - California END - California Endangered CSC - California Species of Concern WL - Watch List FP - California Fully Protected CNPS California Rare Plant Rank 1A - Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere 1B - Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere 2B - Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere 4 - Plants of Limited Distribution – A Watch List Threat Ranks 0.1 - Seriously threatened in California 0.2 - Moderately threatened in California 0.3 - Not very threatened in California				

APPENDIX B – CULTURAL RESOURCES

Kimley *Whorn*

MEMORANDUM

То:	City of Pico Rivera, Community & Economic Development Department 6615 Passons Boulevard, Pico Rivera, CA 90660
From:	Jamie Nord, MA, RPA Kimley-Horn and Associates, Inc. 3801 University Ave., Ste 300, Riverside, CA 92501
Date:	December 1 st , 2023
Subject:	Cultural Resources Inventory Report for the Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan in the City of Pico Rivera, Los Angeles County, California

To Whom It May Concern,

At the request of the City of Pico Rivera, Kimley-Horn and Associates, Inc. (KHA) conducted a Cultural Resources Inventory Report of the Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan area located in the City of Pico Rivera (City), Los Angeles County, California. This study was completed to support the City's review of potential impacts to cultural resources within the property as a result of the proposed Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan (Specific Plan). A cultural resources records search and additional research was conducted to identify previously recorded and potential cultural resources within the Specific Plan area.

Project Description and Location

The Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan (Specific Plan) area is within the western City of Pico Rivera and southern portion of the County of Los Angeles, California. The Plan area includes 88 legal parcels that total of 349.80 acres with Rosemead Blvd to the east, Crider Ave to the west, and Washington Blvd to the north (Figures 1-2). The Specific Plan will be used as a policy and regulatory guide for subsequent Project-specific reviews and approvals when Project-level proposals within the Specific Plan area are submitted to the City.

Natural Setting

The Specific Plan area is located within the Los Angeles Basin with the Rio Hondo River located immediately to the west. The natural geomorphology consists of an alluvial fan associated with the river environment (SoilWeb 2023). While the Specific Plan area is now comprised of urban, developed land, this area would have once been a lush, wet environment that supported an abundance of plant and animal resources. The Specific Plan area is situated north of the Lower Elysian Park thrust Quaternary line (U.S. Geological Survey 2023).



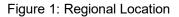




Figure 2: Specific Plan Project Area

History

The City of Pico Rivera has been the setting for a long history of human occupation, including Native American villages, Spanish and Mexican ranchos, and post-World War II settlements. Because of this cultural and historical background, the City of Pico Rivera contains numerous historic and archaeological resources (City of Pico Rivera 2014).

The proposed Specific Plan site is located within the ancestral lands of the Gabrieleño/Tongva. Gabrieleño is a Spanish word associated with the San Gabriel Mission, which was located approximately 9 miles to the north. Kroeber (1925) recorded cultural territory information about southern California tribes, including the Gabrieleño/Tongva. However, exact traditional territories remain unclear, especially in the coastal regions, for several reasons. First, traditional territories were dynamic and changing. Second, early European settlement in this region displaced Native Americans living here prior to significant ethnographic documentation of their occupation in this region. Many Gabrieleño/Tongva were forcibly recruited into the Spanish Mission system. Although exact boundaries are undefined, a range of archaeological, ethnographic, and historic evidence still exists to support prehistoric occupation by Gabrieleño/Tongva peoples in this part of the Los Angeles Basin (Gabrieleño [Tongva] Band of Mission Indians 2023). Kroeber reported that the Gabrieleño/Tongva were engaging in trade with other regional communities and exporting marine resources. In addition to exploiting sea resources, Gabrieleño/Tongva hunted mammals, such as deer and antelope, and gathered and processed a variety of native plants (King 2011). A range of lithic resources were utilized, most notably steatite. Gabrieleño/Tongva established settlements throughout their traditional lands, while fostering long-distance trade that included the prominent shell bead network.

After vast decimation of Gabrieleño/Tongva communities in the region, the Specific Plan site was included in the Rancho Paso de Bartolo Mexican land grant awarded by Governor Jose Figueroa to Juan Crispin Perez in 1835 (Bowman 1947). California achieved statehood in the U.S. in 1850. Afterwards, this area was largely settled as farmland due to the rich, fertile soil. The arrival of the Union Pacific rail line and Atchison, Topeka and Santa Fe rail line in the 1880s brought new industry and increased development to the region (Los Angeles County Library 2023). The City of Pico Rivera was founded in 1958 by merging two historic communities: Pico and Rivera (City of Pico Rivera 2023). The City of Pico Rivera transformed from agricultural land into an industrial and residential community following WWII.

Cultural Resources Records Search

A cultural resources records search was conducted at the South Central Coastal Information Center (SCCIC) on November 13th, 2023 by KHA staff for the Specific Plan area and a 0.5-mile buffer. The results indicated that six (6) cultural studies were previously conducted and eight (8) cultural resources previously recorded within the Specific Plan area, consisting entirely of historic built environment resources (Table 1, Attachment A). These resources are generally concentrated in the northern and northeastern region of the Specific Plan. Seven (7) buildings were previously evaluated and recommended ineligible for listing in the National Register and California Register. However, one (1) resource, P-19-191099, was recommended eligible for listing in the National Register under Criterion

at the local level of significance for its association with the broad pattern of postwar suburbanization, dining, and entertainment in Southern California after World War II (English and Moruzzi 2010). It was additionally noted that, despite modifications to the building, it continued to exhibit a high level of integrity of overall design, location, setting, feeling, and association. However, based on the resource record, the Dale Rae Restaurant remains unevaluated for the California Register. An additional 105 cultural resources were previously recorded within 0.5 miles of the Specific Plan site as a result of 12 previous cultural studies (Attachment B).

Table 1. Cultural Resources Previously Recorded in the Specific Plan Area				
Resource	Age	Туре	Description	
P-19-191099	Historic	Building	9023 Washington Blvd, Dal Rae Restaurant, one story commercial building	
P-19-191489	Historic	Building	8335 Washington Blvd, multi family residence	
P-19-191490	Historic	Building	8423 Washington Blvd, Luau Manor, multi family residence	
P-19-191491	Historic	Building	8535 Washington Blvd, one story commercial building	
P-19-191492	Historic	Building	8737 Washington Blvd, one story commercial building	
P-19-191493	Historic	Building	9033 Washington Blvd, two story commercial building	
P-19-191494	Historic	Building	9049 Washington Blvd, one story commercial building	
P-19-191495	Historic	Building	9055 Washington Blvd, one story commercial building	

Additional Research

A review of available historical and topographic maps, aerial imagery, historic resource repository data, City General Plans, and literature was conducted to ascertain the level of existing disturbance, potential for archaeological resources, and presence of built historic resources within the Specific Plan area. A review of resource databases and repositories indicated the general area's sensitivity for historic built environment resources. For example, within Pico Rivera city limits, 371 historic resources are listed on the Built Environment Resources Directory (Office of Historic Preservation 2023).

The City also acknowledges and tracks the information regarding its historic built environment. The City's General Plan describes how the City's history has played a role in defining Pico Rivera's current land use pattern. Certain pieces of history, such as 13 buildings and sites identified by the City as having potential for historical significance, have also endured and become important assets to the community. The General Plan outlines seven (7) policies with the goal of preserving important cultural and paleontological resources that contribute to the unique identity and character of Pico Rivera (City of Pico Rivera 2014).

Historic topographic maps of the Specific Plan area date to 1896 (Historic Aerials 2023). The earliest maps portray the Atchison, Topeka and Santa Fe rail line immediately south of the Specific Plan area and the Rio Hondo River to the west. The presence of the railroad in the immediate vicinity contributes to the historical background of the Specific Plan site and indicates long-term use of this

area as an important travel corridor. Historic maps from the early 1900s also portray a tributary of the river running southeast across the Specific Plan area. Historic aerial images of the Specific Plan area from 1953 indicate that the property consisted almost entirely of vacant agricultural land at that time (Historic Aerials 2023). Throughout the 1960s, the Specific Plan site was largely developed with industrial warehouses. A small part of the Specific Plan area was also residentially or commercially developed. However, in 2002, the central part of the property was redeveloped with new warehouse buildings (ParcelQuest 2023).

A review of Los Angeles County property data revealed that of the 88 parcels within the proposed Specific Plan, 43 parcels contain buildings that are of 45 years of age or older (ParcelQuest 2023). As indicated in the cultural resources records search section above, eight (8) of these historic buildings have previously been recorded. Table 2 lists the remaining 35 properties that have not previously been subject to recordation or evaluation.

Table 2. Properties in the Specific Plan Area with Unrecorded Historic Buildings			
Date of Construction	Property Address		
1961	6726 Keltonview Dr		
1978	8701 Washington Blvd		
1973	8605 Washington Blvd		
1961	7240 Crider Ave		
1962	7065 Paramount Blvd		
1966	8320 Rex Rd		
1961	7343 Paramount Blvd		
1961	6623 Rosemead Blvd		
1974	6505 Rosemead Blvd		
1961	6508 Rosemead Blvd		
1977	7004 Rosemead Blvd		
1917	7246 Rosemead Blvd		
1952	7314 Rosemead Blvd		
1972	6730 Rosemead Blvd		
1956	8809 Washington Blvd		
1963	8323 Canford St		
1960	7029 Paramount Blvd		
1958	7105 Paramount Blvd		
1958	7141 Paramount Blvd		
1959	7157 Paramount Blvd		
1958	8320 Canford St		
1971	8350 Rex Rd		
1972	7330 Crider Ave		

Kimley *Worn*

1961 7317 Paramount Blvd 1963 7305 Paramount Blvd 1959 7271 Paramount Blvd 1960 8300 Rex Rd 1959 7225 Paramount Blvd 1973 6525 Rosemead Blvd 1962 6540 Rosemead Blvd 1972 9050 Carron Dr 1952 9015 Carron Dr 1961 7226 Rosemead Blvd 1952 7246 Rosemead Blvd		
1959 7271 Paramount Blvd 1960 8300 Rex Rd 1959 7225 Paramount Blvd 1973 6525 Rosemead Blvd 1962 6540 Rosemead Blvd 1972 9050 Carron Dr 1952 9015 Carron Dr 1962 6616 Rosemead Blvd 1961 7226 Rosemead Blvd	1961	7317 Paramount Blvd
1960 8300 Rex Rd 1959 7225 Paramount Blvd 1973 6525 Rosemead Blvd 1962 6540 Rosemead Blvd 1972 9050 Carron Dr 1952 9015 Carron Dr 1962 6616 Rosemead Blvd 1961 7226 Rosemead Blvd	1963	7305 Paramount Blvd
1959 7225 Paramount Blvd 1973 6525 Rosemead Blvd 1962 6540 Rosemead Blvd 1972 9050 Carron Dr 1952 9015 Carron Dr 1962 6616 Rosemead Blvd 1962 6616 Rosemead Blvd	1959	7271 Paramount Blvd
1973 6525 Rosemead Blvd 1962 6540 Rosemead Blvd 1972 9050 Carron Dr 1952 9015 Carron Dr 1962 6616 Rosemead Blvd 1961 7226 Rosemead Blvd	1960	8300 Rex Rd
1962 6540 Rosemead Blvd 1972 9050 Carron Dr 1952 9015 Carron Dr 1962 6616 Rosemead Blvd 1961 7226 Rosemead Blvd	1959	7225 Paramount Blvd
1972 9050 Carron Dr 1952 9015 Carron Dr 1962 6616 Rosemead Blvd 1961 7226 Rosemead Blvd	1973	6525 Rosemead Blvd
1952 9015 Carron Dr 1962 6616 Rosemead Blvd 1961 7226 Rosemead Blvd	1962	6540 Rosemead Blvd
1962 6616 Rosemead Blvd 1961 7226 Rosemead Blvd	1972	9050 Carron Dr
1961 7226 Rosemead Blvd	1952	9015 Carron Dr
	1962	6616 Rosemead Blvd
1952 7246 Rosemead Blvd	1961	7226 Rosemead Blvd
	1952	7246 Rosemead Blvd

<u>Results</u>

Prior to historic and modern development, the archaeological sensitivity of the Specific Plan area may have been moderate given the proximity to the Rio Hondo River and presence of natural resources associated with the river (e.g., plants and animals) that were vital for Native American communities to thrive in the environment. However, in its current condition, the Specific Plan site has a low potential for surface or subsurface archaeological resources due to the level of previous development spanning 60+ years within the Specific Plan boundaries. However, the Specific Plan area is sensitive for historic built environment resources. Eight (8) historic buildings were previously recorded within the Specific Plan area, one (1) of which was recommended eligible for listing on the National Register but remains unevaluated for the California Register. Additionally, literature review identified an additional 35 properties over 45 years of age that have not been recorded or evaluated for potential eligibility.

Recommendations

As a result of the research and inventory efforts in this memo report, Kimley-Horn and Associates, Inc. (KHA) identified eight (8) previously recorded and 35 unrecorded historic built environment resources within the Specific Plan. One (1) of the eight (8) previously recorded resources is recommended eligible for listing in the NRHP, while the remaining seven (7) are not recommended eligible for listing in the NRHP. The additional 35 resources have not been recorded or evaluated. Given that no development is being proposed within the Specific Plan at this time, there will be no impacts to any resources and, as such, no further action related to the consideration of cultural resources is recommended for the purposes of the proposed Specific Plan. However, future projects within the Specific Plan area should be subject to project-specific resource inventory and evaluations and adhere to applicable policies related to cultural resources within the City's 2014 General Plan, such as General Plan Policies 8.7-1 through 8.7-7 (City of Pico Rivera 2014).

Sincerely,

Jamis Nord

Jamie Nord, MA RPA Kimley-Horn and Associates, Inc.

RPA Number: 5502

Attachment A: CA DPR Site Records

Attachment B: Cultural Resources Records Search Results for the 0.5-Mile Buffer

References:

- Bowman, J.N., 1947. The Names of the Los Angeles and San Gabriel Rivers. *The Quarterly: Historical Society of Southern California*, 29(2), pp.93-99.
- City of Pico Rivera, 2014. General Plan. Land Use Element and Environmental Resources Element.
- City of Pico Rivera. Our City. https://www.pico-rivera.org/our-city/. Accessed November 30, 2023.
- English, J. and Moruzzi P., 2010. EIS/EIR. Metropolitan Transportation Authority. Eastside Phase 2.
- Gabrieleño (Tongva) Band of Mission Indians Government Website. <u>https://www.gabrieleno-</u> nsn.us/maps. Accessed November 30, 2023.

Historic Aerials. https://www.historicaerials.com/viewer. Accessed November 30, 2023.

King, C., 2011. Overview of the History of American Indians in the Santa Monica Mountains. Topanga Archaeological Consultants. Submitted to the National Park Service, Pacific West Region, Santa Monica Mountains National Recreation Area, Los Angeles, California.

Kroeber, A., 1925. Handbook of the Indians of California. Bureau Of American Ethnology Bulletin 78.

- Los Angeles County Library. <u>https://lacountylibrary.org/pico-rivera-local-history/#:~:text=Pico%20and%20Rivera%20began%20separately,for%20houses%20and%20odeparately,for%20houses%20houses%20deparately,for%20houses%20deparately,for%20houses%20deparately,for%20house%20deparately,for%20houses%20deparately,for%20houses%20deparately,</u>
- Office of Historic Preservation. <u>https://ohp.parks.ca.gov/?page_id=30338</u>. Accessed November 30, 2023.

ParcelQuest. <u>https://pgweb.parcelquest.com/#home</u>. Accessed November 30, 2023.

SoilWeb. https://casoilresource.lawr.ucdavis.edu/gmap/. Accessed November 30, 2023.

U.S. Geological Survey. U.S. Quaternary Faults. <u>https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aa</u> <u>df88412fcf</u>. Accessed November 30, 2023.

Attachment A: CA DPR Site Records

Page 9

State of California The Resources Ag DEPARTMENT OF PARKS AND RECRE		Primary # HR #	19-191099
PRIMARY RECORD			
	Other Listings		
	Review Code	Reviewer	Date
Page <u>1</u> of <u>4</u> * Resource Name or #: <u>9023 Washi</u> P1. Other Identifier: <u>Dal Rae Res</u>			
* P2. Location: Not for Public	ation 🗸 Unrestricted	a. County Los Angeles	
		e T; R; 1/4 of City Pico Rivera	
d. UTM: (Give more than one for	large and/or linear feature)	Zone,	mE/mN
e. Other Locational Data: (e.g. p	arcel #, legal description, d	lirections to resource, elevation, addi	tional UTMs, etc. as app

APN(s): 6378019067

* P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

This one-story restaurant building is rectangular in plan and capped by a flat roof with parapet. It is of wood frame construction and vernacular modern in style with stucco utilized for most exterior finishes. The windowless south elevation that faces Washington Boulevard is distinguished by a decorative horizontal canopy and the restaurant name "Dal Rae" rendered in rear lit plastic using a period typeface. Another sign with the word "RESTAURANT" – also of rear lit plastic – features individual light boxes for each letter the top one-third of which rise above the parapet. The building's west elevation is similar in design to the south-facing façade and also sports the same "Dal Rae" signage. The primary entrance is located on the east elevation where a concrete path leads to a large entry door bordered by a chimney of rough-hewn flagstone on its south side. Flagstone is also used for a portion of a wall that extends south towards the street as an enclosure for outdoor seating that is sheltered by a taut canvas roof. The north end of the east elevation contains another outdoor seating area similarly sheltered. Remaining elevations are primarily utilitarian in design with entrances for the kitchen, storage areas, etc. The interior features a main dining room, bar, lounge area with cocktail seating, and a separate banquet room. A renovation in 1998 resulted in the remodel of the main entry, recladding of some exterior surfaces with new flagstone, and the addition of the exterior patio dining areas. In addition, the existing interior spaces were remodeled with work being predominantly limited to the replacement of carpeting, wall finishes and material coverings, and several lighting fixtures. (continued on page 3)

* P3b. Resource Attributes: (List attributes and codes) <u>HP06 1-3 Story Commercial E</u>	Building
* P4. Resources Present: Building Structure Object Site District	Element of District Other (Isolates, etc.)
P5a. Photograph or Drawing	P5b. Description of Photo: (View, date, etc.)
	East elev, lkg northwest 7/22/2010
	* P6. Date Constructed/Age and Sources: ☐ Prehistoric ✔ Historic ☐ Both
1+1	1951 (Factual) Building Permit
Lalkas	* P7. Owner and Address:
	Sequoyah Holding Llc
* P1. Report Citation: (Cite survey report/other sources or "none")	 * P8. Recorded by: (Name, affiliation, address) John English, Peter Moruzzi ICF International 811 W 7th Street, Suite 800 Los Angeles, CA 90017 * P9. Date Recorded: 1/17/2010 * P10. Survey Type: (Describe) Reconaissance-Level Survey
EIS/EIR. Metropolitan Transportation Authority. Eastside Phase 2. Septemb	

* Attachments:	NONE	Location Map	Sketch Map	Continuation Sheet	 Building, Structure, 	and Object Record
Archaeologica	al Record	District Record	Linear Feature Record	Milling Station Record	Rock Art Record	Artifact Record
Photograph R	ecord Oth	ner: (List)				

State of California The Resources Agency DEPARTMENT OF PARKS AND RECREATION	Primary # HR #
BUILDING, STRUCTURE, AND OBJECT	RECORD
Page of4	* NRHP Status Code <u>3S</u>
* Resource Name or #: 9023 Washington Blvd B1. Historic Name: None	
B2. Common Name Dal Rae Restaurant	
B3. Original Use: Restaurant	B4. Present Use: Restaurant
* B5. Architectural Style: Vernacular Modern	
* B6. Construction History: (Construction date, alterations, and date Constructed in 1954 1955: Addition. Cost: \$2,000. 1958:	of alterations.)
 * B7. Moved? ✓ No Yes Unknown Date * B8. Related Features: 	Original Location:
B9a. Architect: <u>David R. Maclean</u>	b. Builder: David R. Maclean

* B10. Significance:	10. Significance: Them Suburban postwar fine dining		Area Pico Rivera	
Period of Significa	ince <u>1954</u>	Property Type Commercial	Applicable Criteria A	

The Dal Rae restaurant appears eligible for listing in the National Register under Criterion A at the local level of significance for its association with the broad pattern of postwar suburbanization, dining, and entertainment in Southern California after World War II. Although modified in recent years, the subject property represents an excellent and rare example of a continental style fine dining restaurant in the suburb of Pico Rivera that continues to exemplify this trend.

Fine dining is associated with the upscale dinner houses that were popular in American cities from the 1940s through the 1970s. Classic fine dining establishments served "continental cuisine" – an eclectic melding of European and American dishes floridly described in elaborate menus. The key elements of a classic fine dining restaurant include white tablecloths, leather or semicircular vinyl booths of red, dark brown or black vinyl, indirect lighting in often windowless rooms, tuxedoed captains and waiters, and tableside service. Many feature dark wood paneling reminiscent of old world European restaurants. Flaming dishes prepared tableside offer the patron a theatrical restaurant experience markedly different from typical restaurants, which helps justify the cost of fine dining and attracts special event celebrations where elegant service and high prices are part of the appeal. With cocktails, dinner, dessert, and live entertainment, fine dining is an experience that often lasts the entire evening. (continued on page 3)

B11. Additional Resource Attributes: (List attributes and codes):

* B12. References:

County Tax Assessor, Tract Maps, Sanborn Maps, Los Angeles Times

B13. Remarks:

* B14. Evaluator: John English, Peter Moruzzi, ICF International Date of Evaluation: 1/17/2010

(This space reserved for official comments.)



(Sketch map with north arrow required)

	19-191099
ry #	

	State of California The Resources Agency				Primary #			
DEPART	DEPARTMENT OF PARKS AND RECREATION		HR #					
CON	TIN	1U	ΑΤΙ	ON SHEET		Trinomial		_
Page	3	of	4	* Resource Name or #:	(Assigned by recorder	9023 Washington Blvd		
* Record	ed b	y:	Johr	English, Peter Moruzzi	i, ICF International		* Date: 1/17/2010	
Cont								-

P3a. Description continued.

An enormous two-sided flashing neon pole sign displaying the restaurant's name is located on the Washington Boulevard frontage. Another monumental two-sided sign of neon and flashing bulbs centered by a marquee of applied letters occupies the southeast corner of the property. All noted neon and plastic rear lit signs are contributing features of the property. Lush landscaping is an important element of the overall design with a mix of green lawns, clipped hedges, shrubs, palm trees and other subtropical flora decorating the west, south, and a portion of the east elevations. An asphalt parking lot surrounds the building on three sides.

B10. Significance continued.

Los Angeles' upscale dinner houses of the 1920s and 1930s were for the most part located in and around Hollywood, downtown Los Angeles, and the central city as opposed to outlying suburbs. After World War II and paralleling national trends, Southern California restaurateurs opened new Modern, freestanding restaurants along the auto-dominated commercial corridors of newly established suburban communities such as Pico Rivera where the Dal Rae would open in 1958. Here they could draw from a growing mobile customer base that was buoyed by steady well paying jobs in manufacturing and the defense industry. In response, a profusion of new eating establishments were erected along the commercial corridors of new suburban communities. Indeed, the environment of suburban postwar Los Angeles fostered the development of many food service businesses including coffee shops, drive-in restaurants, bars and fast food franchises; however, due to the high cost of operations that translated into higher food prices, fine dining establishments were more rare.

Some of the postwar suburban fine dining restaurants that have since closed are Bordeaux in Costa Mesa, Chadney's in Burbank, Chateau Briand in Pico Rivera, Heritage Inn in Temple City, Lord Charley's in Covina, Monty's in Pasadena, The Arches in Newport Beach, and another branch of the Dal Rae in Fullerton.

Several circumstances led to the disappearance of most of Southern California's great fine dining restaurants. First, many of the original restaurateurs whose establishments were named after them either died or sold their businesses to others (who were unable to maintain the restaurant's quality and reputation). Examples include Perino's, Chasen's, LaRue, and Romanoff's in Los Angeles. Secondly, tastes changed, particularly in the 1980s when rich "continental" style offerings served in formal settings were considered passé. Suddenly, white tablecloths and tuxedoed waiters were now stuffy and formal, ushering in a new era of noisy hard surfaces and more casual dining. In addition, changes to the economy during the 1970s and the eventual downsizing and closure of industrial plants during the 1980s and 1990s, as well as demographic shifts in suburban residential populations and other distractions, spelled the end for most fine dining restaurants in Southern California. The few that remain include the Dresden in Los Feliz, the Riviera in Westminster, and the Dal Rae in Pico Rivera (the subject property).

Utilizing an existing one-story freestanding restaurant building, brothers Ben and Bill Smith opened the Dal Rae restaurant in May of 1958. It subsequently expanded with additions to the north (rear) and east of the property as the business grew. The Dal Rae has continually served a predominantly middle class/upper middle class clientele that once included executives of the Ford manufacturing plant (later Rockwell Aerospace) that had been located diagonally across from the restaurant at the southwest corner of Rosemead and Washington Boulevards (since replaced by a shopping center). An enormous two-sided flashing neon pole sign displaying the restaurant's name is located on the street frontage and has been a familiar icon along the Washington Boulevard corridor for over fifty years.

The Dal Rae's menu is traditional continental fine dining with Steak Diane, Caesar Salad, and desserts such as Cherries Jubilee and Bananas Foster all prepared tableside – often flamed – in a theatrical display by the owner or maître d'. Other typical items include Oysters Rockefeller, Lobster Thermidor, Pepper Steak, and Chateaubriand for two. The Dal Rae has a separate cocktail bar with tables and, for entertainment, a piano bar. On any given night there is a microphone available for customer participation, which often would include semi-professional local musicians sitting in for the evening. The requisite banquet room at the Dal Rae situated off of the piano bar is often occupied by service organizations such as the Elks, Rotary, Soroptimist and other groups as well as receptions, charity dinners, and other special events.

	19-191099
State of California The Resources Agency DEPARTMENT OF PARKS AND RECREATION	Primary # HR #
CONTINUATION SHEET	Trinomial
Page 4 of 4 * Resource Name or #: (Assigned by recorder	9023 Washington Blvd
* Recorded by: John English, Peter Moruzzi, ICF International	* Date: 1/17/2010
Continuation Update	

How the Dal Rae has continued to thrive while so many other fine dining restaurants have disappeared is a matter of conjecture. Possible explanations include continuous family ownership with renewed energy coming from the nephews who took over from the remaining founder in the early 1990s, a consistently high level of food quality and service, lower fixed costs due to family ownership of land and building, reduced pressure on commercial land values in Pico Rivera making replacement by new development more unlikely, a suburban clientele less inclined to latch onto rapidly changing dining trends in the urban core, and a location far enough from downtown Los Angeles to make it the most convenient high-end restaurant of choice for people living in surrounding communities, particularly for the celebration of special occasions.

The Dal Rae represents one of the few remaining locations where one can enjoy continental style fine dining and entertainment typical of the early postwar years in suburban Los Angeles. Although the property has been altered it continues to exhibit a high level of integrity of overall design, location, setting, feeling, and association. As such, the subject property appears eligible for listing in the National Register under Criterion A for its association with the broad pattern of postwar suburbanization, dining, and entertainment in Southern California after World War II.

As relates to architectural merit, it does not appear that the subject property represents a level of design distinction or association with a master architect to qualify for National Register eligibility under Criterion C. Further, current research uncovered no known associations with historic personages for the property to meet Criterion B of the National Register.

			19-191489
State of California The Resources Agency DEPARTMENT OF PARKS AND RECREATION PRIMARY RECORD			
			Date
Page <u>1</u> of <u>2</u> * Resource Name or #: <u>8335 Washington Bl</u> P1. Other Identifier:			
b. USGS 7.5' Quad	Date	T; R; 1/4	of1/4 of Sec; B.M.
c. Address 8335 Washington Blvd		<u>City</u> Pico Rivera	Zip <u>90660</u>
d. UTM: (Give more than one for large and			mE/mN
e. Other Locational Data: (e.g. parcel #, le APN(s): 6348026026	egal description, directi		
* P3a. Description: (Describe resource and its n	najor elements. Include	design, materials, condition, alt	erations, size, setting, and boundaries.)
- Type: multiple-family residence			
- Stories: 2			
- Construction: wood frame			
- Cladding: rough textured stucco			
- Roof: side-gable			
- Entrance: metal security door to passagewa	ay		
- Windows: aluminum			
- Related features: decorative metal screens,	grassy lawn with hed	lges, several trees	
- Style: Vernacular Modern			
- Character defining features present: low pi	tched roof, shallow ea	aves, stucco finish, minimal	ornamentation
- Character defining features not present: sta	andard stucco finish		

- Character defining features not present: stand - Status: exhibits a moderate level of integrity

* P3b. Resource Attributes: (List attributes and codes) HP03 Multiple-family Property	erty
* P4. Resources Present: Building Structure Object Site Distri	ct Element of District Other (Isolates, etc.)
P5a. Photograph or Drawing	P5b. Description of Photo: (View, date, etc.)
	South elev, lkg northeast 4/1/2010
	* P6. Date Constructed/Age and Sources:
	Prehistoric Historic Both
	1959 (Estimated) Tax Assessor
	* P7. Owner and Address:
	Koneru, Kumar
	-
	* P8. Recorded by: (Name, affiliation, address)
	Meghan Potter, Peter Moruzzi
	ICF International 811 W 7th Street, Suite 800
	Los Angeles, CA 90017
	* P9. Date Recorded: 10/1/2010
	* P10. Survey Type: (Describe)
	Reconaissance-Level Survey
* P11. Report Citation: (Cite survey report/other sources or "none")	
EIS/EIR. Metropolitan Transportation Authority. Eastside Phase 2. Septer	mber, 2010

State of California The Resources Agency DEPARTMENT OF PARKS AND RECREATION	Primary # HR #			
BUILDING, STRUCTURE, AND OBJECT RECORD				
Page of	* NRHP Status Code 6Y			
* Resource Name or #: 8335 Washington Blvd				
B1. Historic Name: None				
B2. Common Name None				
B3. Original Use: Multi-Family Residence	B4. Present Use: Multi-Family Residence			
* B5. Architectural Style: Vernacular Modern				
* B6. Construction History: (Construction date, alterations, and date Construction date: 1959	of alterations.)			
 * B7. Moved? ✓ No Yes Unknown Date: * B8. Related Features: 	_Original Location:			
Raa Architect: Unknown	b Builder Unknown			

B9a.	Architect: UIIKIIO	WII		b. Builder:	UIIKIIOWII		
* B10.	Significance:	Theme Residential De	evelopment		Area	Pico Rivera	
	Period of Significa	ance <u>1959</u>	Property Ty	pe <u>Residential</u>		Applicable Criteria $\underline{\mathrm{N/A}}$	

The subject property represents one of 245 parcels within Tract 12553 that was subdivided in 1949 by Walter Bollenbacher and Louis L. Kelton. The two builders were notably prolific with many of their projects given the Allied Gardens moniker. There were Allied Gardens in Van Nuys, Reseda, Compton, Rosecrans, and the so-called Whittier citrus belt in which the subject tract is located. Indeed, it was not long before the citrus groves would give way to residential development such that its previous agricultural history would be relegated to the distant past. Later, Tract 12553 would be annexed to the City of Pico Rivera.

Bollenbacher and Kelton are typical of the well-financed large-scale developers operating in Southern California following World War II who were responsible for all aspects of a new residential project, from subdividing the land and providing street improvements to constructing the houses, then marketing, arranging financing, and selling them. Tract 12553 represents a historically consistent grouping of Minimal Traditional style single-family residences erected in 1949 that embody the response to the need for middle class housing in east Los Angeles County in the years after World War II. However, due to substantial alterations to a majority of properties within the grouping, particularly the replacement of original wood fenestration with metal or vinyl windows, the physical integrity of the residential subdivision has been severely compromised. In addition, the development history of the subdivision and its associated builders does not differ substantially from that of other similar subdivisions in the area. As a result, the residential grouping lacks overall architectural quality, distinction, and integrity and does not meet district registration requirements at the federal, state or local levels of significance.

As relates to the subject property, alterations include the application of non-original rough textured stucco finish. Because of this modification the property no longer represents a good example of the Vernacular Modern architectural style as applied to an apartment building. Therefore, for reasons of compromised integrity, this property does not appear eligible for individual listing under National Register, California Register or local criteria.

B11. Additional Resource Attributes: (List attributes and codes):

* B12. References:

County Tax Assessor, Tract Maps, Sanborn Maps, Los Angeles Times

B13. Remarks:

* B14. Evaluator: Meghan Potter, Peter Moruzzi, ICF International Date of Evaluation: 10/1/2010

(This space reserved for official comments.)

Washington Blv



					19-19149()
State of California The Resources Agency DEPARTMENT OF PARKS AND RECREATION PRIMARY RECORD		HR # Trinomial NRHP Status C	ode <u>6</u> Y			
			Reviewer			
* Res P1. * P2. * P3: - T - S - C - R - R - E	 b. USGS 7.5' Quad c. Address <u>8423 Washington</u> d. UTM: (Give more than one for e. Other Locational Data: (e.g. p APN(s): 6370030015 a. Description: (Describe resource ype: multi family residence tories: 2 construction: wood frame ladding: rough textured stucco oof: very low pitched hip ntrance: appears original 	ation Unrestricted Blvd large and/or linear feature) arcel #, legal description,	City <u>Pico R</u> Zone _ directions to resource, ele	Angeles ; 1/4 of ivera , evation, addition	_1/4 of Sec; Zip _90660 mE/ al UTMs, etc. as app	B.M.
- R - S - C - C	Vindows: aluminum elated features: extensive origina tyle: Vernacular Modern haracter defining features preser haracter defining features not pro- tatus: exhibits a high level of inte	at: roof form, stucco fini esent: none				

 4. Resources Present: ✓ Building Structure Object Site District 5a. Photograph or Drawing 	ty Element of District Other (Isolates, etc.) P5b. Description of Photo: (View, date, etc.) South elev, lkg northeast 4/1/2010
**	* P6. Date Constructed/Age and Sources: ☐ Prehistoric
	* P7. Owner and Address: Tabash, Edward Z
	* P8. Recorded by: (Name, affiliation, address) Peter Moruzzi ICF International 811 W 7th Street, Suite 800 Los Angeles, CA 90017
	* P9. Date Recorded: 8/1/2010 * P10. Survey Type: (Describe) Reconaissance-Level Survey

* Attachments:		Location Map	Sketch Map	Continuation Sheet	Building, Structure	, and Object Record
Archaeological	Record	District Record	Linear Feature Record	Milling Station Record	Rock Art Record	Artifact Record
Photograph Re	cord Ot	her: (List)				
DPR 523A (1/95)						* Required Information

19-191490 8423 Washington Blvd

State of California The Resources Agency DEPARTMENT OF PARKS AND RECREATION	Primary # HR #
BUILDING, STRUCTURE, AND OBJECT	RECORD
Page of	* NRHP Status Code 6Y
* Resource Name or #: <u>8423 Washington Blvd</u>	
B1. Historic Name: Luau Manor	
B2. Common Name Luau Manor	
B3. Original Use: <u>Multi-Family Residence</u>	B4. Present Use: Multi-Family Residence
* B5. Architectural Style: Vernacular Modern	
* B6. Construction History: (Construction date, alterations, and date Construction date: 1960	of alterations.)
* B7. Moved? ✓No Yes Unknown Date: * B8. Related Features:	Original Location:
B9a. Architect: Unknown	_b. Builder: Unknown
* B10. Significance: Theme Residential Development	Area Pico Rivera
Period of Significance 1960 Property Type R	esidential Applicable Criteria N/A

The subject property represents one of 102 parcels within Tract 19509 that was subdivided in 1956 by a consortium of numerous investors. Of the numerous parcels within the subdivision, those facing Washington Boulevard, such as the subject property, were assigned for use as apartment buildings or for commercial uses. The subject multi-family dwelling retains a high level of physical integrity; however, the building represents an unexceptional example of the Vernacular Modern style as applied to an apartment building. Therefore, due to a lack of sufficient historical and architectural merit, this property does not appear eligible for individual listing under National Register, California Register or local criteria.

B11. Additional Resource Attributes: (List attributes and codes):

* B12. References:

County Tax Assessor, Tract Maps, Sanborn Maps, Los Angeles Times

B13. Remarks:

* B14. Evaluator: Peter Moruzzi, ICF International

Date of Evaluation: 8/1/2010

(This space reserved for official comments.)



(Sketch map with north arrow required)

			19-191491
State of California The Resources Agency DEPARTMENT OF PARKS AND RECREATION PRIMARY RECORD		Primary #	
		Trinomial	
		NRHP Status Code 6Y	
	Other Listings		
	Review Code Rev	/iewer	Date
* Resource Name or #: <u>8535 Wash</u> P1. Other Identifier:	-		
* P2. Location: Not for Public			
		T; R; 1/4 of	
c. Address washington	li Bivu	City_Pico Rivera	•
d. UTM: (Give more than one fo	r large and/or linear feature)	Zone,	mE/mN
e. Other Locational Data: (e.g.) APN(s): 6370021001	parcel #, legal description, direct	ions to resource, elevation, additio	nal UTMs, etc. as app

* P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

This parcel contains an east-facing Vernacular Modern mini strip mall consists of two one-story buildings and a parking lot. The building to the west, with a shallow L-shape plan, has a flat composition roof fronted by a clay tile mansard roof over the multiple store fronts. The exterior wall surface is stucco and the storefront fenestrations consist of aluminum storefront windows and doors. The second building, a donut shop located at the corner of Washington Boulevard and Phaeton Avenue, is square in plan with a composition roof and surrounding parapet. The donut shop features a deep projecting parapet clad in stucco. Below that is a surround of glass in metal frames around all four sides, below which is located a exterior countertop with a tapered base. The underside of the overhang features a folded-plate pattern of glass and stucco. The building to the west with multiple stores exhibits a moderate level of integrity due to later alterations, and the building located at the corner of the property exhibits a high level of integrity.

* P3b. Resource Attributes:	(List attributes and codes)	HP06 1-3 Story Co	ommercial E	Building
* P4. Resources Present:	Building Structure	Object Site	District	Element of District Other (Isolates, etc.)
P5a. Photograph or Drawing				P5b. Description of Photo: (View, date, etc.)
				East elev, lkg west 7/22/2010
			HELINT	 * P6. Date Constructed/Age and Sources: Prehistoric Historic Both 1964 (Factual) Building Permit * P7. Owner and Address: Marinos, Tim & Helen Trust * P8. Recorded by: (Name, affiliation, address) David Greenwood, B. Lamprecht ICF International 811 W 7th Street, Suite 800 Los Angeles, CA 90017 * P9. Date Recorded: 8/16/2010
				* P10. Survey Type: (Describe)
				Reconaissance-Level Survey
 * P11. Report Citation: (Cite survey report/other sources or "none") EIS/EIR. Metropolitan Transportation Authority. Eastside Phase 2. September, 2010 				
	Leastian Man	Skatab Man	Continuation C	hast Duilding Structure and Object Depart

Continuation Sheet ✓ Building, Structure, and Object Record Attachments: Location Map Sketch Map Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other: (List)

State of California The Resources Agency DEPARTMENT OF PARKS AND RECREATION	Primary # HR #			
BUILDING, STRUCTURE, AND OBJECT	RECORD			
Page of	* NRHP Status Code 6Y			
* Resource Name or #: 8535 Washington Blvd				
B1. Historic Name: None				
B2. Common Name None				
B3. Original Use: Commercial Retail Building	B4. Present Use: Commercial Retail Building			
* B5. Architectural Style: Vernacular Modern				
* B6. Construction History: (Construction date, alterations, and date Construction Date: 1964	of alterations.)			
 * B7. Moved? ✓No Yes Unknown Date: * B8. Related Features: 	_Original Location:			
B9a. Architect: Unknown	b. Builder: Fred White Realty			
* B10. Significance: Theme Commercial Development	Area Pico Rivera			
Period of Significance 1964 Property Type C	Commercial Applicable Criteria <u>N/A</u>			

The 1964 building permit indicates that Fred White Realty was the original owner. The architect was not listed. The builder was Fred White Realty.

The building is a direct product of a major expansion of suburban development throughout the region and the resultant exploding demand for products and services by Southern California consumers during the 1950's and 1960's. However, the area's development history does not differ substantially from that of other Southern California industrial and commercial areas that responded similarly to the wave of rapid suburban growth during this period.

Although the subject property, containing a strip mall comprising two one-story buildings, exhibits a moderate to high level of integrity, it does not meet the criteria for significance required for federal, state or local designation. It does not appear to be associated with events, activities, or developments that were important in the past (Criterion A, NRHP); does not appear to be associated with the lives of people important in the past (Criterion B, NRHP); is not associated with significant architectural history, landscape history, or engineering achievement (Criterion C, NRHP); and lacks the overall architectural quality and distinction required of a good example of the Vernacular Modern architectural style. Therefore, due to a lack of sufficient historical and architectural merit, this property does not appear to be eligible for individual listing in the National Register of Historic Places, the California Register of Historical Resources, or for local designation.

B11. Additional Resource Attributes: (List attributes and codes):

* B12. References:

County Tax Assessor, Tract Maps, Sanborn Maps, Los Angeles Times

B13. Remarks:

* B14. Evaluator: <u>David Greenwood</u>, B. Lamprecht, ICF International Date of Evaluation: <u>8/16/2010</u>

(This space reserved for official comments.)



(Sketch map with north arrow required)

						•
State of California The Resources Agency DEPARTMENT OF PARKS AND RECREATION PRIMARY RECORD						
		Trinomial		QV		
	Other Listings					
	Review Code	Review	/er		Date	
 * Resource Name or #: <u>8737</u> P1. Other Identifier: <u></u> * P2. Location: Not for 			a. County Los An	igeles		
b. USGS 7.5' Quad		Date	; R;	1/4 of	1/4 of Sec;	B.M.
	nington Blvd					
d. UTM: (Give more than	one for large and/or linear featur	e)	Zone	,	mE/	mN
e. Other Locational Data: APN(s): 637002500	(e.g. parcel #, legal descriptio	on, direction	s to resource, eleva	tion, additio	onal UTMs, etc. as app	

* P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

This Vernacular Modern south-facing commercial building is one story in height located on a corner lot. The structure is steel frame construction with a rectangular shape plan. The roof is a flat composition roof with deep surrounding parapet, closely held to the wall surface. The main entrance is recessed, sheltering bank ATM machines and an entrance of aluminum frame doors and windows. The exterior wall surface is stucco with a portion of natural rock veneer located to the west end of the primary south elevation and part of the west elevation. There is a carport roof extension, supported with square columns, on the west elevation, accommodating a car drive-up ATM machine. The property exhibits a high level of integrity.

(List attributes and codes) HP06 1-3 Story Commercial Building



EIS/EIR. Metropolitan Transportation Authority. Eastside Phase 2. September, 2010

* P3b. Resource Attributes:

10-101402

State of California The Resources Agency DEPARTMENT OF PARKS AND RECREATION	Primary # HR #
BUILDING, STRUCTURE, AND OBJECT	RECORD
Page of	* NRHP Status Code 6Y
* Resource Name or #: 8737 Washington Blvd	
B1. Historic Name: None	
B2. Common Name None	
B3. Original Use: Commercial Retail Building	B4. Present Use: Commercial Retail Building
* B5. Architectural Style: Vernacular Modern	
* B6. Construction History: (Construction date, alterations, and date Construction Date: 1956	e of alterations.)
* B7. Moved? VNO Yes Unknown Date:	Original Location:
* B8. Related Features:	
B9a. Architect: Merrill W. Baird	b. Builder: Unknown
* B10. Significance: Theme Commercial Development	Area Pico Rivera
Period of Significance <u>1956</u> Property Type (Commercial Applicable Criteria N/A

The 1956 building permit indicates that California Bank was the original owner. The architect was Merrill W. Baird. The builder was not listed.

The building is a direct product of a major expansion of suburban development throughout the region and the resultant exploding demand for products and services by Southern California consumers during the 1950's and 1960's. However, the area's development history does not differ substantially from that of other Southern California industrial and commercial areas that responded similarly to the wave of rapid suburban growth during this period.

Although the subject property, containing a one story bank building, exhibits a high level of integrity, it does not meet the criteria for significance required for federal, state or local designation. It does not appear to be associated with events, activities, or developments that were important in the past (Criterion A, NRHP); does not appear to be associated with the lives of people important in the past (Criterion B, NRHP); is not associated with significant architectural history, a master architect or builder including subject property architect Merrill W. Baird, landscape history, or engineering achievement (Criterion C, NRHP); and lacks the overall architectural quality and distinction required of a good example of the Vernacular Modern architectural style. Therefore, due to a lack of sufficient historical and architectural merit, this property does not appear to be eligible for individual listing in the National Register of Historic Places, the California Register of Historical Resources, or for local designation.

B11. Additional Resource Attributes: (List attributes and codes):

* B12. References:

County Tax Assessor, Tract Maps, Sanborn Maps, Los Angeles Times

B13. Remarks:

* B14. Evaluator: <u>David Greenwood</u>, B. Lamprecht, ICF International Date of Evaluation: <u>8/16/2010</u>

(This space reserved for official comments.)



			19-191493
State of California The Resources A	Agency	Primary #	
DEPARTMENT OF PARKS AND RECREATION			
PRIMARY RECORD		NRHP Status Code 6Y	
	Other Listings		
	Review Code Re	viewer	Date
* Resource Name or #:9033 Wash P1. Other Identifier:			
* P2. Location: Not for Publi	cation V Unrestricted	a. County Los Angeles	
b. USGS 7.5' Quad	Date	T; R; 1/4 of	_1/4 of Sec; B.M.
c. Address9033 Washingto	n Blvd	City Pico Rivera	 Zip <u>_90660</u>
d. UTM: (Give more than one for	or large and/or linear feature)	Zone,	mE/mN
e. Other Locational Data: (e.g. APN(s): 6378019052	parcel #, legal description, direc	tions to resource, elevation, addition	nal UTMs, etc. as app

* P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

This Modern south-facing commercial building is two stories in height and is steel frame construction with a rectangular plan. The roof is flat with composition sheeting, and has a projecting roof overhang surrounding the four sides of the building. The primary elevation has eleven steel posts that extend from the ground to meet the bottom of the overhang where they are aligned along its center line. Windows and doors on the ground floor are vertical in orientation comprised of bands of aluminum-framed windows, while the bands of smaller windows on the second floor are square aluminum frame. The exterior wall surface is stucco with the exception of the south and part of the east elevations, where a mid course of stucco paneling separates the ground and upper story windows. The property exhibits a high level of integrity.

 * P3b. Resource Attributes:
 (List attributes and codes) <u>HP06 1-3 Story Commercial Building</u>

 * P4. Resources Present:
 ✓ Building Structure Object Site District Element of District Other (Isolates, etc.)

DEs Distances a Drawing	P5b. Description of Photo: (View, date, etc.)
P5a. Photograph or Drawing	South elev, lkg north 7/22/2010
	 * P6. Date Constructed/Age and Sources: □ Prehistoric ♥ Historic □ Both 1965 (Factual) Building Permit
	* P7. Owner and Address: Mackel, Lawrence O
	* P8. Recorded by: (Name, affiliation, address) David Greenwood, B. Lamprecht ICF International 811 W 7th Street, Suite 800 Los Angeles, CA 90017
	* P9. Date Recorded: 8/16/2010
	* P10. Survey Type: (Describe) Reconaissance-Level Survey
P11. Report Citation: (Cite survey report/other sources or "none") EIS/EIR. Metropolitan Transportation Authority. Eastside Phase 2. Septemb	per, 2010

		Resources Agency S AND RECREATION		rry #
BU	ILDING, ST	RUCTURE, AND	OBJECT RECO	
Page	e of		* NRHI	P Status Code 6Y
* Reso	ource Name or #: <u>9</u>	033 Washington Blvd		
B1.	Historic Name: N	one		
B2.	Common Name N	one		
B3.	Original Use: C	ommercial Office Buildin	g <u>B</u> 4. Pres	ent Use: Commercial Office Building
* B5.	Architectural Style	: Modern		
	Construction Histo : Remodel. Cost: \$3	•	rations, and date of alteration:	5.)
* B7.	Moved? No	Yes Unknown Dat	e:Original Lo	cation:
* B8.	Related Features:			
	Architect: Lorand			Feldman Const.
* B10.	Significance:	heme Commercial Develo	pment	Area Pico Rivera
	Period of Significan	ce <u>1965</u>	Property Type Commercial	Applicable Criteria N/A

The 1965 building permit indicates that Ronald Binder was the original owner. The architect was Lorand West. The builder was Feldman Const.

The building is a direct product of a major expansion of suburban development throughout the region and the resultant exploding demand for products and services by Southern California consumers during the 1950's and 1960's. However, the area's development history does not differ substantially from that of other Southern California industrial and commercial areas that responded similarly to the wave of rapid suburban growth during this period.

The subject property, containing a two-story office building in the mid-century Modern style, exhibits a high level of integrity, it does not meet the criteria for significance required for federal, state or local designation. It does not appear to be associated with events, activities, or developments that were important in the past (Criterion A, NRHP); does not appear to be associated with the lives of people important in the past, including Ronald Binder, the original owner (Criterion B, NRHP); is not associated with significant architectural history, a master architect or builder including subject property architect Lorand West and builder Feldman Construction, landscape history, or engineering achievement (Criterion C, NRHP). While a sound example of the Modernist architectural style, it lacks the overall architectural quality, distinction, and rarity required for significance under this criterion. Therefore, due to a lack of sufficient historical and architectural merit, this property does not appear to be eligible for individual listing in the National Register of Historic Places, the California Register of Historical Resources, or for local designation.

B11. Additional Resource Attributes: (List attributes and codes):

* B12. References:

County Tax Assessor, Tract Maps, Sanborn Maps, Los Angeles Times

B13. Remarks:

* B14. Evaluator: <u>David Greenwood</u>, B. Lamprecht, ICF International Date of Evaluation: <u>8/16/2010</u>

(This space reserved for official comments.)



(Sketch map with north arrow required)

			19-191494
State of California The Resources Agency DEPARTMENT OF PARKS AND RECREATION		Primary #	
PRIMARY RECORD			
	Other Listings		
	Review Code Rev	viewer	Date
* Resource Name or #: <u>9049 Wash</u> P1. Other Identifier:			
* P2. Location: Not for Publi	cation V Unrestricted	a. County Los Angeles	
		T; R; 1/4 of	
c. Address <u>9049 Washingto</u>	n Blvd	City Pico Rivera	 Zip _90660
d. UTM: (Give more than one fo	r large and/or linear feature)	Zone,	mE/mN
e. Other Locational Data: (e.g. APN(s): 6378019053	parcel #, legal description, direct	tions to resource, elevation, additio	nal UTMs, etc. as app

* P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

This Vernacular Modern south-facing commercial building has two heights, one-story and one story. It is wood frame construction with a rectangular shape plan with five bays. The four on the east are evenly spaced and separated by stone veneer pilasters, and the fifth defining the entrance on the west, is marked by projecting, flanking piers clad in stone veneer. The taller portion is located at rear of the building at the north end. The roofs are flat composition with a surrounding parapet. The recessed entrance is slightly elevated with concrete steps and characterized by aluminum frame windows and entry doors, while the eastern bays are fronted by a continuous planter. There are glass-block windows which run atop of the main window openings, but appear to have been in-filled. The exterior wall surfaces are stucco, with stone veneer used for the walls, planters, and square posts supporting the entry porch roof overhang. The property exhibits a moderate level of integrity.

P3b. Resource Attributes: (List attributes and codes) HP06 1-3 Story Commercial B	Building
P4. Resources Present: ☑ Building □ Structure □ Object □ Site □ District	Element of District Other (Isolates, etc.)
P5a. Photograph or Drawing	P5b. Description of Photo: (View, date, etc.)
F1. Report Citation: (Cite survey report/other sources or "none") ElS/EIR. Metropolitan Transportation Authority. Eastside Phase 2. Septemble	 South elev, lkg north 7/22/2010 * P6. Date Constructed/Age and Sources: Prehistoric Prehistoric Historic Both 1965 (Factual) Building Permit * P7. Owner and Address: Shneidman, Harriet M Co Trust * P8. Recorded by: (Name, affiliation, address) David Greenwood, B. Lamprecht ICF International 811 W 7th Street, Suite 800 Los Angeles, CA 90017 * P9. Date Recorded: 8/16/2010 * P10. Survey Type: (Describe) Reconaissance-Level Survey

NONE Sketch Map * Attachments: Location Map Continuation Sheet Building, Structure, and Object Record Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other: (List)

State of California The Resources Agency DEPARTMENT OF PARKS AND RECREATION	Primary # HR #
BUILDING, STRUCTURE, AND OBJECT	RECORD
Page of	* NRHP Status Code 6Y
* Resource Name or #: <u>9049 Washington Blvd</u>	
B1. Historic Name: None	
B2. Common Name None	
B3. Original Use: Commercial Retail Building	B4. Present Use: Commercial Retail Building
* B5. Architectural Style: Modern	
* B6. Construction History: (Construction date, alterations, and date Construction Date: 1965	of alterations.)
* B7. Moved? VNO Yes Unknown Date:	_Original Location:
* B8. Related Features:	
B9a. Architect: Daniel L. Dworsky	b. Builder: Unknown
* B10. Significance: Theme Commercial Development	Area Pico Rivera
Period of Significance 1965 Property Type C	Commercial Applicable Criteria <u>N/A</u>

The name of the original owner found on the 1965 building permit was Illegible. The architect was Daniel L. Dworsky. The builder was not listed.

The building is a direct product of a major expansion of suburban development throughout the region and the resultant exploding demand for products and services by Southern California consumers during the 1950's and 1960's. However, the area's development history does not differ substantially from that of other Southern California industrial and commercial areas that responded similarly to the wave of rapid suburban growth during this period.

The subject property exhibits a moderate level of integrity based on some alterations to the façade over time. Although designed by a master architect, Dan Dworsky, FAIA, it is not one of his important designs, and does not meet the criteria for significance required for federal, state or local designation. It does not appear to be associated with events, activities, or developments that were important in the past (Criterion A, NRHP); does not appear to be associated with the lives of people important in the past (Criterion B, NRHP); is not associated with the lives of people important in the past (Criterion C, NRHP). While the property was designed by an architectural history, landscape history, or engineering achievement (Criterion C, NRHP). While the property was designed by an architect of note, it is not one of his distinguished designs, and lacks the overall architectural quality and distinction required of a good example of the Modern architectural style or of Mr. Dworsky's work . Therefore, due to a lack of sufficient historical and architectural merit, this property does not appear to be eligible for individual listing in the National Register of Historic Places, the California Register of Historical Resources, or for local designation.

B11. Additional Resource Attributes: (List attributes and codes):

* B12. References:

County Tax Assessor, Tract Maps, Sanborn Maps, Los Angeles Times

B13. Remarks:

* B14. Evaluator: <u>David Greenwood</u>, B. Lamprecht, ICF International Date of Evaluation: <u>8/16/2010</u>

(This space reserved for official comments.)



						,
State of California The Resources Agency DEPARTMENT OF PARKS AND RECREATION			Primary #			
			HR #			
			Trinomial			
PRIMARY RECORD			NRHP Status Cod	e <u>6</u> Y		
	Other Listings					
	Review Code	Revie	wer		Date	
 * Resource Name or #: <u>9055 W</u> P1. Other Identifier: * P2. Location: Not for P 				ngeles		
b. USGS 7.5' Quad			•			
c. Address 9055 Washin						
d. UTM: (Give more than on	e for large and/or linear featu	re)	Zone	,	mE/	mN
e. Other Locational Data: (APN(s): 6378019037	e.g. parcel #, legal description	on, directio	ns to resource, eleva	tion, additio	onal UTMs, etc. as app	

* P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

This south-facing Modern commercial building is one story in height and is set deeply into its corner lot. It has a rectangular plan and appears to be brick construction. The roof is a folded-plate pattern and is covered with composition shingles. The primary south elevation has aluminum store front windows and doors for two commercial businesses. A projecting upward angled porch roof extension, part of the folding-plate roof pattern, extends over the store entries on the west side of the façade, and is supported by six round steel column posts. A large metal sign is located in the parking lot in front of the primary elevation. The property exhibits a high level of integrity.

(List attributes and codes) HP06 1-3 Story Commercial Building



* P3b. Resource Attributes:

10-101405

	of California The Resources Agency RTMENT OF PARKS AND RECREATION	Primary # HR #
BU	ILDING, STRUCTURE, AND OB.	JECT RECORD
Page	e <u>2</u> of <u>2</u>	* NRHP Status Code 6Y
* Reso	ource Name or #: 9055 Washington Blvd	
B1.	Historic Name: None	
B2.	Common Name None	
B3.	Original Use: Commercial Retail Building	B4. Present Use: Commercial Retail Building
* B5.	Architectural Style: Modern	
	Construction History: (Construction date, alterations, truction Date: 1958	and date of alterations.)
* B7.	Moved? ✔No Yes Unknown Date:	Original Location:
* B8.	Related Features:	
	Architect: Mackintosh And Mackintosh	b. Builder: Robert Chuckrow Const. Co.
* B10.	Significance: Theme Commercial Development	Area Pico Rivera
	Period of Significance 1954 Property	y Type Commercial Applicable Criteria N/A

The 1958 building permit indicates that G. R. Kinney Corporation was the original owner. The architect was Mackintosh and Mackintosh. The builder was Robert Chuckrow Const. Co.

The building is a direct product of a major expansion of suburban development throughout the region and the resultant exploding demand for products and services by Southern California consumers during the 1950's and 1960's. However, the area's development history does not differ substantially from that of other Southern California industrial and commercial areas that responded similarly to the wave of rapid suburban growth during this period.

Although the subject property, containing a one-story commercial building unusual in its folded roof pattern, exhibits a high level of integrity, it does not meet the criteria for significance required for federal, state or local designation. It does not appear to be associated with events, activities, or developments that were important in the past (Criterion A, NRHP); does not appear to be associated with the lives of people important in the past (Criterion B, NRHP); is not associated with significant architectural history, a master architect or builder including subject property architect Mackintosh & Mackintosh and builder Robert Chuckrow Construction Co., landscape history, or engineering achievement (Criterion C, NRHP); and lacks the overall architectural quality and distinction required of a good example of the Modern architectural style. Therefore, due to a lack of sufficient historical and architectural merit, this property does not appear to be eligible for individual listing in the National Register of Historic Places, the California Register of Historical Resources, or for local designation.

B11. Additional Resource Attributes: (List attributes and codes):

* B12. References:

County Tax Assessor, Tract Maps, Sanborn Maps, Los Angeles Times

B13. Remarks:

* B14. Evaluator: <u>David Greenwood</u>, B. Lamprecht, ICF International Date of Evaluation: <u>8/16/2010</u>

(This space reserved for official comments.)



(Sketch map with north arrow required)

Kimley **»Horn**

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Attachment B: Cultural Resources Records Search Results for the 0.5-Mile Buffer

Resource List for 0.5-mile Buffer

Primary No.	Trinomial	Other IDs	Туре	Age	Attribute codes	Recorded by	Reports
P-19-178665		OHP Property Number - 029345; Resource Name - Rivera First Bapist Church; Other - PHI LAN-008; OHP Property Number - 090775	Building	Historic	HP16	1969	
P-19-186753		OHP Property Number - 173064; Resource Name - CRM Tech 789- 1H; Other - CRM Tech 789-1H	Building	Historic	HP02	2002 (B. Tang, CRM Tech); 2008 (Bai "Tom" Tang)	LA-07871, LA- 08158, LA-09444, LA-12321
P-19-186754		OHP Property Number - 173065; Resource Name - CRM Tech 789- H2; Other - CRM Tech 789-H2	Building	Historic	HP02	2002 (B. Tang, CRM Tech); 2008 (Bai "Tom" Tang)	LA-07871, LA- 08158, LA-09444, LA-12321
P-19-186755		OHP Property Number - 173066; Resource Name - CRM Tech 789- 3H; Other - CRM Tech 789-3H	Building	Historic	HP02	2002 (B. Tang, CRM Tech); 2008 (Bai "Tom" Tang)	LA-07871, LA- 08158, LA-09444, LA-12321
P-19-186804		OHP Property Number - 173074; Resource Name - Burlington Northern & Santa Fe Railroad, Atchison Topeka & Santa Fe RR; Other - BNSF Formerly Atchison, Topeka; Other - Atchison, Topeka and Santa Fe; Other - CRM Tech 789-50H, 2334- 1H; Other - Atchison Topeka & Santa Fe Railroad	Structure, Site	Historic	HP11; HP19; HP37; HP39	2002 (Daniel Ballester and Bail "Tom" Tang, CRM Tech); 2002 (Daniel Ballester and Bail "Tom" Tang, CMR Tech); 2007 (Steven McCormick); 2007 (Francesca G. Smith and Caprice D. Harper, Parsons); 2011 (Pam Daly, Cogstone); 2016 (Chandra Miller, AECOM); 2018 (Jessica B. Feldman, ICF); 2019 (Jenna Kachour, GPA)	LA-07871, LA- 08158, LA-09117, LA-09119, LA- 09444, LA-09938, LA-10189, LA- 10391, LA-10452, LA-10638, LA- 10996, LA-11054, LA-11549, LA- 11642, LA-12349, LA-12488, LA-13430
P-19-188231		OHP Property Number - 139438	Building	Historic	HP02	2003	
P-19-188233		OHP Property Number - 142443	Building	Historic	HP02	2003	LA-12321
P-19-188234		OHP Property Number - 146017	Building	Historic	HP02	2004	LA-12321
P-19-188239		OHP Property Number - 150597	Building	Historic	HP02	2004	
P-19-188240		OHP Property Number - 153228	Building	Historic	HP02	2005	
P-19-188243		OHP Property Number - 161659	Building	Historic	HP02	2006	
P-19-188244		OHP Property Number - 162522	Building	Historic	HP02	2006	
P-19-188254		OHP Property Number - 168043	Building	Historic	HP02	2007	
P-19-188259		Other - CRM TECH 2234-5	Building	Historic	HP06	2008 (J. Smallwood, CRM Tech)	LA-09446

Primary No.	Trinomial	Other IDs	Туре	Age	Attribute codes	Recorded by	Reports
P-19-188774		Resource Name - Atchison Topeka & Santa Fe Rio Hondo Bridge	Structure	Historic	HP19	1994 (Dana Slawson, Greenwood & Associates)	
P-19-190007		Resource Name - Pico Rivera United Methodist Church	Building	Historic	HP16	2012	LA-11715
P-19-191098		Resource Name - 6751 Lindsey Ave	Building	Historic	HP02	2010 (Colleen Davis, ICF International)	LA-12894
P-19-191105		Resource Name - Pico Rivera Historical Museum; Resource Name - Atchison, Topeka & Santa Fe Railroad Station	Building	Historic	HP17	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191160		Resource Name - 1016 S 4th St	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191161		Resource Name - 1017 S 4th St	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191333		Resource Name - 123 Washington Blvd	Building	Historic	HP06	2010 (Carson Anderson, ICF International)	LA-12894
P-19-191335		Resource Name - 405 Washington Blvd	Building	Historic	HP06	2010 (Carson Anderson, ICF International)	LA-12894
P-19-191336		Resource Name - 410 Washington Blvd	Building	Historic	HP13	2010 (Carson Anderson, ICF International)	LA-12894
P-19-191337		Resource Name - 420 Washington Blvd	Building	Historic	HP08	2010 (Carson Anderson, ICF International)	LA-12894
P-19-191338		Resource Name - 500 Washington Blvd	Building	Historic	HP06	2010 (Carson Anderson, ICF International)	LA-12894
P-19-191378		Resource Name - 6719 Bollenbacher Dr	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191379		Resource Name - 6722 Bollenbacher Dr	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191380		Resource Name - 6728 Bollenbacher Dr	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191381		Resource Name - 6732 Bollenbacher Dr	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191382		Resource Name - 6738 Bollenbacher Dr	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894

Primary No.	Trinomial	Other IDs	Туре	Age	Attribute codes	Recorded by	Reports
P-19-191383		Resource Name - 7001 Bonnie Vale Pl	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191384		Resource Name - 7007 Bonnie Vale Pl	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191385		Resource Name - 7010 Bonnie Vale Pl	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191386		Resource Name - 7011 Bonnie Vale Pl	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191387		Resource Name - 6727 Candace Ave	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191388		Resource Name - 6733 Candace Ave	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191391		Resource Name - 6739 Candace Ave	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191392		Resource Name - 6767 Citronell Ave	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191393		Resource Name - 6768 Citronell Ave	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191394		Resource Name - 6772 Citronell Ave	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191395		Resource Name - 6773 Citronell Ave	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191396		Resource Name - 6762 Cord Ave	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191397		Resource Name - 6765 Cord Ave	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191398		Resource Name - 6768 Cord Ave	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191399		Resource Name - 6769 Cord Ave	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191400		Resource Name - 6719 Crossway Dr	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191401		Resource Name - 6723 Crossway Dr	Building	Historic	HP02	2010 (Elizabeth Hilton, ICF International)	LA-12894
P-19-191404		Resource Name - 6722 Keltonview Dr	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894

Primary No.	Trinomial	Other IDs	Туре	Age	Attribute codes	Recorded by	Reports
P-19-191405		Resource Name - 6723 Keltonview Dr	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191406		Resource Name - 6729 Keltonview Dr	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191407		Resource Name - 6735 Keltonview Dr	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191408		Resource Name - 6739 Keltonview Dr	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191409		Resource Name - 7007 Kilgarry Ave	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191410		Resource Name - 7010 Kilgarry Ave	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191411		Resource Name - 6767 Lemoran Ave	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191412		Resource Name - 6773 Lemoran Ave	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191413		Resource Name - 6744 Lindsey Ave	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191414		Resource Name - 6745 Lindsey Ave	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191415		Resource Name - 6752 Lindsey Ave	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191416		Resource Name - 6738 Loch Alene Ave	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191417		Resource Name - 6739 Loch Alene Ave	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191418		Resource Name - 6744 Loch Alene Ave	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191419		Resource Name - 6745 Loch Alene Ave	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191420		Resource Name - 7003 Loch Alene Ave	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191421		Resource Name - 7011 Loch Alene Ave	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191422		Resource Name - 9203 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894

Primary No.	Trinomial	Other IDs	Туре	Age	Attribute codes	Recorded by	Reports
P-19-191423		Resource Name - 9211 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191424		Resource Name - 9219 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191425		Resource Name - 9225 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191426		Resource Name - 9229 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191427		Resource Name - 9241 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191428		Resource Name - 9249 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191429		Resource Name - 9255 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191430		Resource Name - 9261 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191431		Resource Name - 9265 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191432		Resource Name - 9275 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191433		Resource Name - 9433 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191434		Resource Name - 9439 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191435		Resource Name - 9445 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191436		Resource Name - 9503 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191437		Resource Name - 9507 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191439		Resource Name - 9519 Lochinvar Dr	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191467		Resource Name - 6765 Millux Ave	Building	Historic	HP02	2010 (Portia Lee, ICF International)	LA-12894
P-19-191473		Resource Name - Rio Hondo Bridge 53C0156	Structure	Historic	HP11; HP19	2010 (Barbara Lamprecht, ICF International)	LA-12894

Primary No.	Trinomial	Other IDs	Туре	Age	Attribute codes	Recorded by	Reports
P-19-191496		Resource Name - 9107 Washington Blvd	Building	Historic	HP06	2010 (David Greenwood, ICF International)	LA-12894
P-19-191497		Resource Name - 9214 Washington Blvd	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191498		Resource Name - 9220 Washington Blvd	Building	Historic	HP02	2015 (Meghan Potter, ICF International)	LA-12894
P-19-191499		Resource Name - 9228 Washington Blvd	Building	Historic	HP02	2015 (Meghan Potter, ICF International)	LA-12894
P-19-191500		Resource Name - 9236 Washington Blvd	Building	Historic	HP02	2015 (Meghan Potter, ICF International)	LA-12894
P-19-191501		Resource Name - 9244 Washington Blvd	Building	Historic	HP02	2015 (Meghan Potter, ICF International)	LA-12894
P-19-191502		Resource Name - 9252 Washington Blvd	Building	Historic	HP02	2015 (Meghan Potter, ICF International)	LA-12894
P-19-191503		Resource Name - 9260 Washington Blvd	Building	Historic	HP02	2015 (Meghan Potter, ICF International)	LA-12894
P-19-191504		Resource Name - 9266 Washington Blvd	Building	Historic	HP02	2015 (Meghan Potter, ICF International)	LA-12894
P-19-191505		Resource Name - 9274 Washington Blvd	Building	Historic	HP02	2015 (Meghan Potter, ICF International)	LA-12894
P-19-191506		Resource Name - 9300 Washington Blvd	Building	Historic	HP06	2010 (David Greenwood, ICF International)	LA-12894
P-19-191507		Resource Name - 9316 Washington Blvd	Building	Historic	HP06	2010 (David Greenwood, ICF International)	LA-12894
P-19-191509		Resource Name - 9434 Washington Blvd	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191510		Resource Name - 9437 Washington Blvd	Building	Historic	HP06	2010 (David Greenwood, ICF International)	LA-12894
P-19-191512		Resource Name - 9444 Washington Blvd	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191514		Resource Name - 9454 Washington Blvd	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191515		Resource Name - 9502 Washington Blvd	Building	Historic	HP02	2010 (Meghan Potter, ICF International)	LA-12894
P-19-191389 P-19-191390 P-19-191402 P-19-191403	6738 Candace 8730 Goodbe	e Ave Historic Building e Ave Historic Building					

Report List for 0.5-mile Buffer

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
LA-00358	Paleo -	1976	Stickel, Gary E.	An Archaeological and Paleontological Resource Survey of the Los Angeles River, Rio Hondo River and the Whittier Narrows Flood Control Basin, Los Angeles, California	Environmental Research Archaeologists	19-000858, 19-001009, 19-001311
LA-02882		1993	McKenna, Jeanette A.	Cultural Resources Investigations, Site Inventory, and Evaluations, the Cajon Pieline Project Corridor, Los Angeles and San Bernadino Counties, California	Mc Kenna et al.	19-000967, 19-001046
LA-02970		1992	Chamberlaine, Pat and Jean Rivers-Council	Cajon Pipeline Project Draft Environmental Impact Statement Environmental Impact Report	City of Adelanto, and Bureau of Land Management	19-000059, 19-000060, 19-000067, 19-000077, 19-000194, 19-000213, 19-000216, 19-000248, 19-000441, 19-000444, 19-000823, 19-000903, 19-000925, 19-000926, 19-000927, 19-000962, 19-001015, 19-001046, 19-001134, 19-001354, 19-001595, 56-000027, 56-000062, 56-000141, 56-000240, 56-000241, 56-000644, 56-000842, 56-000916, 56-000917
LA-03102		1994	McCawley, William, John Romani, and Dana Slawson	The Los Angeles County Drainage Area Subsequent Environmental Impact Report	Greenwood and Associates	19-000693, 19-000696
LA-03408		1994	Stickel, Gary E.	Draft Report: a Cultural Resources Literature Search for the Rio Hondo Water Reclamation Program	Environmental Research Archaeologists	
LA-05713		2002	Wlodarski, Robert J.	A Phase I Archaeological Study for Telacu Housing-pico Rivera, Inc., 9020-9054 Washington Boulevard Pico Rivera, Los Angeles County, California	Historical, Environmental, Archaeological, Research, Team	
LA-06933		2001	Mason, Roger D.	Cultural Resources Records Search and Literature Review Report for an American Tower Corporation Telecommunications Facility: Number La_510_m2 Matchless Parking Lot in the City of Pico Rivera, Los Angeles, California	Chambers Group, Inc.	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
LA-07871		2003	Tang, Bai "Tom" and Teresa Woodard	Historical Resource Compliance Report - Third Main Track and Grade Seperation Project Hobart (mp 148.9) to Basta (mp 163.3), Bnsf/metrolink East-west Main Line Railroad Track, Vernon to Fullerton, Los Angeles and Orange Counties, California	CRM Tech	19-186753, 19-186754, 19-186755, 19-186756, 19-186757, 19-186758, 19-186759, 19-186760, 19-186761, 19-186762, 19-186763, 19-186764, 19-186765, 19-186766, 19-186767, 19-186768, 19-186769, 19-186770, 19-186771, 19-186775, 19-186776, 19-186774, 19-186775, 19-186776, 19-186780, 19-186778, 19-186782, 19-186783, 19-186781, 19-186785, 19-186783, 19-186784, 19-186785, 19-186786, 19-186780, 19-186791, 19-186789, 19-186790, 19-186794, 19-186795, 19-186796, 19-186797, 19-186798, 19-186796, 19-186797, 19-186798, 19-186799, 19-186800, 19-186798, 19-186804, 30-176663
LA-08158		2006	Tang, Bai "Tom", Michael Hogan, and Deirdre Encarnacion	Archaeological Survey Report/historical Resources Evaluation Report: Passons Boulevard Grade Separation Project Bnsf/metrolink East-west Main Line Railroad Track (mp 151.45) City of Pico Rivera, Los Angeles County, California 07-la-0-prv	CRM Tech	19-186753, 19-186754, 19-186755, 19-186756, 19-186757, 19-186758, 19-186759, 19-186760, 19-186761, 19-186762, 19-186804, 30-176663
LA-10391		2009	Tang, Bai and Smallwood, Josh	Historical Resources Evaluation Report, Third Main Track Project, Segments 6, 7, and 8. Pico Rivera (MP) 150. to La Mirada (MP) 158.8, BNSF/Metrolink East- West Mainline Los Angeles County, California Caltrans District 7	CRM Tech	19-000182, 19-186804
LA-10440		2010	Maki, Mary	Phase I Archaeological Survey Report of Approximately 1.5 Acres for the Pico Rivera Library Project, Pico Rivera, Los Angeles County, California	Conejo Archaeological Consultants	
LA-11715		2012	Martorana, Dean	Verizon Wireless - Guild. 6440 Paramount Boulevard, Pico Rivera, Ca 90660	URS	19-000383, 19-190007

APPENDIX C – MOBILITY ASSESSMENT

MOBILITY ASSESSMENT

Pico Rivera Transit Oriented Development

PREPARED FOR:



CITY OF PICO RIVERA

NOVEMBER 2024 | DRAFT FINAL

Prepared By:



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1. INTRODUCTION

The following mobility assessment has been prepared to determine potential Level of Service (LOS) deficiencies associated with the proposed Washington and Rosemead TOD Specific Plan ("Project") in the City of Pico Rivera, CA. It is the intent for the mobility assessment, as part of this project, to provide an existing conditions analysis and future full buildout of the traffic operations at and near the Specific Plan area.

Figure 1 illustrates the location of the project site in relation to the adjacent roadway network. The Project site plan is presented in Figure 2.

This mobility assessment was prepared to address the Project's LOS effects in order to assist the City of Pico Rivera ("City") with planning and the identification of conditions of approval and to improve identified LOS deficiencies, if necessary. Since there are no planned projects within the Specific Plan at this time, a more detailed transportation operations analysis will be completed as each individual project is proposed.

The following discusses the methodology, analysis, and results of the traffic assessment.

STUDY METHODOLOGY

TRAFFIC OPERATIONS ANALYSIS

A transportation impact analysis was conducted to evaluate the Project's effect on LOS operations at nine (9) intersections within the project site and adjacent to the project site.

Study Area

The proposed project will generate new vehicular trips that may increase traffic volumes on the nearby street network. To assess changes in traffic conditions associated with the proposed project, the following intersections listed below were evaluated and are shown in **Figure 1**. The study intersections were selected based on the estimated vehicle trips generated by the project and the distribution of the trips to the roadway network.

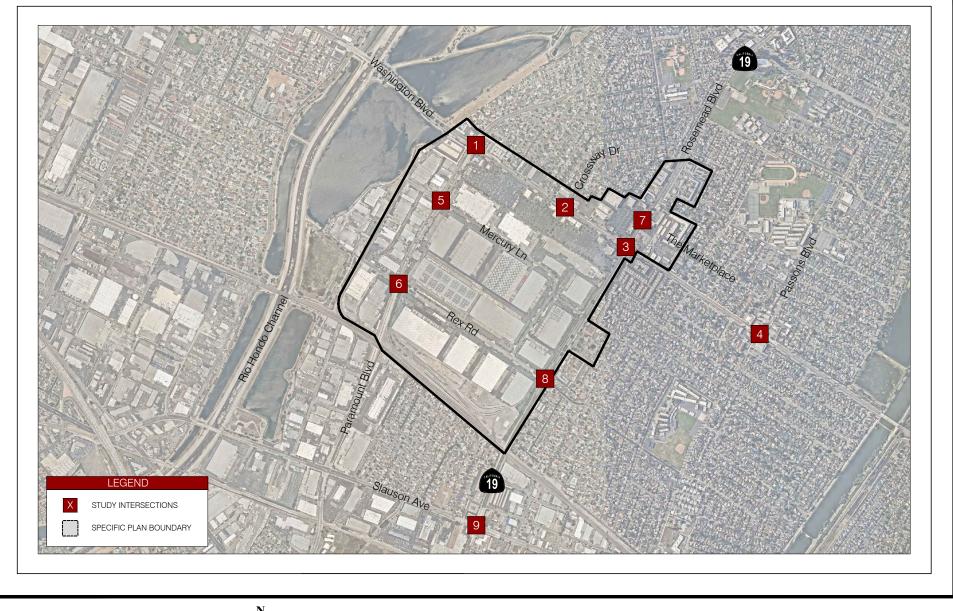
- 1. Washington Boulevard/Paramount Boulevard
- 2. Washington Boulevard/Crossway Drive
- 3. Washington Boulevard/Rosemead Boulevard
- 4. Washington Boulevard/Passons Boulevard
- 5. Mercury Lane/Paramount Boulevard
- 6. Rex Road/Paramount Boulevard
- 7. The Marketplace/Rosemead Boulevard
- 8. Rex Road/Rosemead Boulevard
- 9. Slauson Avenue/Rosemead Boulevard

Analysis Scenarios

This traffic analysis evaluated the following four (4) scenarios:

• **Existing conditions** – Based on existing traffic counts collected in 2023 and adjusted for pre-Covid conditions and existing roadway geometry and traffic control.

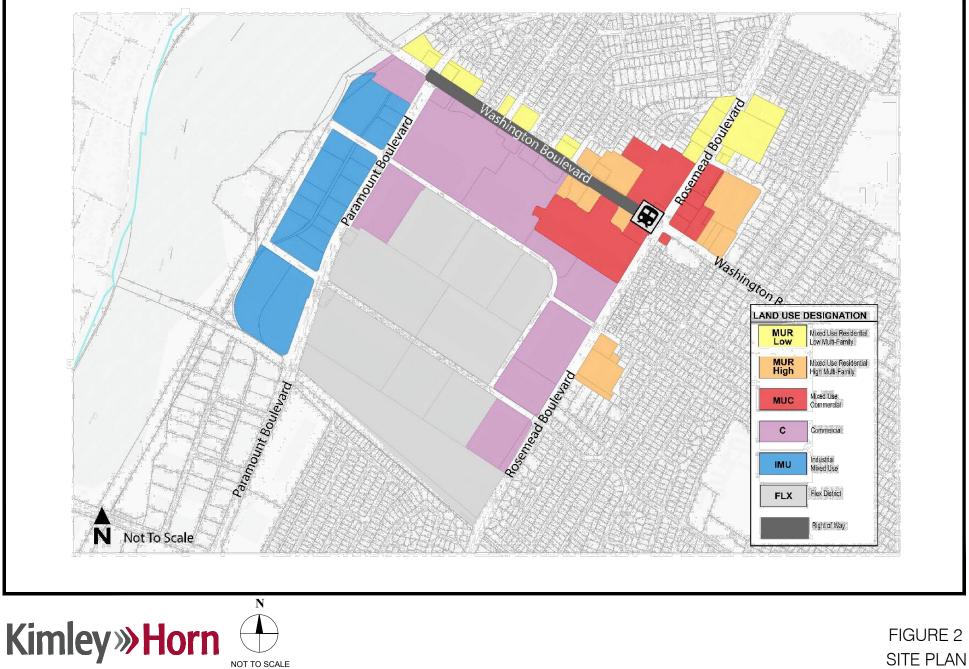
- Existing plus project traffic conditions Based on existing volumes and existing roadway geometry and traffic control plus the traffic generated by the Project.
- **Future conditions** Based growth rates from the Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) travel demand model and future roadway geometry and traffic control.
- Future plus project traffic conditions Based on future volumes and future roadway geometry and traffic control plus the traffic generated by the Project.



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FIGURE 1 PROJECT LOCATION AND STUDY INTERSECTIONS WASHINGTON/ROSEMEAD TOD SPECIFIC PLAN - CITY OF PICO RIVERA

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Level of Service Standards

Analysis of the study intersections and roadways were based on the concept of Level of Service (LOS), a qualitative measure used to describe operational conditions. LOS ranges from A (best), which represents minimal delay, to F (worst), which represents heavy delay and a facility that is operating at or near its functional capacity. Levels of service for this study were determined using methods defined in the *City of Pico Rivera Vehicle Miles Traveled (VMT) Transportation Study Guidelines*¹. For intersections, this methodology uses intersection capacity utilization (ICU) methodology, which is based on volume to capacity (v/c), to determine intersection LOS. For the roadway segments, the LOS was also determined based on a volume to capacity (v/c) analysis. **Table 1** relates the operational characteristics associated with each LOS category for signalized and unsignalized intersections.

Level of Service	Description	v/c Ratio
А	Free flow with no delays. Users are virtually unaffected by others in the traffic stream	x ≤ 0.60
В	Stable traffic. Traffic flows smoothly with few delays.	0.61 ≤ x ≤ 0.70
С	Stable flow but the operation of individual users becomes affected by other vehicles. Modest delays.	0.71 ≤ x ≤ 0.80
D	Approaching unstable flow. Operation of individual users becomes significantly affected by other vehicles. Delays may be more than one cycle during peak hours.	0.81 ≤ x ≤ 0.90
E	Unstable flow with operating conditions at or near the capacity level. Long delays and vehicle queuing.	0.91 ≤ x ≤ 1.00
F	Forced or breakdown flow that causes reduced capacity. Stop and go traffic conditions. Excessive long delays and vehicle queuing.	x ≥ 1.00

The v/c ratios for each study intersection were determined based on the *Highway Capacity Manual, 2000* (HCM 2000) outputs within Synchro analysis software. The v/c ratios for roadway segments were determined based on an assumed capacity of 1,400 passenger cars per hour per lane (pcphpl).

It should be noted that recent changes to the California Environmental Quality Act (CEQA) now recognizes vehicle miles traveled (VMT) as the primary standard of review for project impacts and is no longer based on intersection delay and LOS. Therefore, the LOS evaluation is provided for informational purposes only and to document the operational changes as a result of the project. The VMT evaluation has been provided in Chapter 4.

Operational deficiencies are outlined in **Table 3** of the *City of Pico Rivera Vehicle Miles Traveled (VMT) Transportation Study Guidelines.* **Table 2** summarizes the operational deficiencies for the City of Pico Rivera.

¹ City of Pico Rivera, *City of Pico Rivera Vehicle Miles Traveled (VMT) Transportation Study Guidelines*, November 2022.

Table 2 – Operational Deficiency Thresholds

Pre-Proje			
LOS	v/c	Project v/c Increase	
С	0.71 ≤ x ≤ 0.80	0.04 or more	
D	0.81 ≤ x ≤ 0.90	0.02 or more	
E	0.91 ≤ x ≤ 1.00	0.01 or more	
F	x ≥ 1.00	0.01 or more	

Source: City of Pico Rivera Vehicle Miles Traveled (VMT) Transportation Study Guidelines, City of Pico Rivera, November 2022.

REPORT ORGANIZATION

The remainder of the report is divided into the following chapters:

- Chapter 2: Existing Conditions describes existing conditions on the roadway network.
- Chapter 3: Project Description describes the project including project trip generation, distribution, and assignment.
- Chapter 4: Vehicles Miles Traveled describes the Project's Vehicle Miles Traveled (VMT) methodology, analysis, and results.
- Chapter 5: Traffic Operations Analysis describes intersection level of service analysis and roadway level of service
- Chapter 6: Roadway Segment Operations Analysis describes roadway segment analysis, related to roadway level of service.
- Chapter 7: Site Pedestrian, Bicycle, and Transit Circulation describes site circulation for the site related to pedestrian, bicycle, and transit users.
- Chapter 8: Conclusion summarizes potential deficiencies and improvements of the proposed project, if necessary.

2. EXISTING CONDITIONS

This chapter describes the existing conditions of the roadway network within the vicinity of the project site. The chapter also presents existing turning movement volumes and intersection levels of service.

EXISTING ROADWAY NETWORK

WASHINGTON BOULEVARD

Washington Boulevard is a 6-lane, east-west arterial that connects to Paramount Boulevard on the west end and to State Route 19 (SR-19) / Rosemead Boulevard on the east end. The roadway within the study area is three lanes in each direction with a raised center median. The land use along the corridor consists of mainly commercial. Within the study area, the speed limit on Washington Boulevard is 40 miles per hour.

PARAMOUNT BOULEVARD

Paramount Boulevard is a north-south arterial. It connects to Washington Boulevard to the north and Rex Road to the south. The roadway within the study area is two lanes in each direction and has a center raised median. It serves mainly industrial and commercial uses along the corridor. Within the study area, the speed limit on Paramount Boulevard is 45 miles per hour.

MERCURY LANE

Mercury Lane is a two-lane east-west collector between Paramount Boulevard and Rosemead Boulevard with a center two-way left-turn lane (TWLTL). The roadway continues as 'Stealth Parkway' past the stop controlled intersection at Danbridge Street and connects to Rex Road. The adjacent land use is mainly industrial. Within the study area, the speed limit on Mercury Lane is 35 miles per hour.

REX ROAD

Rex Road is a two-lane east-west collector between Paramount Boulevard and Rosemead Boulevard with a center two-way left-turn lane (TWLTL) that is not striped on the pavement. The land use along the corridor consists of mainly industrial. Within the study area, the speed limit on Rex Road is 35 miles per hour.

ROSEMEAD BOULEVARD

Rosemead Boulevard, also referred to as SR-19, is a four- to six-lane arterial with a raised center median within the project area. The land use along the corridor consists of commercial, industrial, and non-fronting residentials. Within the study area, the speed limit on Rosemead Boulevard is 40 miles per hour.

PASSONS BOULEVARD

Passons Boulevard is a four-lane, north-south arterial that runs parallel to Rosemead Boulevard. It connects to Washington Boulevard to the north and Slauson Avenue to the south. The roadway within the study area is two lanes in each direction and the adjacent land use along the corridor consists of commercial, industrial, residential, and a middle school. Within the study area, the speed limit on Passons Boulevard is 25 miles per hour.

SLAUSON AVENUE

Slauson Avenue is a six-lane arterial that runs parallel to Washington Blvd and crosses Paramount Boulevard and Rosemead Boulevard. The roadway within the study area is three lanes in each direction and the adjacent land use along the corridor consists of mainly commercial. Within the study area, the speed limit on Slauson Avenue is 40 miles per hour.

EXISTING TRANSIT FACILITIES

LA Metro and Montebello are two bus agencies that provide transit service to the project area. Only routes that service the nearby area of the project are described in this section. **Figure 3** shows the transit facilities in the project area. Schedules for each route are current as of November 2023, but may change due to COVID-19 or other external factors.

LA Metro - Line 265 is a bus route that operates between the Pico Rivera Plaza and the Lakewood Center Mall. In the vicinity of the project site, Line 265 operates on Paramount Boulevard. On weekdays, Line 265 operates between 5:04 AM and 8:59 PM in the northbound direction and between 5:35 AM and 9:33 PM in the southbound direction with 60-minute headways in both directions. On weekends and holidays, Line 265 operates between 7:25 AM and 8:21 PM in the northbound direction and between 7:52 AM and 8:52 PM in the southbound direction with 60-minute headways in both directions. The closest bus stop is on the intersection of Paramount Boulevard and Washington Boulevard.

LA Metro - Line 266 is a bus route that operates between Lakewood Center Mall and Sierra Madre Villa Station. In the vicinity of the project site, Line 265 operates on Rosemead Boulevard. On weekdays, Line 266 operates between 4:18 AM and 11:01 PM in the southbound direction and operates between 5:09 AM and 11:34 PM in the southbound direction with 20-minute headways in both directions. On weekends and holidays, Line 266 operates between 5:23 AM and 11:01 PM in the southbound direction and between 5:33 AM and 11:49 PM in the northbound direction with 30-minute headways in both directions. The closest bus stop to the project area is on Rosemead Boulevard and Whittier Boulevard.

Montebello – Line 50 is a bus route that operate between Downtown Los Angeles and the Whittier and La Mirada Theatre Center in La Mirada, California. Line 50 operates on Washington Boulevard and runs in the eastbound and westbound directions. Line 50's services on Washington Boulevard pertaining only to the project area, operates between 6:44 AM and 9:42 PM in the westbound direction and between 4:51 AM and 7:47 PM in the eastbound direction with approximately 45-minute headways in both directions. On the weekends, Line 50 operated between 6:13 AM and 9:12 PM in the westbound direction and between 4:26 AM and 6:45 PM in the eastbound direction with 60-minute headways in both directions. The closest bus stop area is at the intersections along Washington Boulevard at Rosemead Boulevard.

Montebello – Line 60 is a bus route that operate between the intersection of Telegraph Road and Arrington Avenue and San Gabriel Parkway. Line 60 operates on Passons Boulevard and runs in the northbound and southbound directions. Line 60's services on Passons Boulevard pertaining only to the project area, operates between 6:55 AM and 4:05 PM in the southbound direction and between 7:20 AM and 3:35 PM in the northbound directions. Line 60 does not operate on weekends. The closest bus stop area is at the intersection of Rosemead Boulevard and Whittier Boulevard.

EXISTING PEDESTRIAN FACILITIES

Existing pedestrian facilities in the project area include sidewalks on both sides along Washington Boulevard, Paramount Boulevard, Rosemead Boulevard, and Rex Road. Sidewalks also exist on south side of Rex Road. No sidewalks currently exist along the project frontage near the train tracks.

EXISTING BICYCLE FACILITIES

Bicycle facilities are divided into four classes. Class I bike paths are physically separated from motor vehicle lanes and are further divided into Class IA Multi-use Paths and Class IB Sidepaths. Class II bike lanes on roadways are marked by signage and pavement striping. Painted buffers may separate the vehicle travel lanes from the bike lane and green bike lane pavement coloring are used to highlight potential conflict zones between vehicles and cyclists. Class III bike routes share the travel lane with motor vehicles and have signs and sharrow striping to guide bicyclists on paved routes. Class IV bike facilities are protected cycle tracks that provide a physical barrier between motor vehicles and cyclists. **Figure 4** shows the bicycle facilities in the project area.

Direct access to bicycle facilities is proposed to the project site including Class II bike lanes along Rosemead Boulevard and Class III bike routes along Washington Boulevard, Paramount Boulevard, Passons Boulevard, and Slauson Avenue.

EXISTING LANE CONFIGURATION AND TRAFFIC CONTROL

Existing intersection lane configuration and traffic controls are illustrated in Figure 5.

EXISTING PEAK-HOUR TURNING MOVEMENT VOLUMES

Volumes are based on traffic counts collected in October 2023 during a typical weekday while local schools were in session and outside of any holidays. The traffic counts were compared to historical volumes provided by the City from 2019 and 2021. Volumes from 2021 were determined to be lower than the 2023 counts collected. However, 2019 volumes were determined to generally be greater than then 2023 counts collected. This is likely due to 2019 volumes being prior to COVID-19, which have generally been higher than current volumes. Therefore, the 2023 volumes were adjusted based on the percent difference between 2019 and 2023 volumes and are summarized in **Table 6**. No adjustments were made for roadways with volumes higher in 2023 than 2019. Existing peak hour turning movement volumes are shown in **Figure 6**.

Table 3 – Existing Volume Adjustment Factors

Roadway	AM Adjustment Factor	PM Adjustment Factor
Washington Boulevard between east of Paramount Blvd & Rosemead Rd	1.27	1.07
Paramount Boulevard between Slauson Ave & Washington Blvd	1.19	1.22
Passons Boulevard	Volumes higher in 2023,	Volumes higher in
between Slauson Ave & north of Washington Blvd	no adjustment.	2023, no adjustment.
Rosemead Boulevard between south of Slauson Ave & Washington Blvd	1.08	Volumes higher in 2023, no adjustment.
Rex Road between Rosemead Blvd & Paramount Blvd	1.56	1.48
Slauson Avenue between Paramount Blvd & Rosemead Blvd	1.01	Volumes higher in 2023, no adjustment.





FIGURE 3 EXISTING TRANSIT FACILTIES WASHINGTON/ROSEMEAD TOD SPECIFIC PLAN - CITY OF PICO RIVERA

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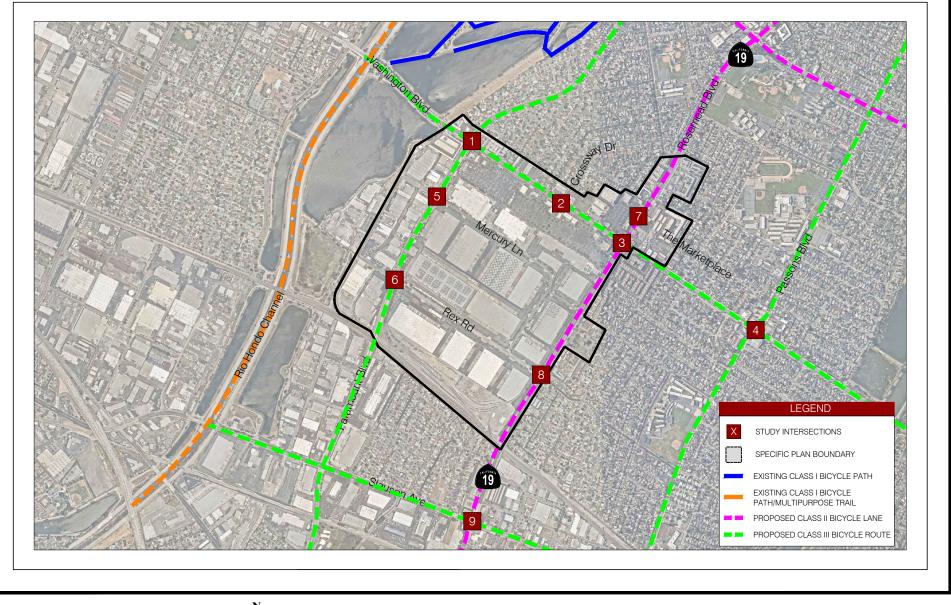




FIGURE 4 EXISTING BICYCLE FACILITIES WASHINGTON/ROSEMEAD TOD SPECIFIC PLAN - CITY OF PICO RIVERA

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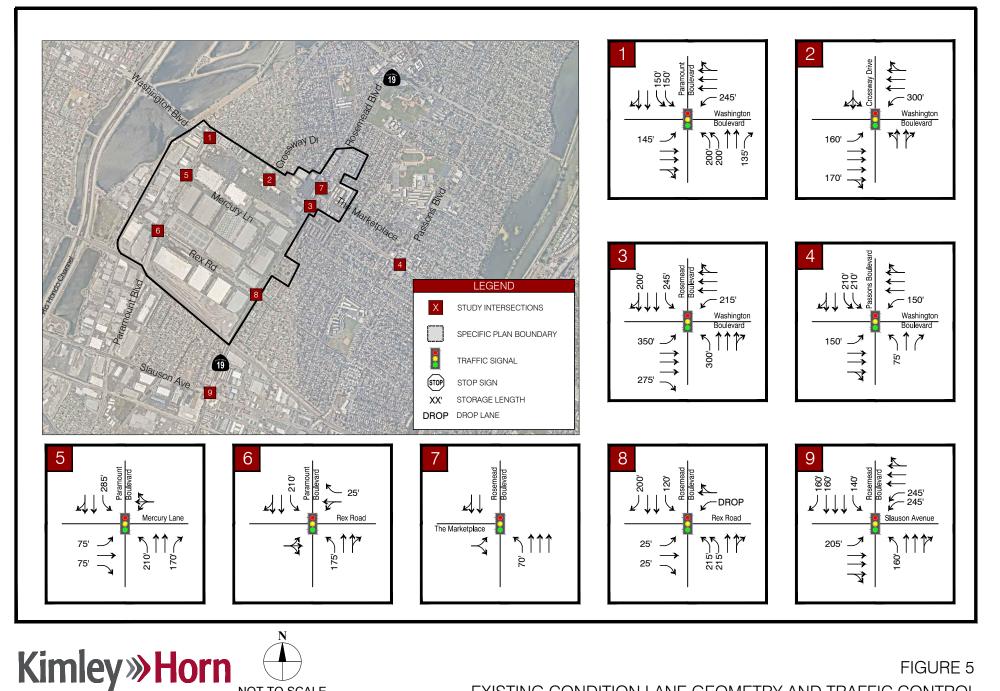
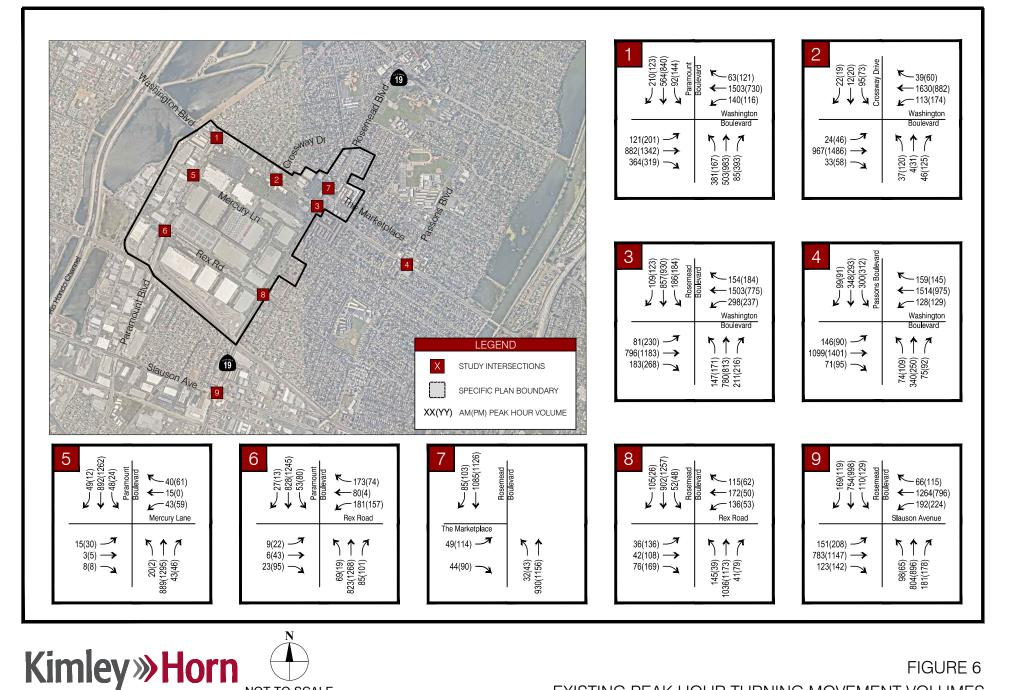


FIGURE 5 EXISTING CONDITION LANE GEOMETRY AND TRAFFIC CONTROL WASHINGTON/ROSEMEAD TOD SPECIFIC PLAN - CITY OF PICO RIVERA

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3. PROJECT DESCRIPTION

This chapter presents a description of the proposed site use, trip generation, trip distribution, and trip assignment for the proposed project on the transportation system.

PROPOSED SITE USE

The Washington and Rosemead TOD Specific Plan is defined by the general area of Crider Avenue, Rosemead Boulevard, BNSF railroad, and Washington Boulevard. There are portions of the Specific Plan Area that extend to the north of Washington Boulevard and east of Rosemead Boulevard. **Figure 2** shows the Specific Plan Area.

The existing land uses within the Specific Plan Area would potentially be redeveloped with the following land uses, separated into three blocks, as shown in **Figure 7**.

The existing land uses for each block are summarized in **Table 4** and proposed land uses for each block are summarized in **Table 5**. **Table 6** shows the difference in land use sizes between existing and proposed conditions.

Figure 7 – Proposed Land Uses and Blocks

	Revise		P LU Table		
	Acres	Density	Dwelling Units	FAR	SQFT
MURL	16.8	25.0	420	0.30	219,542.40
MURH	19.6	40.0	784	0.30	256,132.80
MUC	28.3	40.0	1132	0.30	369,824.40
С	75.9		7 .7.1)	0.50	1,653,102.00
IMU	39.5	1010	200	0.50	860,310.00
FLX	116.2		270	0.50	2,530,836.00
Washington Boulevard	8.81		220	10000	50%
Total	305.11	<u>100</u> 0	2336	102201	5,889,747.60

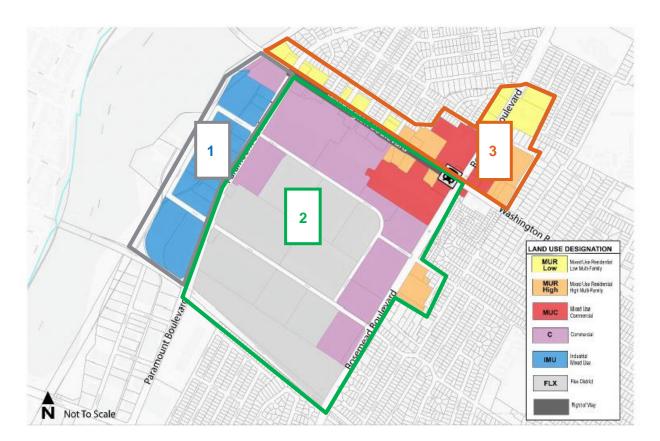


Table 4 – Existing Land Uses

Land Use	Units	Square Footage (KSF)
Block 1		
General Light Industrial	-	65.016
Manufacturing	-	773.314
Warehousing	-	362.523
Mini-Warehouse	-	137.974
Block 2		
Manufacturing	-	392.404
Warehousing	-	2,438.016
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit)	7	-
Motel	49	-
Nursing Home	10	-
Shopping Center (>150k)	-	977.656
Walk-in Bank	-	2.85
Block 3		
Multi-Family Housing (Low-Rise) (Not Close to Rail Transit)	323	-
Assisted Living	61	-
Motel	150	-
General Office Building	-	76.013
Shopping Center (>150k)	-	315.389
Strip Retail Plaza (<40k)	-	60.554
Liquor Store	-	1.854
Drive-in Bank	-	6.67
Fast Casual Restaurant	-	4.266
Fine Dining Restaurant	-	7.954
High-Turnover (Sit-Down) Restaurant	-	8.534
Fast-Food Restaurant with Drive-Through Window	-	3.012
Convenience Store/Gas Station	12	-

Table 5 – Proposed Land Uses

Land Use		Units	Square Footage (KSF)	
Block 1	_			
Commercial	Employment		24.206	
Commercial	Commercial		62.457	
Industrial Mixed Llas	Commercial		258.093	
Industrial Mixed Use	Industrial		602.217	
Block 2				
Commercial	Employment		437.530	
	Commercial		1,128.909	
Flex District	Employment		506.167	
	Industrial		2,024.669	
Mixed Use Residential High Multi-fami	ly	312	101.805	
Mixed Use Commercial		588	192,202	
Block 3				
Mixed Use Residential Low Multi-famil	420	219.542		
Mixed Use Residential High Multi-fami	ixed Use Residential High Multi-family			
Mixed Use Commercial		544	177.622	

Table 6 – Differences in Land Use Between Existing and Proposed Conditions

Land Use	∆ Units (Proposed – Existing)	∆ Square Footage (KSF) (Proposed – Existing)
Gas Station	-12 pumps	-
Motel	-199 rooms	
Residential	+1,935 dwelling units	-
Retail/Commercial	-	+906.219
Office	-	+891.890
General Light Industrial	-	+1959.653
General Industrial ¹	-	-3,502.014

¹Includes Manufacturing, Warehousing, and Industrial Mixed Use.

TRIP GENERATION

Trip generation for developments is typically calculated based on data from the Institute of Transportation Engineer's (ITE) *Trip Generation Manual, 11th Edition*². This is the standard reference for determining trip

² Trip Generation Manual, 11th Edition, Institute of Transportation Engineers, Washington D.C., 2022.

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generation for potential projects. Trip generation estimates for each land use listed for existing conditions and the proposed project were calculated. It should be noted that the trip generation rates and equations for each land use were determined from surveys collected at standalone projects and not within a shopping center or any other multi-use development. For some land uses an average rate and a fitted curve equation are provided for the sample data. The average rate was used to develop the existing and proposed trip generation for all uses.

Table 7 shows the trip generation rates to be used for the existing land uses in the weekday daily, weekday AM peak, and weekday PM peak. **Table 8** shows the trip generation rates to be used for the proposed land uses in the weekday daily, weekday AM peak, and weekday PM peak.

Landling	ITE	11	D - 11	AM	Peak H	our	PM	Peak H	our
Land Use	Code	Unit	Daily	Total	In	Out	Total	14% 31% 28% 47% 63% 63% 39% 54% 33% 17% 46% 50% 50% 50% 55% 67% 61% 52%	Out
General Light Industrial	110	KSF	4.87	0.74	88%	12%	0.65	14%	86%
Manufacturing	140	KSF	4.75	0.68	76%	24%	0.74	31%	69%
Warehousing	150	KSF	1.71	0.17	77%	23%	0.18	28%	72%
Mini-Warehouse	151	KSF	1.45	0.09	59%	41%	0.15	47%	53%
Single-Family Detached Housing	210	DU	9.43	0.7	25%	75%	0.94	63%	37%
Multi-Family Housing (Low- Rise)(Not Close to Rail Transit)	220	DU	6.74	0.4	24%	76%	0.51	63%	37%
Assisted Living	254	Beds	2.6	0.18	60%	10%	0.24	39%	61%
Motel	320	Rooms	3.35	0.35	37%	63%	0.36	54%	46%
Nursing Home	620	Beds	3.06	0.14	72%	28%	0.14	33%	67%
General Office Building	710	KSF	10.84	1.52	88%	12%	1.44	17%	83%
Building Materials and Lumber Store	812	KSF	17.05	1.59	62%	38%	2.25	46%	54%
Shopping Center (>150k)	820	KSF	37.01	0.84	62%	38%	3.4	48%	52%
Strip Retail Plaza (<40k)	822	KSF	54.45	2.36	60%	40%	6.59	50%	50%
Liquor Store	899	KSF	107.21	0.59	79%	21%	16.62	50%	50%
Walk-in Bank	911	KSF	100.35	9.95	58%	42%	12.13	44%	56%
Drive-in Bank	912	KSF	100.35	9.95	58%	42%	21.01	50%	50%
Fast Casual Restaurant	930	KSF	97.14	1.43	50%	50%	12.55	55%	75%
Fine Dining Restaurant	931	KSF	83.84	0.73	50%	50%	7.8	67%	33%
High-Turnover (Sit-Down) Restaurant	932	KSF	107.21	9.57	55%	45%	9.05	61%	39%
Fast-Food Restaurant with Drive-Through Window	934	KSF	467.48	44.61	51%	49%	33.03	52%	48%
Convenience Store/Gas Station	945	VFP	265.12	16.06	50%	50%	18.42	50%	50%

Table 7 –	Existing	Trip	Generation	Rates
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Table 8 – Proposed Use Trip Generation Rates

Land Use	ITE	Unit	Deily	AM Peak Hour			PM	Peak H	our
Land Use	Code	Unit	Daily	Total	In	Out	Total	In	Out
Multifamily Housing (Mid-Rise) Not Close to Transit	221	DU	4.54	0.37	23%	77%	0.39	61%	39%
Shopping Center (>150k)	820	KSF	37.01	0.84	62%	38%	3.4	48%	52%
General Office Building	710	KSF	10.84	1.52	88%	12%	1.44	17%	83%
General Light Industrial	110	KSF	4.87	0.74	88%	12%	0.65	14%	86%
Industrial Park	130	KSF	3.37	0.34	81%	19%	0.34	22%	78%
Strip Retail Plaza (<40k)	822	KSF	54.45	2.36	60%	40%	6.59	50%	50%

INTERNAL CAPTURE

With multi-use development there is potential for interaction among uses within the site. These types of trips are considered internal to the site and are "captured" within the site. The standard engineering reference for determining internal capture reductions for the proposed land uses is the ITE *Trip Generation Handbook, 3rd Edition*³. The following site specific characteristics of the proposed project as outlined in the ITE *Trip Generation* Handbook, 3rd Edition make it a good candidate for internal capture trip reductions:

- Internal street network and pedestrian connectivity: The proposed project is a mixed-use development with a well-integrated internal street network providing pedestrian and vehicle connectivity for easy access between land uses. Motorists will be able to travel between the land uses without leaving the project site and thereby creating external trips.
- Project size: The proposed project is also a prime candidate for internal capture reductions because the project size is between the 100,000 square feet to 2 million square feet of building space that ITE recommends. The data in the *Trip Generation Handbook, 3rd Edition* corresponds to this range in building size.
- Complimentary land uses: The land uses also include a combination of residential, retail, office, and industrial. The complimentary land uses allow for a believable interaction between the proposed land uses.
- No competing markets: The proposed project location is secluded from any adjacent competing markets, making the likelihood higher for capturing trips internally within the mixed-use development site.

Internal capture reductions within the blocks and between the blocks were included. For existing trips, internal capture reductions result in 21 percent reduction in daily trips, 24 percent reduction in AM peak hour trips, and 17 percent reduction in PM peak hour trips. For proposed trips, internal capture reductions result in 12 percent reduction in daily trips, 8 percent reduction in AM peak hour trips, and 14 percent reduction in PM peak hour trips.

³ *Trip Generation Handbook, 3rd Edition*, Institute of Transportation Engineers, Washington D.C., August 2014.

TRANSIT REDUCTION

As part of the proposed project, the Gold Line Eastside Rail will be extended along Washington Boulevard to Whittier Boulevard. Since it can be assumed that the rail extension would result in a higher transit mode, a transit reduction was applied to the proposed project trip generation. The guidelines for determining the transit reduction percentage were taken from the City of Los Angeles Transportation Assessment Guidelines, which state that development adjacent to a dedicated transit line station with convenient pedestrian access to the station may qualify for a maximum 25 percent trip generation adjustment. Therefore, a 25 percent transit reduction was applied to the proposed trip generation. For the existing trip generation, a 10% transit reduction was taken since the project is within 1/4 mile of a public bus stop.

PASS-BY TRIPS

Due to the nature of the proposed uses, there will be pass-by trips to the project. Pass-by trips represent trips already on the road which stop as they pass by the site as a matter of convenience on their path to another destination. These trips enter and exit the site at the driveways but are not new trips on the external street and roadway network.

The most complete source of data regarding average pass-by rates for various land uses is found in *Trip Generation Handbook*. The rates published by ITE are based on numerous studies by professional transportation engineers throughout the country. ITE methodology states that when determining the passby rate to use for each land use, one should begin by using the fitted curve equation for each land use in Appendix F. However, there is no fitted curve equation on any of the land use data plots because there are either less than 10 data points available or the R² value is less than 0.5. If there is no fitted curve equation, then the average rate is the next best starting point, if the sample consists of at least three data points and the size of the study is within the range of data points provided.

Pass-by reductions were applied to the restaurant and retail uses. For existing trips, pass-by reductions result in 14 percent reduction in daily trips, 7 percent reduction in AM peak hour trips, and 20 percent reduction in PM peak hour trips. For proposed trips, pass-by reductions result in 8 percent reduction in daily trips, no reduction in AM peak hour trips, and 15 percent reduction in PM peak hour trips. There is no pass-by percentage stated for the residential, office, or industrial uses. Therefore, no pass-by reductions will be assumed in the analysis for these uses.

NET TRIP GENERATION

For existing trips, the internal capture, transit, and pass-by reductions result in a total of 39 percent reduction in daily trips, 36 percent reduction in AM peak hour trips, and 40 percent reduction in PM peak hour trips. This results in a total of 29,904 daily trips, 1,849 AM peak hour trips, and 3,010 PM peak hour trips.

For proposed trips, the internal capture, transit, and pass-by reductions result in a total of 40 percent reduction in daily trips, 31 percent reduction in AM peak hour trips, and 46 percent reduction in PM peak hour trips. Note that the sum of the individual percent reductions from each type of reduction does not equal the total percent reduction since the reductions are based on the number of trips after the previous reduction has been applied. This results in a total of 71,294 daily trips, 4,105 AM peak hour trips, and 6,330 PM peak hour trips. A full summary of the existing trip generation can be found in **Appendix A** and the proposed trip generation can be found in **Appendix B**.

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

The Project's trip distribution was estimated based on the project access locations, freeway access, and roadway network within the study area. The following provides the trip distribution assumptions used for this project:

- 25% to/from the east along Washington Boulevard
- 15% to/from the west along Washington Boulevard
- 5% to/from the north along Paramount Boulevard
- 15% to/from the south along Paramount Boulevard
- 5% to/from the north along Rosemead Boulevard
- 15% to/from the south along Rosemead Boulevard
- 5% to/from the north along Passons Boulevard
- 5% to/from the south along Passons Boulevard
- 5% to/from the east along Slauson Avenue
- 5% to/from the west along Slauson Avenue

Figure 8 presents the trip distribution assumed for the project.

Based on the assumed trip distribution, the volumes generated by the project were assigned to the roadway network. Trip assignment to the project driveways was based on the on-site circulation and available movements for each driveway. **Figure 9** presents the project's AM and PM peak hour trip assignment.

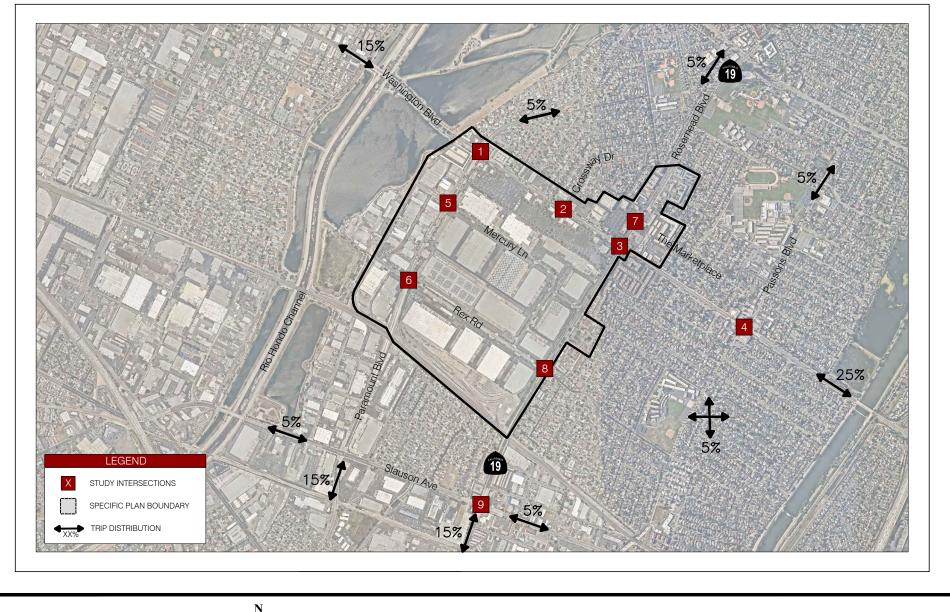
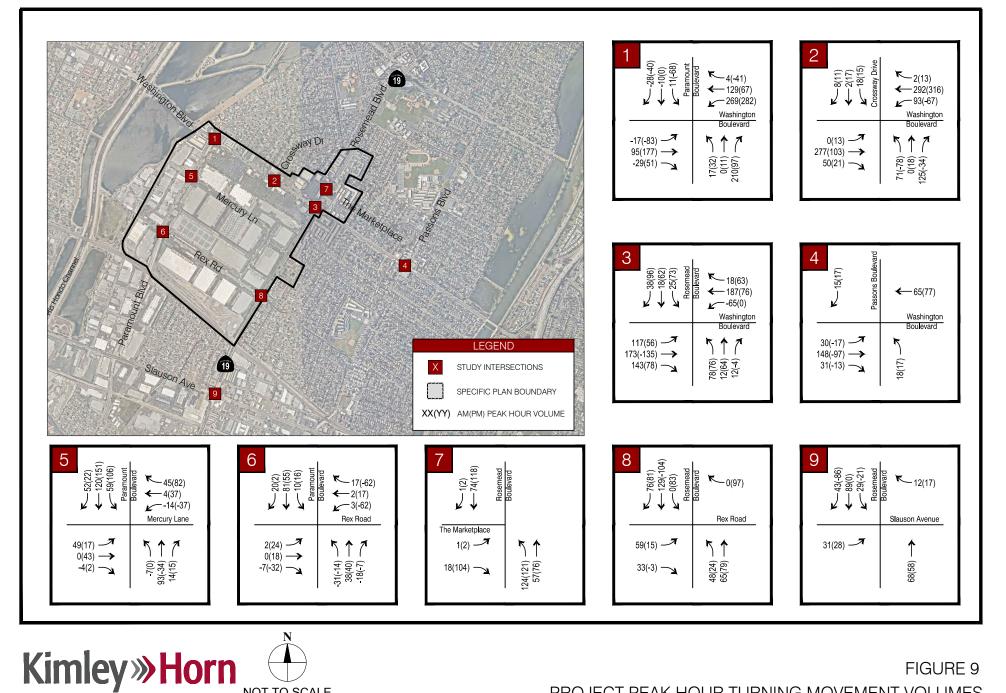




FIGURE 8 PROJECT TRIP DISTRIBUTION WASHINGTON/ROSEMEAD TOD SPECIFIC PLAN - CITY OF PICO RIVERA

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4. VEHICLE MILES TRAVELED (VMT)

This chapter summarizes the Project's Vehicle Miles Traveled (VMT) methodology, analysis, and results.

VMT METHODOLOGY

The City has adopted VMT guidelines and a methodology for determining VMT impacts in the City of Pico Rivera *Vehicles Miles Traveled (VMT) Transportation Study Guidelines*. These guidelines are based on the Governor's Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA⁴ to determine potential impacts under Senate Bill (SB) 743. The VMT guidelines describe VMT screening criteria, which if met, the project would be exempt from further VMT analysis. It should be noted that only one screening criteria needs to be met to be then exempt from further VMT analysis.

VMT SCREENING ANALYSIS

Of the screening categories described in the City's Transportation Study Guidelines, the Project would meet the transit proximity criteria:

For existing baseline projects that are located within a ½-mile of where two or more 15-minute (during commute hours) bus routes intersect or within a ½-mile of a corridor served by 15-minute (during commute hours) bus service may be eligible. Future baseline conditions would also include the area located within a ½-mile of the Eastside Transit Corridor Phase 2 Project. In addition, the project should meet the following criteria:

- A Floor Area Ratio (FAR) of 0.75 or greater
- Is consistent with the applicable SCAG Sustainable Community Strategy (SCS) (as determined by the City)
- Does not provide more parking than required by the City
- Does not replace affordable housing units

The proposed Project is to be located within a ½-mile of the future Eastside Transit Corridor Phase 2 Project. Since the project is planned to be transit-oriented development that is centered around the future Rosemead transit station along the Eastside Transit Corridor, this project satisfies the initial transit proximity criteria. In addition, the project will have a FAR of 0.75 or greater, will be consistent with the SCS, provide less than or equal to the required City parking, and does not replace affordable housing. Therefore, the proposed project will meet the VMT screening criteria and have a **less than significant impact** for transportation.

⁴ Technical Advisory on Evaluating Transportation Impacts in CEQA, Governor's Office of Planning and Research, December 2018.

5. TRAFFIC OPERATIONS ANALYSIS

This chapter will discuss the traffic operations analysis that was conducted to determine the effect of the proposed project on the transportation system. The operations analysis includes intersection level of service.

EXISTING CONDITIONS

Existing conditions represent operations based on the existing roadway configuration (**Figure 5**) and existing volumes (**Figure 6**).

INTERSECTION LEVEL OF SERVICE

Traffic operations were evaluated at the study intersections under existing traffic conditions. Results of the analysis are presented in **Table 9**. Analysis sheets are provided in **Appendix C**.

EXISTING PLUS PROJECT CONDITIONS

LANE GEOMETRY AND CONTROL

The project is not proposing any roadway improvements at any study intersection and therefore Existing Plus Project conditions assumed existing lane geometry as illustrated in **Figure 5**.

TRAFFIC VOLUMES

As described in Chapter 3, the Project trip generation includes existing trip credits and proposed trips. For existing trip credits, the project will have a total of 29,904 daily trips, 1,849 AM peak hour trips, and 3,010 PM peak hour trips removed from the baseline scenarios. For proposed trips, the project will generate 71,294 daily trips, 2,944 AM peak hour trips, and 2,414 PM peak hour trips. After combining the existing trip credits and the proposed trip generation, the project is estimated to generate a net +41,390 daily trips, +2,256 AM peak hour trips, and +3,320 PM peak hour trips.

Existing Plus Project volumes were determined by adding the total project traffic, **Figure 9**, to the Existing conditions volumes, **Figure 6**. Existing Plus Project peak hour volumes are shown in **Figure 10**.

INTERSECTION LEVEL OF SERVICE

Existing Plus Project traffic conditions were evaluated at the study intersections. Results are presented in **Table 9**. All study intersections function within acceptable LOS standards under this analysis scenario except for the following intersections:

- Intersection #1 Paramount Boulevard / Washington Boulevard (AM and PM Peak Hours)
- Intersection #3 Rosemead Boulevard / Washington Boulevard (AM and PM Peak Hours)
- Intersection #4 Passons Boulevard / Washington Boulevard (AM Peak Hour)
- Intersection #9 Rosemead Boulevard / Slauson Avenue (AM Peak Hour)

These are considered intersection deficiencies because the Project V/C increase exceeds the threshold listed in **Table 2**. Analysis sheets are provided in **Appendix C**.

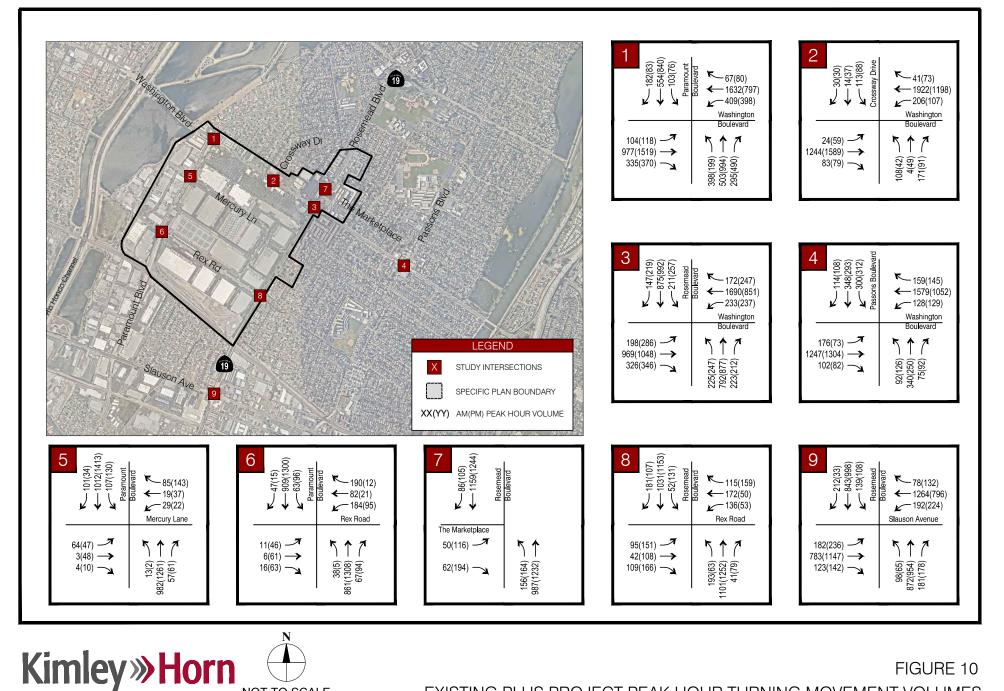


FIGURE 10 EXISTING PLUS PROJECT PEAK HOUR TURNING MOVEMENT VOLUMES WASHINGTON/ROSEMEAD TOD SPECIFIC PLAN - CITY OF PICO RIVERA

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					Exis	sting			E	Existing F	Plus Project			
#	Intersection	Jurisdiction	Control	AM Peak		PM Peak		AM Peak			PM Peak		ık	
				LOS	v/c	LOS	v/c	LOS	v/c	Var	LOS	v/c	Var	
1	Paramount Boulevard / Washington Boulevard	City	Signal	Е	0.98	Е	0.95	F	1.14	0.16	F	1.19	0.24	
2	Crossway Drive / Washington Boulevard	City	Signal	В	0.64	Α	0.58	С	0.80	0.16	Α	0.57	-0.01	
3	Rosemead Boulevard / Washington Boulevard	City	Signal	Е	0.98	D	0.87	F	1.17	0.19	Е	0.98	0.11	
4	Passons Boulevard / Washington Boulevard	City	Signal	Е	0.95	С	0.75	Е	0.98	0.03	С	0.72	-0.03	
5	Paramount Boulevard / Mercury Lane	City	Signal	А	0.51	А	0.60	В	0.64	0.13	D	0.82	0.22	
6	Paramount Boulevard / Rex Road	City	Signal	В	0.67	D	0.83	В	0.67	0.00	С	0.78	-0.05	
7	Rosemead Boulevard / The Marketplace	City	Signal	В	0.61	В	0.65	С	0.72	0.11	С	0.80	0.15	
8	Rosemead Boulevard / Rex Road	City	Signal	В	0.66	В	0.70	С	0.77	0.11	D	0.82	0.12	
9	Rosemead Boulevard / Slauson Avenue	City	Signal	D	0.86	D	0.83	Е	0.93	0.07	D	0.84	0.01	

Table 9 – Existing and Existing Plus Project Peak Hour LOS Summary

Note: Project deficiencies are BOLD and shaded.

CUMULATIVE CONDITIONS

LANE GEOMETRY

Under Cumulative conditions, no roadway improvements were assumed, therefore existing lane geometry was assumed as shown in **Figure 5**.

TRAFFIC VOLUMES

To account for future development and growth within the study area and the City, the Cumulative traffic volumes were developed by determining volume growth between the base year and future year models from the Southern California Association of Governments (SCAG) travel demand model. Existing and future year model outputs were acquired for the roadway links in the study area. These link volumes were then used to calculate the link volume difference between the base year and future year. Future intersection turning movement volumes were then calculated using the Furnessing method, which is an iterative process to determine future link volumes. The volumes were reviewed to ensure that there would be no decrease in volumes from Existing to the Cumulative year. There were exceptions, which included rerouting of future volumes on new roadways (e.g., Serapis Avenue connects across the railroad tracks just north of Perkins Street), which would account for a decrease in volumes on adjacent roadways. Except for those locations, volumes that should not decrease were conservatively assumed to equal the Existing volume. Cumulative peak hour volumes are presented in **Figure 11**.

INTERSECTION LEVEL OF SERVICE

Cumulative volumes were evaluated at the study intersections. Results are presented in **Table 10**. Analysis sheets are provided in **Appendix C.**

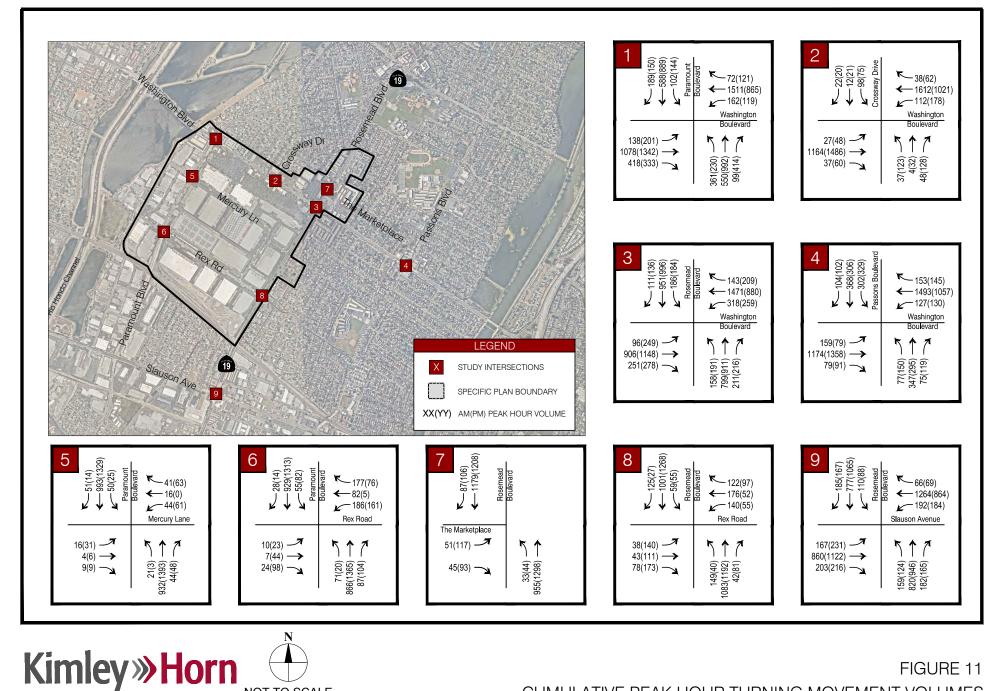


FIGURE 11 CUMULATIVE PEAK HOUR TURNING MOVEMENT VOLUMES WASHINGTON/ROSEMEAD TOD SPECIFIC PLAN - CITY OF PICO RIVERA

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					Cumu	ulative			Cu	mulative	Plus P	roject	
#	Intersection	Jurisdiction	Control	AM Peak PM Peak		AM Peak			PM Peak				
				LOS	v/c	LOS	v/c	LOS	v/c	Var	LOS	v/c	Var
1	Paramount Boulevard / Washington Boulevard	City	Signal	E	0.98	F	1.00	F	1.13	0.15	F	1.23	0.23
2	Crossway Drive / Washington Boulevard	City	Signal	Α	0.60	А	0.56	С	0.76	0.16	А	0.58	0.02
3	Rosemead Boulevard / Washington Boulevard	City	Signal	E	0.97	D	0.87	F	1.06	0.09	F	1.01	0.14
4	Passons Boulevard / Washington Boulevard	City	Signal	D	0.87	С	0.76	ш	0.91	0.04	С	0.73	-0.03
5	Paramount Boulevard / Mercury Lane	City	Signal	Α	0.49	А	0.57	А	0.60	0.11	В	0.67	0.10
6	Paramount Boulevard / Rex Road	City	Signal	В	0.66	С	0.79	В	0.68	0.02	С	0.75	-0.04
7	Rosemead Boulevard / The Marketplace	City	Signal	Α	0.60	В	0.68	В	0.70	0.1	D	0.83	0.15
8	Rosemead Boulevard / Rex Road	City	Signal	В	0.68	В	0.66	С	0.77	0.09	С	0.78	0.12
9	Rosemead Boulevard / Slauson Avenue	City	Signal	D	0.85	D	0.87	D	0.90	0.05	D	0.89	0.02

Table 10 – Cumulative and Cumulative Plus Project Peak Hour LOS Summary

Note: Project deficiencies are BOLD and shaded.

CUMULATIVE PLUS PROJECT

LANE GEOMETRY AND CONTROL

The project is not proposing any roadway improvements at any study intersection and therefore Cumulative Plus Project conditions assumed existing lane geometry as illustrated in **Figure 5**.

TRAFFIC VOLUMES

Similar to the Project trips in Existing plus Project, the project is estimated to generate a net +41.390 daily trips, +2,256 AM peak hour trips, and +3,320 PM peak hour trips. Cumulative Plus Project volumes were determined by adding the net project traffic, **Figure 9**, to the Cumulative conditions volume, **Figure 11**. Cumulative Plus Project peak hour volumes are shown in **Figure 12**.

INTERSECTION LEVEL OF SERVICE

Cumulative Plus Project traffic conditions were evaluated at the study intersections. Results are presented in **Table 10**. All study intersections function within acceptable LOS standards under this analysis scenario except for the following intersections:

- Intersection #1 Paramount Boulevard / Washington Boulevard (AM and PM Peak Hours)
- Intersection #3 Rosemead Boulevard / Washington Boulevard (AM and PM Peak Hours)
- Intersection #4 Passons Boulevard / Washington Boulevard (AM Peak Hour)
- Intersection #9 Rosemead Boulevard / Slauson Avenue (AM Peak Hour)

These are considered intersection deficiencies because the Project V/C increase exceeds the threshold listed in **Table 2**. Analysis sheets are provided in **Appendix C**.

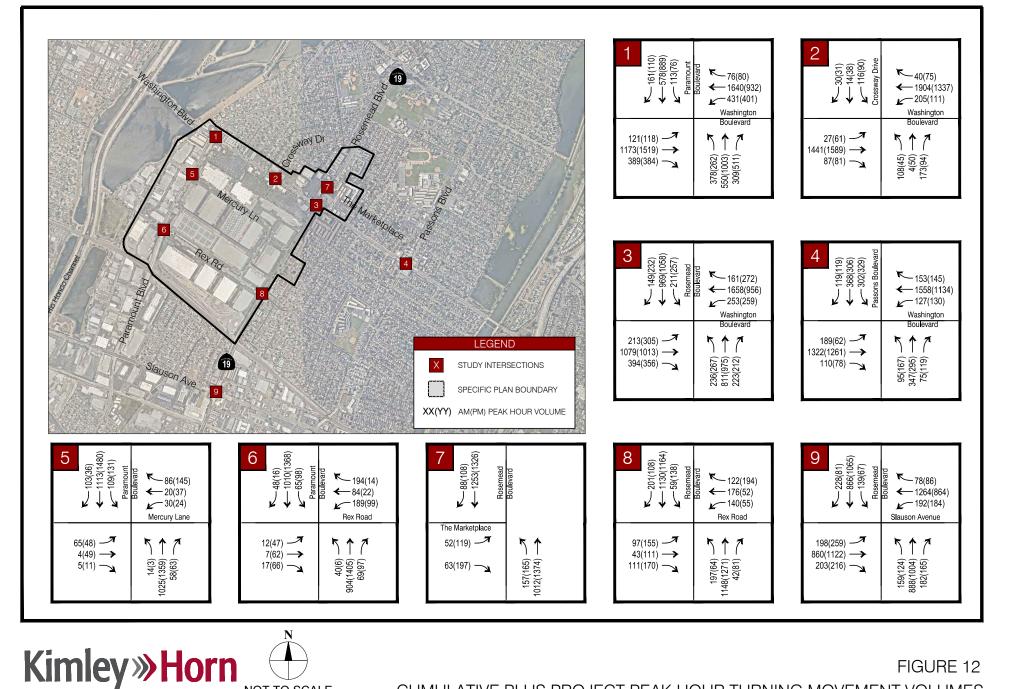


FIGURE 12 CUMULATIVE PLUS PROJECT PEAK HOUR TURNING MOVEMENT VOLUMES WASHINGTON/ROSEMEAD TOD SPECIFIC PLAN - CITY OF PICO RIVERA

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6. ROADWAY SEGMENT OPERATIONS ANALYSIS

This chapter presents the results of the roadway analysis under Existing and Cumulative Conditions, with and without the Project, in the peak hours. The following roadway segments were analyzed:

- 1. Washington Boulevard between Paramount Boulevard and Rosemead Boulevard
- 2. Washington Boulevard between Rosemead Boulevard and Passons Boulevard
- 3. Rosemead Boulevard between Washington Boulevard and Balfour Street
- 4. Rosemead Boulevard between Washington Boulevard and Rex Road

Traffic volumes and the number of lanes in each direction were used to determine the segment v/c ratio. It is assumed that the capacity of the roadway segment is 1,400 vphpl. This assumption was based on the total capacity of a 50/50 directional split two-lane roadway, 2,800 passenger cars per hour, as specified in the *City of Pico Rivera Vehicle Miles Traveled (VMT) Transportation Study Guidelines.*

Table 11 and **Table 12** summarizes the Existing and Existing Plus Project roadway segment analysis in the AM and PM peak hours, respectively.

Table 13 and **Table 14** summarizes the Cumulative and Cumulative Plus Project roadway segment analysisin the AM and PM peak hours, respectively.

Based on the analysis, all roadway segments operate at an acceptable LOS.

		# of	Capacity		Existing AM Peak Hour			Existing plus Project AM Peak Hour				
Location	Limits	Lanes	(vph)	Volume (vph)	LOS	V/C	Project Generated Trips	Volume (vph)	LOS	V/C	∆ V/C	
		Arterial	Segment									
ER Weshington Roulevard	Paramount Blvd to Rosemead Blvd	3	4,200	1,108	Α	0.264	327	1,435	Α	0.342	0.078	
EB Washington Boulevard	Rosemead Blvd to Passons Blvd	3	4,200	1,316	Α	0.313	210	1,526	Α	0.363	0.050	
M/D Mashington Douloverd	Rosemead Blvd to Passons Blvd	3	4,200	1,955	Α	0.465	140	2,095	Α	0.499	0.033	
WB Washington Boulevard	Paramount Blvd to Rosemead Blvd	3	4,200	1,782	Α	0.424	402	2,184	А	0.520	0.096	
NP December d Pouloverd	Rex Rd to Washington Blvd	2	2,800	1,187	Α	0.424	124	1,311	А	0.468	0.044	
NB Rosemead Boulevard	Washington Blvd to Balfour St	2	2,800	1,015	Α	0.363	181	1,196	Α	0.427	0.065	
SB Rosemead Boulevard	Washington Blvd to Balfour St	2	2,800	1,170	Α	0.418	92	1,262	А	0.451	0.033	
	Rex Rd to Washington Blvd	2	2,800	1,338	Α	0.478	205	1,543	А	0.551	0.073	

Table 11 – Existing and Existing Plus Project AM Peak Hour Roadway Segment Summary

Note: Assumed capacity of 1,400 vehicle per hour per lane

Table 12 – Existing and Existing Plus Project PM Peak Hour Roadway Segment Summary

		# of	Conositu	Existing PM P Hour			Existing	plus Project PM Peak Hour				
Location	Limits	Lanes	(vph)	Volume (vph)	LOS	V/C	Project Generated Trips	Volume (vph)	LOS	V/C	∆ V/C	
		Arterial	Segment									
EB Mashington Baulayard	Paramount Blvd to Rosemead Blvd	3	4,200	1,879	Α	0.447	206	2,085	А	0.496	0.049	
EB Washington Boulevard	Rosemead Blvd to Passons Blvd	3	4,200	1,586	Α	0.378	-66	1,520	А	0.362	-0.016	
WB Washington Boulevard	Rosemead Blvd to Passons Blvd	3	4,200	1,196	Α	0.285	139	1,335	А	0.318	0.033	
WB Washington Boulevard	Paramount Blvd to Rosemead Blvd	3	4,200	1,116	Α	0.266	32	1,148	А	0.273	0.008	
NB Rosemead Boulevard	Rex Rd to Washington Blvd	2	2,800	1,371	Α	0.490	21	1,392	А	0.497	0.008	
IND Roselliead Boulevard	Washington Blvd to Balfour St	2	2,800	1,270	Α	0.454	197	1,467	А	0.524	0.070	
SB Rosemead Boulevard	Washington Blvd to Balfour St	2	2,800	1,237	Α	0.442	231	1,468	А	0.524	0.083	
SB Rusemeau Boulevalu	Rex Rd to Washington Blvd	2	2,800	1,435	Α	0.513	140	1,575	А	0.563	0.050	

Note: Assumed capacity of 1,400 vehicle per hour per lane

		# of	of Capacity Cumulative AM Peak			Cumulat	Cumulative plus Project AM Peak Hour				
Location	Limits	Lanes	(vph)	Volume (vph)	LOS	V/C	Project Generated Trips	Volume (vph)	LOS	V/C	∆ V/C
		Arteria	Segment								
EB Washington Baulayard	Paramount Blvd to Rosemead Blvd	3	4,200	1,279	Α	0.305	327	1,606	Α	0.382	0.078
EB Washington Boulevard	Rosemead Blvd to Passons Blvd	3	4,200	1,412	Α	0.336	210	1,622	Α	0.386	0.050
WB Washington Boulevard	Rosemead Blvd to Passons Blvd	3	4,200	1,932	Α	0.460	140	2,072	Α	0.493	0.033
	Paramount Blvd to Rosemead Blvd	3	4,200	1,758	Α	0.419	402	2,160	Α	0.514	0.096
NB Rosemead Boulevard	Rex Rd to Washington Blvd	2	2,800	1,239	А	0.443	124	1,363	А	0.487	0.044
NB Rosellieau Boulevalu	Washington Blvd to Balfour St	2	2,800	1,038	А	0.371	181	1,219	А	0.435	0.065
SB Rosemead Boulevard	Washington Blvd to Balfour St	2	2,800	1,264	Α	0.451	92	1,356	Α	0.484	0.033
SB Rosemeau Boulevalu	Rex Rd to Washington Blvd	2	2,800	1,520	Α	0.543	205	1,725	В	0.616	0.073

Table 13 – Cumulative and Cumulative Plus Project AM Peak Hour Roadway Segment Summary

Note: Assumed capacity of 1,400 vehicle per hour per lane

Table 14 – Cumulative and Cumulative Plus Project PM Peak Hour Roadway Segment Summary

		# 66	Consoitu	Cumulat	ive AN Hour	l Peak	Cumulative plus Project AM Peak Hour				
Location	Limits	# of Lanes	Capacity (vph)	Volume (vph) LOS V/C		V/C	Project Generated Trips	Volume (vph)	LOS	V/C	∆ V/C
		Arteria	I Segment								
ED Mechington Boulevord	Paramount Blvd to Rosemead Blvd	3	4,200	1,900	Α	0.452	206	2,106	А	0.501	0.049
EB Washington Boulevard	Rosemead Blvd to Passons Blvd	3	4,200	1,548	Α	0.369	-66	1,482	Α	0.353	-0.016
WB Washington Boulevard	Rosemead Blvd to Passons Blvd	3	4,200	1,348	А	0.321	139	1,487	А	0.354	0.033
WB Washington Boulevard	Paramount Blvd to Rosemead Blvd	3	4,200	1,255	А	0.299	32	1,287	А	0.306	0.008
NB Rosemead Boulevard	Rex Rd to Washington Blvd	2	2,800	1,422	А	0.508	21	1,443	А	0.515	0.007
IND ROSellieau Boulevalu	Washington Blvd to Balfour St	2	2,800	1,412	А	0.504	197	1,609	А	0.575	0.070
SB Rosemead Boulevard	Washington Blvd to Balfour St	2	2,800	1,316	Α	0.470	231	1,547	А	0.553	0.083
SB Rosemeau Boulevalu	Rex Rd to Washington Blvd	2	2,800	1,533	Α	0.548	140	1,673	А	0.598	0.050

Note: Assumed capacity of 1,400 vehicle per hour per lane

7. SITE PEDESTRIAN, BICYCLE, AND TRANSIT CIRCULATION

This section discusses pedestrian facilities, bicycle facilities, and transit recommendations for the project. At this time, the Washington and Rosemead TOD Specific Plan is a preliminary plan and therefore many of the project components are undefined. Therefore, this chapter will make recommendations for pedestrian, bicycle, and transit circulation.

PEDESTRIAN FACILITIES

The Project should construct sidewalks within the Specific Plan and along its border to ensure there are no gaps in the pedestrian network. New sidewalks should connect and conform to existing sidewalks and crosswalks adjacent the site to allow residents, employees, and patrons access to nearby transit facilities, as well as residential and commercial uses surrounding the project site. In addition, the project should not conflict with City and other local plans, ordinances, or policies as it relates to pedestrian facilities that would result in a significant impact.

BICYCLE FACILITIES

The Project should provide bicycle connectivity within the Specific Plan and along its border to ensure there are no gaps in the bicycle network. New bicycle facilities should connect and conform to existing bicycle facilities adjacent the site to allow residents, employees, and patrons access to nearby transit facilities, as well as residential and commercial uses surrounding the project site. In addition, the project should not conflict with City and other local plans, ordinances, or policies as it relates to bicycle facilities that would result in a significant impact.

TRANSIT

The Project should provide transit connectivity between the Specific Plan and the adjacent transit network. This project will be planned around the future Rosemead transit station. The project should provide pedestrian and bicycle connectivity to this future transit station. In addition, the project should not conflict with City and other local plans, ordinances, or policies as it relates to transit facilities that would result in a significant impact.

8. CONCLUSION

This section summarizes the results and recommendations of this TIA.

PROJECT IMPACTS AND MITIGATIONS

As discussed previously in Chapter 4, the proposed Project is to be located within a ½-mile of the future Eastside Transit Corridor Phase 2 Project. Since the project is planned to be transit-oriented development that is centered around the future Rosemead transit station along the Eastside Transit Corridor, this project satisfies the initial transit proximity criteria. In addition, the project will have a FAR of 0.75 or greater, will be consistent with the SCS, provide less than or equal to the required City parking, and does not replace affordable housing. Therefore, the proposed project will meet the VMT screening criteria and have a **less than significant impact** for transportation. No mitigation is required.

PROJECT DEFICIENCIES

LOS DEFICIENCIES

In cases when the project traffic increases the intersection v/c by the operational deficiency thresholds identified in **Table 2**, this is considered a project deficiency. Based on the results of the traffic analysis, the following intersection project deficiencies are noted:

Project LOS Deficiency: Paramount Boulevard/Washington Boulevard (intersection #1)

The intersection of Paramount Boulevard and Washington Boulevard will have an LOS deficiency in the Existing Plus Project and Cumulative Plus Project for the AM and PM peak hours.

Existing Plus Project

In the Existing Plus Project conditions, the intersection of Paramount Boulevard and Washington Boulevard will operate at an unacceptable LOS F with a v/c ratio of 1.14 in the AM peak hour. The intersection operates at an unacceptable LOS E with a v/c ratio of 0.98 without the project in the AM peak hour, and the project increases the v/c ratio by 0.16. Since the v/c ratio increase is equal to or more than 0.01, this is a project deficiency.

In addition, the intersection operates at an unacceptable LOS F with v/c ratio of 1.19 in the PM peak hour. The intersection operates at an unacceptable LOS E with a v/c ratio of 0.95 without the project in the PM peak hour, and the project increases the v/c ratio by 0.24. Since the v/c ratio increase is equal to or more than 0.01, this is a project deficiency.

<u>Deficiency Improvement</u>. Adding an additional westbound left-turn lane, adding an exclusive eastbound right-turn lane, and optimizing signal timings would improve the v/c ratio to 0.95 for the AM peak hour and 0.95 for the PM peak hour in the Existing Plus Project condition. With the current roadway width of approximately 88 feet, the proposed configuration of three eastbound through lanes, two westbound left-turn lanes, two westbound through lanes, and one westbound shared through-right-turn lane would require additional roadway width. Assuming 12-foot lanes because Washington Boulevard is classified as a Primary Roadway, which according to the Pico Rivera Muni Code, has a minimum lane width of 12 feet, a total roadway width of 100 feet would be required (including a 4-foot median). In addition, significant traffic improvements are anticipated with the E-Line extension. The design of the E-Line extension is uncertain at this point and therefore if ROW were needed, coordination with Metro is required. This project should

work with the E-Line extension to determine the ultimate roadway width needed to accommodate all improvements.

Analysis sheets can be found in Appendix C.

Cumulative Plus Project

In the Cumulative Plus Project conditions, the intersection of Paramount Boulevard and Washington Boulevard will operate at an unacceptable LOS F with a v/c ratio of 1.13 in the AM peak hour. The intersection operates at an unacceptable LOS E with a v/c ratio of 0.98 without the project in the AM peak hour, and the project increases the v/c ratio by 0.15. Since the v/c ratio increase is equal to or more than 0.01, this is a project deficiency.

In addition, the intersection operates at an unacceptable LOS F with v/c ratio of 1.23 in the PM peak hour. The intersection operates at an unacceptable LOS F with a v/c ratio of 1.00 without the project in the PM peak hour, and the project increases the v/c ratio by 0.23. Since the v/c ratio increase is equal to or more than 0.01, this is a project deficiency.

<u>Deficiency Improvement</u>. Adding an additional westbound left-turn lane would improve the v/c ratio to 0.98 for the AM peak hour and 0.98 for the PM peak hour in the Cumulative Plus Project condition. Similar to the Existing plus Project improvement, this project should work with the E-Line extension to determine the ultimate roadway width needed to accommodate all improvements. Analysis sheets can be found in **Appendix C.**

Project LOS Deficiency: Rosemead Boulevard/Washington Boulevard (intersection #3)

The intersection of Rosemead Boulevard and Washington Boulevard will have an LOS deficiency in the Existing Plus Project and Cumulative Plus Project for the AM and PM peak hours.

Existing Plus Project

In the Existing Plus Project conditions, the intersection of Paramount Boulevard and Washington Boulevard will operate at an unacceptable LOS F with a v/c ratio of 1.17 in the AM peak hour. The intersection operates at an unacceptable LOS E with a v/c ratio of 0.98 without the project in the AM peak hour, and the project increases the v/c ratio by 0.19. Since the v/c ratio increase is equal to or more than 0.01, this is a project deficiency.

In addition, the intersection operates at an unacceptable LOS E with v/c ratio of 0.98 in the PM peak hour. The intersection operates at an acceptable LOS D with a v/c ratio of 0.87 without the project in the PM peak hour, and the project increases the v/c ratio by 0.11. Since the v/c ratio increase is equal to or more than 0.02, this is a project deficiency.

<u>Deficiency Improvement</u>. Because the cycle length cannot be greater than 130 seconds, adding an additional southbound left-turn lane, eastbound left turn lane, and westbound left-turn lane, as well as exclusive right-turn lanes for all approaches would improve the v/c ratio to 0.96 for the AM peak hour and 0.78 for the PM peak in the Existing Plus Project condition.

With the current roadway width of approximately 91 feet for the eastbound and westbound approaches, the proposed configuration of three opposing through lanes, two approach left-turn lanes, three approach through lanes, and one approach right-turn lane would require additional roadway width. Assuming 12-foot lanes because Washington Boulevard is classified as a Primary Roadway, which according to the Pico

Rivera Muni Code, has a minimum lane width of 12 feet, a total roadway width of 112 feet would be required (including a 4-foot median). In addition, significant traffic improvements are anticipated with the E-Line extension. The design of the E-Line extension is uncertain at this point and therefore if ROW were needed, coordination with Metro is required. This project should work with the E-Line extension to determine the ultimate roadway width needed to accommodate all improvements.

For the southbound and northbound approaches, the current roadway width is approximately 85 feet. The proposed configuration of three opposing through lanes, two approach left-turn lanes, three approach through lanes, and one approach right-turn lane would require additional roadway width. Assuming 12-foot lanes, a total roadway width of 112 feet would be required (including a 4-foot median). This project should work with the City to determine the ultimate roadway width needed to accommodate all improvements.

Analysis sheets can be found in **Appendix C.**

Cumulative Plus Project

In the Cumulative Plus Project conditions, the intersection of Paramount Boulevard and Washington Boulevard will operate at an unacceptable LOS F with a v/c ratio of 1.06 in the AM peak hour. The intersection operates at an unacceptable LOS E with a v/c ratio of 0.97 without the project in the AM peak hour, and the project increases the v/c ratio by 0.09. Since the v/c ratio increase is equal to or more than 0.01, this is a project deficiency.

In addition, the intersection operates at an unacceptable LOS F with v/c ratio of 1.01 in the PM peak hour. The intersection operates at an acceptable LOS D with a v/c ratio of 0.87 without the project in the PM peak hour, and the project increases the v/c ratio by 0.14. Since the v/c ratio increase is equal to or more than 0.02, this is a project deficiency.

<u>Deficiency Improvement</u>. Because the cycle length cannot be greater than 130 seconds, adding an additional southbound left-turn lane, eastbound left turn lane, and westbound left-turn lane, as well as exclusive right-turn lanes for all approaches would improve the v/c ratio to 0.91 for the AM peak hour and 0.80 for the PM peak hour in the Cumulative Plus Project condition. Similar to the Existing plus Project improvement, this project should work with the City to determine the ultimate roadway width needed to accommodate all improvements. Analysis sheets can be found in **Appendix C**.

Project LOS Deficiency: Passons Boulevard/Washington Boulevard (intersection #4)

The intersection of Passons Boulevard and Washington Boulevard will have an LOS deficiency in the Existing Plus Project and Cumulative Plus Project for the AM peak hour.

Existing Plus Project

In the Existing Plus Project conditions, the intersection of Passons Boulevard and Washington Boulevard will operate at an unacceptable LOS E with a v/c ratio of 0.98 in the AM peak hour. The intersection operates at an unacceptable LOS E with a v/c ratio of 0.95 without the project in the AM peak hour, and the project increases the v/c ratio by 0.03. Since the v/c ratio increase is equal to or more than 0.01, this is a project deficiency.

<u>Deficiency Improvement</u>. Adding exclusive eastbound and westbound right-turn lanes would improve the v/c ratio to 0.93 for the AM peak hour in the Existing Plus Project condition. With the current roadway width of approximately 78 feet, the proposed configuration of three opposing through lanes, one approaching left-

turn lane, three approach through lanes, and one approach right-turn lane would require additional roadway width. Assuming 12-foot lanes because Washington Boulevard is classified as a Primary Roadway, which according to the Pico Rivera Muni Code, has a minimum lane width of 12 feet, a total roadway width of 100 feet would be required (including a 4-foot median). Note this improvement may be excessive since the roadway would need to be significantly widened with a minor increase in v/c. In addition, the project is a transit-oriented development, and therefore, roadway improvements should prioritize multi-modal improvements, rather than vehicle throughput. Therefore, this intersection should be monitored and if the intersection is over capacity, the project should consider transportation demand management measures to reduce the traffic added by the project. Analysis sheets can be found in **Appendix C**.

Cumulative Plus Project

In the Cumulative Plus Project conditions, the intersection of Paramount Boulevard and Washington Boulevard will operate at an unacceptable LOS E with a v/c ratio of 0.91 in the AM peak hour. The intersection operates at an acceptable LOS D with a v/c ratio of 0.87 without the project in the AM peak hour, and the project increases the v/c ratio by 0.04. Since the v/c ratio increase is equal to or more than 0.01, this is a project deficiency.

<u>Deficiency Improvement</u>. Adding exclusive eastbound and westbound right-turn lanes would improve the v/c ratio to 0.87 for the AM peak hour in the Cumulative Plus Project condition. Similar to the Existing plus Project improvement, improvement may be excessive. Therefore, this intersection should be monitored and if the intersection is over capacity, the project should consider transportation demand management measures to reduce the traffic added by the project. Analysis sheets can be found in **Appendix C**.

Project LOS Deficiency: Rosemead Boulevard / Slauson Avenue (intersection #9)

The intersection of Rosemead Boulevard and Slauson Avenue will have an LOS deficiency in the Existing Plus Project and Cumulative Plus Project for the AM peak hour.

Existing Plus Project

In the Existing Plus Project conditions, the intersection of Rosemead Boulevard and Slauson Avenue will operate at an unacceptable LOS E with a v/c ratio of 0.93 in the AM peak hour. The intersection operates at an acceptable LOS D with a v/c ratio of 0.86 without the project in the AM peak hour, and the project increases the v/c ratio by 0.07. Since the v/c ratio increase is equal to or more than 0.02, this is a project deficiency.

<u>Deficiency Improvement</u>. No improvement is recommended as any recommended improvement would result in widening Rosemead Boulevard or Slauson Avenue. Widening the roadway may be excessive since the project is a transit-oriented development, and therefore, roadway improvements should prioritize multimodal improvements, rather than vehicle throughput. Therefore, this intersection should be monitored and if the intersection is over capacity, the project should consider transportation demand management measures to reduce the traffic added by the project. In addition, the analysis shown that in the Cumulative plus Project condition the intersection operates at an acceptable LOS D.

Cumulative Plus Project

In the Cumulative Plus Project conditions, the intersection of Rosemead Boulevard and Slauson Avenue will operate at an acceptable LOS D with a v/c ratio of 0.90 in the AM peak hour. The intersection operates at an acceptable LOS D with a v/c ratio of 0.85 without the project in the AM peak hour, and the project

increases the v/c ratio by 0.05. Since the v/c ratio increase is equal to or more than 0.02, this is a project deficiency.

<u>Deficiency Improvement</u>. Similar to the Existing plus Project improvement, no improvements were recommended as any recommended improvement would result in widening Rosemead Boulevard or Slauson Avenue and may be excessive since the intersection operates at an acceptable LOS D with the addition of Project traffic.

ROADWAY SEGMENT DEFICIENCIES

In cases when the addition of project trips causes an acceptably operating roadway segment to operate at an unacceptable LOS F, a roadway segment project deficiency was identified. Based on the results of the traffic analysis, no roadway segment project deficiencies are noted.

APPENDIX

- A EXISTING TRIP GENERATION
- **B PROPOSED TRIP GENERATION**
- C SYNCHRO OUTPUTS

A – EXISTING TRIP GENERATION

Appendix A - Existing Trip Generation

	ITE					ΔΝ	Peak Hou	r	PM	1 Peak Hou	r
Land Use	Code	Size	Unit	Rate/Eqn?	Daily	Total	In	Out	Total	In	Out
Trip Generation						- Otai		out	rotur		out
Trip Generation Before Reductions											
General Light Industrial	110	28.274	KSF	Rate	138	21	18	3	18	3	15
Manufacturing	140	934.968	KSF	Rate	4,441	636	484	152	692	215	477
Warehousing	150	2672.937	KSF	Rate	4,571	454	349	105	481	134	347
Mini-Warehouse	151	58.916	KSF	Rate	85	5	3	2	9	4	5
Single-Family Detached Housing	210	1	DU	Rate	9	1	0	1	1	1	0
Multi-Family Housing (Low-Rise)(Not Close to Rail											
Transit)	220	330	DU	Rate	2,224	132	32	100	169	107	62
Assisted Living	254	61	Beds	Rate	159	11	7	4	15	6	9
Motel	320	199	Rooms	Rate	667	70	26	44	72	39	33
Nursing Home	620	10.331	Beds	Rate	32	1	1	0	1	0	1
General Office Building	710	35.825	KSF	Rate	388	54	48	6	52	9	43
Building Materials and Lumber Store	812	169.166	KSF	Rate	2,884	269	167	102	381	175	206
Shopping Center (>150k)	820	577.663	KSF	Rate	21,379	485	301	184	1,964	942	1,022
Strip Retail Plaza (<40k)	822	54.192	KSF	Rate	2,951	128	77	51	357	179	178
Liquor Store	899	1.854	KSF	Rate	199	1	1	0	31	16	15
Walk-in Bank	911	2.85	KSF	Rate	286	28	16	12	35	15	20
Drive-in Bank	912	7.81	KSF	Rate	784	78	45	33	164	82	82
Fast Casual Restaurant	930	4.634	KSF	Rate	450	7	4	3	58	32	26
Fine Dining Restaurant	931	9.448	KSF	Rate	792	7	4	3	74	50	24
High-Turnover (Sit-Down) Restaurant	932	10.44	KSF	Rate	1,119	100	55	45	94	57	37
Fast-Food Restaurant with Drive-Through Window	934	4.351	KSF	Rate	2,034	194	99	95	144	75	69
											
Convenience Store/Gas Station	945	12	VFP	Rate	3,181	193	97	96	221	111	110
	ross Trip	S			48,773	2,875	1,834	1,041	5,033	2,252	2,781
Trip Generation for Block 1	4.4.0	00.074					10		10	-	1.5
General Light Industrial	110	28.274	KSF	Rate	138	21	18	3	18	3	15
Manufacturing	140	560.565	KSF	Rate	2,663	381	290	91	415	129	286
Warehousing	150	220.353	KSF	Rate	377	37	28	9	40	11	29
Mini-Warehouse	151	58.916	KSF	Rate	85	5	3	2	9	4	5
Total Block 1					3,263	444	339	105	482	147	335
Trip Generation for Block 2	140	274 402	WGF	Dete	4 770	255	104	64	277	00	101
Manufacturing	140	374.403	KSF	Rate	1,778	255	194	61	277	86	191
Warehousing	150	2452.584	KSF	Rate	4,194	417	321	96	441	123	318
Multi-Family Housing (Low-Rise)(Not Close to Rail	220	7	DU	Rate	47	3	1	2	4	3	1
Transit) Motel	320	49	Rooms	Rate	164	17	6	11	10	10	8
	620	10.331			32			11	18	10	
Nursing Home	812	169.166	Beds KSF	Rate Rate	2,884	1 269	1 167	0 102	1 381	0 175	1 206
Building Materials and Lumber Store	820	486.205	KSF	Rate	17,994	408	253	102		793	860
Shopping Center (>150k) Walk-in Bank	911	2.85	KSF	Rate	286	28	16	135	1,653 35	15	20
Total Block 2	911	2.05	K3I	Nate	27,379	1,398	959	439	2,810	1,205	1,605
Trip Generation for Block 3					27,375	1,558	555	435	2,810	1,205	1,005
Single-Family Detached Housing	210	1	DU	Rate	9	1	0	1	1	1	0
Multi-Family Housing (Low-Rise)(Not Close to Rail	210	1	00	Nate	9		0	1	1	1	0
Transit)	220	323	DU	Rate	2,177	129	31	98	165	104	61
Assisted Living	254	61	Beds	Rate	159	11	7	4	15	6	9
Motel	320	150	Rooms	Rate	503	53	20	33	54	29	25
General Office Building	710	35.825	KSF	Rate	388	54	48	6	52	9	43
Building Materials and Lumber Store	812	0	KSF	Rate	0	0	40	0	0	0	43
Strip Retail Plaza (<40k)	822	54.192	KSF	Rate	2,951	128	77	51	357	179	178
Liquor Store	899	1.854	KSF	Rate	199	128	1	0	31	1/9	178
Drive-in Bank	912	7.81	KSF	Rate	784	78	45	33	164	82	82
Fast Casual Restaurant	930	4.634	KSF	Rate	450	78	45	3	58	32	26
Fine Dining Restaurant	931	9.448	KSF	Rate	792	7	4	3	74	50	20
High-Turnover (Sit-Down) Restaurant	932	10.44	KSF	Rate	1,119	100	55	45	94	57	37
Fast-Food Restaurant with Drive-Through Window	932	4.351	KSF	Rate	2,034	194	99	45 95	144	75	69
Convenience Store/Gas Station	945	12	VFP	Rate	3,181	194	97	96	221	111	110
Total Block 3	5-5	12			18,131	1,033	536	497	1,741	900	841
Trip Generation for All Blocks					48,773	2,875	1,834	1,041	5,033	2,252	
The Generation for Air Blocks					40,775	2,075	1,054	1,041	5,055	2,252	2,701

Trips Subject to Internal Capture (All Blocks)											
Office					9,623	1,170	902	268	1,252	365	887
Retail					31,664	1,182	704	478	3,153	1,520	1,633
Restaurant					4,395	308	162	146	370	214	156
Cinema/Entertainment					0	0	0	0	0	0	0
Residential					2,233	133	32	101	170	108	62
Hotel					667	70	26	44	72	39	33
Office Internal Trip Reductions	1		1		1,925	222	110	112	170	40	130
Retail Internal Trip Reductions					4,591	201	102	99	369	217	150
Restaurant Internal Trip Reductions					2,494	191	123	68	187	90	97
Cinema/Entertainment Internal Trip Reductions					0	0	0	0	0	0	0
Residential Internal Trip Reductions					815	26	3	23	114	71	43
Hotel Internal Trip Reductions					302	38	1	37	36	20	16
Total Internal Capture Reductions					10,127	678	339	339	876	438	438
Total Internal Capture by ITE LUC											
General Light Industrial	110	28.274	KSF	Rate	28	3	2	1	2	0	2
Manufacturing	140	934.968	KSF	Rate	888	123	59	64	94	24	70
Warehousing	150	2672.937	KSF	Rate	914	87	43	44	66	15	51
Mini-Warehouse	151	58.916	KSF	Rate	17	1	0	1	1	0	1
Single-Family Detached Housing	210	1	DU	Rate	3	0	0	0	1	1	0
Multi-Family Housing (Low-Rise)(Not Close to Rail		222									
Transit)	220	330	DU	Rate	812	26	3	23	113	70	43
Assisted Living	254	61	Beds	Rate	0	0	0	0	0	0	0
Motel	320	199	Rooms	Rate	302	38	1	37	36	20	16
Nursing Home	620	10.331	Beds	Rate	0	0	0	0	0	0	0
General Office Building	710	35.825	KSF	Rate	78	9	6	3	7	1	6
Building Materials and Lumber Store	812	169.166	KSF	Rate	418	45	24	21	44	25	19
Shopping Center (>150k)	820	577.663	KSF	Rate	3,100	82	44	38	229	134	95
Strip Retail Plaza (<40k)	822	54.192	KSF	Rate	428	22	11	11	43	26	17
Liquor Store	899	1.854	KSF	Rate	29	0	0	0	3	2	1
Walk-in Bank	911	2.85	KSF	Rate	41	4	2	2	4	2	2
Drive-in Bank	912	7.81	KSF	Rate	114	14	7	7	20	12	8
Fast Casual Restaurant	930	4.634	KSF	Rate	255	4	3	1	29	13	16
Fine Dining Restaurant	931	9.448	KSF	Rate	449	4	3	1	36	21	15
High-Turnover (Sit-Down) Restaurant	932	10.44	KSF	Rate	635	63	42	21	47	24	23
Fast-Food Restaurant with Drive-Through Window	934	4.351	KSF	Rate	1,155	119	75	44	75	32	43
Convenience Store/Gas Station	945	12	VFP	Rate	461	34	14	20	26	16	10
Total					10,127	678	339	339	876	438	438
Total Trip Generation after Internal Capture for Block 1					10,127	678	339	339	876	438	438
	110	28.274	KSF	Rate	10,127 110	678 18	339 16	339 2	876 16	438 3	438
Trip Generation after Internal Capture for Block 1	110 140	28.274 28.274	KSF KSF	Rate							
<i>Trip Generation after Internal Capture for Block 1</i> General Light Industrial		-		-	110	18	16	2	16	3	13
Trip Generation after Internal Capture for Block 1 General Light Industrial Manufacturing Warehousing Mini-Warehouse	140	28.274	KSF	Rate	110 2,131	18 308	16 255	2 53	16 359	3 115	13 244
Trip Generation after Internal Capture for Block 1 General Light Industrial Manufacturing Warehousing	140 150	28.274 560.565	KSF KSF	Rate Rate	110 2,131 302 68 0	18 308 29	16 255 24	2 53 5	16 359 35 8 0	3 115 10 4 0	13 244 25 4 0
Trip Generation after Internal Capture for Block 1 General Light Industrial Manufacturing Warehousing Mini-Warehouse Single-Family Detached Housing Total Block 1	140 150 151	28.274 560.565 220.353	KSF KSF KSF	Rate Rate Rate	110 2,131 302 68	18 308 29 4	16 255 24 3	2 53 5 1	16 359 35 8	3 115 10 4	13 244 25 4
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2	140 150 151 210	28.274 560.565 220.353 58.916	KSF KSF KSF DU	Rate Rate Rate Rate	110 2,131 302 68 0 2,611	18 308 29 4 0 359	16 255 24 3 0 298	2 53 5 1 0 61	16 359 35 8 0 418	3 115 10 4 0 132	13 244 25 4 0 286
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2Manufacturing	140 150 151 210 140	28.274 560.565 220.353 58.916 374.403	KSF KSF DU KSF	Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422	18 308 29 4 0 359 205	16 255 24 3 0 298 170	2 53 5 1 0 61 35	16 359 35 8 0 418 239	3 115 10 4 0 132 76	13 244 25 4 0 286 163
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousing	140 150 151 210	28.274 560.565 220.353 58.916	KSF KSF KSF DU	Rate Rate Rate Rate	110 2,131 302 68 0 2,611	18 308 29 4 0 359	16 255 24 3 0 298	2 53 5 1 0 61	16 359 35 8 0 418	3 115 10 4 0 132	13 244 25 4 0 286
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to Rail	140 150 151 210 140 150	28.274 560.565 220.353 58.916 374.403	KSF KSF DU KSF KSF	Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355	18 308 29 4 0 359 205 338	16 255 24 3 0 298 170	2 53 5 1 0 61 35 56	16 359 35 8 0 418 239 380	3 115 10 4 0 132 76 109	13 244 25 4 0 286 163 271
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)	140 150 151 210 140 150 220	28.274 560.565 220.353 58.916 374.403 2452.584 7	KSF KSF DU KSF KSF DU	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30	18 308 29 4 0 359 205 338 3	16 255 24 3 0 298 170 282 1	2 53 5 1 0 61 35 56 2	16 359 35 8 0 418 239 380 2	3 115 10 4 0 132 76 109 2	13 244 25 4 0 286 163 271 0
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Motel	140 150 151 210 140 150 220 320	28.274 560.565 220.353 58.916 374.403 2452.584 7 49	KSF KSF DU KSF KSF DU Rooms	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90	18 308 29 4 0 359 205 338 3 3 8	16 255 24 3 0 298 170 282 1 1 6	2 53 5 1 0 61 35 56 2 2 2	16 359 35 8 0 418 239 380 2 2 9	3 115 10 4 0 132 76 109 2 5	13 244 25 4 0 286 163 271 0 4
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing Home	140 150 151 210 140 150 220 320 620	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331	KSF KSF DU KSF KSF KSF DU Rooms Beds	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32	18 308 29 4 0 359 205 338 205 338 3 8 3 1	16 255 24 3 0 298 170 282 1 1 6 1	2 53 5 1 0 61 35 56 2 2 2 0	16 359 35 8 0 418 239 380 2 2 9 1	3 115 10 4 0 132 76 109 2 5 0	13 244 25 4 0 286 163 271 0 4 1
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber Store	140 150 151 210 140 150 220 320 620 812	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166	KSF KSF DU KSF KSF DU Rooms Beds KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466	18 308 29 4 0 359 205 338 205 338 3 8 1 1 224	16 255 24 3 0 298 170 282 1 1 6 1 143	2 53 5 1 0 61 35 56 2 2 2 0 81	16 359 35 8 0 418 239 380 2 2 9 1 1 337	3 115 10 4 0 132 76 109 2 2 5 0 150	13 244 25 4 0 286 163 271 0 4 1 187
Trip Generation after Internal Capture for Block 1 General Light Industrial Manufacturing Warehousing Mini-Warehouse Single-Family Detached Housing Total Block 1 Trip Generation after Internal Capture for Block 2 Manufacturing Warehousing Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Motel Nursing Home Building Materials and Lumber Store Shopping Center (>150k)	140 150 151 210 140 150 220 320 620 812 820	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205	KSF KSF DU KSF KSF DU Rooms Beds KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385	18 308 29 4 0 359 205 338 205 338 3 8 1 225 338 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	16 255 24 3 0 298 170 282 1 1 6 1 143 216	2 53 5 1 0 61 35 56 2 2 0 81 123	16 359 35 8 0 418 239 380 2 2 9 1 337 1,460	3 115 10 4 0 132 76 109 2 5 0 150 680	13 244 25 4 0 286 163 271 0 4 1 187 780
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in Bank	140 150 151 210 140 150 220 320 620 812	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166	KSF KSF DU KSF KSF DU Rooms Beds KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385 245	18 308 29 4 0 359 205 338 3 3 8 1 224 339 24	16 255 24 3 0 298 170 282 1 1 6 1 143 216 14	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10	16 359 35 8 0 418 239 380 2 2 9 1 337 1,460 31	3 115 10 4 0 132 76 109 2 5 0 150 680 13	13 244 25 4 0 286 163 271 0 4 1 187 780 18
Trip Generation after Internal Capture for Block 1 General Light Industrial Manufacturing Warehousing Mini-Warehouse Single-Family Detached Housing Total Block 1 Trip Generation after Internal Capture for Block 2 Manufacturing Warehousing Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Motel Nursing Home Building Materials and Lumber Store Shopping Center (>150k) Walk-in Bank Total Block 2	140 150 151 210 140 150 220 320 620 812 820	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205	KSF KSF DU KSF KSF DU Rooms Beds KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385	18 308 29 4 0 359 205 338 205 338 3 8 1 225 338 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	16 255 24 3 0 298 170 282 1 1 6 1 143 216	2 53 5 1 0 61 35 56 2 2 0 81 123	16 359 35 8 0 418 239 380 2 2 9 1 337 1,460	3 115 10 4 0 132 76 109 2 5 0 150 680	13 244 25 4 0 286 163 271 0 4 1 187 780
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3	140 150 151 210 140 150 220 320 620 812 820 911	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85	KSF KSF DU KSF KSF DU Rooms Beds KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385 245 23,025	18 308 29 4 0 359 205 338 3 3 8 1 225 338 3 1 224 339 24 1,142	16 255 24 3 0 298 170 282 1 1 6 1 143 216 14 833	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309	16 359 35 8 0 418 239 380 2 9 1 1 337 1,460 31 2,459	3 115 10 4 0 132 76 109 2 5 0 150 680 13 1,035	13 244 25 4 0 286 163 271 0 4 1 187 780 18 1,424
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached Housing	140 150 151 210 140 150 220 320 620 812 820	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205	KSF KSF DU KSF KSF DU Rooms Beds KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385 245	18 308 29 4 0 359 205 338 3 3 8 1 224 339 24	16 255 24 3 0 298 170 282 1 1 6 1 143 216 14	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10	16 359 35 8 0 418 239 380 2 2 9 1 337 1,460 31	3 115 10 4 0 132 76 109 2 5 0 150 680 13	13 244 25 4 0 286 163 271 0 4 1 187 780 18
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to Rail	140 150 151 210 140 150 220 320 620 812 820 911	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85	KSF KSF DU KSF KSF DU Rooms Beds KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385 245 23,025	18 308 29 4 0 359 205 338 3 3 8 1 225 338 3 1 224 339 24 1,142	16 255 24 3 0 298 170 282 1 1 6 1 143 216 14 833	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309	16 359 35 8 0 418 239 380 2 9 1 1 337 1,460 31 2,459	3 115 10 4 0 132 76 109 2 5 0 150 680 13 1,035	13 244 25 4 0 286 163 271 0 4 1 187 780 18 1,424
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to Rail	140 150 151 210 140 150 220 320 620 812 820 911 210 220	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 2.85	KSF KSF DU KSF KSF KSF DU Rooms Beds KSF KSF KSF CSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385 245 23,025 6 1,382	18 308 29 4 0 359 205 338 3 3 8 1 225 338 3 8 1 224 339 24 1,142 1 1 103	16 255 24 3 0 298 170 282 1 1 6 1 143 216 14 833 216 14 833	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309	16 359 35 8 0 418 239 380 2 2 9 1 380 2 9 1 337 1,460 31 2,459 0 54	3 115 10 4 0 132 76 109 2 76 109 2 5 0 150 680 13 1,035 0 35	13 244 25 4 0 286 163 271 0 4 1 187 780 18 1,424 0 19
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTrip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted Living	140 150 210 140 150 220 320 620 812 820 911 210 220 254	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 1 323 61	KSF KSF DU KSF KSF KSF DU Rooms Beds KSF KSF KSF DU DU DU DU	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385 245 23,025 6 1,382 159	18 308 29 4 0 359 205 338 3 3 8 1 225 338 3 24 1,142 1 103 11	16 255 24 3 0 298 170 282 1 170 282 1 143 216 14 3216 14 833 0 0 28 7	2 53 5 1 0 61 35 56 2 2 0 81 123 10 309	16 359 35 8 0 418 239 380 2 2 9 1 337 1,460 31 2,459 0 54 15	3 115 10 4 0 132 76 109 2 76 109 2 2 5 0 150 680 13 1,035 0 35 6	13 244 25 4 0 286 163 271 0 4 163 271 0 4 187 780 18 1,424 0 18 1,424
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTrip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotel	140 150 151 210 140 150 220 320 620 812 820 911 210 220 254 320	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 1 323 61 150	KSF KSF DU KSF KSF CDU Rooms Beds KSF KSF KSF CDU DU DU DU DU Beds Rooms	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 30 90 32 2,466 15,385 245 23,025 6 6 1,382 6 1,382	18 308 29 4 0 359 205 338 3 3 8 1 225 338 3 8 1 224 339 24 1,142 1 1 103 11 224	16 255 24 3 0 298 170 282 1 1 6 1 143 216 14 333 216 14 833 0 0 288 7 19	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309 1 1 75 4 5	16 359 35 8 0 418 239 380 2 9 1 1 337 1,460 31 2,459 0 54 0 54 15 27	3 115 10 4 0 132 76 109 2 5 0 150 680 13 1,035 0 35 6 14	13 244 25 4 0 286 163 271 0 4 163 271 0 4 1 187 780 18 1,424 0 19 9 13
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTrip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelNursing Home	140 150 151 210 140 150 220 320 620 812 820 911 210 220 254 320 620	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 1 323 61 150 0	KSF KSF DU KSF KSF KSF DU Rooms Beds KSF KSF KSF DU DU DU DU Beds Rooms Beds	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385 245 23,025 6 1,382 6 1,382 159 275 0	18 308 29 4 0 359 205 338 3 3 8 1 225 338 3 3 24 1,142 1 103 11 103 11 224 0	16 255 24 3 0 298 170 282 1 1 6 1 4 3 216 14 3 216 14 833 216 14 833 216 14 9 0 28 7 19 0 0	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309 1 1 75 4 5 0	16 359 35 8 0 418 239 380 2 2 9 1 337 1,460 31 2,459 0 54 0 54 15 27 0	3 115 10 4 0 132 76 109 2 76 109 2 5 0 150 680 13 1,035 0 13 1,035 0 35 6 14 0	13 244 25 4 0 286 163 271 0 4 163 271 0 4 18 1,424 1 187 780 18 1,424 0 18 1,424
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTrip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelNursing HomeGeneral Office Building	140 150 151 210 140 150 220 320 620 812 820 911 210 220 254 320 620 710	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 1 323 61 150 0 35.825	KSF KSF DU KSF KSF KSF DU Rooms Beds KSF KSF DU DU DU DU Beds Rooms Beds KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385 245 23,025 6 1,382 6 1,382 159 275 0 310	18 308 29 4 0 359 205 338 3 3 8 1 225 338 3 3 24 1,142 1 103 11 103 11 24 0 1 45	16 255 24 3 0 298 170 282 1 1 6 1 4 3 216 1 4 3 3 216 14 3 3 216 14 4 8 33 0 0 28 7 19 0 0 28 7 19 0 0 42	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309 1 1 75 4 5 0 3	16 359 35 8 0 418 239 380 2 2 9 1 1 337 1,460 31 2,459 0 54 15 27 0 54 15 27 0 0 45	3 115 10 4 0 132 76 109 2 5 0 150 680 13 1,035 0 150 680 13 1,035 0 35 6 14 0 8	13 244 25 4 0 286 163 271 0 4 163 271 0 4 187 780 18 1,424 0 18 1,424 0 19 9 13 0 19 9 13 0 37
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTrip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelNursing HomeGeneral Office BuildingShopping Center (>150k)	140 150 210 151 210 140 150 220 320 620 812 820 911 210 220 254 320 620 710 820	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 323 61 150 0 35.825 91.458	KSF KSF DU KSF KSF CDU Rooms Beds KSF KSF KSF DU DU DU DU Beds Rooms Beds KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 30 90 32 2,466 15,385 245 23,025 6 1,382 6 1,382 5 9 0 310 2,894	18 308 29 4 0 359 205 338 3 3 8 1 225 338 3 8 1 224 339 24 1,142 1 1 103 11 103 11 224 0 45 64	16 255 24 3 0 298 170 282 1 1 6 1 143 216 14 333 216 14 833 216 14 833 0 0 28 7 19 0 28 7 19 0 42 41	2 53 5 1 0 61 35 56 2 2 0 81 123 10 309 1 1 75 4 5 0 3 3 9	16 359 35 8 0 418 239 380 2 9 1 2 9 1 337 1,460 31 2,459 0 54 0 54 15 27 0 54 15 27 0 45	3 115 10 4 0 132 76 109 2 5 0 150 680 13 1,035 0 150 680 13 1,035 0 35 6 14 0 35 6 14 0 8 128	13 244 25 4 0 286 163 271 0 4 163 271 0 4 1 187 780 18 1,424 0 18 1,424 0 19 9 13 0 19 9 13 0 37 147
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTrip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelNursing HomeGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	140 150 210 151 210 20 220 320 620 812 820 911 210 220 254 320 620 710 820 822	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 1 323 61 150 0 35.825 91.458 54.192	KSF KSF DU KSF KSF KSF DU Rooms Beds KSF KSF DU DU DU DU Beds Rooms Beds KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385 245 23,025 6 1,382 6 1,382 159 275 0 0 310 2,894 2,894 2,523	18 308 29 4 0 359 205 338 3 3 8 1 225 338 3 1 224 339 24 1,142 1 103 11 103 11 224 0 1 103 11 24 0 1 103	16 255 24 3 0 298 170 282 1 1 6 1 4 3 216 14 3 216 14 833 216 14 833 0 0 28 7 19 0 28 7 19 0 42 41 66	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309 1 1 75 4 5 0 309	16 359 35 8 0 418 239 380 2 2 9 1 337 1,460 31 2,459 0 54 15 2,459 0 54 15 27 0 0 45 275 314	3 115 10 4 0 132 76 109 2 76 109 2 5 0 150 680 13 1,035 0 150 680 13 1,035 0 150 680 13 1,035 0 13 1,035	13 244 25 4 0 286 163 271 0 4 1 187 780 18 1,424 0 18 1,424 0 19 9 13 0 19 9 13 0 37 147 161
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTrip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelNursing HomeGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	140 150 151 210 151 210 140 150 220 320 620 911 210 220 254 320 620 710 820 822 899	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 2.85 1 323 61 150 0 35.825 91.458 54.192 1.854	KSF KSF DU KSF KSF CDU Rooms Beds KSF KSF KSF DU DU DU DU Beds Rooms Beds KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385 245 23,025 6 1,382 6 1,382 159 275 0 159 275 0 0 310 2,894 2,523 170	18 308 29 4 0 359 205 338 3 3 8 1 225 338 3 8 1 224 339 24 1,142 1 103 11 103 11 24 0 1 103 11 24 0 45 64 106 1	16 255 24 3 0 298 170 282 1 1 6 1 4 3 216 1 4 3 3 216 1 4 3 3 0 28 7 0 28 7 19 0 28 7 19 0 0 42 41 66 1 1	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309 1 1 75 4 5 0 309	16 359 35 8 0 418 239 380 2 2 9 1 1 337 1,460 31 2,459 0 54 15 2,459 0 54 15 27 0 54 15 27 0 0 45 275 314 28	3 115 10 4 0 132 76 109 2 5 0 150 680 13 1,035 0 150 680 13 1,035 0 35 6 14 0 8 128 128 153 14	13 244 25 4 0 286 163 271 0 4 163 271 0 4 187 780 18 1,424 0 18 1,424 0 19 9 13 0 19 9 13 0 37 147 161 14
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTrip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelNursing HomeGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	140 150 151 210 151 140 150 220 320 620 812 820 911 220 254 320 620 710 820 822 829 912	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 2.85 1 323 61 150 0 35.825 91.458 54.192 1.854 7.81	KSF KSF DU KSF KSF KSF DU Rooms Beds KSF KSF DU DU DU DU Beds Rooms Beds KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385 245 23,025 6 1,382 6 1,382 159 275 0 159 275 0 310 2,894 2,894 2,523 170 670	18 308 29 4 0 359 205 338 3 3 8 1 224 339 24 1,142 1 103 11 103 11 224 0 45 64 106 1 1 64	16 255 24 3 0 298 170 282 1 1 6 1 4 3 3 3 216 14 3 3 3 0 2 8 7 19 0 2 8 7 19 0 2 8 7 19 0 42 41 66 1 1 3 8	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309 1 123 10 309 1 1 75 4 5 0 309 3 10 309	16 359 35 8 0 418 239 380 2 9 1 380 2 9 1 337 1,460 31 2,459 0 54 0 54 15 2,459 0 54 15 2,7 0 54 15 2,7 0 45 2,75 314 2,8 144	3 115 10 4 0 132 76 109 2 7 5 0 150 6 80 13 1,035 0 150 6 80 13 1,035 0 35 6 14 0 35 6 14 0 8 128 153 14 70	13 244 25 4 0 286 163 271 0 4 1 3 271 0 4 1 8 1,424 0 18 1,424 0 18 1,424 0 18 1,424 0 19 9 13 0 19 9 13 0 37 147 161 14 14 74
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelNursing HomeGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	140 150 210 151 210 20 220 320 620 911 220 254 320 620 710 820 822 899 912 930	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 2.85 1 323 61 150 0 35.825 91.458 54.192 1.854 7.81 4.634	KSF KSF DU KSF KSF KSF DU Rooms Beds KSF KSF DU DU DU DU Beds Rooms Beds KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385 245 23,025 6 1,382 6 1,382 30 90 32 2,466 15,385 245 23,025 7 5 0 310 310 2,894 2,523 170 670 195	18 308 29 4 0 359 205 338 3 3 8 1 224 339 24 1,142 1 103 11 103 11 224 339 24 1,142 1 0 4 5 64 106 1 1 64 3	16 255 24 3 0 298 170 282 1 1 6 1 4 3 216 1 4 3 3 3 0 28 7 19 0 28 7 19 0 28 7 19 0 42 41 66 1 38 1	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309 1 1 75 4 5 0 309 1 1 75 4 5 0 309 309	16 359 35 8 0 418 239 380 2 2 9 1 337 1,460 31 2,459 0 54 15 2,459 0 54 15 2,7 0 54 15 2,7 0 45 2,75 314 2,8 144 28 144	3 115 10 4 0 132 76 109 2 76 109 2 5 0 150 680 13 1,035 0 150 680 13 1,035 0 150 680 13 1,035 0 13 1,035 0 8 128 128 153 14 70 19	13 244 25 4 0 286 163 271 0 4 1 187 780 18 1,424 0 18 1,424 0 19 9 13 0 19 9 13 0 37 147 161 147 161 14 74 10
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelNursing HomeGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	140 150 210 151 210 210 220 320 620 812 820 911 220 254 320 620 710 820 820 820 820 820 820 820 820 820 82	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 2.85 1 323 61 150 0 35.825 91.458 54.192 1.854 7.81 4.634 9.448	KSF KSF DU KSF KSF KSF DU Rooms Beds KSF KSF KSF DU DU DU DU Beds Rooms Beds KSF KSF KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385 245 23,025 7 6 1,382 245 23,025 7 6 1,382 245 23,025 7 7 0 1,382 159 275 0 0 310 2,894 2,523 170 670 195 343	18 308 29 4 0 359 205 338 3 3 8 1 225 338 3 3 8 1 224 339 24 1,142 1 103 11 103 11 24 0 1 103 11 24 0 45 64 106 1 1 64 3 3 3	16 255 24 3 0 298 170 282 1 1 6 1 4 3 216 1 4 3 3 3 0 2 8 7 1 9 0 2 8 7 1 9 0 2 8 7 1 9 0 2 8 7 1 9 0 2 8 7 1 9 0 2 8 1 1 4 3 8 1 1 3 8 1 1 1 3 8 1 1 1 1 1 1 1 1 1	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309 1 1 23 10 309 1 1 75 4 5 0 309 1 1 75 4 5 0 3 3 23 40 0 0 26 2 2 2	16 359 35 8 0 418 239 380 2 2 9 1 1 337 1,460 31 2,459 0 54 15 2,459 0 54 15 2,459 0 54 15 2,75 314 2,75 314 2,8 144 28 144 29 38	3 115 10 4 0 132 76 109 2 5 0 150 680 13 1,035 0 150 680 13 1,035 0 35 6 14 0 35 6 14 0 8 128 153 14 70 19 29	13 244 25 4 0 286 163 271 0 4 163 271 0 4 1 187 780 18 1,424 0 18 1,424 0 19 9 13 0 19 9 13 0 19 9 13 0 37 147 161 147 161 14 74 10 9
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTrip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelNursing HomeGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	140 150 151 210 151 210 220 320 620 812 820 911 220 254 320 620 710 820 822 829 912 829 912 930 931	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 2.85 1 323 61 150 0 35.825 91.458 54.192 1.854 7.81 4.634 9.448	KSF KSF DU KSF KSF KSF DU Rooms Beds KSF DU Beds KSF KSF	Rate </td <td>110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 30 90 32 2,466 15,385 245 23,025 6 1,382 245 23,025 0 6 1,382 159 275 0 0 310 2,894 2,523 170 670 195 343 484</td> <td>18 308 29 4 0 359 205 338 3 3 8 1 224 339 24 1,142 1 103 11 224 339 24 1,142 1 103 11 24 0 45 64 106 1 1 64 3 3 3 3 3 3</td> <td>16 255 24 3 0 298 170 282 1 1 6 1 4 3 216 14 3 3 216 14 8 33 0 2 8 7 19 0 2 8 7 19 0 2 8 7 19 0 42 41 66 1 3 8 1 1 3 8 1 1 1 3 8 1 1 1 3</td> <td>2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309 1 1 23 10 309 1 1 75 4 5 0 309 1 1 75 4 5 0 309 2 3 40 0 3 23 40 0 0 26 2 2 2 2 4</td> <td>16 359 35 8 0 418 239 380 2 2 9 1 337 1,460 31 2,459 0 54 31 2,459 0 54 15 27 0 54 15 27 0 54 15 27 0 45 275 314 28 144 28 144 29 38 47</td> <td>3 115 10 4 0 132 76 109 2 5 0 150 680 13 1,035 0 150 680 13 1,035 0 35 6 14 0 35 6 14 0 8 128 153 14 70 19 29 33</td> <td>13 244 25 4 0 286 163 271 0 4 1 3 271 0 4 1 187 780 18 1,424 0 18 1,424 0 19 9 13 0 19 9 13 0 37 147 161 147 161 14 74 10 9 9 14</td>	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 30 90 32 2,466 15,385 245 23,025 6 1,382 245 23,025 0 6 1,382 159 275 0 0 310 2,894 2,523 170 670 195 343 484	18 308 29 4 0 359 205 338 3 3 8 1 224 339 24 1,142 1 103 11 224 339 24 1,142 1 103 11 24 0 45 64 106 1 1 64 3 3 3 3 3 3	16 255 24 3 0 298 170 282 1 1 6 1 4 3 216 14 3 3 216 14 8 33 0 2 8 7 19 0 2 8 7 19 0 2 8 7 19 0 42 41 66 1 3 8 1 1 3 8 1 1 1 3 8 1 1 1 3	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309 1 1 23 10 309 1 1 75 4 5 0 309 1 1 75 4 5 0 309 2 3 40 0 3 23 40 0 0 26 2 2 2 2 4	16 359 35 8 0 418 239 380 2 2 9 1 337 1,460 31 2,459 0 54 31 2,459 0 54 15 27 0 54 15 27 0 54 15 27 0 45 275 314 28 144 28 144 29 38 47	3 115 10 4 0 132 76 109 2 5 0 150 680 13 1,035 0 150 680 13 1,035 0 35 6 14 0 35 6 14 0 8 128 153 14 70 19 29 33	13 244 25 4 0 286 163 271 0 4 1 3 271 0 4 1 187 780 18 1,424 0 18 1,424 0 19 9 13 0 19 9 13 0 37 147 161 147 161 14 74 10 9 9 14
Trip Generation ofter Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTrip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelNursing HomeGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	140 150 210 210 220 220 320 620 812 820 911 210 224 220 254 320 620 710 820 822 899 912 899 912 930 931 932	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 2.85 1 5 486.205 2.85 3 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4	KSF KSF DU KSF KSF KSF DU Rooms Beds KSF KSF DU DU DU DU Beds Rooms Beds KSF KSF KSF KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385 245 23,025 7 6 1,382 30 90 32 2,466 15,385 245 23,025 7 5 0 159 275 0 310 310 2,894 2,523 170 6 70 310 2,894 2,523 170 6 70 310 2,894 2,523 343 484	18 308 29 4 0 359 205 338 3 3 3 3 3 3 3 1 224 339 24 1,142 1 103 11 103 11 224 339 24 1,142 1 0 4 5 64 106 1 1 64 3 3 3 3 7 75	16 255 24 3 0 298 170 282 1 1 6 1 4 3 8 3 3 0 2 8 7 1 9 0 2 8 7 1 9 0 2 8 7 1 9 0 2 8 7 1 9 0 2 8 7 1 9 0 2 8 7 1 9 0 2 8 1 1 4 3 8 3 1 1 1 3 8 1 1 1 3 8 1 1 1 3 8 1 1 1 3 8 2 4	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309 1 1 23 10 309 1 1 75 4 5 0 309 1 1 75 4 5 0 309 2 1 0 309	16 359 35 8 0 418 239 380 2 2 9 1 380 2 9 1 337 1,460 31 2,459 0 54 15 2,459 0 54 15 2,459 0 54 15 2,7 0 0 54 15 27 0 0 54 31 2,459 31 4 2,75 314 28 144 29 38 144 29 38 47 69	3 115 10 4 0 132 76 109 2 5 0 150 680 13 1,035 0 150 680 13 1,035 0 35 6 14 0 35 6 14 0 8 128 153 14 70 19 29 33 43	13 244 25 4 0 286 163 271 0 4 1 3 7 80 18 1,424 1 1 87 7 80 18 1,424 0 18 1,424 0 19 9 13 0 19 9 13 0 37 147 161 147 161 14 74 10 9 14 26
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelNursing HomeGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	140 150 151 210 151 210 220 320 620 812 820 911 220 254 320 620 710 820 822 829 912 829 912 930 931	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 2.85 1 323 61 150 0 35.825 91.458 54.192 1.854 7.81 4.634 9.448	KSF KSF DU KSF KSF KSF DU Rooms Beds KSF DU Beds KSF KSF	Rate </td <td>110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 30 90 32 2,466 15,385 245 23,025 7 6 1,382 245 23,025 7 7 0 1,382 159 275 0 0 310 2,894 2,75 0 0 310 2,894 2,523 170 6 70 310 2,894 2,523 170 6 70 343 484 879 2,720</td> <td>18 308 29 4 0 359 205 338 3 3 3 1 224 339 24 1,142 1 203 3 3 1 103 11 24 0 45 64 106 1 64 3 37 75 159</td> <td>16 255 24 3 0 298 170 282 1 1 6 1 4 3 216 14 3 3 216 14 3 3 3 0 2 8 7 19 0 2 8 7 19 0 2 8 7 19 0 2 8 7 19 0 42 41 66 1 1 38 1 1 1 38 1 1 1 38 1 1 1 38 1 1 38 2 4 83</td> <td>2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309 1 1 23 10 309 1 1 75 4 5 0 309 1 1 75 4 5 0 309 2 1 0 309 2 1 0 309 2 1 0 309 2 1 2 3 40 0 0 26 2 2 2 2 4 5 5 1 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7</td> <td>16 359 35 8 0 418 239 380 2 2 9 380 2 9 1 1 337 1,460 31 2,459 0 54 31 2,459 0 54 15 2,459 0 54 15 2,459 0 54 15 2,75 314 2,75 314 2,8 144 28 144 28 144 29 38 47 69 195</td> <td>3 115 10 4 0 132 76 109 2 5 0 150 680 13 1,035 0 150 680 13 1,035 0 35 6 14 0 35 6 14 0 8 128 153 14 70 19 29 33 43 95</td> <td>13 244 25 4 0 286 163 271 0 4 17 0 4 187 780 18 1,424 0 19 9 13 0 37 147 161 14 74 10 9 14 74 100 9 14 74 100 9 14 74 100 9 14 26 100</td>	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 30 90 32 2,466 15,385 245 23,025 7 6 1,382 245 23,025 7 7 0 1,382 159 275 0 0 310 2,894 2,75 0 0 310 2,894 2,523 170 6 70 310 2,894 2,523 170 6 70 343 484 879 2,720	18 308 29 4 0 359 205 338 3 3 3 1 224 339 24 1,142 1 203 3 3 1 103 11 24 0 45 64 106 1 64 3 37 75 159	16 255 24 3 0 298 170 282 1 1 6 1 4 3 216 14 3 3 216 14 3 3 3 0 2 8 7 19 0 2 8 7 19 0 2 8 7 19 0 2 8 7 19 0 42 41 66 1 1 38 1 1 1 38 1 1 1 38 1 1 1 38 1 1 38 2 4 83	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309 1 1 23 10 309 1 1 75 4 5 0 309 1 1 75 4 5 0 309 2 1 0 309 2 1 0 309 2 1 0 309 2 1 2 3 40 0 0 26 2 2 2 2 4 5 5 1 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	16 359 35 8 0 418 239 380 2 2 9 380 2 9 1 1 337 1,460 31 2,459 0 54 31 2,459 0 54 15 2,459 0 54 15 2,459 0 54 15 2,75 314 2,75 314 2,8 144 28 144 28 144 29 38 47 69 195	3 115 10 4 0 132 76 109 2 5 0 150 680 13 1,035 0 150 680 13 1,035 0 35 6 14 0 35 6 14 0 8 128 153 14 70 19 29 33 43 95	13 244 25 4 0 286 163 271 0 4 17 0 4 187 780 18 1,424 0 19 9 13 0 37 147 161 14 74 10 9 14 74 100 9 14 74 100 9 14 74 100 9 14 26 100
Trip Generation ofter Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelNursing HomeGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	 140 150 210 210 220 320 620 812 820 911 220 224 320 620 710 820 822 899 912 930 931 932 934 945 	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 2.85 1 5 486.205 2.85 3 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4	KSF KSF DU KSF KSF KSF DU Rooms Beds KSF KSF DU DU DU DU Beds Rooms Beds KSF KSF KSF KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 2,466 15,385 245 23,025 6 1,382 45 23,025 6 1,382 159 275 0 6 1,382 159 275 0 310 2,894 2,523 170 6 310 2,894 2,523 170 6 7 310 2,894 2,523 170 6 7 310 2,894 2,523 170 6 7 310 2,894 2,523 170 6 7 343 484 879 2,720 13,010	18 308 29 4 0 359 205 338 3 1 224 339 24 1,142 1 0 45 64 106 1 64 3 3 37 75 159	16 255 24 3 0 298 170 282 1 1 6 1 4 3 216 1 4 3 3 3 3 8 1 1 3 8 1 1 3 8 1 1 3 8 1 1 3 8 1 1 3 8 1 1 3 8 1 1 3 8 1 1 3 8 3 6 4	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309 1 1 75 4 5 0 309 1 1 75 4 5 0 309 1 1 75 4 5 0 309 2 1 0 309 2 1 1 75 4 5 5 0 3 2 3 2 3 40 0 0 26 2 2 2 2 4 5 5 1 7 5 5 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	16 359 35 8 0 418 239 380 2 2 9 1 380 2 9 1 337 1,460 31 2,459 0 54 31 2,459 0 54 15 27 0 54 15 27 0 54 15 27 0 45 275 314 2,75 314 28 144 28 144 29 38 47 69 195 1,280	3 115 10 4 0 132 76 109 2 76 109 2 5 0 150 680 13 1,035 0 150 680 13 1,035 0 35 6 14 0 35 6 14 0 8 128 153 14 70 19 29 33 14 70 19 29 33 43 95	13 244 25 4 0 286 163 271 0 4 1 187 780 18 1,424 0 18 1,424 0 19 9 13 0 19 9 13 0 37 147 161 147 161 147 161 147 161 147 161 147 161 147 161 147 161 147 163
Trip Generation after Internal Capture for Block 1General Light IndustrialManufacturingWarehousingMini-WarehouseSingle-Family Detached HousingTotal Block 1Trip Generation after Internal Capture for Block 2ManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation after Internal Capture for Block 3Single-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelNursing HomeGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	 140 150 210 210 220 320 620 812 820 911 220 224 320 620 710 820 822 899 912 930 931 932 934 945 	28.274 560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 2.85 1 5 486.205 2.85 3 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4	KSF KSF DU KSF KSF KSF DU Rooms Beds KSF KSF DU DU DU DU Beds Rooms Beds KSF KSF KSF KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	110 2,131 302 68 0 2,611 1,422 3,355 30 90 32 30 90 32 2,466 15,385 245 23,025 7 6 1,382 245 23,025 7 7 0 1,382 159 275 0 0 310 2,894 2,75 0 0 310 2,894 2,523 170 6 70 310 2,894 2,523 170 6 70 343 484 879 2,720	18 308 29 4 0 359 205 338 3 3 3 1 224 339 24 1,142 1 203 3 3 1 103 11 24 0 45 64 106 1 64 3 37 75 159	16 255 24 3 0 298 170 282 1 1 6 1 4 3 216 14 3 3 216 14 3 3 3 0 2 8 7 19 0 2 8 7 19 0 2 8 7 19 0 2 8 7 19 0 42 41 66 1 1 38 1 1 1 38 1 1 1 38 1 1 1 38 1 1 38 2 4 83	2 53 5 1 0 61 35 56 2 2 2 0 81 123 10 309 1 1 23 10 309 1 1 75 4 5 0 309 1 1 75 4 5 0 309 2 1 0 309 2 1 0 309 2 1 0 309 2 1 2 3 40 0 0 26 2 2 2 2 4 5 5 1 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	16 359 35 8 0 418 239 380 2 2 9 380 2 9 1 1 337 1,460 31 2,459 0 54 31 2,459 0 54 15 2,459 0 54 15 2,459 0 54 15 2,75 314 2,75 314 2,8 144 28 144 28 144 29 38 47 69 195	3 115 10 4 0 132 76 109 2 5 0 150 680 13 1,035 0 150 680 13 1,035 0 35 6 14 0 35 6 14 0 8 128 153 14 70 19 29 33 43 95	13 244 25 4 0 286 163 271 0 4 163 271 0 4 187 780 18 1,424 0 19 9 13 0 37 147 161 14 74 10 9 14 74 100 9 14 74 100 9 14 26 100

Transit Reduction											
Trip Generation for Block 1 after Transit Reduction	110	20.274	LKCE	Dete	00	10	1.4	2	10	2	10
General Light Industrial	110 140	28.274	KSF	Rate	99	16 278	14 230	2	15	3 104	12
Manufacturing Warehousing	140	560.565 220.353	KSF KSF	Rate Rate	1,918 272	278	230	48 5	324 32	9	220 23
Mini-Warehouse	151	58.916	KSF	Rate	61	4	3	1	8	9 4	4
Total Block 1	131	36.910	КЭГ	nale	2,350	325	269	56	379	120	259
Trip Generation for Block 2 after Transit Reduction					2,330	323	205	50	575	120	235
Manufacturing	140	374.403	KSF	Rate	1,280	185	153	32	215	68	147
Single-Family Detached Housing	210	0	DU	Rate	0	0	0	0	0	0	0
Multi-Family Housing (Low-Rise)(Not Close to Rail		_						-			
Transit)	220	/	DU	Rate	27	3	1	2	2	2	0
Motel	320	49	Rooms	Rate	81	7	5	2	9	5	4
Nursing Home	620	10.331	Beds	Rate	29	1	1	0	1	0	1
Building Materials and Lumber Store	812	169.166	KSF	Rate	2,219	202	129	73	303	135	168
Shopping Center (>150k)	820	486.205	KSF	Rate	13,847	305	194	111	1,314	612	702
Walk-in Bank	911	2.85	KSF	Rate	221	22	13	9	28	12	16
Total Block 2					20,724	1,029	750	279	2,214	932	1,282
Trip Generation for Block 3 after Transit Reduction	1	1.	1	1	_			-			
Single-Family Detached Housing	210	1	DU	Rate	5	1	0	1	0	0	0
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit)	220	323	DU	Rate	1,244	93	25	68	49	32	17
Assisted Living	254	61	Beds	Rate	143	10	6	4	13	5	8
Motel	320	150	Rooms	Rate	248	22	17	5	25	13	12
General Office Building	710	35.825	KSF	Rate	279	41	38	3	40	7	33
Building Materials and Lumber Store	812	0	KSF	Rate	0	0	0	0	0	0	0
Shopping Center (>150k)	820	91.458	KSF	Rate	2,605	58	37	21	247	115	132
Strip Retail Plaza (<40k)	822	54.192	KSF	Rate	2,271	95	59	36	283	138	145
Liquor Store	899	1.854	KSF	Rate	153	1	1	0	26	13	13
Drive-in Bank	912	7.81	KSF	Rate	603	57	34	23	130	63	67
Fast Casual Restaurant	930	4.634	KSF	Rate	176	3	1	2	26	17	9
Fine Dining Restaurant	931	9.448	KSF	Rate	309	3	1	2	34	26	8
High-Turnover (Sit-Down) Restaurant	932	10.44	KSF	Rate	436	34	12	22	43	30	13
Fast-Food Restaurant with Drive-Through Window	934	4.351	KSF	Rate	791	68	22	46	62	39	23
Convenience Store/Gas Station	945	12	VFP	Rate	2,448	143	75	68	176	86	90
Total Block 3 Trip Generation for All Blocks after Transit Reduction					11,711	629	328	301	1,154	584	570
Percent Reductions due to Transit Reduction	271				34,785 10%	1,983 10%	1,347 10%	636 10%	3,747 10%	1,636 10%	2,111 10%
					10/0	10/0	10/0	10/0	10/0	TO \0	TO \0
Pass-By Reduction											
Pass-By Reduction Trin Generation for Block 1 after Pass-By Reduction											
Trip Generation for Block 1 after Pass-By Reduction	-	28 274	KSE	Bate	99	16	14	2	15	3	12
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial	110	28.274	KSF KSF	Rate	99 1.918	16 278	14 230	2 48	15 324	3 104	12 220
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial Manufacturing	110 140	560.565	KSF	Rate	1,918	278	230	48	324	104	220
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial	110										
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial Manufacturing Warehousing	110 140 150	560.565 220.353	KSF KSF	Rate Rate	1,918 272	278 27	230 22	48 5	324 32	104 9	220 23
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial Manufacturing Warehousing Mini-Warehouse	110 140 150 151	560.565 220.353	KSF KSF	Rate Rate	1,918 272 61	278 27 4	230 22 3	48 5 1	324 32 8	104 9 4	220 23 4
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial Manufacturing Warehousing Mini-Warehouse Total Block 1	110 140 150 151	560.565 220.353	KSF KSF	Rate Rate	1,918 272 61	278 27 4	230 22 3	48 5 1	324 32 8	104 9 4	220 23 4
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial Manufacturing Warehousing Mini-Warehouse Total Block 1 Trip Generation for Block 2 after Pass-By Reduction	110 140 150 151	560.565 220.353 58.916	KSF KSF KSF	Rate Rate Rate	1,918 272 61 2,350	278 27 4 325	230 22 3 269	48 5 1 56	324 32 8 379	104 9 4 120	220 23 4 259
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial Manufacturing Warehousing Mini-Warehouse Total Block 1 Trip Generation for Block 2 after Pass-By Reduction Manufacturing Warehousing Multi-Family Housing (Low-Rise)(Not Close to Rail	110 140 150 151 140	560.565 220.353 58.916 374.403	KSF KSF KSF KSF	Rate Rate Rate Rate	1,918 272 61 2,350 1,280	278 27 4 325 185	230 22 3 269 153	48 5 1 56 32	324 32 8 379 215	104 9 4 120 68	220 23 4 259 147
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial Manufacturing Warehousing Mini-Warehouse Total Block 1 Trip Generation for Block 2 after Pass-By Reduction Manufacturing Warehousing Multi-Family Housing (Low-Rise)(Not Close to Rail Transit)	110 140 150 151 151 140 150 220	560.565 220.353 58.916 374.403 2452.584 7	KSF KSF KSF KSF KSF DU	Rate Rate Rate Rate Rate Rate Rate	1,918 272 61 2,350 1,280 3,020 27	278 27 4 325 185 304 3	230 22 3 269 153 254 1	48 5 1 56 32 50 2	324 32 8 379 215 342 2	104 9 4 120 68 98 2	220 23 4 259 147 244 0
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial Manufacturing Warehousing Mini-Warehouse Total Block 1 Trip Generation for Block 2 after Pass-By Reduction Manufacturing Warehousing Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Motel	110 140 150 151 140 150 220 320	560.565 220.353 58.916 374.403 2452.584 7 49	KSF KSF KSF KSF KSF KSF DU Rooms	Rate Rate Rate Rate Rate Rate Rate Rate	1,918 272 61 2,350 1,280 3,020 27 81	278 27 4 325 185 304 3 7	230 22 3 269 153 254 1 1 5	48 5 1 56 32 50 2 2 2	324 32 8 379 215 342 2 9	104 9 4 120 68 98 2 2 5	220 23 4 259 147 244 0 4
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial Manufacturing Warehousing Mini-Warehouse Total Block 1 Trip Generation for Block 2 after Pass-By Reduction Manufacturing Warehousing Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Motel Nursing Home	110 140 150 151 151 140 150 220 320 620	560.565 220.353 58.916 374.403 2452.584 7 49 10.331	KSF KSF KSF KSF KSF DU Rooms Beds	Rate Rate Rate Rate Rate Rate Rate Rate	1,918 272 61 2,350 1,280 3,020 27 81 29	278 27 4 325 185 304 3 7 1	230 22 3 269 153 254 1 1 5 1	48 5 1 56 32 50 2 2 2 0	324 32 8 379 215 342 2 9 1	104 9 4 120 68 98 2 2 5 0	220 23 4 259 147 244 0 4 1
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial Manufacturing Warehousing Mini-Warehouse Total Block 1 Trip Generation for Block 2 after Pass-By Reduction Manufacturing Warehousing Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Motel Nursing Home Building Materials and Lumber Store	110 140 150 151 140 150 220 320 620 812	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166	KSF KSF KSF KSF KSF DU Rooms Beds KSF	RateRateRateRateRateRateRateRateRateRateRateRateRateRateRateRateRate	1,918 272 61 2,350 1,280 3,020 27 81 29 1,931	278 27 4 325 185 304 3 7 1 202	230 22 3 269 153 254 1 5 1 5 1 129	48 5 1 56 32 50 2 2 2 0 73	324 32 8 379 215 342 2 9 1 224	104 9 4 120 68 98 2 2 5 0 0 100	220 23 4 259 147 244 0 4 1 124
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial Manufacturing Warehousing Mini-Warehouse Total Block 1 Trip Generation for Block 2 after Pass-By Reduction Manufacturing Warehousing Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Motel Nursing Home Building Materials and Lumber Store Shopping Center (>150k)	110 140 150 151 140 150 220 320 620 812 820	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205	KSF KSF KSF KSF KSF DU Rooms Beds KSF KSF	RateRateRateRateRateRateRateRateRateRateRateRateRateRateRateRateRateRateRate	1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324	278 27 4 325 185 304 3 7 1 202 305	230 22 3 269 153 254 1 1 5 1 5 1 129 194	48 5 1 56 32 50 2 2 2 0 73 111	324 32 8 379 215 342 2 2 9 1 224 1,025	104 9 4 120 68 98 2 2 5 0 100 477	220 23 4 259 147 244 0 4 1 124 548
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial Manufacturing Warehousing Mini-Warehouse Total Block 1 Trip Generation for Block 2 after Pass-By Reduction Manufacturing Warehousing Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Motel Nursing Home Building Materials and Lumber Store	110 140 150 151 140 150 220 320 620 812	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166	KSF KSF KSF KSF KSF DU Rooms Beds KSF	RateRateRateRateRateRateRateRateRateRateRateRateRateRateRateRateRate	1,918 272 61 2,350 1,280 3,020 27 81 29 1,931	278 27 4 325 185 304 3 7 1 202	230 22 3 269 153 254 1 5 1 5 1 129	48 5 1 56 32 50 2 2 2 0 73	324 32 8 379 215 342 2 9 1 224	104 9 4 120 68 98 2 2 5 0 0 100	220 23 4 259 147 244 0 4 1 124
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial Manufacturing Warehousing Mini-Warehouse Total Block 1 Trip Generation for Block 2 after Pass-By Reduction Manufacturing Warehousing Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Motel Nursing Home Building Materials and Lumber Store Shopping Center (>150k) Walk-in Bank	110 140 150 151 151 220 320 620 812 820 911	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205	KSF KSF KSF KSF KSF DU Rooms Beds KSF KSF	RateRateRateRateRateRateRateRateRateRateRateRateRateRateRateRateRateRateRate	1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324 221	278 27 4 325 185 304 3 7 1 202 305 22	230 22 3 269 153 254 1 1 5 1 129 194 13	48 5 1 56 32 50 2 2 2 0 73 111 9	324 32 8 379 215 342 2 2 9 1 224 1,025 28	104 9 4 120 68 98 2 2 5 0 100 477 12	220 23 4 259 147 244 0 4 1 124 548 16
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial Manufacturing Warehousing Mini-Warehouse Total Block 1 Trip Generation for Block 2 after Pass-By Reduction Manufacturing Warehousing Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Motel Nursing Home Building Materials and Lumber Store Shopping Center (>150k) Walk-in Bank Total Block 2	110 140 150 151 151 220 320 620 812 820 911	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205	KSF KSF KSF KSF KSF DU Rooms Beds KSF KSF	RateRateRateRateRateRateRateRateRateRateRateRateRateRateRateRateRateRateRate	1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324 221	278 27 4 325 185 304 3 7 1 202 305 22	230 22 3 269 153 254 1 1 5 1 129 194 13	48 5 1 56 32 50 2 2 2 0 73 111 9	324 32 8 379 215 342 2 2 9 1 224 1,025 28	104 9 4 120 68 98 2 2 5 0 100 477 12	220 23 4 259 147 244 0 4 1 124 548 16
Trip Generation for Block 1 after Pass-By ReductionGeneral Light IndustrialManufacturingWarehousingMini-WarehouseTotal Block 1Trip Generation for Block 2 after Pass-By ReductionManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation for Block 3 after Pass-By ReductionSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to Rail	110 140 150 151 140 150 220 320 620 812 820 911 210	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1	KSF KSF KSF KSF KSF DU Rooms Beds KSF KSF KSF KSF SF	Rate	1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324 221 18,913	278 27 4 325 185 304 3 7 1 202 305 22 1,029	230 22 3 269 153 254 1 1 5 1 129 194 13 750	48 5 1 56 32 50 2 2 2 0 73 111 9 279 1	324 32 8 379 215 342 2 2 9 1 224 1,025 28 1,846	104 9 4 120 68 98 2 2 5 0 100 477 12 762 762	220 23 4 259 147 244 0 4 1 124 548 16 1,084 0
Trip Generation for Block 1 after Pass-By Reduction General Light Industrial Manufacturing Warehousing Mini-Warehouse Total Block 1 Trip Generation for Block 2 after Pass-By Reduction Manufacturing Warehousing Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Motel Nursing Home Building Materials and Lumber Store Shopping Center (>150k) Walk-in Bank Total Block 2 Trip Generation for Block 3 after Pass-By Reduction Single-Family Detached Housing Multi-Family Housing (Low-Rise)(Not Close to Rail Transit)	110 140 150 151 151 220 320 620 812 820 911 210 220	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 323	KSF KSF KSF KSF KSF DU Rooms Beds KSF KSF KSF KSF DU DU	Rate	1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324 221 18,913 5 1,244	278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 1 93	230 22 3 269 153 254 1 1 5 1 129 194 13 750 0 25	48 5 1 56 32 50 2 2 2 0 73 111 9 279 279 1 68	324 32 8 379 215 342 2 2 9 1 224 1,025 28 1,846 0 49	104 9 4 120 68 98 2 2 5 0 100 477 12 762 762	220 23 4 259 147 244 0 4 1 124 548 16 1,084 0 17
Trip Generation for Block 1 after Pass-By ReductionGeneral Light IndustrialManufacturingWarehousingMini-WarehouseTotal Block 1Trip Generation for Block 2 after Pass-By ReductionManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation for Block 3 after Pass-By ReductionSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)	110 140 150 151 151 220 320 620 812 820 911 820 911 210 220 2254	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 323 61	KSF KSF KSF KSF KSF DU Rooms Beds KSF KSF KSF KSF DU DU DU	Rate	1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324 221 18,913 5 5 1,244 143	278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 1 93 10	230 22 3 269 153 254 1 1 5 1 1 25 1 1 29 194 13 750 0 25 0 25 6	48 5 1 56 32 50 2 2 2 0 73 111 9 279 279 1 1 68 4	324 32 8 379 215 342 2 2 9 1 224 1,025 28 1,846 0 49 13	104 9 4 120 68 98 2 2 5 0 100 477 12 762 762 0 32 5	220 23 4 259 147 244 0 4 1 124 548 16 1,084 16 1,084 0 17 8
Trip Generation for Block 1 after Pass-By ReductionGeneral Light IndustrialManufacturingWarehousingMini-WarehouseTotal Block 1Trip Generation for Block 2 after Pass-By ReductionManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation for Block 3 after Pass-By ReductionSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTrip Generation for Block 3 after Pass-By ReductionSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotel	110 140 150 151 151 220 320 320 620 812 820 911 210 210 220 254 320	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 323 61 150	KSF KSF KSF KSF KSF KSF DU Rooms Beds KSF KSF KSF KSF DU DU DU DU DU DU Beds	Rate	1,918 272 61 2,350 1,280 3,020 27 81 27 81 29 1,931 12,324 221 18,913 5 5 1,244 143 248	278 27 4 325 185 304 3 7 1 202 305 22 1,029 1,029 1 1 93 10 22	230 22 3 269 153 254 1 1 5 1 129 194 13 750 9 194 13 750 0 25 6 1 7	48 5 1 56 32 50 2 2 2 0 73 111 9 279 279 1 1 68 4 5	324 32 8 379 215 342 2 2 9 1 1 224 1,025 28 1,846 0 0 49 13 25	104 9 4 120 68 98 2 2 5 0 100 477 12 762 762 0 32 5 13	220 23 4 259 147 244 0 4 1 124 548 16 1,084 16 1,084 16 1,084
Trip Generation for Block 1 after Pass-By ReductionGeneral Light IndustrialManufacturingWarehousingMini-WarehouseTotal Block 1Trip Generation for Block 2 after Pass-By ReductionManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation for Block 3 after Pass-By ReductionSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelGeneral Office Building	110 140 150 151 151 220 320 620 812 820 911 820 911 210 210 220 254 320 254 320	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 323 61 150 35.825	KSFKSFKSFKSFKSFDURoomsBedsKSFKSFDUDUDUBedsKSF	Rate	1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324 29 1,931 12,324 221 18,913 5 5 1,244 143 248 279	278 27 4 325 185 304 3 3 7 1 202 305 22 1,029 1 1 93 10 22 41	230 22 3 269 153 254 1 1 5 1 1 25 1 1 29 194 13 750 0 25 0 25 6 17 38	48 5 1 56 32 50 2 2 2 0 73 111 9 279 279 1 1 68 4 5 3	324 32 8 379 215 342 2 2 9 1 224 1,025 28 1,846 0 49 13 25 40	104 9 4 120 68 98 2 2 5 0 100 477 12 762 762 0 32 0 32 5 13 7	220 23 4 259 147 244 0 4 1 124 548 16 1,084 16 1,084 0 17 8 12 33
Trip Generation for Block 1 after Pass-By ReductionGeneral Light IndustrialManufacturingWarehousingMini-WarehouseTotal Block 1Trip Generation for Block 2 after Pass-By ReductionManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation for Block 3 after Pass-By ReductionSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelGeneral Office BuildingShopping Center (>150k)	110 140 150 151 151 220 320 620 812 820 911 210 210 220 254 320 254 320 710 820	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 323 61 150 35.825 91.458	KSF KSF KSF KSF KSF C C C C C C C C C C C C C C C C C C C	Rate	1,918 272 61 2,350 1,280 3,020 27 81 27 81 29 1,931 12,324 221 18,913 5 5 1,244 221 18,913	278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 1 93 10 22 41 58	230 22 3 269 153 254 1 1 5 1 1 25 1 1 29 194 13 750 0 25 0 25 6 17 38 37	48 5 1 56 32 50 2 2 2 2 0 73 111 9 279 279 1 1 68 4 5 3 3 21	324 32 8 379 215 342 2 9 1 1 224 1,025 28 1,846 0 0 49 13 25 40 193	104 9 4 120 68 98 2 5 0 100 477 12 762 762 0 32 0 32 5 13 7 90	220 23 4 259 147 244 0 4 1 124 548 16 1,084 16 1,084 0 17 8 12 33 103
Trip Generation for Block 1 after Pass-By ReductionGeneral Light IndustrialManufacturingWarehousingMini-WarehouseTotal Block 1Trip Generation for Block 2 after Pass-By ReductionManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation for Block 3 after Pass-By ReductionSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	 110 140 150 151 151 140 150 220 320 620 812 820 911 210 210 220 254 320 710 820 822 	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 323 61 150 35.825 91.458 54.192	KSFKSFKSFKSFKSFDURoomsBedsKSFKSFDUDUBedsKSF	Rate	1,918 272 61 2,350 1,280 3,020 27 81 27 81 29 1,931 12,324 29 1,931 12,324 221 18,913 5 5 1,244 143 248 248 279 2,318 1,817	278 27 4 325 185 304 3 7 1 202 305 22 1,029 1,029 1 1 93 10 22 41 58 95	230 22 3 269 153 254 1 1 5 1 129 194 13 750 9 0 25 6 17 38 37 38 37 59	48 5 1 56 32 50 2 2 2 0 73 111 9 279 279 1 1 68 4 5 3 3 21 36	324 32 8 379 215 342 2 9 1 224 1,025 28 1,846 0 49 13 25 40 193 170	104 9 4 120 68 98 2 5 0 100 477 12 762 762 0 32 5 13 7 90 83	220 23 4 259 147 244 0 4 1 244 0 4 1 124 548 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 10 3 3 103 87
Trip Generation for Block 1 after Pass-By ReductionGeneral Light IndustrialManufacturingWarehousingMini-WarehouseTotal Block 1Trip Generation for Block 2 after Pass-By ReductionManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation for Block 3 after Pass-By ReductionSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	 110 140 150 151 151 150 220 320 620 812 820 911 210 210 220 254 320 710 820 822 899 	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 323 61 150 35.825 91.458 54.192 1.854	KSFKSFKSFKSFKSFDURoomsBedsKSFKSFDUDUBedsKSF	Rate	1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324 29 1,931 12,324 221 18,913 5 5 1,244 143 248 279 2,318 1,817 153	278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 2 2 1,029 1 1 93 10 22 41 58 95 1	230 22 3 269 153 254 1 1 5 1 1 25 1 1 29 194 13 750 0 25 6 17 38 37 59 1	48 5 1 56 32 50 2 2 2 0 73 111 9 279 279 279 1 1 68 4 5 3 21 36 0	324 32 8 379 215 342 2 9 1 224 1,025 28 1,846 0 49 13 25 40 193 170 26	104 9 4 120 68 98 2 5 0 100 477 12 762 762 0 32 762 0 32 5 13 7 90 83 13	220 23 4 259 147 244 0 4 1 124 548 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 10 3 3 103 87 13
Trip Generation for Block 1 after Pass-By ReductionGeneral Light IndustrialManufacturingWarehousingMini-WarehouseTotal Block 1Trip Generation for Block 2 after Pass-By ReductionManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation for Block 3 after Pass-By ReductionSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	 110 140 150 151 151 220 320 620 812 820 911 210 2210 220 320 54 320 710 820 822 899 912 	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 323 61 150 35.825 91.458 54.192 1.854 7.81	KSFKSFKSFKSFKSFDURoomsBedsKSFKSFDUDUBedsKSF	Rate	1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324 221 18,913 5 1,244 221 18,913 5 1,244 221 18,913	278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 1 93 10 22 41 58 95 1 1 57	230 22 3 269 153 254 1 1 5 1 129 194 13 750 0 25 6 17 38 37 59 1 1 34	48 5 1 56 32 50 2 2 2 0 73 111 9 279 7 3 111 9 279 1 1 68 4 5 3 21 36 0 0 23	324 32 8 379 215 342 2 9 1 1 224 1,025 28 1,846 0 49 13 25 40 193 13 25 40 193 170 26 130	104 9 4 120 68 98 2 5 0 100 477 12 762 762 0 32 762 0 32 5 13 7 90 83 13 7	220 23 4 259 147 244 0 4 1 244 0 4 1 124 548 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 12 33 103 87 13 67
Trip Generation for Block 1 after Pass-By ReductionGeneral Light IndustrialManufacturingWarehousingMini-WarehouseTotal Block 1Trip Generation for Block 2 after Pass-By ReductionManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation for Block 3 after Pass-By ReductionSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	 110 140 150 151 151 151 220 320 620 812 820 911 220 210 220 254 320 710 820 822 899 912 930 	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 323 61 150 35.825 91.458 54.192 1.854 7.81 4.634	KSF KSF KSF KSF KSF KSF KSF KSF KSF Beds KSF KSF DU Beds KSF Beds KSF SF SF KSF KSF KSF SF KSF KS	Rate	1,918 272 61 2,350 1,280 3,020 27 81 27 81 29 1,931 12,324 221 18,913 5 5 1,244 221 18,913 5 5 1,244 221 18,913	278 27 4 325 185 304 3 7 1 202 305 22 1,029 1,029 1 1 93 10 22 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 1 5 8 9 5 1 1 5 5 7 3	230 22 3 269 153 254 1 1 5 1 129 194 13 750 0 25 6 17 38 37 59 1 38 37 59 1 34 1	48 5 1 56 32 50 2 2 2 0 73 111 9 279 279 1 1 68 4 5 3 21 36 3 21 36 0 23 2	324 32 8 379 215 342 2 9 1 224 1,025 28 1,846 0 49 13 25 40 193 170 26 130 15	104 9 4 120 68 98 2 5 0 100 477 12 762 762 0 32 5 13 7 2 5 13 7 90 83 13 7 90 83 13 63 10	220 23 4 259 147 244 0 4 1 244 0 4 1 124 548 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 10 3 3 10 3 3 10 3 87 13 67 5
Trip Generation for Block 1 after Pass-By ReductionGeneral Light IndustrialManufacturingWarehousingMini-WarehouseTotal Block 1Trip Generation for Block 2 after Pass-By ReductionManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation for Block 3 after Pass-By ReductionSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	 110 140 150 151 151 150 220 320 620 812 820 911 210 220 254 320 254 320 710 820 710 820 912 930 931 	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 7 41 323 61 150 35.825 91.458 54.192 1.854 7.81 4.634 9.448	KSFKSFKSFKSFKSFDURoomsBedsKSFKSFDUDUBedsKSF	Rate	1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324 221 18,913 5 1,244 221 18,913 5 1,244 221 18,913 279 2,318 1,244 143 248 279 2,318 1,817 153 603 138 241	278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 2 2 1,029 1 0 22 41 58 93 10 22 41 58 95 1 1 57 3 3 3	230 22 3 269 153 254 1 1 5 1 1 25 1 1 29 194 13 750 0 25 6 17 38 37 59 1 38 37 59 1 34 1 1	48 5 1 56 32 50 2 2 2 0 7 3 111 9 279 279 1 1 68 4 5 3 21 36 0 23 21 36 0 23 2 2	324 32 8 379 215 342 2 9 1 1 224 1,025 28 1,846 0 40 193 13 25 40 193 170 26 130 15 19	104 9 4 120 68 98 2 5 0 100 477 12 762 762 0 477 12 762 762 762 762 762 762 762 762 762 8 3 13 7 90 83 13 63 10 10 15	220 23 4 259 147 244 0 4 1 124 548 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 10 3 3 10 3 87 13 67 5 5 4
Trip Generation for Block 1 after Pass-By ReductionGeneral Light IndustrialManufacturingWarehousingMini-WarehouseTotal Block 1Trip Generation for Block 2 after Pass-By ReductionManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation for Block 3 after Pass-By ReductionSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	 110 140 150 151 150 151 220 320 620 812 820 911 210 220 254 320 254 320 710 820 822 899 912 930 931 932 	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 323 61 150 35.825 91.458 54.192 1.854 7.81 4.634 9.448 10.44	KSFKSFKSFKSFKSFKSFDURoomsBedsKSFKSFDUDUBedsKSF	Rate	1,918 272 61 2,350 1,280 3,020 27 81 27 81 29 1,931 12,324 221 18,913 5 1,244 221 18,913 5 1,244 221 18,913 221 18,913 2318 1,244 279 2,318 1,817 153 603 138 241 342	278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 1 93 10 22 41 58 95 1 1 57 3 3 3 3 4	230 22 3 269 153 254 1 1 5 1 129 194 13 750 0 25 6 17 38 37 59 1 38 37 59 1 34 1 1 2	48 5 1 56 32 50 2 2 2 0 73 111 9 279 279 1 1 68 4 5 3 21 36 0 23 21 36 0 23 21 36 0 23 21 22 22	324 32 8 379 215 342 2 9 1 1 224 1,025 28 1,846 0 49 13 25 40 193 13 25 40 193 170 26 130 15 19 24	104 9 4 120 68 98 2 5 0 100 477 12 762 0 100 477 12 762 0 32 5 13 7 90 83 13 7 90 83 13 63 10 15 17	220 23 4 259 147 244 0 4 1 244 0 4 1 124 548 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 12 33 103 87 13 67 5 4 7
Trip Generation for Block 1 after Pass-By ReductionGeneral Light IndustrialManufacturingWarehousingMini-WarehouseTotal Block 1Trip Generation for Block 2 after Pass-By ReductionManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation for Block 3 after Pass-By ReductionSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	 110 140 150 151 151 151 220 320 620 812 820 911 220 254 320 254 320 710 820 822 899 912 930 931 932 934 	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 323 61 150 35.825 91.458 54.192 1.854 7.81 4.634 9.448 10.44	KSF Beds KSF KSF Beds KSF DU Beds KSF KSF <td< td=""><td>Rate<!--</td--><td>1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324 29 1,931 12,324 221 18,913 5 1,244 221 18,913 5 1,244 143 248 279 2,318 1,244 143 248 279 2,318 1,817 153 603 138 241 342 376</td><td>278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 3 3 5 2 2 1,029 1 3 3 3 3 3 3 3 3 4 3 4 3 4</td><td>230 22 3 269 153 254 1 1 5 1 1 29 194 13 750 0 25 6 1 7 50 25 6 17 38 37 59 1 38 37 59 1 34 1 1 12 11</td><td>48 5 1 56 32 50 2 2 2 0 73 111 9 279 279 1 1 68 4 5 3 111 9 279 279 279 279 279 279 279 279 279 2</td><td>324 32 8 379 215 342 2 9 1 224 1,025 28 1,846 0 49 13 25 40 193 170 26 130 15 19 24 28</td><td>104 9 4 120 68 98 2 5 0 100 477 12 762 762 0 32 5 13 7 90 32 5 13 7 90 83 13 7 90 83 13 63 10 15 17 18</td><td>220 23 4 259 147 244 0 4 1 244 0 4 1 124 548 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 10 3 3 103 87 13 67 5 4 13 67 5 4 7 10</td></td></td<>	Rate </td <td>1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324 29 1,931 12,324 221 18,913 5 1,244 221 18,913 5 1,244 143 248 279 2,318 1,244 143 248 279 2,318 1,817 153 603 138 241 342 376</td> <td>278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 3 3 5 2 2 1,029 1 3 3 3 3 3 3 3 3 4 3 4 3 4</td> <td>230 22 3 269 153 254 1 1 5 1 1 29 194 13 750 0 25 6 1 7 50 25 6 17 38 37 59 1 38 37 59 1 34 1 1 12 11</td> <td>48 5 1 56 32 50 2 2 2 0 73 111 9 279 279 1 1 68 4 5 3 111 9 279 279 279 279 279 279 279 279 279 2</td> <td>324 32 8 379 215 342 2 9 1 224 1,025 28 1,846 0 49 13 25 40 193 170 26 130 15 19 24 28</td> <td>104 9 4 120 68 98 2 5 0 100 477 12 762 762 0 32 5 13 7 90 32 5 13 7 90 83 13 7 90 83 13 63 10 15 17 18</td> <td>220 23 4 259 147 244 0 4 1 244 0 4 1 124 548 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 10 3 3 103 87 13 67 5 4 13 67 5 4 7 10</td>	1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324 29 1,931 12,324 221 18,913 5 1,244 221 18,913 5 1,244 143 248 279 2,318 1,244 143 248 279 2,318 1,817 153 603 138 241 342 376	278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 3 3 5 2 2 1,029 1 3 3 3 3 3 3 3 3 4 3 4 3 4	230 22 3 269 153 254 1 1 5 1 1 29 194 13 750 0 25 6 1 7 50 25 6 17 38 37 59 1 38 37 59 1 34 1 1 12 11	48 5 1 56 32 50 2 2 2 0 73 111 9 279 279 1 1 68 4 5 3 111 9 279 279 279 279 279 279 279 279 279 2	324 32 8 379 215 342 2 9 1 224 1,025 28 1,846 0 49 13 25 40 193 170 26 130 15 19 24 28	104 9 4 120 68 98 2 5 0 100 477 12 762 762 0 32 5 13 7 90 32 5 13 7 90 83 13 7 90 83 13 63 10 15 17 18	220 23 4 259 147 244 0 4 1 244 0 4 1 124 548 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 10 3 3 103 87 13 67 5 4 13 67 5 4 7 10
Trip Generation for Block 1 after Pass-By ReductionGeneral Light IndustrialManufacturingWarehousingMini-WarehouseTotal Block 1Trip Generation for Block 2 after Pass-By ReductionManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation for Block 3 after Pass-By ReductionSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	 110 140 150 151 150 151 220 320 620 812 820 911 210 220 254 320 254 320 710 820 822 899 912 930 931 932 	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 323 61 150 35.825 91.458 54.192 1.854 7.81 4.634 9.448 10.44	KSFKSFKSFKSFKSFKSFDURoomsBedsKSFKSFDUDUBedsKSF	Rate	1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324 29 1,931 12,324 221 18,913 5 1,244 221 18,913 1,244 221 18,913 1,244 143 248 279 2,318 1,817 153 603 138 241 342 376 734	278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 1 93 10 22 1,029 1 1 93 10 22 41 58 95 1 1 57 3 3 3 4 34 34 34	230 22 3 269 153 254 1 1 5 1 1 25 1 1 29 194 13 750 0 25 6 17 38 37 59 1 38 37 59 1 34 34 1 1 2 34 1 1 2 3	48 5 1 56 32 50 2 2 2 0 73 111 9 279 7 1 1 68 4 5 3 21 36 0 23 21 36 0 23 21 36 0 23 21 36 0 23 21 36 0 23 21 22 22 22 22 23 20	324 32 8 379 215 342 2 9 1 1 224 1,025 28 1,846 0 40 49 13 25 40 193 13 25 40 193 170 26 130 193 170 26 130 15 19 24 28 53	104 9 4 120 68 98 2 5 0 100 477 12 762 0 477 12 762 0 32 5 13 7 0 32 5 13 7 90 83 13 7 90 83 13 63 10 15 17 18 26	220 23 4 259 147 244 0 4 1 124 548 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 10 33 10 3 87 13 67 5 5 4 7 10 27
Trip Generation for Block 1 after Pass-By ReductionGeneral Light IndustrialManufacturingWarehousingMini-WarehouseTotal Block 1Trip Generation for Block 2 after Pass-By ReductionManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation for Block 3 after Pass-By ReductionSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	 110 140 150 151 151 220 320 620 812 820 911 220 254 320 254 320 710 820 710 820 911 932 934 945 	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 323 61 150 35.825 91.458 54.192 1.854 7.81 4.634 9.448 10.44	KSF Beds KSF KSF Beds KSF DU Beds KSF KSF <td< td=""><td>Rate<!--</td--><td>1,918 272 61 2,350 1,280 3,020 27 81 27 81 29 1,931 12,324 221 18,913 5 1,244 221 18,913 5 1,244 143 248 279 2,318 1,244 143 248 279 2,318 1,817 153 603 138 241 342 376 734 8,641</td><td>278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 3 3 3 1 2 2 1 3 3 3 1 3 3 3 3 3 3 3 3</td><td>230 22 3 269 153 254 1 1 5 1 129 194 13 750 0 25 6 17 38 37 59 1 38 37 59 1 34 1 1 34 1 1 1 2 3 4 1 1 1 2 3 5 9</td><td>48 5 1 56 32 50 2 2 2 0 73 111 9 279 7 3 111 9 279 7 3 111 6 8 4 5 3 21 3 6 8 4 5 3 21 3 6 0 23 2 1 3 6 0 23 2 2 2 2 2 2 2 2 3 20 2 30</td><td>324 32 8 379 215 342 2 9 1 224 1,025 28 1,846 0 49 13 25 40 13 25 40 193 170 26 130 193 170 26 130 15 19 24 28 53 19 24 28 53</td><td>104 9 4 120 68 98 2 5 0 100 477 12 762 0 100 477 12 762 0 32 5 13 7 90 83 13 10 90 83 10 90 83 10 10 10 10 10 10 10 10 10 10 10 10 10</td><td> 220 23 4 259 147 244 0 4 124 548 16 1,084 67 33 103 87 13 67 5 4 7 10 27 393 </td></td></td<>	Rate </td <td>1,918 272 61 2,350 1,280 3,020 27 81 27 81 29 1,931 12,324 221 18,913 5 1,244 221 18,913 5 1,244 143 248 279 2,318 1,244 143 248 279 2,318 1,817 153 603 138 241 342 376 734 8,641</td> <td>278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 3 3 3 1 2 2 1 3 3 3 1 3 3 3 3 3 3 3 3</td> <td>230 22 3 269 153 254 1 1 5 1 129 194 13 750 0 25 6 17 38 37 59 1 38 37 59 1 34 1 1 34 1 1 1 2 3 4 1 1 1 2 3 5 9</td> <td>48 5 1 56 32 50 2 2 2 0 73 111 9 279 7 3 111 9 279 7 3 111 6 8 4 5 3 21 3 6 8 4 5 3 21 3 6 0 23 2 1 3 6 0 23 2 2 2 2 2 2 2 2 3 20 2 30</td> <td>324 32 8 379 215 342 2 9 1 224 1,025 28 1,846 0 49 13 25 40 13 25 40 193 170 26 130 193 170 26 130 15 19 24 28 53 19 24 28 53</td> <td>104 9 4 120 68 98 2 5 0 100 477 12 762 0 100 477 12 762 0 32 5 13 7 90 83 13 10 90 83 10 90 83 10 10 10 10 10 10 10 10 10 10 10 10 10</td> <td> 220 23 4 259 147 244 0 4 124 548 16 1,084 67 33 103 87 13 67 5 4 7 10 27 393 </td>	1,918 272 61 2,350 1,280 3,020 27 81 27 81 29 1,931 12,324 221 18,913 5 1,244 221 18,913 5 1,244 143 248 279 2,318 1,244 143 248 279 2,318 1,817 153 603 138 241 342 376 734 8,641	278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 2 2 1,029 1 3 3 3 1 2 2 1 3 3 3 1 3 3 3 3 3 3 3 3	230 22 3 269 153 254 1 1 5 1 129 194 13 750 0 25 6 17 38 37 59 1 38 37 59 1 34 1 1 34 1 1 1 2 3 4 1 1 1 2 3 5 9	48 5 1 56 32 50 2 2 2 0 73 111 9 279 7 3 111 9 279 7 3 111 6 8 4 5 3 21 3 6 8 4 5 3 21 3 6 0 23 2 1 3 6 0 23 2 2 2 2 2 2 2 2 3 20 2 30	324 32 8 379 215 342 2 9 1 224 1,025 28 1,846 0 49 13 25 40 13 25 40 193 170 26 130 193 170 26 130 15 19 24 28 53 19 24 28 53	104 9 4 120 68 98 2 5 0 100 477 12 762 0 100 477 12 762 0 32 5 13 7 90 83 13 10 90 83 10 90 83 10 10 10 10 10 10 10 10 10 10 10 10 10	 220 23 4 259 147 244 0 4 124 548 16 1,084 67 33 103 87 13 67 5 4 7 10 27 393
Trip Generation for Block 1 after Pass-By ReductionGeneral Light IndustrialManufacturingWarehousingMini-WarehouseTotal Block 1Trip Generation for Block 2 after Pass-By ReductionManufacturingWarehousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)MotelNursing HomeBuilding Materials and Lumber StoreShopping Center (>150k)Walk-in BankTotal Block 2Trip Generation for Block 3 after Pass-By ReductionSingle-Family Detached HousingMulti-Family Housing (Low-Rise)(Not Close to RailTransit)Assisted LivingMotelGeneral Office BuildingShopping Center (>150k)Strip Retail Plaza (<40k)	 110 140 150 151 151 220 320 620 812 820 911 220 254 320 254 320 710 820 710 820 911 932 934 945 	560.565 220.353 58.916 374.403 2452.584 7 49 10.331 169.166 486.205 2.85 1 323 61 150 35.825 91.458 54.192 1.854 7.81 4.634 9.448 10.44	KSF Beds KSF KSF Beds KSF DU Beds KSF KSF <td< td=""><td>Rate<!--</td--><td>1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324 29 1,931 12,324 221 18,913 5 1,244 221 18,913 1,244 221 18,913 1,244 143 248 279 2,318 1,817 153 603 138 241 342 376 734</td><td>278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 1 93 10 22 1,029 1 1 93 10 22 41 58 95 1 1 57 3 3 3 4 34 34 34</td><td>230 22 3 269 153 254 1 1 5 1 1 25 1 1 29 194 13 750 0 25 6 17 38 37 59 1 38 37 59 1 34 34 1 1 2 34 1 1 2 3</td><td>48 5 1 56 32 50 2 2 2 0 73 111 9 279 7 1 1 68 4 5 3 21 36 0 23 21 36 0 23 21 36 0 23 21 36 0 23 21 36 0 23 21 22 22 22 22 23 20</td><td>324 32 8 379 215 342 2 9 1 1 224 1,025 28 1,846 0 40 49 13 25 40 193 13 25 40 193 170 26 130 193 170 26 130 15 19 24 28 53</td><td>104 9 4 120 68 98 2 5 0 100 477 12 762 0 477 12 762 0 32 5 13 7 0 32 5 13 7 90 83 13 7 90 83 13 63 10 15 17 18 26</td><td>220 23 4 259 147 244 0 4 1 124 548 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 12 33 103 87 13 67 5 5 4 7 10 5 5 4 7 10 27</td></td></td<>	Rate </td <td>1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324 29 1,931 12,324 221 18,913 5 1,244 221 18,913 1,244 221 18,913 1,244 143 248 279 2,318 1,817 153 603 138 241 342 376 734</td> <td>278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 1 93 10 22 1,029 1 1 93 10 22 41 58 95 1 1 57 3 3 3 4 34 34 34</td> <td>230 22 3 269 153 254 1 1 5 1 1 25 1 1 29 194 13 750 0 25 6 17 38 37 59 1 38 37 59 1 34 34 1 1 2 34 1 1 2 3</td> <td>48 5 1 56 32 50 2 2 2 0 73 111 9 279 7 1 1 68 4 5 3 21 36 0 23 21 36 0 23 21 36 0 23 21 36 0 23 21 36 0 23 21 22 22 22 22 23 20</td> <td>324 32 8 379 215 342 2 9 1 1 224 1,025 28 1,846 0 40 49 13 25 40 193 13 25 40 193 170 26 130 193 170 26 130 15 19 24 28 53</td> <td>104 9 4 120 68 98 2 5 0 100 477 12 762 0 477 12 762 0 32 5 13 7 0 32 5 13 7 90 83 13 7 90 83 13 63 10 15 17 18 26</td> <td>220 23 4 259 147 244 0 4 1 124 548 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 12 33 103 87 13 67 5 5 4 7 10 5 5 4 7 10 27</td>	1,918 272 61 2,350 1,280 3,020 27 81 29 1,931 12,324 29 1,931 12,324 221 18,913 5 1,244 221 18,913 1,244 221 18,913 1,244 143 248 279 2,318 1,817 153 603 138 241 342 376 734	278 27 4 325 185 304 3 7 1 202 305 22 1,029 1 1 93 10 22 1,029 1 1 93 10 22 41 58 95 1 1 57 3 3 3 4 34 34 34	230 22 3 269 153 254 1 1 5 1 1 25 1 1 29 194 13 750 0 25 6 17 38 37 59 1 38 37 59 1 34 34 1 1 2 34 1 1 2 3	48 5 1 56 32 50 2 2 2 0 73 111 9 279 7 1 1 68 4 5 3 21 36 0 23 21 36 0 23 21 36 0 23 21 36 0 23 21 36 0 23 21 22 22 22 22 23 20	324 32 8 379 215 342 2 9 1 1 224 1,025 28 1,846 0 40 49 13 25 40 193 13 25 40 193 170 26 130 193 170 26 130 15 19 24 28 53	104 9 4 120 68 98 2 5 0 100 477 12 762 0 477 12 762 0 32 5 13 7 0 32 5 13 7 90 83 13 7 90 83 13 63 10 15 17 18 26	220 23 4 259 147 244 0 4 1 124 548 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 16 1,084 12 33 103 87 13 67 5 5 4 7 10 5 5 4 7 10 27

Net New Trip Generation After Reductions											
Trip Generation for Block 1											
General Light Industrial	110	28.274	KSF	Rate	99	16	14	2	15	3	12
Manufacturing	140	560.565	KSF	Rate	1,918	278	230	48	324	104	220
Warehousing	150	220.353	KSF	Rate	272	27	22	5	32	9	23
Mini-Warehouse	151	58.916	KSF	Rate	61	4	3	1	8	4	4
Single-Family Detached Housing	210	0	DU	Rate	0	0	0	0	0	0	0
Total Block 1					2,350	325	269	56	379	120	259
Trip Generation for Block 2											
Manufacturing	140	374.403	KSF	Rate	1,280	185	153	32	215	68	147
Warehousing	150	2452.584	KSF	Rate	3,020	304	254	50	342	98	244
Multi-Family Housing (Low-Rise)(Not Close to Rail	220	7	DU	Rate	27	3	1	2	2	2	0
Transit)	220	/	00	Nate	27			2	2	2	0
Motel	320	49	Rooms	Rate	81	7	5	2	9	5	4
Nursing Home	620	10.331	Beds	Rate	29	1	1	0	1	0	1
Building Materials and Lumber Store	812	169.166	KSF	Rate	1,931	202	129	73	224	100	124
Shopping Center (>150k)	820	486.205	KSF	Rate	12,324	305	194	111	1,025	477	548
Walk-in Bank	911	2.85	KSF	Rate	221	22	13	9	28	12	16
Total Block 2					18,913	1,029	750	279	1,846	762	1,084
Trip Generation for Block 3											
Single-Family Detached Housing	210	1	DU	Rate	5	1	0	1	0	0	0
Multi-Family Housing (Low-Rise)(Not Close to Rail											
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit)	220	323	DU	Rate	1,244	93	0 25	1 68	49	32	17
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Assisted Living	220 254					93 10					
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit)	220	323	DU	Rate	1,244	93	25	68	49	32	17
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Assisted Living	220 254	323 61	DU Beds	Rate Rate	1,244 143	93 10	25 6	68 4	49 13	32 5	17 8
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Assisted Living Motel	220 254 320	323 61 150	DU Beds Rooms	Rate Rate Rate	1,244 143 248	93 10 22	25 6 17	68 4 5	49 13 25	32 5 13	17 8 12
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Assisted Living Motel General Office Building	220 254 320 710	323 61 150 35.825	DU Beds Rooms KSF	Rate Rate Rate Rate	1,244 143 248 279	93 10 22 41	25 6 17 38	68 4 5 3	49 13 25 40	32 5 13 7	17 8 12 33
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Assisted Living Motel General Office Building Shopping Center (>150k)	220 254 320 710 820	323 61 150 35.825 91.458	DU Beds Rooms KSF KSF	Rate Rate Rate Rate Rate Rate	1,244 143 248 279 2,318	93 10 22 41 58	25 6 17 38 37	68 4 5 3 21	49 13 25 40 193	32 5 13 7 90	17 8 12 33 103
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Assisted Living Motel General Office Building Shopping Center (>150k) Strip Retail Plaza (<40k)	220 254 320 710 820 822	323 61 150 35.825 91.458 54.192	DU Beds Rooms KSF KSF KSF	Rate Rate Rate Rate Rate Rate	1,244 143 248 279 2,318 1,817	93 10 22 41 58 95	25 6 17 38 37 59	68 4 5 3 21 36	49 13 25 40 193 170	32 5 13 7 90 83	17 8 12 33 103 87
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Assisted Living Motel General Office Building Shopping Center (>150k) Strip Retail Plaza (<40k) Liquor Store	220 254 320 710 820 822 899	323 61 150 35.825 91.458 54.192 1.854	DU Beds Rooms KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	1,244 143 248 279 2,318 1,817 153	93 10 22 41 58 95 1	25 6 17 38 37 59 1	68 4 5 3 21 36 0	49 13 25 40 193 170 26	32 5 13 7 90 83 13	17 8 12 33 103 87 13
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Assisted Living Motel General Office Building Shopping Center (>150k) Strip Retail Plaza (<40k) Liquor Store Drive-in Bank	220 254 320 710 820 822 899 912	323 61 150 35.825 91.458 54.192 1.854 7.81	DU Beds Rooms KSF KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	1,244 143 248 279 2,318 1,817 153 603	93 10 22 41 58 95 1 1 57	25 6 17 38 37 59 1 34	68 4 5 3 21 36 0 23	49 13 25 40 193 170 26 130	32 5 13 7 90 83 13 63	17 8 12 33 103 87 13 67
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Assisted Living Motel General Office Building Shopping Center (>150k) Strip Retail Plaza (<40k) Liquor Store Drive-in Bank Fast Casual Restaurant	220 254 320 710 820 822 899 912 930	323 61 150 35.825 91.458 54.192 1.854 7.81 4.634	DU Beds Rooms KSF KSF KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	1,244 143 248 279 2,318 1,817 153 603 138	93 10 22 41 58 95 1 57 3	25 6 17 38 37 59 1 34 1	68 4 5 3 21 36 0 23 2	49 13 25 40 193 170 26 130 15	32 5 13 7 90 83 13 63 10	17 8 12 33 103 87 13 67 5
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Assisted Living Motel General Office Building Shopping Center (>150k) Strip Retail Plaza (<40k) Liquor Store Drive-in Bank Fast Casual Restaurant Fine Dining Restaurant	220 254 320 710 820 822 899 912 930 931	323 61 150 35.825 91.458 54.192 1.854 7.81 4.634 9.448	DU Beds Rooms KSF KSF KSF KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	1,244 143 248 279 2,318 1,817 153 603 138 241	93 10 22 41 58 95 1 57 3 3 3	25 6 17 38 37 59 1 34 1 1 1	68 4 5 3 21 36 0 23 2 2 2 2	49 13 25 40 193 170 26 130 15 19	32 5 13 7 90 83 13 63 10 15	17 8 12 33 103 87 13 67 5 4
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Assisted Living Motel General Office Building Shopping Center (>150k) Strip Retail Plaza (<40k) Liquor Store Drive-in Bank Fast Casual Restaurant Fine Dining Restaurant High-Turnover (Sit-Down) Restaurant	220 254 320 710 820 822 899 912 930 931 932	323 61 150 35.825 91.458 54.192 1.854 7.81 4.634 9.448 10.44	DU Beds Rooms KSF KSF KSF KSF KSF KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	1,244 143 248 279 2,318 1,817 153 603 138 241 342	93 10 22 41 58 95 1 57 3 3 3 3 3 34	25 6 17 38 37 59 1 34 1 1 1 12	68 4 5 3 21 36 0 23 2 2 2 2 2 22	49 13 25 40 193 170 26 130 15 19 24	32 5 13 7 90 83 13 63 10 15 17	17 8 12 33 103 87 13 67 5 4 7
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Assisted Living Motel General Office Building Shopping Center (>150k) Strip Retail Plaza (<40k) Liquor Store Drive-in Bank Fast Casual Restaurant Fine Dining Restaurant High-Turnover (Sit-Down) Restaurant Fast-Food Restaurant with Drive-Through Window	220 254 320 710 820 822 899 912 930 931 932 934	323 61 150 35.825 91.458 54.192 1.854 7.81 4.634 9.448 10.44 4.351	DU Beds Rooms KSF KSF KSF KSF KSF KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	1,244 143 248 279 2,318 1,817 153 603 138 241 342 376	93 10 22 41 58 95 1 57 3 3 3 3 3 4 34	25 6 17 38 37 59 1 34 1 1 12 12 11	68 4 5 3 21 36 0 23 2 2 2 2 2 2 2 2 2 2 2 2 3	49 13 25 40 193 170 26 130 15 19 24 28	32 5 13 7 90 83 13 63 10 15 17 18	17 8 12 33 103 87 13 67 5 4 7 10
Multi-Family Housing (Low-Rise)(Not Close to Rail Transit) Assisted Living Motel General Office Building Shopping Center (>150k) Strip Retail Plaza (<40k) Liquor Store Drive-in Bank Fast Casual Restaurant Fine Dining Restaurant High-Turnover (Sit-Down) Restaurant Fast-Food Restaurant with Drive-Through Window Convenience Store/Gas Station	220 254 320 710 820 822 899 912 930 931 932 934	323 61 150 35.825 91.458 54.192 1.854 7.81 4.634 9.448 10.44 4.351	DU Beds Rooms KSF KSF KSF KSF KSF KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	1,244 143 248 279 2,318 1,817 153 603 138 241 342 376 734	93 10 22 41 58 95 1 57 3 3 3 3 3 4 34 34 34 34	25 6 17 38 37 59 1 34 1 1 12 11 23	68 4 5 3 21 36 0 23 2 2 2 2 2 2 2 2 2 2 2 3 20	49 13 25 40 193 170 26 130 15 19 24 28 28 53	32 5 13 7 90 83 13 63 10 15 17 18 26	17 8 12 33 103 87 13 67 5 4 7 10 27

B – PROPOSED TRIP GENERATION

L00/Q total total <th< th=""><th></th><th>ITE</th><th>0</th><th></th><th>5.1 /5.0</th><th>D #</th><th>AN</th><th>/I Peak Hou</th><th>ır</th><th>PN</th><th>1 Peak Hou</th><th>r</th></th<>		ITE	0		5.1 /5.0	D #	AN	/I Peak Hou	ır	PN	1 Peak Hou	r
Trik Conservation (File Nexa No. 9)	Land Use	Code	Size	Unit	Rate/Eqn?	Daily	Total	In	Out	Total	In	Out
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Bail Dropp Quie 1930610194		221	2 2 2 4	DU	Pato	10,605	964	100	445	011	554	255
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International productions International productins International productions Int	General Light Industrial				Rate			1,318				1,132
Sign Answer of the sector of				KSF	Rate							
Anall Componer function8080.2080.5080.5080.70 <t< td=""><td></td><td>oss Trips</td><td>5</td><td></td><td></td><td>117,922</td><td>5,966</td><td>4,172</td><td>1,794</td><td>11,628</td><td>4,767</td><td>6,861</td></t<>		oss Trips	5			117,922	5,966	4,172	1,794	11,628	4,767	6,861
One DescriptionNo <th< td=""><td></td><td>820</td><td>320 55</td><td>KSE</td><td>Rate</td><td>11 864</td><td>269</td><td>167</td><td>102</td><td>1 090</td><td>523</td><td>567</td></th<>		820	320 55	KSE	Rate	11 864	269	167	102	1 090	523	567
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International of the Basis International of the Basis <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>												
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Seard Sorger Center 13(8)Sorger	Trip Generation for Block 3											
Intell all consistent of all holes 94.9 94.9 95.8 2.428 1.120 Trips Medication latternal Capture (AL Books) 11.023 5.566 4.11 1.920 15.650 3.714 1.7192 15.690 4.0160 Meadential Internal Trip Reductions 10.0455 6.444 1.99 6.65 9.11 2.738 3.714 6.78 5.783 3.745 6.864 1.99 6.65 9.11 6.65 9.11 6.78 7.283 3.745 6.781 6.783 6.783 6.783 6.783 6.783 6.783 6.783 6.783 7.283 7.83 7.84 7.83 3.745 6.783 7.283 7.83 7.84 7.83 <td>-</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td>	-				-		-					
International for All Rooks Internal Capture (All Rooks) Residential 10.005 864 179 6.065 9.11 5.56 355 Reside 10.005 864 179 205 9.13 5.56 355 Reside 22.331 3.174 2.77 2.95 2.915 4.65 2.453 Residential Internal Trip Reductions 9.413 2.33 118 115 7.56 4.49 322 12.33 118 115 7.56 4.49 322 12.21 11.41 4.17 7.56 4.92 2.22 12.21 11.11 4.17 7.56 3.22 12.21 11.11 4.17 7.56 3.22 12.21 11.11 4.17 7.56 3.22 12.21 12.21 12.24 139 11.6 4.05 3.37 7.22 132 13.10 11.5 12.24 131 11.13 11.13 11.13 11.13 11.13 11.13 11.13 11.13 11.13 11.13		820	551.49	KSF	Rate							
Inferstand Capture (All Block) University							-	-	-			
Namia <th< td=""><td></td><td></td><td></td><td></td><td></td><td>117,923</td><td>0,905</td><td>4,173</td><td>1,792</td><td>11,029</td><td>4,767</td><td>0,002</td></th<>						117,923	0,905	4,173	1,792	11,029	4,767	0,002
NameBestartBestart1.1971.1971.1972.107<						10,605	864	199	665	911	556	355
Belaintinternal Trip Reductions 2.714 2.4 4 2.0 4.41 2.78 16.3 Belaintinternal Trip Reductions 9.413 2.33 1.18 11.5 78.0 44.9 3.37 Trip Reductions 1.15.5 4.7 2.40 1.5.4 41.1 45.0 2.2 2.5 1.0 0.0 5.2 5.0 1.0 5.2 3.0 2.2 3.1 2.4 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0												
Partal interval Frip Reductions 9413 233 111 111 471 873 Trial interval Frip Reductions 15.560 472 245 124 111 471 672 522 Trial interval Frip Reductions 15.560 472 476 102 1070 523 577 Retail interval Frip Reductions 2.291 2.42 107 4.8 4.0 118 Retail interval Frip Reductions 1.5360 2.02 1.22 4.8 1.71 4.6 111 Office 2.291 2.42 1.90 4.3 1.71 4.6 1.11 Retail interval Frip Reductions 1.76 2.00 1.70 7.5 4.71 4.6 4.00 1.70 7.5 4.71 4.6 4.71 7.6 5.22 2.510 1.70 2.50 1.70 2.50 7.50 7.50 7.50 7.50 7.50 7.50 7.50 7.50 7.50 7.50 7.50 7.50 7.50 7.50	Office					22,381	3,174	2,779	395	2,915	466	2,449
One-shearnal Trip Reductions 24.49 235 144 111 41.70 96 322 Trips Mayed to Internal Explore (Bock 1) U 24.00 24.00 12.00<	Residential Internal Trip Reductions					2,714	24	4	20	441	278	163
Total Internal Capture 119.560 492 246 124.41 822 822 Mice 119.640 1019 122 120 120 120 120 120 120 537 547 Mice 2291 242 199 43 240 511 189 Retail Internal Trip Reductions .534 .20 12 8 .177 4.6 111 Office Internal Trip Reductions .176 .20 8 .127 .11 4.6 Tips Adject of Internal Trip Reductions .176 .406 .333 .77 .256 .351 .214 .137 Retail Internal Trip Reductions .1051 .100 .2 .8 .107 .43 Retail Internal Trip Reductions .1048 .207 .102 .105 .392 .244 .144 198 Additional Trip Reductions .1048 .207 .102 .105 .392 .244 .144 198 Additinternal Trip Reductions .10475	Retail Internal Trip Reductions					9,413	233	118	115	786	449	337
Trips Subject to Internal Capture (Brock 1) Unital												
Behalm11 Beh2.091.011.021.0905.035.67Office2.2912.2912.421.091.021.011.011.01Office Internal Trip Reductions7.162.007.04.01.011.011.01Office Internal Trip Reductions7.162.007.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td>14,556</td> <td>492</td> <td>246</td> <td>246</td> <td>1,644</td> <td>822</td> <td>822</td>						14,556	492	246	246	1,644	822	822
Online2,2912421994.324051199Betall Internal Trip Reductions-534-20-12-8-11-11Onlice Internal Trip Reductions-1176-20-8-12-17-11-Betall Internal Trip ReductionsBetall <td></td> <td></td> <td></td> <td></td> <td></td> <td>11.864</td> <td>260</td> <td>167</td> <td>102</td> <td>1 000</td> <td>522</td> <td>567</td>						11.864	260	167	102	1 000	522	567
Retail internal Trip Reductions 534 20 11 8 11 6 11 Office internal Trip Reductions 176 20 8 172 17 1 4 Figs Subject to internal Capture (Bok 2) 4 176 20 83 77 256 351 214 137 Restall 52.662 1.195 744 454 4388 2.22 2.516 Office 20.090 2.932 2.800 352 2.675 415 2.600 Residential Internal Trip Reductions 1.061 10 2 8 1.007 4.3 Office Internal Trip Reductions 1.0649 207 100 99 250 55 195 Tips Subject to Internal Capture (Bok 3) 1.11 107 8.3 1.02 48 1.07 4.00 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05												
Office Internal Trip Reductions -176 -9.0 -8 -12 -17 -11 6 Trips Studjest to Internal Capture (Box 2)						2/271			10	210	01	107
Trips Subject to Internal Capture (Bock 2) 4,086 333 77 25.6 25.1 14 137. Retail 52,66.2 1,195 74.1 45.4 4.838 2.322 2.516 Office 20,090 2,922 2.580 35.2 2.675 41.5 2.260 Residential Internal Trip Reductions -1,051 -10 2 8. 7.00 7.00 4.33 Retail Internal Trip Reductions -1,648 2.007 -102 -105 3.92 2.44 -1.48 Retail Internal Trip Reductions -1,648 2.007 -102 -105 3.92 2.14 -1.48 Retail Internal Trip Reductions -1,648 2.07 1.00 3.02 2.18 Retail 6.519 5.31 1.22 4.09 5.00 9.75 7.00 Retail Internal Trip Reductions -1,475 6 2 2.44 2.47 1.57 9.00 Retail Internal Trip Reductions -1,475 6.5 2.82	Detail Internal Trip Deductions					E24	20	10	0	17	4	11
Residential Restantial metantial metantial metantial metantial metantial metantial Residential metantial metantial metantial metantial metantial metantial metantial metantial metantial metantial metantial metantial metantial metantial metantial metantian metantial metantial metantial metantial metantial metantial metantian metantial metantian metantial metantian metantial metantian metan							-	-	-		-	
Office20,0902,9322,5803522,6754152,200Residential Internal Trip Reductions-0,010-010-010-010-010-010Retal Internal Trip Reductions-0,695-200-102-108-290-250-250-155Trip Subject to Internal Capture (Block 3)	Office Internal Trip Reductions						-	-	-		-	
Residential internal Trip Reductions 1.051 1.0 2 8 1.70 1.03 Retail internal Trip Reductions 6.665 207 1.02 1.99 2.24 1.44 Retail internal Trip Reductions 1.6.665 207 1.08 9.99 2.25 5.55 1.95 Trip Subject to Internal Cepture (Block 3) 20 7.65 9.99 2.25 7.55 1.95 Residential internal Trip Reductions 6.519 5.31 1.22 4.09 5.60 3.21 2.18 Retail internal Trip Reductions 1.477 6 2.2 4 2.247 1.90 1.57 Trip Subject to Internal Cepture (Block 1 and 2) 2.130.56 4.76 2.38 1.420 -00 -70 Residential internal Trip Reductions 1.305.6 4.76 2.38 1.420 5.00 -20 4 3.259 2.944 1.90 2.945 2.945 2.945 2.945 2.945 2.945 2.945 2.945 2.945 2.945 2.945 <	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2)					-176	-20	-8	-12	-17	-11	-6
Retail Internal Trip Reductions 4.6695 2.07 1.02 1.05 3.92 2.44 1.18 Office Internal Crip Reductions -1.648 2.07 -108 -90 2.50 5.5 1.91 Trips Subject Onternal Capture (Block .3) - <t< td=""><td>Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail</td><td></td><td></td><td></td><td></td><td>-176 4,086 52,662</td><td>-20 333 1,195</td><td>-8 77 741</td><td>-12 256 454</td><td>-17 351 4,838</td><td>-11 214 2,322</td><td>-6 137 2,516</td></t<>	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail					-176 4,086 52,662	-20 333 1,195	-8 77 741	-12 256 454	-17 351 4,838	-11 214 2,322	-6 137 2,516
Office Internal Trip Reductions -1.6.48 -207 -1.08 -99 -250 -55 -1.95 Trips Subject to Internal Capture (Block.3)	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail					-176 4,086 52,662	-20 333 1,195	-8 77 741	-12 256 454	-17 351 4,838	-11 214 2,322	-6 137 2,516
Trips Subject to Internal Capture (Block 3) 122 1409 531 122 409 532 11875 900 975 Residential 20,411 463 287 17.6 1.875 900 975 Residential Internal Trip Reductions -1,475 -6 -2 -4 -247 -90 -157 Restal Internal Trip Reductions -1,475 -6 -2 -4 -207 -70 -707 Restal Internal Trip Reductions -1,3056 -476 -238 -238 -1340 -707 -707 Restal Internal Trip Reductions -13,056 -476 -238 -248 1810 707 -707 Residential -13,056 -476 -238 -238 -248 400 2,924 Residential -13,056 -277 1,237 797 443 5,519 2,924 Office -20,557 2,947 2,663 244 2,648 400 2,642 Residential Internal Trip Reductions -266 -2 0 -2 4 -3 -2	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions					-176 4,086 52,662 20,090 -1,051	-20 333 1,195 2,932 -10	-8 77 741 2,580 -2	-12 256 454 352 -8	-17 351 4,838 2,675 -170	-11 214 2,322 415 -107	-6 137 2,516 2,260 -63
Residential6.519511122409560342218Retall20.4114032871761.87590975Residential Internal Trip Reductions1.4,477-6-4-22.47901.57Total Internal Capture Within Blocks1.3,064.762.882.381.34001.57Total Internal Capture Within Blocks1.3,053.23752.481.8110774Residential Internal Capture Within Blocks3.0353.23752.481.8110774Residential Internal Trip Reductions5.72,971.2377944.435.5192.2942.248Residential Internal Trip Reductions5.66-2004.644.02.248Office Internal Capture (Block 1 and 2).248.25192.248.2488 <t< td=""><td>Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions</td><td></td><td></td><td></td><td></td><td>-176 4,086 52,662 20,090 -1,051 -6,695</td><td>-20 333 1,195 2,932 -10 -207</td><td>-8 77 741 2,580 -2 -102</td><td>-12 256 454 352 -8 -105</td><td>-17 351 4,838 2,675 -170 -392</td><td>-11 214 2,322 415 -107 -244</td><td>-6 137 2,516 2,260 -63 -148</td></t<>	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions					-176 4,086 52,662 20,090 -1,051 -6,695	-20 333 1,195 2,932 -10 -207	-8 77 741 2,580 -2 -102	-12 256 454 352 -8 -105	-17 351 4,838 2,675 -170 -392	-11 214 2,322 415 -107 -244	-6 137 2,516 2,260 -63 -148
Retail 20,411 463 287 176 1,875 900 975 Residential Internal Trip Reductions 1,475 6 -2 4 -247 -157 Retail Internal Trip Reductions 1,477 -6 4 -2 -247 -90 Retail Internal Trip Reductions 1,477 -6 4 -2 -247 -90 -157 Total Internal Capture With Blocks 13.056 476 -2 2.48 1.07 -74 Residential 3.035 323 75 2.48 181 07 74 Retail 5.7297 1.237 794 44.3 5.519 2.592 2.924 Office 20,557 2.947 2.663 284 400 2.288 Retail Internal Trip Reductions -2 4 -3 -2 -2 4 -3 -2 -2 4 -2 -2 4 -2 -2 4 -2 -2 -2 4 -2<	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions					-176 4,086 52,662 20,090 -1,051 -6,695	-20 333 1,195 2,932 -10 -207	-8 77 741 2,580 -2 -102	-12 256 454 352 -8 -105	-17 351 4,838 2,675 -170 -392	-11 214 2,322 415 -107 -244	-6 137 2,516 2,260 -63 -148
Retail Internal Trip Reductions -1.477 -6 -4 -2 -247 -90 -157 Tota Internal Capture within Blocks -30.056 -476 -238 -238 -30 -670 -670 Trips Subject to Internal Capture (Block 1 and 2)	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3)					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648	-20 333 1,195 2,932 -10 -207 -207	-8 77 741 2,580 -2 -102 -108	-12 256 454 352 -8 -105 -99	-17 351 4,838 2,675 -170 -392 -250	-11 214 2,322 415 -107 -244 -55	-6 137 2,516 2,260 -63 -148 -195
Retail Internal Trip Reductions -1.477 -6 -4 -2 -247 -90 -157 Tota Internal Capture within Blocks -30.056 -476 -238 -238 -30 -670 -670 Trips Subject to Internal Capture (Block 1 and 2)	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 6,519	-20 333 1,195 2,932 -10 -207 -207 531	-8 77 741 2,580 -2 -102 -108 122	-12 256 454 352 -8 -105 -99 409	-17 351 4,838 2,675 -170 -392 -250 560	-11 214 2,322 415 -107 -244 -55 342	-6 137 2,516 2,260 -63 -148 -195 218
Total Internal Capture within Blocks -13,056 476 -238 -238 -1,340 -670 Trips Subject to Internal Capture (Block T and 2)	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 6,519 20,411	-20 333 1,195 2,932 -10 -207 -207 531 463	-8 77 741 2,580 -2 -102 -108 122 287	-12 256 454 352 -8 -105 -99 409 176	-17 351 4,838 2,675 -170 -392 -250 560 1,875	-11 214 2,322 415 -107 -244 -55 342 900	-6 137 2,516 2,260 -63 -148 -195 218 975
Residential3,0353237524818110774Retail57,2971,2377,444435,5192,5952,924Office20,5572,9472,6632842,6484002,248Residential Internal Trip Reductions.56.20004644.0.2Office Internal Trip Reductions.15744.000.44.12.55.2Residential.15744.000.44.12.55.55.2.55.2.55.2.55.2.55.2.55.2.55.2.55.2.55.2.55.2.55.2.55.2.55.2.55.2.2.55.2.2.55.2.2.55.2.2.55.2.2.55.2.2.55.2.2.2.55.2.2.55.2.2.55.2.55.2.2.55.2.55.2.55.2.55.2.55.2.55.2.2.55.2	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Residential Retail Residential Internal Trip Reductions					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 	-20 333 1,195 2,932 -10 -207 -207 531 463 -6	-8 77 741 2,580 -2 -102 -108 122 287 -2	-12 256 454 352 -8 -105 -99 409 176 -4	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247	-11 214 2,322 415 -107 -244 -55 342 900 -157	-6 137 2,516 2,260 -63 -148 -195 218 975 -90
Retail 57,297 1,237 794 443 5,519 2,595 2,924 Office 20,557 2,947 2,663 284 2,648 400 2,248 Residential Internal Trip Reductions -56 -2 0 -2 4 -3 -2 Retail Internal Trip Reductions -221 0 0 0 646 -6 Office Internal Trip Reductions -157 -4 4 0 -64 12 -52 Trips Subject to Internal Capture (Block 1 and 3)	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Office Internal Trip Reductions Retail Internal Trip Reductions Retail Residential Retail Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 	-20 333 1,195 2,932 -10 -207 -207 -207 - 531 463 -6 -6	-8 77 741 2,580 -2 -102 -108 122 287 -2 287 -2 -4	-12 256 454 352 -8 -105 -99 409 176 -4 -4 -2	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247	-11 214 2,322 415 -107 -244 -55 342 900 -157 -90	-6 137 2,516 2,260 -63 -148 -195 218 975 -90 -157
Office 2,957 2,947 2,663 284 2,648 400 2,248 Residential Internal Trip Reductions -56 -2 0 -2 4 -3 -2 Retail Internal Trip Reductions -221 0 0 0 -46 40 -6 Office Internal Trip Reductions -157 4 -2 0 -24 10 -64 12 -22 Trips Subject to Internal Capture (Block 1 and 3)	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Consect to Internal Capture (Block 3) Residential Residential Residential Residential Residential Internal Trip Reductions Total Internal Trip Reductions Total Internal Capture within Blocks Trips Subject to Internal Capture (Block 1 and 2)					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 6,519 20,411 -1,475 -1,477 -13,056	-20 333 1,195 2,932 -10 -207 -207 531 463 -6 -6 -6 -476	-8 77 741 2,580 -2 -102 -102 -108 122 287 -2 -2 -4 -238	-12 256 454 352 -8 -105 -99 409 176 -4 -4 -2	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247	-11 214 2,322 415 -107 -244 -55 342 900 -157 -90	-6 137 2,516 2,260 -63 -148 -195 218 975 -90 -157 -670
Residential Internal Trip Reductions	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 2) Residential					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 6,519 20,411 -1,475 -1,477 -1,477 -1,477 -1,3,056	-20 333 1,195 2,932 -10 -207 -207 -207 531 463 -6 -6 -6 -476 323	-8 77 741 2,580 -2 -102 -108 122 287 -2 -4 -238 75	-12 256 454 352 -8 -105 -99 176 -4 -2 -238 248	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247 -247 -1,340 181	-11 214 2,322 415 -107 -244 -55 342 900 -157 -90 -670 107	-6 137 2,516 2,260 -63 -148 -195 218 975 -90 -157 -90 -157 -670 74
Retail Internal Trip Reductions -221 0 0 0 -46 40 -6 Office Internal Trip Reductions -157 4 4 0 -64 -12 -52 Trips Subject to Internal Capture (Block 1 and 3)	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Residential Internal Trip Reductions Total Internal Trip Reductions Total Internal Capture within Blocks Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Retail					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 -1,648 	-20 333 1,195 2,932 -10 -207 -207 531 463 -6 -6 -6 -476 -22 -207 -20	-8 77 741 2,580 -2 -102 -108 122 287 -2 287 -2 -4 -2 -2 -4 -238 75 794	-12 256 454 352 -8 -105 -99 176 -4 -2 -238 -238 -248 443	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247 -247 -247 -247 -247 -247 -247	-11 214 2,322 415 -107 -244 -55 342 900 -157 -90 -670 107 2,595	-6 137 2,516 2,260 -63 -148 -195 -218 975 -90 -157 -57 -70 -74 2,924
Office Internal Trip Reductions	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Retail Residential Retail Residential Internal Trip Reductions Total Internal Trip Reductions Total Internal Capture within Blocks Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 6,519 20,411 -1,475 -1,477 -1,477 -1,477 -1,477 -1,477 -1,3,056 3,035 57,297 20,557	-20 333 1,195 2,932 -10 -207 -207 531 463 -6 -6 -6 -476 323 1,237 2,947	-8 77 741 2,580 -2 -102 -102 -108 122 287 -2 -2 -4 -238 75 794 2,663	-12 256 454 352 -8 -105 -99 409 176 -4 -2 -238 248 443 284	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247 -247 -1,340 181 5,519 2,648	-11 214 2,322 415 -107 -244 -55 342 900 -157 -90 -670 107 2,595 400	-6 137 2,516 2,260 -63 -148 -195 218 975 -90 -157 -90 -157 -670 74 2,924 2,248
Trips Subject to Internal Capture (Block 1 and 3) Residential 5,044 525 120 405 313 185 128 Retail 30,264 706 438 268 2,701 1,327 1,374 Office 2,115 222 191 31 223 40 183 Residential Internal Trip Reductions 36 -2 0 -2 -7 -4 -3 Retail Internal Trip Reductions 144 0 0 0 -20 -15 -5 Office Internal Capture (Block 2 and 3) 36 -2 0 0 0 -3 -3 Retail Internal Trip Reductions 144 0 0 0 -13 -3 -10 Trips Subject to Internal Capture (Block 2 and 3)	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 6,519 20,411 -1,475 -1,477 -1,477 -1,477 -1,477 -1,477 -3,056 	-20 333 1,195 2,932 -10 -207 -207 531 463 -6 -6 -6 -476 323 1,237 2,947 -2	-8 77 741 2,580 -2 -102 -108 122 287 -2 -4 -2 -3 -2 -4 -238 75 794 2,663 0	-12 256 454 352 -8 -105 -99 176 -4 -2 -238 248 443 284 -2	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247 -247 -247 -247 -1,340 181 5,519 2,648 -4	-11 214 2,322 415 -107 -244 -55 342 900 -157 -90 -670 107 2,595 400 -3	-6 137 2,516 2,260 -63 -148 -195 218 975 -90 -157 -90 -157 -70 74 2,924 2,248 -2
Residential 5,044 525 120 405 313 185 128 Retail 30,264 706 438 268 2,701 1,327 1,374 Office 2,115 222 191 31 223 40 183 Residential Internal Trip Reductions -36 -2 0 -2 -7 -4 -3 Retail Internal Trip Reductions -144 0 0 0 -20 15 -5 Office Internal Capture (Block 2 and 3) -7 4 -5 -5 -10 -5 -5 -10 -5 -5 -10 -5 -5 -10 -5 -5 -10 -5 -5 -5 -5 -5 -5 -5 -10 -5 -5 -5 -5 -5 -10 -5 -5 -10 -5 -5 -10 -5 -5 -10 -5 -5 -10 -5 -5 -10 -5 -5	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Residential Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1) Residential Retail Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1) Residential Retail Office Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Retail					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 -1,648 	-20 333 1,195 2,932 -10 -207 -207 531 463 -6 -6 -476 323 1,237 2,947 -2 0	-8 77 741 2,580 -2 -102 -108 122 287 -2 287 -2 -4 -238 75 794 2,663 0 0	-12 256 454 352 - 8 -105 -99 409 176 -4 -2 -238 248 443 284 -2 0	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247 -247 -247 -1,340 181 5,519 2,648 -4 -4	-11 214 2,322 415 -107 -244 -55 342 900 -157 -90 -670 -157 2,595 400 -3 -3 -40	-6 137 2,516 2,260 -63 -148 -148 -195 -218 975 -90 -157 -670 74 2,924 2,248 -2 -2 -6
Retail 30,264 706 438 268 2,701 1,327 1,374 Office 2,115 222 191 31 223 40 183 Residential Internal Trip Reductions -36 -2 0 -2 -7 4 -3 Retail Internal Trip Reductions -144 0 0 0 -20 133 -3 -10 Trips Reductions -144 0 0 0 -20 133 -3 -10 Trips Reductions -154 0 0 0 133 -3 -10 Trips Subject to Internal Cellock 2 and 3 -7 4 -7 4 -7 <td>Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Residential Internal Trip Reductions Total Internal Trip Reductions Total Internal Capture within Blocks Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Total Internal Capture within Blocks Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions</td> <td></td> <td></td> <td></td> <td></td> <td>-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 -1,648 </td> <td>-20 333 1,195 2,932 -10 -207 -207 531 463 -6 -6 -476 323 1,237 2,947 -2 0</td> <td>-8 77 741 2,580 -2 -102 -108 122 287 -2 287 -2 -4 -238 75 794 2,663 0 0</td> <td>-12 256 454 352 - 8 -105 -99 409 176 -4 -2 -238 248 443 284 -2 0</td> <td>-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247 -247 -247 -1,340 181 5,519 2,648 -4 -4</td> <td>-11 214 2,322 415 -107 -244 -55 342 900 -157 -90 -670 -157 2,595 400 -3 -3 -40</td> <td>-6 137 2,516 2,260 -63 -148 -148 -195 -218 975 -90 -157 -670 74 2,924 2,248 -2 -2 -6</td>	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Residential Internal Trip Reductions Total Internal Trip Reductions Total Internal Capture within Blocks Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Total Internal Capture within Blocks Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 -1,648 	-20 333 1,195 2,932 -10 -207 -207 531 463 -6 -6 -476 323 1,237 2,947 -2 0	-8 77 741 2,580 -2 -102 -108 122 287 -2 287 -2 -4 -238 75 794 2,663 0 0	-12 256 454 352 - 8 -105 -99 409 176 -4 -2 -238 248 443 284 -2 0	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247 -247 -247 -1,340 181 5,519 2,648 -4 -4	-11 214 2,322 415 -107 -244 -55 342 900 -157 -90 -670 -157 2,595 400 -3 -3 -40	-6 137 2,516 2,260 -63 -148 -148 -195 -218 975 -90 -157 -670 74 2,924 2,248 -2 -2 -6
Office 2,115 222 191 31 223 40 183 Residential Internal Trip Reductions 36 -2 0 -2 -7 -4 -3 Retail Internal Trip Reductions -144 0 0 0 -20 -15 -5 Office Internal Trip Reductions -144 0 0 0 -20 -15 -5 Office Internal Capture (Block 2 and 3) -10 -154 0 0 0 -33 -10 Trips Subject to Internal Capture (Block 2 and 3) -7 -8 -7 -8 -7 -9 -7 -9 -7 -9 -7 -9 -7 -9 -7 -7 -9 -7	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Residential Internal Trip Reductions Total Internal Trip Reductions Total Internal Capture within Blocks Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reducting Retail Internal Trip Reducting Retail Internal Trip Reducti					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 - - -1,648 - - - - - 1,648 - - - - 1,648 - - - - - 1,648 - - - - - - - - - - - - - - - - - - -	-20 333 1,195 2,932 -10 -207 -207 -207 -207 -331 463 -6 -6 -6 -476 -6 -476 -323 1,237 2,947 -2 0 -4	-8 77 741 2,580 -2 -102 -102 102 -287 -2 287 -2 287 -2 -2 -4 -238 -75 794 2,663 0 0 0 -4	-12 256 454 352 -8 -105 -99 409 176 -4 -2 -238 -238 -248 443 284 -2 0 0 0	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247 -247 -1,340 181 5,519 2,648 -4 -46 -64	-11 214 2,322 415 -107 -244 -55 	-6 137 2,516 2,260 -63 -148 -148 -148 -148 -148 -148 -148 -148
Retail Internal Trip Reductions 144 0 0 0 -20 -15 -5 Office Internal Trip Reductions 154 0 0 0 0 13 3 10 Trips Subject to Internal Capture (Block 2 and 3) 88/079 848 195 653 494 292 202 Retail 64,901 1,445 922 523 6,074 2,888 3,186 Office 18,442 2,725 2,472 253 2,425 360 2,065 Residential Internal Trip Reductions -95 -4 0 -4 -12 -7 -5 Retail Internal Trip Reductions -342 0 0 0 -644 -53 -10 Office Internal Trip Reductions -294 -4 0 -73 -14 -59	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Retail Retail Internal Trip Reductions Total Internal Trip Reductions Total Internal Capture within Blocks Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Total Internal Trip Reductions Total Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 	-20 333 1,195 2,932 -10 -207 -207 -207 -207 -207 -2 -6 -6 -476 -476 -2 -2 0 -2 -2 0 -2 -2 0 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2	-8 77 741 2,580 -2 -102 -102 102 287 -2 287 -2 287 -2 -4 -238 -2 -2 -4 -238 -2 -2 -4 -238 -2 -2 -4 -2 -3 -2 -4 -2 -2 -4 -2 -3 -2 -102 -102 -102 -102 -102 -102 -102 -	-12 256 454 352 -8 -105 -99 409 176 -4 -2 -238 -248 443 284 -2 0 0 0 0	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247 -247 -1,340 181 5,519 2,648 -4 -4 -46 -64 -64 -313	-11 214 2,322 415 -107 -244 -55 -342 900 -157 -90 -670 -00 -670 -00 -07 -00 -670 -00 -07 -00 -670 -00 -03 -40 -12 -12 -185	-6 137 2,516 2,260 -63 -148 -148 -148 -148 -148 -148 -218 -90 -157 -57 -57 -74 2,924 2,248 -2 -6 -52 -52 -128
Retail Internal Trip Reductions -144 0 0 -20 -15 -5 Office Internal Trip Reductions -154 0 0 0 13 -3 -10 Trips Subject to Internal Capture (Block 2 and 3) -10 -154 0 0 0 13 -3 -10 Retail 0 0 0 13 20 202 Retail 8,079 848 195 653 494 292 202 Retail 64,901 1,445 922 523 6,074 2,888 3,186 Office 18,442 2,725 2,472 253 2,425 360 2,055 Residential Internal Trip Reductions -95 -4 0 -4 12 -7 5 Retail Internal Trip Reductions -342 0 0 0 -644 -53 -10 Office Internal Trip Reductions -294 4 4 0 -73 -14 -59	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Residential Internal Trip Reductions Total Internal Trip Reductions Total Internal Capture within Blocks Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Total Internal Trip Reductions Total Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Office Residential Internal Trip Reductions Retail Retail					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 -1,648 -1,648 -1,649 -1,649 -1,051 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,56 -2,62 -2,64 -2,64 -2,64 -2,65 -2,65 -2,65 -2,65 -2,75 -2,65 -2,75 -2,65 -2,75 -2,77 -2,55 -2,57 -	-20 333 1,195 2,932 -10 -207 -207 -207 -207 -207 -207 -207 -207 -207 -207 -207 -207 -207 -207 -207 -4 -207 -20	-8 77 741 2,580 -2 -102 -102 102 287 -2 287 -2 287 -2 -2 -4 -238 75 794 2,663 0 0 0 - 4 38	-12 256 454 352 -8 -105 -99 409 176 -4 -2 -238 -2 248 443 284 -2 0 0 0 0 0 0 0 0 0 0 0 0	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247 -247 -1,340 181 5,519 2,648 -4 -46 -64 -4 -46 -64 -4 -46 -64	-11 214 2,322 415 -107 -244 900 -157 -90 -670 -670 -670 -07 -07 -07 -670 -3 -40 -3 -40 -3 -40 -3 -40 -3 -40 -3 -40 -3 -40 -3 -40 -3 -40 -40 -3 -40 -40 -3 -40 -3 -40 -40 -3 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40	-6 137 2,516 2,260 -63 -148 -195 218 975 -90 -157 -570 -74 2,924 2,248 -2 -6 -6 -2 -6 -52 -2 -128 1,374
Trips Subject to Internal Capture (Block 2 and 3) Residential 8,079 848 195 653 494 292 202 Retail 64,901 1,445 922 523 6,074 2,888 3,186 Office 18,442 2,725 2,472 253 2,425 360 2,065 Residential Internal Trip Reductions -95 -4 0 -4 -12 -7 -5 Retail Internal Trip Reductions -342 0 0 0 -64 -53 -10 Office Internal Trip Reductions -294 -4 -4 0 -73 -14 -59	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Retail Retail Internal Trip Reductions Total Internal Capture within Blocks Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Total Internal Trip Reductions Total Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Office Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 	-20 333 1,195 2,932 -10 -207 -207 -207 -207 -207 -2 -6 -6 -476 -6 -476 -2 -2 0 -2 -2 0 -2 -2 0 -2 -2 -0 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2	-8 77 741 2,580 -2 -102 -102 102 287 122 287 -2 287 -2 -2 -4 -238 75 794 2,663 0 0 0 -4 120 438 191	-12 256 454 352 -8 -105 -99 409 176 -4 -2 -238 -2 -238 -248 443 284 -2 -2 0 0 0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247 -247 -1,340 -247 -246 -247 -247 -247 -247 -247 -247 -247 -247 -247 -247 -247 -247 -247 -247 -247 -246 -46 -64 -223 -223	-11 214 2,322 415 -107 -244 -55 -342 900 -157 -90 -670 -00 -670 -00 -00 -00 -00 -00 -00 -00 -00 -00 -	-6 137 2,516 2,260 -63 -148 -148 -148 -148 -148 -75 -70 -157 -70 -157 -670 -74 2,924 2,248 -2 -6 -52 -2 -6 -52 -128 1,374 183
Residential 8,079 848 195 653 494 292 202 Retail 64,901 1,445 922 523 6,074 2,888 3,186 Office 18,442 2,725 2,472 253 2,425 360 2,065 Residential Internal Trip Reductions -95 -4 0 -4 -12 -7 -5 Retail Internal Trip Reductions -342 0 0 0 -644 -53 -10 Office Internal Trip Reductions -294 -4 0 -73 -14 -59	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Residential Internal Trip Reductions Total Internal Trip Reductions Total Internal Capture within Blocks Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Total Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Retail Office Residential Retail Office Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Office Residential Retail					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 -1,648 -1,648 -1,648 -1,477 -1,475 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,648 -1,44 -1,475 -2,62 -2,115 -36 -1,144	-20 333 1,195 2,932 -10 -207 -	-8 77 741 2,580 -2 -102 -102 102 287 -2 287 -2 -4 -238 75 794 2,663 0 0 0 0 0 - 120 438 191 0 0 0	-12 256 454 352 -8 -105 -99 176 -4 -2 -238 -2 -238 -2 -238 -2 -238 -2 -2 -238 -2 -2 -238 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247 -1,340 181 5,519 2,648 -4 -4 -46 -64 -4 -46 -64 -313 2,701 223 -7 -20	-11 214 2,322 415 -107 -244 -55 -342 900 -157 -90 -670 -00 -670 -00 -670 -00 -3 -40 -3 -40 -3 -40 -3 -40 -15	-6 137 2,516 2,260 -63 -148 -148 -195 -218 975 -90 -157 -70 -157 -70 -157 -70 -157 -70 -157 -70 -157 -74 2,924 2,248 -2 -6 -6 -3 -128 -128 -128 -128 -137 -137 -137 -137 -137 -137 -137 -137
Retail 664,901 1,445 922 523 6,074 2,888 3,186 Office 18,442 2,725 2,472 253 2,425 360 2,065 Residential Internal Trip Reductions -95 -4 0 -4 -12 -7 -5 Retail Internal Trip Reductions -342 0 0 0 -644 -53 -10 Office Internal Trip Reductions -294 -4 0 -73 -14 -59	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Residential Internal Trip Reductions Retail Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Retail Retail Internal T					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 -1,648 -1,648 -1,648 -1,477 -1,475 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,477 -1,648 -1,44 -1,475 -2,62 -2,115 -36 -1,144	-20 333 1,195 2,932 -10 -207 -	-8 77 741 2,580 -2 -102 -102 102 287 -2 287 -2 -4 -238 75 794 2,663 0 0 0 0 0 - 120 438 191 0 0 0	-12 256 454 352 -8 -105 -99 176 -4 -2 -238 -2 -238 -2 -238 -2 -238 -2 -2 -238 -2 -2 -238 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247 -1,340 181 5,519 2,648 -4 -4 -46 -64 -4 -46 -64 -313 2,701 223 -7 -20	-11 214 2,322 415 -107 -244 -55 -342 900 -157 -90 -670 -00 -670 -00 -670 -00 -3 -40 -3 -40 -3 -40 -3 -40 -15	-6 137 2,516 2,260 -63 -148 -148 -195 -218 975 -90 -157 -70 -157 -70 -157 -70 -157 -70 -157 -70 -157 -74 2,924 2,248 -2 -6 -6 -3 -128 -128 -128 -128 -137 -137 -137 -137 -137 -137 -137 -137
Office 18,442 2,725 2,472 253 2,425 360 2,065 Residential Internal Trip Reductions -95 -4 0 -4 -12 -7 -5 Retail Internal Trip Reductions -342 0 0 0 -64 -53 -10 Office Internal Trip Reductions -294 -4 -4 0 -73 -14 -59	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Office Internal Trip Reductions Office Internal Trip Reductions Retail Internal Trip Reductions Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Residential Internal Trip Reductions Retail Int					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 	-20 333 1,195 2,932 -10 -207 -207 531 463 -6 -6 -476 323 1,237 2,947 -2 0 -2 0 -4 525 706 222 -2 0 0 0 0	-8 77 741 2,580 -2 -102 -108 122 287 -2 287 -2 -2 -4 -238 75 794 2,663 0 0 0 -4 120 438 191 0 0 0 0 0	-12 256 454 352 -8 -105 -9 -9 -0 -0 -0 -4 -2 -238 248 443 284 -2 0 0 -0 -0 -0 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247 -247 -1,340 181 5,519 2,648 -4 -4 -46 -64 -64 -313 2,701 223 -7 -20 -13	-11 214 2,322 415 -107 -244 900 -157 -90 -157 -90 -670 107 2,595 400 -3 -670 -07 2,595 400 -3 -40 -12 -12 -185 1,327 40 -15 -3	-6 137 2,516 2,260 -63 -148 -148 -148 -148 -148 -218 975 -90 -157 -670 74 2,248 -2 -6 -52 -128 1,374 183 -3 -5 -10 -10
Residential Internal Trip Reductions -95 -4 0 -4 -12 -7 -5 Retail Internal Trip Reductions -342 0 0 0 -64 -53 -10 Office Internal Trip Reductions -294 -4 -4 0 -73 -14 -59	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Retail Residential Internal Trip Reductions Total Internal Trip Reductions Total Internal Capture within Blocks Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Total Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Retail Office Residential Internal Trip Reductions Retail Internal Trip Reduct					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 	-20 333 1,195 2,932 -10 -207 -	-8 77 741 2,580 -2 -102 102 122 287 -2 287 -2 287 -2 -2 -4 -238 75 794 2,663 0 0 0 -4 120 438 191 0 0 0 0 0	-12 256 454 352 -8 -105 -99 409 176 -4 -2 -238 -2 -238 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247 -247 -1,340 181 5,519 2,648 -4 -46 -64 -64 -46 -64 -313 2,701 223 -7 -20 -13 -494	-11 214 2,322 415 -107 -244 -55 -3 342 900 -157 -90 -670 -157 -90 -670 -07 2,595 400 -3 -40 -12 -185 1,327 40 -12 -185 1,327 40 -3 -3 -3 292	-6 137 2,516 2,260 -63 -148 -148 -148 -148 -148 -218 975 -90 -157 -670 -74 2,924 2,248 -2 -6 -52 -2 -6 -52 -2 -6 -52 -2 -6 -52 -2 -6 -52 -2 -2 -6 -52 -2 -2 -6 -52 -2 -2 -6 -52 -2 -2 -2 -2 -2 -2 -2 -2 -2 -
Retail Internal Trip Reductions -342 0 0 -64 -53 -10 Office Internal Trip Reductions -294 -4 -4 0 -73 -14 -59	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Residential Internal Trip Reductions Total Internal Trip Reductions Total Internal Capture within Blocks Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Total Internal Trip Reductions Total Internal Trip Reductions Total Internal Trip Reductions Total Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reduc					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 	-20 333 1,195 2,932 -10 -207 -200 -44 -44 -44 -44 -44 -44 -45 -207 -200 -44 -45 -200 -44 -45 -200 -200 -200 -44 -200 -200 -200 -200 -44 -200 -200 -200 -200 -44 -200 -20	-8 77 741 2,580 -2 -102 102 102 287 22 287 -2 287 -2 287 -2 2,663 0 0 -4 -238 -2 -2 -4 -238 -2 -2 -4 -238 -2 -2 -4 -2 -2 -4 -238 -2 -2 -2 -4 -2 -2 -102 -102 -102 -102 -102 -102 -10	-12 256 454 352 - 8 -105 -99 409 176 -4 -2 -233 - 248 443 284 -2 0 0 0 0 - 268 31 -2 0 0 0 - 268 31 -2 0 0 0 - 268 31 -2 - 0 - 0 - 0 - -2 - -2 - -2 	-17 351 4,838 2,675 -170 -392 -250 -250 1,875 -247 -20 -13 -448 -	-11 214 2,322 415 -107 -244 -55 - 342 900 -157 -90 -670 - 107 2,595 400 -3 -40 -12 - 107 2,595 400 -3 -40 -12 - 185 1,327 40 -12 - 2888	-6 137 2,516 2,260 -63 -148 -148 -95 -218 975 -90 -157 -670 74 2,924 2,248 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2
Office Internal Trip Reductions -294 -4 -4 0 -73 -14 -59	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Retail Retail Internal Trip Reductions Total Internal Trip Reductions Total Internal Capture within Blocks Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Total Internal Trip Reductions Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Trips Subject to Internal Capture (Block 2 and 3) Residential Retail Office					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 	-20 333 1,195 2,932 -10 -207 -207 531 463 -6 -6 -476 323 1,237 2,947 -2 0 -4 525 706 222 -2 0 0 0 0 848 1,445 2,725	-8 77 741 2,580 -2 -102 102 122 287 -2 287 -2 287 -2 -2 -4 -238 75 794 2,663 0 0 0 -4 120 438 191 0 0 0 0 -4 120 2,472	-12 256 454 352 -8 -105 -9 -0 -0 -0 -4 -2 -238 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2	-17 351 4,838 2,675 -170 -392 -250 	-11 214 2,322 415 -107 -244 -55 - 342 900 -157 -90 -670 - 0 -670 - 0 -670 - 0 -670 - 0 -670 - - - - - - - - - - - - - - - - - - -	-6 137 2,516 2,260 -63 -148 975 -90 -157 -90 -157 -670 74 2,924 2,248 -2 -6 -52 -2 -10 -10 -10 -10 -10 -10 -10 -10
	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Residential Internal Trip Reductions Total Internal Trip Reductions Total Internal Capture within Blocks Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Total Internal Trip Reductions Total Internal Trip Reductions Total Internal Trip Reductions Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Retail Office Residential Internal Trip Reductions Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Re					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 	-20 333 1,195 2,932 -10 -207 -	-8 77 741 2,580 -2 -102 102 122 287 -2 287 -2 287 -2 -2 -4 -238 75 794 2,663 0 0 -4 -238 -2 -2 -4 -238 -2 -2 -4 -238 -2 -2 -2 -4 -238 -2 -2 -2 -2 -102 -102 -02 -02 -02 -02 -02 -02 -02 -02 -02 -	-12 256 454 352 - 8 -105 -99 409 176 -4 -2 -238 - 248 443 284 -2 0 0 0 0 - 268 31 -2 0 0 0 - 268 31 -2 0 0 0 - 0 - -2 - -2 - -2 - -2 - -2	-17 351 4,838 2,675 -170 -392 -250 -250 -250 1,875 -247 -20 -13 -44 -46 -6,074 -2,425 -12 -12	-11 214 2,322 415 -107 -244 -55 - 342 900 -157 -90 -670 - 70 -670 - 70 -670 - 70 -670 - 70 -670 - 70 -670 - 70 -670 - 70 -670 - 70 -670 - 70 -7 - 888 - 360 -7	-6 137 2,516 2,260 -63 -148 -148 -95 -218 975 -90 -157 -670 74 2,924 2,248 -2,248 -2,248 -2,248 1,374 183 -3 -5 -10 -10 -10 -10 -10 -10 -10 -10
	Office Internal Trip Reductions Trips Subject to Internal Capture (Block 2) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Office Internal Trip Reductions Trips Subject to Internal Capture (Block 3) Residential Retail Retail Residential Internal Trip Reductions Total Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 2) Residential Retail Office Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Retail Internal Trip Reductions Trips Subject to Internal Capture (Block 1 and 3) Residential Retail Office Residential Internal Trip Reductions Retail Internal Trip Reductions Ret					-176 4,086 52,662 20,090 -1,051 -6,695 -1,648 	-20 333 1,195 2,932 -10 -207 -207 -207 -207 -207 -2 -6 -6 -476 -6 -6 -476 -2 -2 0 -4 -2 0 -2 0 -2 0 -2 0 -2 -2 0 -2 -2 0 -2 -2 0 -2 -2 0 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2	-8 77 741 2,580 -2 -102 102 287 122 287 -2 287 -2 -4 -238 75 794 2,663 0 0 -4 -238 75 794 2,663 0 0 -4 -2 -2 -4 -238 -2 -2 -4 -238 -2 -2 -2 -4 -2 -2 -2 -2 -4 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2	-12 256 454 352 -8 -105 -99 409 176 -4 -2 -238 -2 -238 -2 -238 -2 -238 -2 -238 -2 -238 -2 -238 -2 -2 -238 -2 -2 -238 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2	-17 351 4,838 2,675 -170 -392 -250 560 1,875 -247 -247 -247 -1,340 181 5,519 2,648 -4 -4 -46 -64 313 2,701 223 -7 -20 -13 -494 6,074 2,425 -12 -64	-11 214 2,322 415 -107 -244 -55 -342 900 -157 -90 -670 -157 -90 -670 -0 -0 -107 2,595 400 -3 -40 -12 -185 1,327 40 -12 -185 1,327 40 -12 -185 1,327 -40 -12 -185 1,327 -40 -12 -185 1,327 -40 -12 -195 -195 -195 -195 -195 -195 -195 -195	-6 137 2,516 2,260 -63 -148 975 -90 -157 -92 -248 -22 -2 -2 -2 -5 -5 -10 -5 -5 -5 -10 -5 -5 -5 -10 -5 -5 -10 -5 -5 -5 -10 -5 -5 -10 -5 -5 -10 -5 -5 -5 -5 -10 -5 -5 -5 -10 -5 -5 -5 -10 -5 -5 -5 -10 -5 -5 -5 -10 -5 -10 -5 -5 -10 -5 -5 -10 -5 -5 -10 -5 -5 -10 -5 -5 -10 -5 -5 -5 -10 -5 -5 -5 -10 -5 -5 -5 -10 -5 -5 -5 -5 -10 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5

Trip Generation for Block 1 after Internal Capture											
Retail (Shopping Center >150k)		320.55	KSF		11,236	249	155	94	1,057	504	553
Office		24.21	KSF		248	36	33	4	33	5	28
Industrial		602.22	KSF		1,685	185	157	27	165	29	136
Total Block 1					13,170	470	345	125	1,256	539	717
Trip Generation for Block 2 after Internal Capture											
Multifamily Residential		900	DU		2,942	320	75	245	172	102	70
Retail (Shopping Center >150k)		1,422.92	KSF		45,540	988	639	349	4,363	2,007	2,356
Office		943.70	KSF		9,571	1,366	1,225	141	1,240	206	1,034
General Light Industrial		2,024.67	KSF		8,447	1,352	1,240	112	1,060	130	929
Total Block 2 Trip Generation for Block 3 after Internal Capture					66,500	4,020	3,179	847	6,834	2,445	4,389
Multifamily Residential		1,436	DU		4,949	520	120	400	298	176	122
Retail (Shopping Center >150k)		551.49	KSF		18,748	457	283	174	1,597	785	812
Total Block 3					23,697	977	403	574	1,895	962	934
Trip Generation for All Blocks after Internal Capture	2				103,367	5,473	3,927	1,546	9,985	3,945	6,040
Percent Reductions due to Internal Capture					12%	8%	6%	14%	14%	17%	12%
Transit Reduction											
Trip Generation for Block 1 after Transit Reduction											
Retail (Strip Retail Plaza <40k)	822	0.00	KSF	Rate	8,427	187	116	71	793	378	415
Office Industrial	710 130	0.00	KSF KSF	Rate Rate	186 1,264	27	24 118	3 21	25 124	4 22	21 102
Total Block 1	130	0.00	V)L	ndle	9,877	353	258	95	942	404	538
Trip Generation for Block 2 after Transit Reduction					7,077	333	230	/5	772	104	000
Multifamily Residential	221	0	DU	Rate	2,206	240	56	184	129	76	53
Retail (Shopping Center >150k)	820	0.00	KSF	Rate	34,155	741	479	262	3,272	1,505	1,767
Office	710	0.00	KSF	Rate	7,179	1,024	919	105	929	154	775
General Light Industrial	110	0.00	KSF	Rate	6,335	1,014	930	84	795	98	697
Total Block 2					49,875	3,019	2,384	635	5,125	1,833	3,292
Trip Generation for Block 3 after Transit Reduction											
Multifamily Residential	221	0	DU	Rate	3,712	390	90	300	223	132	91
Retail (>150k)	820	0.00	KSF	Rate	14,061	343	212	131	1,198	589	609
Total Block 3 Trip Generation for All Blocks after Transit Reductio					17,773 77,525	733 4,105	302 2,944	431 1,161	1,421 7,488	721 2,958	700 4,530
Percent Reductions due to Transit Reduction	// /				25%	4,105	2,944	25%	25%	2,958	4,530
Pass-By Reduction					2370	2370	2370	2370	2370		- 2370
Trip Generation for Block 1 after Pass-By Reduction											
Retail (Strip Retail Plaza <40k)	822	0.00	KSF	Rate	7,500	187	116	71	619	295	324
Office	710	0.00	KSF	Rate	186	27	24	3	25	4	21
Industrial	130	0.00	KSF	Rate	1,264	139	118	21	124	22	102
Total Block 1											
					8,950	353	258	95	768	321	447
Trip Generation for Block 2 after Pass-By Reduction	221	0	DU	Pato							
Multifamily Residential	221 820	0	DU KSE	Rate	2,206	240	56	184	129	76	53
Multifamily Residential Retail (Shopping Center >150k)	820	0.00	KSF	Rate	2,206 30,398	240 741	56 479	184 262	129 2,552	76 1,174	53 1,378
Multifamily Residential	_				2,206	240	56	184	129	76	53
Multifamily Residential Retail (Shopping Center >150k) Office	820 710	0.00 0.00	KSF KSF	Rate Rate	2,206 30,398 7,179	240 741 1,024	56 479 919	184 262 105	129 2,552 929	76 1,174 154	53 1,378 775
Multifamily Residential Retail (Shopping Center >150k) Office General Light Industrial	820 710	0.00 0.00	KSF KSF	Rate Rate	2,206 30,398 7,179 6,335	240 741 1,024 1,014	56 479 919 930	184 262 105 84	129 2,552 929 795	76 1,174 154 98	53 1,378 775 697
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <u>Trip Generation for Block 3 after Pass-By Reduction</u> Multifamily Residential	820 710 110 221	0.00 0.00 0.00 0.00 0.00	KSF KSF KSF DU	Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712	240 741 1,024 1,014 3,019 390	56 479 919 930 2,384 90	184 262 105 84 635 300	129 2,552 929 795 4,405 223	76 1,174 154 98 1,502 132	53 1,378 775 697 2,903 91
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <i>Trip Generation for Block 3 after Pass-By Reduction</i> Multifamily Residential Retail (>150k)	820 710 110	0.00 0.00 0.00	KSF KSF KSF	Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514	240 741 1,024 1,014 3,019	56 479 919 930 2,384 90 212	184 262 105 84 635 300 131	129 2,552 929 795 4,405 223 934	76 1,174 154 98 1,502 132 459	53 1,378 775 697 2,903 91 475
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <i>Trip Generation for Block 3 after Pass-By Reduction</i> Multifamily Residential <u>Retail (>150k)</u> Total Block 3	820 710 110 221 820	0.00 0.00 0.00 0.00 0.00	KSF KSF KSF DU	Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712	240 741 1,024 1,014 3,019 390	56 479 919 930 2,384 90	184 262 105 84 635 300 131 431	129 2,552 929 795 4,405 223	76 1,174 154 98 1,502 132	53 1,378 775 697 2,903 91
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <i>Trip Generation for Block 3 after Pass-By Reduction</i> Multifamily Residential <u>Retail (>150k)</u> Total Block 3 <i>Trip Generation for All Blocks after Pass-by Reduction</i>	820 710 110 221 820	0.00 0.00 0.00 0.00 0.00	KSF KSF KSF DU	Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514	240 741 1,024 1,014 3,019 390 343	56 479 919 930 2,384 90 212	184 262 105 84 635 300 131 431 1,161	129 2,552 929 795 4,405 223 934	76 1,174 154 98 1,502 132 459	53 1,378 775 697 2,903 91 475
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <i>Trip Generation for Block 3 after Pass-By Reduction</i> Multifamily Residential Retail (>150k) Total Block 3 <i>Trip Generation for All Blocks after Pass-by Reductio</i> <i>Percent Reductions due to Transit Reduction</i>	820 710 110 221 820	0.00 0.00 0.00 0.00 0.00	KSF KSF KSF DU	Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514	240 741 1,024 1,014 3,019 390 343	56 479 919 930 2,384 90 212	184 262 105 84 635 300 131 431	129 2,552 929 795 4,405 223 934	76 1,174 154 98 1,502 132 459	53 1,378 775 697 2,903 91 475
Multifamily Residential Retail (Shopping Center >150k) Office General Light Industrial Total Block 2 Trip Generation for Block 3 after Pass-By Reduction Multifamily Residential Retail (>150k) Total Block 3 Trip Generation for All Blocks after Pass-by Reductio Percent Reductions due to Transit Reduction Net New Trip Generation After Reductions	820 710 110 221 820	0.00 0.00 0.00 0.00 0.00	KSF KSF KSF DU	Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514	240 741 1,024 1,014 3,019 390 343	56 479 919 930 2,384 90 212	184 262 105 84 635 300 131 431 1,161	129 2,552 929 795 4,405 223 934	76 1,174 154 98 1,502 132 459	53 1,378 775 697 2,903 91 475
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <u>Trip Generation for Block 3 after Pass-By Reduction</u> Multifamily Residential <u>Retail (>150k)</u> Total Block 3 <u>Trip Generation for All Blocks after Pass-by Reduction</u> Percent Reductions due to Transit Reduction Net New Trip Generation After Reductions <u>Trip Generation for Block 1</u>	820 710 110 221 820	0.00 0.00 0.00 0 0 0 0 0 0	KSF KSF KSF DU KSF	Rate Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514 16,226 71,294 8%	240 741 1,024 1,014 3,019 390 343 733 4,105 0%	56 479 919 930 2,384 90 212 302 2,944 0%	184 262 105 84 635 300 131 431 1,161 0%	129 2,552 929 795 4,405 223 934 1,157 6,330 15%	76 1,174 154 98 1,502 132 459 591 2,414 18%	53 1,378 775 697 2,903 91 475 566 3,916 14%
Multifamily Residential Retail (Shopping Center >150k) Office General Light Industrial Total Block 2 Trip Generation for Block 3 after Pass-By Reduction Multifamily Residential Retail (>150k) Total Block 3 Trip Generation for All Blocks after Pass-by Reduction Percent Reductions due to Transit Reduction Net New Trip Generation After Reductions Trip Generation for Block 1 Retail (Strip Retail Plaza <40k)	820 710 110 221 820 00	0.00 0.00 0.00 0.00 0.00	KSF KSF DU KSF KSF	Rate Rate Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514 16,226 71,294 8% 7,500	240 741 1,024 1,014 3,019 390 343 733 4,105 0%	56 479 919 930 2,384 90 212 302 2,944 0%	184 262 105 84 635 300 131 431 1,161 0%	129 2,552 929 795 4,405 223 934 1,157 6,330 15% 619	76 1,174 154 98 1,502 132 459 591 2,414 18%	53 1,378 775 697 2,903 91 475 566 3,916 14%
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <u>Trip Generation for Block 3 after Pass-By Reduction</u> Multifamily Residential <u>Retail (>150k)</u> Total Block 3 <u>Trip Generation for All Blocks after Pass-by Reduction</u> Percent Reductions due to Transit Reduction Net New Trip Generation After Reductions <u>Trip Generation for Block 1</u>	820 710 110 221 820 00 822 710	0.00 0.00 0.00 0.00 0.00 0.00 0.00	KSF KSF DU KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514 16,226 71,294 8% 7,500 186	240 741 1,024 1,014 3,019 390 343 733 4,105 0% 187 27	56 479 919 930 2,384 90 212 302 2,944 0%	184 262 105 84 635 300 131 431 1,161 0% 71 3	129 2,552 929 795 4,405 223 934 1,157 6,330 15% 619 25	76 1,174 154 98 1,502 132 459 591 2,414 18% 295 4	53 1,378 775 697 2,903 91 475 566 3,916 14%
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <u>Trip Generation for Block 3 after Pass-By Reduction</u> Multifamily Residential <u>Retail (>150k)</u> Total Block 3 <u>Trip Generation for All Blocks after Pass-by Reduction</u> <i>Percent Reductions due to Transit Reduction</i> <i>Net New Trip Generation After Reductions</i> <u>Trip Generation for Block 1</u> Retail (Strip Retail Plaza <40k) Office	820 710 110 221 820 00	0.00 0.00 0.00 0.00 0.00	KSF KSF DU KSF KSF	Rate Rate Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514 16,226 71,294 8% 7,500	240 741 1,024 1,014 3,019 390 343 733 4,105 0%	56 479 919 2,384 90 212 302 2,944 0% 116 24	184 262 105 84 635 300 131 431 1,161 0%	129 2,552 929 795 4,405 223 934 1,157 6,330 15% 619	76 1,174 154 98 1,502 132 459 591 2,414 18%	53 1,378 775 697 2,903 91 475 566 3,916 14% 324 21
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <u>Trip Generation for Block 3 after Pass-By Reduction</u> Multifamily Residential <u>Retail (>150k)</u> Total Block 3 <u>Trip Generation for All Blocks after Pass-by Reduction</u> <u>Percent Reductions due to Transit Reduction</u> <u>Net New Trip Generation After Reductions</u> <u>Trip Generation for Block 1</u> <u>Retail (Strip Retail Plaza <40k)</u> Office Industrial	820 710 110 221 820 00 822 710	0.00 0.00 0.00 0.00 0.00 0.00 0.00	KSF KSF DU KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514 16,226 71,294 8% 7,500 186 1,264	240 741 1,024 1,014 3,019 390 343 733 4,105 0% 187 27 139	56 479 919 930 2,384 90 212 302 2,944 0% 116 24 118	184 262 105 84 635 300 131 431 1,161 0% 71 3 21	129 2,552 929 795 4,405 223 934 1,157 6,330 15% 6,19 25 124	76 1,174 154 98 1,502 132 459 591 2,414 18% 295 4 222	53 1,378 775 697 2,903 91 475 566 3,916 14% 324 21 102
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <u>Trip Generation for Block 3 after Pass-By Reduction</u> Multifamily Residential <u>Retail (>150k)</u> Total Block 3 <u>Trip Generation for All Blocks after Pass-by Reduction</u> <u>Percent Reductions due to Transit Reduction</u> <u>Net New Trip Generation After Reductions</u> <u>Trip Generation for Block 1</u> Retail (Strip Retail Plaza <40k) Office Industrial Total Block 1	820 710 110 221 820 00 822 710	0.00 0.00 0.00 0.00 0.00 0.00 0.00	KSF KSF DU KSF KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514 16,226 71,294 8% 7,500 186 1,264	240 741 1,024 1,014 3,019 390 343 733 4,105 0% 187 27 139	56 479 919 930 2,384 90 212 302 2,944 0% 116 24 118	184 262 105 84 635 300 131 431 1,161 0% 71 3 21	129 2,552 929 795 4,405 223 934 1,157 6,330 15% 6,19 25 124	76 1,174 154 98 1,502 132 459 591 2,414 18% 295 4 222	53 1,378 775 697 2,903 91 475 566 3,916 14% 324 21 102
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 Trip Generation for Block 3 after Pass-By Reduction Multifamily Residential Retail (>150k) Total Block 3 Trip Generation for All Blocks after Pass-by Reduction Net New Trip Generation After Reductions Trip Generation for Block 1 Retail (Strip Retail Plaza <40k) Office Industrial Total Block 1 Trip Generation for Block 2 Multifamily Residential Retail (Shopping Center >150k)	820 710 110 221 820 822 710 130 221 820	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	KSF KSF DU KSF KSF KSF KSF KSF DU KSF	Rate Rate Rate Rate Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514 16,226 71,294 8% 7,500 186 1,264 1,264 8,950 2,206 30,398	240 741 1,024 1,014 3,019 390 343 733 4,105 0% 187 187 27 139 353 240 741	56 479 919 930 2,384 90 212 302 2,944 0% 116 24 118 258 56 479	184 262 105 84 635 300 131 431 1,161 0% 71 3 21 95 184 262	129 2,552 929 795 4,405 223 934 1,157 6,330 15% 619 25 124 768 768	76 1,174 154 98 1,502 132 459 591 2,414 13% 295 4 22 321 76 1,174	53 1,378 775 697 2,903 91 475 566 3,916 14% 324 21 102 447 53 1,378
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <u>Trip Generation for Block 3 after Pass-By Reduction</u> Multifamily Residential <u>Retail (>150k)</u> Total Block 3 <u>Trip Generation for All Blocks after Pass-by Reduction</u> <i>Percent Reductions due to Transit Reductions</i> <u>Trip Generation for Block 1</u> Retail (Strip Retail Plaza <40k) Office Industrial Total Block 1 <u>Trip Generation for Block 2</u> Multifamily Residential Retail (Shopping Center >150k) Office	820 710 110 221 820 822 710 130 221 820 710	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	KSF KSF DU KSF KSF KSF KSF DU KSF	Rate Rate Rate Rate Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514 16,226 71,294 8% 7,500 186 1,264 8,950 2,206 30,398 7,179	240 741 1,024 1,014 3,019 390 343 733 4,105 0% 187 27 139 353 240 741 1,024	56 479 919 2,384 90 212 302 2,944 0% 116 24 118 258 56 479 919	184 262 105 84 635 300 131 431 1,161 0% 71 3 21 95 184 262 105	129 2,552 929 795 4,405 223 934 1,157 6,330 15% 619 25 124 768 129 2,552 929	76 1,174 154 98 1,502 132 459 591 2,414 18% 295 4 22 321 76 1,174 154	53 1,378 775 697 2,903 91 475 566 3,916 14% 324 21 102 447 53 1,378 775
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <u>Trip Generation for Block 3 after Pass-By Reduction</u> Multifamily Residential <u>Retail (>150k)</u> Total Block 3 <u>Trip Generation for All Blocks after Pass-by Reduction</u> <i>Net New Trip Generation After Reductions</i> <i>Net New Trip Generation After Reductions</i> <i>Trip Generation for Block 1</i> Retail (Strip Retail Plaza <40k) Office Industrial Total Block 1 <u>Trip Generation for Block 2</u> Multifamily Residential Retail (Shopping Center >150k) Office General Light Industrial	820 710 110 221 820 822 710 130 221 820	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	KSF KSF DU KSF KSF KSF KSF KSF DU KSF	Rate Rate Rate Rate Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514 16,226 71,294 8% 7,500 186 1,264 8,950 2,206 30,398 7,179 6,335	240 741 1,024 1,014 3,019 390 343 733 4,105 0% 187 27 139 353 4,105 0% 240 741 1,024 1,014	56 479 919 2,384 90 212 302 2,944 0% 116 24 118 258 56 479 919 930	184 262 105 84 635 300 131 431 1,161 0% 71 3 21 95 184 262 105 84	129 2,552 929 795 4,405 223 934 1,157 6,330 15% 619 25 124 768 25 124 768 129 2,552 929 795	76 1,174 154 98 1,502 132 459 591 2,414 18% 295 4 22 321 76 1,174 154 98	53 1,378 775 697 2,903 91 475 566 3,916 14% 324 21 102 447 53 1,378 775 697
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <u>Trip Generation for Block 3 after Pass-By Reduction</u> Multifamily Residential <u>Retail (>150k)</u> Total Block 3 <u>Trip Generation for All Blocks after Pass-by Reduction</u> Net New Trip Generation After Reductions Net New Trip Generation After Reductions <u>Retail (Strip Retail Plaza <40k)</u> Office Industrial Total Block 1 <u>Trip Generation for Block 2</u> Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2	820 710 110 221 820 822 710 130 221 820 710	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	KSF KSF DU KSF KSF KSF KSF DU KSF	Rate Rate Rate Rate Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514 16,226 71,294 8% 7,500 186 1,264 8,950 2,206 30,398 7,179	240 741 1,024 1,014 3,019 390 343 733 4,105 0% 187 27 139 353 240 741 1,024	56 479 919 2,384 90 212 302 2,944 0% 116 24 118 258 56 479 919	184 262 105 84 635 300 131 431 1,161 0% 71 3 21 95 184 262 105	129 2,552 929 795 4,405 223 934 1,157 6,330 15% 619 25 124 768 129 2,552 929	76 1,174 154 98 1,502 132 459 591 2,414 18% 295 4 22 321 76 1,174 154	53 1,378 775 697 2,903 91 475 566 3,916 14% 324 21 102 447 53 1,378 775
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <i>Trip Generation for Block 3 after Pass-By Reduction</i> Multifamily Residential Retail (>150k) Total Block 3 <i>Trip Generation for All Blocks after Pass-by Reduction</i> <i>Net New Trip Generation After Reductions</i> <i>Trip Generation for Block 1</i> Retail (Strip Retail Plaza <40k) Office Industrial Total Block 1 <i>Trip Generation for Block 2</i> Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <i>Trip Generation for Block 3</i>	820 710 110 221 820 820 710 130 221 820 710 130		KSF KSF DU KSF KSF KSF KSF DU KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514 16,226 71,294 8% 7,500 186 1,264 8,950 2,206 30,398 7,179 6,335 46,118	240 741 1,024 1,014 3,019 390 343 733 4,105 0% 187 27 139 353 240 741 1,024 1,014 1,024	56 479 919 2,384 90 212 302 2,944 0% 116 24 118 258 56 479 919 930 2,384	184 262 105 84 635 300 131 431 1,161 0% 71 3 21 95 184 262 105 84 635	129 2,552 929 795 4,405 223 934 1,157 6,330 15% 619 25 124 768 129 2,552 929 795 4,405	76 1,174 154 98 1,502 132 459 591 2,414 18% 295 4 22 321 76 1,174 154 98 1,502	53 1,378 775 697 2,903 91 475 566 3,916 14% 324 21 102 447 53 1,378 775 697 2,903
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <i>Trip Generation for Block 3 after Pass-By Reduction</i> Multifamily Residential <u>Retail (>150k)</u> Total Block 3 <i>Trip Generation for All Blocks after Pass-by Reduction</i> <i>Net New Trip Generation After Reductions</i> <i>Trip Generation for Block 1</i> Retail (Strip Retail Plaza <40k) Office Industrial Total Block 1 <i>Trip Generation for Block 2</i> Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <i>Trip Generation for Block 3</i> Multifamily Residential	820 710 110 221 820 822 710 130 221 820 710 110 110	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	KSF KSF DU KSF KSF KSF KSF DU KSF KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514 16,226 71,294 8% 7,500 186 1,264 8,950 2,206 30,398 7,179 6,335 46,118 3,712	240 741 1,024 1,014 3,019 390 343 733 4,105 0% 733 4,105 0% 733 4,105 0% 733 4,105 0% 733 4,105 0% 741 1,024 1,024 1,024 741 1,024 1,024 1,014 390	56 479 919 930 2,384 90 212 302 2,944 0% 116 24 118 258 56 479 919 930 2,384 90	184 262 105 84 635 300 131 431 1,161 0% 71 3 21 95 184 262 105 84 635 300	129 2,552 929 795 4,405 223 934 1,157 6,330 15% 619 25 124 768 129 2,552 929 795 4,405	76 1,174 154 98 1,502 132 459 591 2,414 18% 295 4 22 321 76 1,174 154 98 1,502 132	53 1,378 775 697 2,903 91 475 566 3,916 14% 324 21 102 447 53 1,378 775 697 2,903 91
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <i>Trip Generation for Block 3 after Pass-By Reduction</i> Multifamily Residential <u>Retail (>150k)</u> Total Block 3 <i>Trip Generation for All Blocks after Pass-by Reduction</i> <i>Net New Trip Generation After Reductions</i> <i>Trip Generation for Block 1</i> Retail (Strip Retail Plaza <40k) Office Industrial Total Block 1 <i>Trip Generation for Block 2</i> Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <i>Trip Generation for Block 3</i> Multifamily Residential Retail (>150k)	820 710 110 221 820 820 710 130 221 820 710 130		KSF KSF DU KSF KSF KSF KSF DU KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514 16,226 71,294 8% 7,500 186 1,264 8,950 2,206 30,398 7,179 6,335 46,118 3,712 12,514	240 741 1,024 1,014 3,019 390 343 733 4,105 0% 187 27 139 353 240 741 1,024 1,014 1,024 1,014 3,019	56 479 919 930 2,384 90 212 302 2,944 0% 116 24 118 258 56 479 919 930 2,384 90 2,384	184 262 105 84 635 300 131 431 1,161 0% 71 3 21 95 184 262 105 84 635 300 131	129 2,552 929 795 4,405 223 934 1,157 6,330 15% 619 25 124 768 129 2,552 929 795 4,405	76 1,174 154 98 1,502 132 459 591 2,414 18% 295 4 225 4 22 321 76 1,174 154 98 1,502	53 1,378 775 697 2,903 91 475 566 3,916 14% 324 21 102 447 53 1,378 775 697 2,903 91 4475
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <u>Trip Generation for Block 3 after Pass-By Reduction</u> Multifamily Residential <u>Retail (>150k)</u> Total Block 3 <u>Trip Generation for All Blocks after Pass-by Reduction</u> <i>Net New Trip Generation After Reductions</i> <u>Trip Generation for Block 1</u> Retail (Strip Retail Plaza <40k) Office Industrial Total Block 1 <u>Trip Generation for Block 2</u> Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <u>Trip Generation for Block 3</u> Multifamily Residential Retail (>150k) Total Block 3	820 710 110 221 820 822 710 130 221 820 710 110 110	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	KSF KSF DU KSF KSF KSF KSF DU KSF KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514 16,226 71,294 8% 7,500 186 1,264 8,950 2,206 30,398 7,179 6,335 46,118 3,712 12,514 16,226	240 741 1,024 1,014 3,019 390 343 733 4,105 0% 187 27 139 353 240 741 1,024 1,014 1,024 1,014 3,019	56 479 919 2,384 90 212 302 2,944 0% 116 24 118 258 56 479 919 930 2,384 90 2,12 302	184 262 105 84 635 300 131 431 1,161 0% 711 3 21 95 184 262 105 84 635 300 131 431	129 2,552 929 795 4,405 223 934 1,157 6,330 15% 619 25 124 768 708 25 124 768 709 2,552 929 795 4,405	76 1,174 154 98 1,502 132 459 591 2,414 18% 295 4 22 321 76 1,174 154 98 1,502 132 459 591	53 1,378 775 697 2,903 91 475 566 3,916 14% 324 21 102 447 53 1,378 775 697 2,903 91 475 566
Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <i>Trip Generation for Block 3 after Pass-By Reduction</i> Multifamily Residential <u>Retail (>150k)</u> Total Block 3 <i>Trip Generation for All Blocks after Pass-by Reduction</i> <i>Net New Trip Generation After Reductions</i> <i>Trip Generation for Block 1</i> Retail (Strip Retail Plaza <40k) Office Industrial Total Block 1 <i>Trip Generation for Block 2</i> Multifamily Residential Retail (Shopping Center >150k) Office <u>General Light Industrial</u> Total Block 2 <i>Trip Generation for Block 3</i> Multifamily Residential Retail (>150k)	820 710 110 221 820 822 710 130 221 820 710 110 110	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	KSF KSF DU KSF KSF KSF KSF DU KSF KSF KSF KSF KSF	Rate Rate Rate Rate Rate Rate Rate Rate	2,206 30,398 7,179 6,335 46,118 3,712 12,514 16,226 71,294 8% 7,500 186 1,264 8,950 2,206 30,398 7,179 6,335 46,118 3,712 12,514	240 741 1,024 1,014 3,019 390 343 733 4,105 0% 187 27 139 353 240 741 1,024 1,014 1,024 1,014 3,019	56 479 919 930 2,384 90 212 302 2,944 0% 116 24 118 258 56 479 919 930 2,384 90 2,384	184 262 105 84 635 300 131 431 1,161 0% 71 3 21 95 184 262 105 84 635 300 131	129 2,552 929 795 4,405 223 934 1,157 6,330 15% 619 25 124 768 129 2,552 929 795 4,405	76 1,174 154 98 1,502 132 459 591 2,414 18% 295 4 225 4 22 321 76 1,174 154 98 1,502	53 1,378 775 697 2,903 91 475 566 3,916 14% 324 21 102 447 53 1,378 775 697 2,903 91 4475

C – SYNCHRO OUTPUTS

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u>↑</u> ↑₽		٦	<u>↑</u> ↑₽		ኘኘ	††	7	ሻሻ	≜ 1⊅	
Traffic Volume (vph)	121	882	364	140	1503	63	381	503	85	92	564	210
Future Volume (vph)	121	882	364	140	1503	63	381	503	85	92	564	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.99		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1641	4514		1671	4866		3303	3406	1351	3433	3282	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1641	4514		1671	4866		3303	3406	1351	3433	3282	
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.85	0.85	0.85	0.92	0.92	0.92
Adj. Flow (vph)	141	1026	423	149	1599	67	448	592	100	100	613	228
RTOR Reduction (vph)	0	46	0	0	3	0	0	0	67	0	24	0
Lane Group Flow (vph)	141	1403	0	149	1663	0	448	592	33	100	817	0
Confl. Peds. (#/hr)	9		9	9		9	3		14	14		3
Heavy Vehicles (%)	10%	10%	7%	8%	6%	2%	6%	6%	16%	2%	4%	8%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			
Actuated Green, G (s)	17.3	50.1		17.3	50.1		20.0	49.0	49.0	11.0	40.0	
Effective Green, g (s)	17.3	50.1		17.3	50.1		20.0	49.0	49.0	11.0	40.0	
Actuated g/C Ratio	0.12	0.34		0.12	0.34		0.13	0.33	0.33	0.07	0.27	
Clearance Time (s)	4.5	6.0		4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	190	1518		194	1637		443	1120	444	253	881	
v/s Ratio Prot	0.09	c0.31		0.09	c0.34		c0.14	0.17		0.03	c0.25	
v/s Ratio Perm	0.07	00.01		0.07	00.01		00.11	0.17	0.02	0.00	00.20	
v/c Ratio	0.74	0.92		0.77	1.02		1.01	0.53	0.07	0.40	0.93	
Uniform Delay, d1	63.6	47.6		63.9	49.4		64.5	40.6	34.4	65.8	53.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.8	10.1		15.0	26.3		45.6	0.7	0.1	0.4	15.9	
Delay (s)	76.4	57.6		78.9	75.7		110.1	41.3	34.5	66.1	68.9	
Level of Service	E	E		E	E		F	D	C	E	E	
Approach Delay (s/veh)	-	59.3		-	76.0		•	67.7	Ŭ	-	68.6	
Approach LOS		E			E			E			E	
Intersection Summary												
HCM 2000 Control Delay (s/	/veh)		68.2	Н	CM 2000	Level of	Service		E			
HCM 2000 Volume to Capac			0.98									
Actuated Cycle Length (s)	,		148.9	S	um of lost	t time (s)			21.5			
Intersection Capacity Utiliza	tion		91.5%		CU Level				F			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	2	4111		2	<u>↑</u> ↑₽			4îÞ			\$	
Traffic Volume (vph)	24	967	33	113	1630	39	37	4	46	95	12	22
Future Volume (vph)	24	967	33	113	1630	39	37	4	46	95	12	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		4.5	6.0			5.0			5.0	
Lane Util. Factor	1.00	0.86		1.00	0.91			0.95			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.96	
Satd. Flow (prot)	1805	5920		1752	4877			3147			1782	
Flt Permitted	0.95	1.00		0.95	1.00			0.81			0.71	
Satd. Flow (perm)	1805	5920		1752	4877			2599			1320	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.84	0.84	0.84	0.72	0.72	0.72
Adj. Flow (vph)	25	1007	34	118	1698	41	44	5	55	132	17	31
RTOR Reduction (vph)	0	3	0	0	1	0	0	42	0	0	6	0
Lane Group Flow (vph)	25	1038	0	118	1738	0	0	62	0	0	174	0
Confl. Peds. (#/hr)	12		8	8		12	4		5	5		4
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	0%	10%	2%	3%	6%	2%	1%	0%	4%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	3.1	36.0		12.0	44.9			19.4			19.4	
Effective Green, g (s)	3.1	36.0		12.0	44.9			19.4			19.4	
Actuated g/C Ratio	0.04	0.43		0.14	0.54			0.23			0.23	
Clearance Time (s)	4.5	6.0		4.5	6.0			5.0			5.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5			3.0			3.0	
Lane Grp Cap (vph)	67	2570		253	2641			608			308	
v/s Ratio Prot	0.01	0.18		c0.07	c0.36			000				
v/s Ratio Perm	0.01	0110						0.02			c0.13	
v/c Ratio	0.37	0.40		0.47	0.66			0.10			0.56	
Uniform Delay, d1	39.0	16.1		32.5	13.5			24.9			28.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.3	0.2		0.5	0.7			0.1			2.4	
Delay (s)	40.2	16.3		33.0	14.3			25.0			30.4	
Level of Service	D	В		С	В			С			С	
Approach Delay (s/veh)		16.8			15.5			25.0			30.4	
Approach LOS		В			В			С			С	
Intersection Summary												
HCM 2000 Control Delay (s/			17.1	H	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capac			0.64									
Actuated Cycle Length (s)	-		82.9	S	um of lost	time (s)			15.5			
Intersection Capacity Utilizat	tion		70.1%			of Service			С			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	2	^	*	1	<u>↑</u> ↑₽		2	<u>↑</u> ↑₽		7	<u></u> ↑↑₽	
Traffic Volume (vph)	81	796	183	298	1503	154	147	780	211	186	857	109
Future Volume (vph)	81	796	183	298	1503	154	147	780	211	186	857	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.5	5.0	4.5	5.5		5.0	5.5		4.5	5.5	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1641	4715	1527	1736	4822		1787	4830		1770	4814	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1641	4715	1527	1736	4822		1787	4830		1770	4814	
Peak-hour factor, PHF	0.85	0.85	0.85	0.93	0.93	0.93	0.84	0.84	0.84	0.87	0.87	0.87
Adj. Flow (vph)	95	936	215	320	1616	166	175	929	251	214	985	125
RTOR Reduction (vph)	0	0	27	0	7	0	0	29	0	0	9	0
Lane Group Flow (vph)	95	936	188	320	1775	0	175	1151	0	214	1101	0
Confl. Peds. (#/hr)	9		9	9		9	13		2	2		13
Confl. Bikes (#/hr)			1			1						1
Heavy Vehicles (%)	10%	10%	4%	4%	6%	4%	1%	3%	6%	2%	5%	10%
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases	•	•	4	Ū	Ū		0	_		•	Ū	
Actuated Green, G (s)	13.5	40.5	58.9	25.2	51.7		18.4	44.0		21.5	46.6	
Effective Green, g (s)	13.5	40.5	58.9	25.2	51.7		18.4	44.0		21.5	46.6	
Actuated g/C Ratio	0.09	0.27	0.39	0.17	0.34		0.12	0.29		0.14	0.31	
Clearance Time (s)	5.0	5.5	5.0	4.5	5.5		5.0	5.5		4.5	5.5	
Vehicle Extension (s)	1.5	4.0	1.5	1.5	4.0		1.5	4.0		1.5	4.0	
Lane Grp Cap (vph)	146	1262	594	289	1648		217	1405		251	1483	
v/s Ratio Prot	0.06	0.20	0.04	c0.18	c0.37		0.10	c0.24		c0.12	c0.23	
v/s Ratio Perm	0.00	0.20	0.04	0.10	0.37		0.10	00.24		0.12	0.20	
v/c Ratio	0.65	0.74	0.32	1.11	1.08		0.81	0.82		0.85	0.74	
Uniform Delay, d1	66.6	50.6	32.1	63.0	49.7		64.7	49.9		63.3	46.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.7	2.5	0.1	84.8	46.2		18.3	4.1		22.6	2.2	
Delay (s)	74.2	53.1	32.2	147.8	96.0		82.9	54.0		85.9	49.1	
Level of Service	74.2 E	55.1 D	J2.2 C	F	70.0 F		62.7 F	D4.0		- 03.7 F	47.1 D	
Approach Delay (s/veh)	L	51.1	U	1	103.9		1	57.7		1	55.0	
Approach LOS		D			F			E			55.0 E	
Intersection Summary												
HCM 2000 Control Delay (s/	/veh)		71.9	H	CM 2000	Level of S	Service		E			
HCM 2000 Volume to Capac	city ratio		0.98									
Actuated Cycle Length (s)			151.2	S	um of los	t time (s)			21.0			
Intersection Capacity Utiliza	tion		89.1%			of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	2	↑ ↑₽		2	<u>↑</u> ↑₽		2	•	۲	ሻሻ	≜ 1⊅	
Traffic Volume (vph)	146	1099	71	128	1514	159	74	340	75	300	348	99
Future Volume (vph)	146	1099	71	128	1514	159	74	340	75	300	348	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	6.0		3.5	6.0		3.5	5.0	5.0	3.5	5.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1787	4706		1770	4791		1770	1863	1520	3467	3402	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1787	4706		1770	4791		1770	1863	1520	3467	3402	
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.90	0.90	0.90	0.83	0.83	0.83
Adj. Flow (vph)	166	1249	81	147	1740	183	82	378	83	361	419	119
RTOR Reduction (vph)	0	5	0	0	9	0	0	0	0	0	23	0
Lane Group Flow (vph)	166	1325	0	147	1914	0	82	378	83	361	515	0
Confl. Peds. (#/hr)	6		12	12		6	37		14	14		37
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	1%	9%	9%	2%	7%	0%	2%	2%	3%	1%	1%	2%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases									4		-	
Actuated Green, G (s)	14.5	42.1		12.7	40.3		8.1	31.2	31.2	16.0	39.1	
Effective Green, g (s)	14.5	42.1		12.7	40.3		8.1	31.2	31.2	16.0	39.1	
Actuated g/C Ratio	0.12	0.35		0.11	0.34		0.07	0.26	0.26	0.13	0.33	
Clearance Time (s)	3.5	6.0		3.5	6.0		3.5	5.0	5.0	3.5	5.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5		1.5	4.0	4.0	1.5	4.0	
Lane Grp Cap (vph)	215	1651		187	1608		119	484	395	462	1108	
v/s Ratio Prot	0.09	c0.28		0.08	c0.40		0.05	c0.20	0.0	c0.10	0.15	
v/s Ratio Perm	0107	00.20		0100	00110		0.00	00.20	0.05	00110	0.10	
v/c Ratio	0.77	0.80		0.79	1.19		0.69	0.78	0.21	0.78	0.46	
Uniform Delay, d1	51.1	35.2		52.3	39.9		54.7	41.2	34.8	50.3	32.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	14.4	4.2		17.9	92.1		12.4	8.5	0.4	7.7	0.4	
Delay (s)	65.6	39.4		70.2	131.9		67.2	49.7	35.1	58.1	32.6	
Level of Service	E	D		E	F		E	D	D	E	C	
Approach Delay (s/veh)	_	42.3		_	127.5		_	50.1	2	_	42.8	
Approach LOS		D			F			D			D	
Intersection Summary												
HCM 2000 Control Delay (s/			78.5	H	CM 2000	Level of S	Service		E			
HCM 2000 Volume to Capac	city ratio		0.95									
Actuated Cycle Length (s)			120.0		um of lost	. ,			18.0			
Intersection Capacity Utilizat	ion		84.9%	IC	CU Level o	of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	↑	1		4		3	††	7	۳.	≜ †⊅	
Traffic Volume (vph)	15	3	8	43	15	40	20	889	43	48	892	49
Future Volume (vph)	15	3	8	43	15	40	20	889	43	48	892	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0		3.0	5.0	5.0	3.0	5.0	
Lane Util. Factor	1.00	1.00	1.00		1.00		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99		0.99		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		0.94		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.98		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1236	1900	1216		1514		1641	3438	1459	1626	3421	
Flt Permitted	0.66	1.00	1.00		0.88		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	854	1900	1216		1365		1641	3438	1459	1626	3421	
Peak-hour factor, PHF	0.81	0.81	0.81	0.74	0.74	0.74	0.96	0.96	0.96	0.86	0.86	0.86
Adj. Flow (vph)	19	4	10	58	20	54	21	926	45	56	1037	57
RTOR Reduction (vph)	0	0	8	0	25	0	0	0	19	0	2	0
Lane Group Flow (vph)	19	4	2	0	107	0	21	926	26	56	1092	0
Confl. Peds. (#/hr)	1		2	2		1	1		9	9		1
Heavy Vehicles (%)	46%	0%	31%	8%	5%	27%	10%	5%	7%	11%	4%	15%
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA	Perm	Prot	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4		4	4					6			
Actuated Green, G (s)	11.9	11.9	11.9		11.9		1.9	33.4	33.4	4.1	35.6	
Effective Green, g (s)	11.9	11.9	11.9		11.9		1.9	33.4	33.4	4.1	35.6	
Actuated g/C Ratio	0.20	0.20	0.20		0.20		0.03	0.55	0.55	0.07	0.59	
Clearance Time (s)	3.0	3.0	3.0		3.0		3.0	5.0	5.0	3.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	168	374	239		268		51	1901	806	110	2016	
v/s Ratio Prot		0.00					0.01	0.27		c0.03	c0.32	
v/s Ratio Perm	0.02		0.00		c0.08				0.02			
v/c Ratio	0.11	0.01	0.01		0.40		0.41	0.49	0.03	0.51	0.54	
Uniform Delay, d1	19.9	19.5	19.5		21.1		28.7	8.3	6.1	27.2	7.5	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3	0.0	0.0		1.0		2.0	0.3	0.0	1.3	0.5	
Delay (s)	20.2	19.5	19.5		22.1		30.7	8.6	6.2	28.5	7.9	
Level of Service	С	В	В		С		С	A	A	С	A	
Approach Delay (s/veh)		19.9			22.1			9.0			8.9	
Approach LOS		В			С			A			A	
Intersection Summary												
HCM 2000 Control Delay (s	/veh)		9.9	Н	CM 2000	Level of S	Service		A			
HCM 2000 Volume to Capa			0.51		2 2000	20101010	0. 100					
Actuated Cycle Length (s)			60.4	S	um of lost	time (s)			11.0			
Intersection Capacity Utiliza	ation		53.0%			of Service			A			
Analysis Period (min)			15						~			
			15									

HCM Signalized Intersection Capacity Analysis 6: Paramount Boulevard & Rex Rd

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			Ł	7	1	↑ ⊅		۲	≜ 1⊅	
Traffic Volume (vph)	9	6	23	181	80	173	69	823	85	53	828	27
Future Volume (vph)	9	6	23	181	80	173	69	823	85	53	828	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0	4.0	5.5		4.0	5.5	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		0.99			1.00	0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt		0.92			1.00	0.85	1.00	0.99		1.00	1.00	
Flt Protected		0.99			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1274			1734	1515	1556	3387		1736	3408	
Flt Permitted		0.91			0.76	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1172			1368	1515	1556	3387		1736	3408	
Peak-hour factor, PHF	0.78	0.78	0.78	0.86	0.86	0.86	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	12	8	29	210	93	201	73	876	90	56	881	29
RTOR Reduction (vph)	0	20	0	0	0	33	0	5	0	0	2	0
Lane Group Flow (vph)	0	29	0	0	303	168	73	961	0	56	908	0
Confl. Peds. (#/hr)	5		5	5		5	4		5	5		4
Heavy Vehicles (%)	23%	30%	40%	6%	5%	5%	16%	4%	13%	4%	5%	16%
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4	·		8	Ū	8	Ŭ	_			Ű	
Actuated Green, G (s)		26.1		-	26.1	26.1	8.1	34.3		7.6	33.8	
Effective Green, g (s)		26.1			26.1	26.1	8.1	34.3		7.6	33.8	
Actuated g/C Ratio		0.32			0.32	0.32	0.10	0.42		0.09	0.41	
Clearance Time (s)		5.0			5.0	5.0	4.0	5.5		4.0	5.5	
Vehicle Extension (s)		3.0			3.0	3.0	1.5	4.0		1.5	4.0	
Lane Grp Cap (vph)		370			432	479	152	1408		159	1396	
v/s Ratio Prot		010			102	177	c0.05	c0.28		0.03	0.27	
v/s Ratio Perm		0.02			c0.22	0.11	00.00	00.20		0.00	0.27	
v/c Ratio		0.02			0.70	0.35	0.48	0.68		0.35	0.65	
Uniform Delay, d1		19.8			24.8	21.7	35.2	19.7		35.1	19.6	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			5.1	0.4	0.9	1.5		0.5	1.2	
Delay (s)		19.9			29.9	22.1	36.1	21.2		35.6	20.8	
Level of Service		В			C	С	D	C		D	C	
Approach Delay (s/veh)		19.9			26.8			22.2		-	21.7	
Approach LOS		В			C			С			C	
Intersection Summary												
HCM 2000 Control Delay (s/	/veh)		22.9	Н	CM 2000	Level of	Service		С			
HCM 2000 Volume to Capac			0.67						-			
Actuated Cycle Length (s)	,		82.5	S	um of losi	t time (s)			14.5			
Intersection Capacity Utilization	tion		69.0%			of Service	2		C			
Analysis Period (min)			15		, _,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				<u> </u>			
c Critical Lane Group			10									

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Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations	Y		*	† ††	≜ î⊧				
Traffic Volume (vph)	49	44	32	930	1085	85			
Future Volume (vph)	49	44	32	930	1085	85			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Total Lost time (s)	4.5		4.0	4.6	4.6	.,			
Lane Util. Factor	1.00		1.00	0.91	0.95				
Frpb, ped/bikes	1.00		1.00	1.00	1.00				
Flpb, ped/bikes	1.00		1.00	1.00	1.00				
Frt	0.94		1.00	1.00	0.99				
Flt Protected	0.97		0.95	1.00	1.00				
Satd. Flow (prot)	1708		1770	4940	3433				
Flt Permitted	0.97		0.95	1.00	1.00				
Satd. Flow (perm)	1708		1770	4940	3433				
Peak-hour factor, PHF	0.83	0.83	0.88	0.88	0.87	0.87			
Adj. Flow (vph)	59	53	36	1057	1247	98			
RTOR Reduction (vph)	44	0	0	0	5	0			
Lane Group Flow (vph)	68	0	36	1057	1340	0			
Confl. Peds. (#/hr)	2		1			1			
Heavy Vehicles (%)	1%	2%	2%	5%	4%	2%			
Turn Type	Prot		Prot	NA	NA				
Protected Phases	4		5	2	6				
Permitted Phases									
Actuated Green, G (s)	8.3		1.4	32.8	27.4				
Effective Green, g (s)	8.3		1.4	32.8	27.4				
Actuated g/C Ratio	0.17		0.03	0.65	0.55				
Clearance Time (s)	4.5		4.0	4.6	4.6				
Vehicle Extension (s)	4.0		0.2	2.0	2.0				
Lane Grp Cap (vph)	282		49	3227	1873				
v/s Ratio Prot	c0.04		c0.02	0.21	c0.39				
v/s Ratio Perm									
v/c Ratio	0.24		0.73	0.33	0.72				
Uniform Delay, d1	18.2		24.2	3.8	8.5				
Progression Factor	1.00		1.00	1.00	1.00				
Incremental Delay, d2	0.6		38.5	0.0	1.1				
Delay (s)	18.8		62.7	3.9	9.6				
Level of Service	В		E	А	А				
Approach Delay (s/veh)	18.8			5.8	9.6				
Approach LOS	В			А	А				
Intersection Summary			<u> </u>		014 6555				
HCM 2000 Control Delay (s			8.4	H	CM 2000	Level of Service	5	А	
HCM 2000 Volume to Capa	city ratio		0.61		un afteri			10.4	
Actuated Cycle Length (s)	tion		50.2		um of lost			13.1	
Intersection Capacity Utiliza			45.7%	IC	U Level C	of Service		А	
Analysis Period (min)			15						

HCM Signalized Intersection Capacity Analysis 8: Rosemead Boulevard & Rex Rd

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	↑	7	٦	Þ		ሻሻ	∱1 ≽		۳	††	1
Traffic Volume (vph)	36	42	76	136	172	115	145	1036	41	52	902	105
Future Volume (vph)	36	42	76	136	172	115	145	1036	41	52	902	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.0	6.0		4.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.99		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.94		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1467	1863	1346	1787	1754		3367	3477		1805	3471	1496
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1467	1863	1346	1787	1754		3367	3477		1805	3471	1496
Peak-hour factor, PHF	0.80	0.80	0.80	0.87	0.87	0.87	0.99	0.99	0.99	0.87	0.87	0.87
Adj. Flow (vph)	45	52	95	156	198	132	146	1046	41	60	1037	121
RTOR Reduction (vph)	0	0	77	0	21	0	0	1	0	0	0	46
Lane Group Flow (vph)	45	53	18	156	309	0	146	1086	0	60	1037	75
Confl. Peds. (#/hr)	6					6	3		2	2		3
Heavy Vehicles (%)	23%	2%	20%	1%	1%	1%	4%	3%	7%	0%	4%	5%
Turn Type	Split	NA	custom	Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	. 4	4	4 5	3	3		5	2		1	6	
Permitted Phases			4									6
Actuated Green, G (s)	9.1	9.1	22.7	24.0	24.0		9.1	60.9		7.0	58.8	58.8
Effective Green, g (s)	9.1	9.1	22.7	24.0	24.0		9.1	60.9		7.0	58.8	58.8
Actuated g/C Ratio	0.08	0.08	0.19	0.20	0.20		0.08	0.51		0.06	0.49	0.49
Clearance Time (s)	4.5	4.5		4.5	4.5		4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		1.5	4.0		1.5	4.0	4.0
Lane Grp Cap (vph)	111	141	254	357	350		255	1764		105	1700	733
v/s Ratio Prot	c0.03	0.03	0.01	0.09	c0.18		c0.04	c0.31		0.03	0.30	
v/s Ratio Perm												0.05
v/c Ratio	0.41	0.38	0.07	0.44	0.88		0.57	0.62		0.57	0.61	0.10
Uniform Delay, d1	52.9	52.7	40.0	42.1	46.6		53.6	21.2		55.0	22.3	16.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.38	0.68		1.00	1.00	1.00
Incremental Delay, d2	2.4	1.7	0.1	0.9	22.1		1.5	1.3		4.6	1.6	0.3
Delay (s)	55.3	54.4	40.1	42.9	68.8		75.4	15.8		59.6	23.9	16.7
Level of Service	E	D	D	D	E		E	В		E	С	В
Approach Delay (s/veh)		47.6			60.5			22.8			24.9	
Approach LOS		D			E			С			С	
Intersection Summary												
HCM 2000 Control Delay (s			31.0	Н	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capa	city ratio		0.66									
Actuated Cycle Length (s)			120.0		um of lost				19.0			
Intersection Capacity Utiliza	ation		69.6%	IC	CU Level o	of Service			С			
Analysis Period (min)			15									
c Critical Lano Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	↑ ↑₽		ሻሻ	ተተ ጮ		٦	<u>↑</u> ↑₽		۳.	***	1
Traffic Volume (vph)	151	783	123	192	1264	66	98	804	181	110	754	169
Future Volume (vph)	151	783	123	192	1264	66	98	804	181	110	754	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	5.5		4.0	5.5		4.0	6.0		4.0	6.0	4.5
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1656	4540		3213	4706		1656	4822		1626	4940	1477
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1656	4540		3213	4706		1656	4822		1626	4940	1477
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.95	0.95	0.95	0.88	0.88	0.88
Adj. Flow (vph)	161	833	131	226	1487	78	103	846	191	125	857	192
RTOR Reduction (vph)	0	17	0	0	5	0	0	31	0	0	0	51
Lane Group Flow (vph)	161	947	0	226	1560	0	103	1006	0	125	857	141
Confl. Peds. (#/hr)	5		1	1		5	2		12	12		2
Heavy Vehicles (%)	9%	12%	10%	9%	9%	15%	9%	4%	4%	11%	5%	8%
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases	,	•		U	Ű		Ű	-		•	Ŭ	6
Actuated Green, G (s)	8.5	31.7		12.3	35.0		9.6	48.0		8.5	46.9	55.4
Effective Green, g (s)	8.5	31.7		12.3	35.0		9.6	48.0		8.5	46.9	55.4
Actuated g/C Ratio	0.07	0.26		0.10	0.29		0.08	0.40		0.07	0.39	0.46
Clearance Time (s)	4.5	5.5		4.0	5.5		4.0	6.0		4.0	6.0	4.5
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	4.0		1.5	4.0	1.5
Lane Grp Cap (vph)	117	1199		329	1372		132	1928		115	1930	681
v/s Ratio Prot	c0.10	0.21		0.07	c0.33		0.06	c0.21		c0.08	0.17	0.01
v/s Ratio Perm	CO. 10	0.21		0.07	0.55		0.00	CU.2 I		0.00	0.17	0.01
v/c Ratio	1.38	0.79		0.69	1.14		0.78	0.52		1.09	0.44	0.00
Uniform Delay, d1	55.8	41.1		52.0	42.5		54.2	27.3		55.8	26.9	19.2
Progression Factor	1.00	1.00		1.00	42.5		1.00	1.00		1.01	0.60	0.85
Incremental Delay, d2	213.8	3.8		4.7	71.1		23.5	1.00		102.0	0.00	0.05
Delay (s)	213.8	44.8		56.7	113.6		77.6	28.3		158.3	16.8	16.3
Level of Service	209.5 F	44.0 D		50.7 E	F		77.0 E	20.3 C		156.5 F	10.0 B	10.3 B
		77.0		L	106.4		L	32.8		Г	31.8	D
Approach Delay (s/veh)		77.0 E			100.4 F			32.0 C			51.0 C	
Approach LOS		E			Г			C			U	
Intersection Summary												
HCM 2000 Control Delay (s			67.3	Н	ICM 2000	Level of S	Service		E			
HCM 2000 Volume to Capa	city ratio		0.86									
Actuated Cycle Length (s)			120.0		um of lost	• • •			20.0			
Intersection Capacity Utiliza	ation		79.7%	10	CU Level of	of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	2	<u></u> ↑↑₽		2	<u>↑</u> ↑₽		ኘኘ	† †	*	ሻሻ	≜ †⊅	
Traffic Volume (vph)	201	1342	319	116	730	121	167	983	393	144	840	123
Future Volume (vph)	201	1342	319	116	730	121	167	983	393	144	840	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1703	4807		1687	4721		3367	3539	1524	3433	3397	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1703	4807		1687	4721		3367	3539	1524	3433	3397	
Peak-hour factor, PHF	0.93	0.93	0.93	0.94	0.94	0.94	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	216	1443	343	123	777	129	174	1024	409	150	875	128
RTOR Reduction (vph)	0	24	0	0	16	0	0	0	106	0	7	0
Lane Group Flow (vph)	216	1762	0	123	890	0	174	1024	303	150	996	0
Confl. Peds. (#/hr)	9		7	7		9	3		13	13		3
Confl. Bikes (#/hr)			1						1			1
Heavy Vehicles (%)	6%	4%	6%	7%	8%	2%	4%	2%	3%	2%	3%	11%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			
Actuated Green, G (s)	29.7	50.1		14.5	34.9		12.1	40.7	40.7	11.5	40.1	
Effective Green, g (s)	29.7	50.1		14.5	34.9		12.1	40.7	40.7	11.5	40.1	
Actuated g/C Ratio	0.21	0.36		0.10	0.25		0.09	0.29	0.29	0.08	0.29	
Clearance Time (s)	4.5	6.0		4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	365	1741		176	1191		294	1041	448	285	984	
v/s Ratio Prot	0.13	c0.37		0.07	c0.19		c0.05	0.29		0.04	c0.29	
v/s Ratio Perm									0.20			
v/c Ratio	0.59	1.01		0.70	0.75		0.59	0.98	0.68	0.53	1.01	
Uniform Delay, d1	48.8	44.1		59.8	47.6		60.7	48.5	43.0	60.8	49.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	24.6		9.4	2.9		2.1	23.9	4.8	0.8	31.7	
Delay (s)	50.6	68.7		69.2	50.6		62.8	72.4	47.8	61.6	80.8	
Level of Service	D	E		E	D		E	E	D	E	F	
Approach Delay (s/veh)		66.8			52.8			65.1			78.3	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay (s/	/veh)		66.1	H	CM 2000	Level of S	Service		E			-
HCM 2000 Volume to Capac	city ratio		0.95									
Actuated Cycle Length (s)			138.3	S	um of lost	t time (s)			21.5			
Intersection Capacity Utilization	tion		97.3%	IC	CU Level o	of Service	:		F			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	4111		٦	<u>↑</u> ↑₽			ብጉ			4	
Traffic Volume (vph)	46	1486	58	174	882	60	120	31	125	73	20	19
Future Volume (vph)	46	1486	58	174	882	60	120	31	125	73	20	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		4.5	6.0			5.0			5.0	
Lane Util. Factor	1.00	0.86		1.00	0.91			0.95			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.93			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1805	6309		1787	4805			3242			1774	
Flt Permitted	0.95	1.00		0.95	1.00			0.77			0.56	
Satd. Flow (perm)	1805	6309		1787	4805			2562			1023	
Peak-hour factor, PHF	0.93	0.93	0.93	0.95	0.95	0.95	0.86	0.86	0.86	0.88	0.88	0.88
Adj. Flow (vph)	49	1598	62	183	928	63	140	36	145	83	23	22
RTOR Reduction (vph)	0	4	0	0	4	0	0	112	0	0	6	0
Lane Group Flow (vph)	49	1656	0	183	987	0	0	209	0	0	122	0
Confl. Peds. (#/hr)	9		7	7		9	7		14	14		7
Heavy Vehicles (%)	0%	3%	0%	1%	7%	3%	1%	0%	0%	1%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	5.4	43.3		15.2	53.1			22.1			22.1	
Effective Green, g (s)	5.4	43.3		15.2	53.1			22.1			22.1	
Actuated g/C Ratio	0.06	0.45		0.16	0.55			0.23			0.23	
Clearance Time (s)	4.5	6.0		4.5	6.0			5.0			5.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5			3.0			3.0	
Lane Grp Cap (vph)	101	2842		282	2655			589			235	
v/s Ratio Prot	0.03	c0.26		c0.10	0.21							
v/s Ratio Perm								0.08			c0.12	
v/c Ratio	0.49	0.58		0.65	0.37			0.36			0.52	
Uniform Delay, d1	44.0	19.7		37.9	12.1			31.0			32.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.3	0.4		3.8	0.2			0.4			1.9	
Delay (s)	45.3	20.1		41.8	12.3			31.4			34.3	
Level of Service	D	С		D	В			С			С	
Approach Delay (s/veh)		20.8			16.9			31.4			34.3	
Approach LOS		С			В			С			С	
Intersection Summary												
HCM 2000 Control Delay (s/			21.0	Н	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capac	city ratio		0.58									
Actuated Cycle Length (s)			96.1		um of lost				15.5			
Intersection Capacity Utilization	tion		81.5%	IC	CU Level	of Service	•		D			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	^	*	1	<u>↑</u> ↑₽		1	<u>↑</u> ↑₽		1	<u></u> ↑↑₽	
Traffic Volume (vph)	230	1183	268	237	775	184	171	813	216	184	930	123
Future Volume (vph)	230	1183	268	237	775	184	171	813	216	184	930	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.5	5.0	4.5	5.5		5.0	5.5		4.5	5.5	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	5036	1543	1736	4757		1787	4899		1770	4815	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1787	5036	1543	1736	4757		1787	4899		1770	4815	
Peak-hour factor, PHF	0.93	0.93	0.93	0.86	0.86	0.86	0.96	0.96	0.96	0.93	0.93	0.93
Adj. Flow (vph)	247	1272	288	276	901	214	178	847	225	198	1000	132
RTOR Reduction (vph)	0	0	26	0	23	0	0	29	0	0	10	0
Lane Group Flow (vph)	247	1272	262	276	1092	0	178	1043	0	198	1122	0
Confl. Peds. (#/hr)	21		18	18		21	26		14	14		26
Confl. Bikes (#/hr)						1						4
Heavy Vehicles (%)	1%	3%	2%	4%	6%	1%	1%	2%	1%	2%	5%	7%
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	24.1	46.6	65.7	25.3	47.3		19.1	43.3		20.7	44.4	
Effective Green, g (s)	24.1	46.6	65.7	25.3	47.3		19.1	43.3		20.7	44.4	
Actuated g/C Ratio	0.15	0.30	0.42	0.16	0.30		0.12	0.28		0.13	0.28	
Clearance Time (s)	5.0	5.5	5.0	4.5	5.5		5.0	5.5		4.5	5.5	
Vehicle Extension (s)	1.5	4.0	1.5	1.5	4.0		1.5	4.0		1.5	4.0	
Lane Grp Cap (vph)	276	1505	650	281	1443		218	1360		235	1371	
v/s Ratio Prot	0.14	c0.25	0.05	c0.16	0.23		0.10	0.21		c0.11	c0.23	
v/s Ratio Perm	0	00120	0.12	00110	0.20		0.10	0.2.			00120	
v/c Ratio	0.89	0.85	0.40	0.98	0.76		0.82	0.77		0.84	0.82	
Uniform Delay, d1	64.7	51.3	31.4	65.1	49.1		66.7	51.7		66.0	52.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	28.0	4.7	0.1	48.4	2.5		19.5	2.8		22.2	4.1	
Delay (s)	92.6	56.0	31.6	113.5	51.6		86.2	54.5		88.2	56.1	
Level of Service	F	E	С	F	D		F	D		F	E	
Approach Delay (s/veh)	-	57.1	-	-	63.8			59.0			60.9	
Approach LOS		E			E			E			E	
Intersection Summary												
HCM 2000 Control Delay (s/	,		60.0	H	CM 2000	Level of S	Service		E			
HCM 2000 Volume to Capac	city ratio		0.87									
Actuated Cycle Length (s)			155.9	S	um of los	t time (s)			21.0			
Intersection Capacity Utiliza	tion		90.3%	IC	CU Level	of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	2	<u>↑</u> ↑₽		1	<u>↑</u> ↑₽		1		*	ሻሻ	≜ 1⊅	
Traffic Volume (vph)	90	1401	95	129	975	145	109	250	92	312	293	91
Future Volume (vph)	90	1401	95	129	975	145	109	250	92	312	293	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	6.0		3.5	6.0		3.5	5.0	5.0	3.5	5.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	4947		1805	4808		1805	1881	1574	3502	3455	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	4947		1805	4808		1805	1881	1574	3502	3455	
Peak-hour factor, PHF	0.96	0.96	0.96	0.90	0.90	0.90	0.89	0.89	0.89	0.92	0.92	0.92
Adj. Flow (vph)	94	1459	99	143	1083	161	122	281	103	339	318	99
RTOR Reduction (vph)	0	5	0	0	16	0	0	0	0	0	25	0
Lane Group Flow (vph)	94	1553	0	143	1228	0	122	281	103	339	392	0
Confl. Peds. (#/hr)	7		2	2		7			3	3		
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	0%	4%	0%	0%	6%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4	1 01111	3	8	
Permitted Phases		-		-					4	-	-	
Actuated Green, G (s)	14.5	60.1		13.4	59.0		10.7	16.5	16.5	12.0	17.8	
Effective Green, g (s)	14.5	60.1		13.4	59.0		10.7	16.5	16.5	12.0	17.8	
Actuated g/C Ratio	0.12	0.50		0.11	0.49		0.09	0.14	0.14	0.10	0.15	
Clearance Time (s)	3.5	6.0		3.5	6.0		3.5	5.0	5.0	3.5	5.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5		1.5	4.0	4.0	1.5	4.0	
Lane Grp Cap (vph)	218	2477		201	2363		160	258	216	350	512	
v/s Ratio Prot	0.05	c0.31		c0.08	0.26		0.07	c0.15	210	c0.10	0.11	
v/s Ratio Perm	0.00	00.01		00.00	0.20		0.07	00.10	0.07	00.10	0.11	
v/c Ratio	0.43	0.63		0.71	0.52		0.76	1.09	0.48	0.97	0.77	
Uniform Delay, d1	48.9	21.8		51.4	20.8		53.4	51.8	47.8	53.8	49.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	1.2		9.5	0.8		17.4	81.9	2.3	39.1	7.2	
Delay (s)	49.4	23.0		60.9	21.6		70.8	133.6	50.0	92.9	56.3	
Level of Service	D	С		E	С		E	F	D	F	E	
Approach Delay (s/veh)		24.5			25.7			101.5	_	-	72.7	
Approach LOS		С			С			F			E	
Intersection Summary												
HCM 2000 Control Delay (s/	,		42.4	Н	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capac	city ratio		0.75									
Actuated Cycle Length (s)			120.0		um of lost				18.0			
Intersection Capacity Utiliza	tion		75.1%	IC	CU Level	of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	1		4		1	† †	*	۲	≜ 1⊅	
Traffic Volume (vph)	30	5	8	59	0	61	2	1295	46	24	1262	12
Future Volume (vph)	30	5	8	59	0	61	2	1295	46	24	1262	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0		3.0	5.0	5.0	3.0	5.0	
Lane Util. Factor	1.00	1.00	1.00		1.00		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99		1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		0.93		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00		0.98		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1719	1429	1436		1644		1805	3539	1435	1612	3483	
Flt Permitted	0.58	1.00	1.00		0.85		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1056	1429	1436		1431		1805	3539	1435	1612	3483	
Peak-hour factor, PHF	0.41	0.41	0.41	0.64	0.64	0.64	0.95	0.95	0.95	0.93	0.93	0.93
Adj. Flow (vph)	73	12	20	92	0	95	2	1363	48	26	1357	13
RTOR Reduction (vph)	0	0	16	0	39	0	0	0	12	0	0	0
Lane Group Flow (vph)	73	12	4	0	148	0	2	1363	36	26	1370	0
Confl. Peds. (#/hr)			1	1					7	7		
Heavy Vehicles (%)	5%	33%	11%	2%	25%	8%	0%	2%	9%	12%	3%	57%
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA	Perm	Prot	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4		4	4					6			
Actuated Green, G (s)	13.5	13.5	13.5		13.5		0.7	42.2	42.2	2.1	43.6	
Effective Green, g (s)	13.5	13.5	13.5		13.5		0.7	42.2	42.2	2.1	43.6	
Actuated g/C Ratio	0.20	0.20	0.20		0.20		0.01	0.61	0.61	0.03	0.63	
Clearance Time (s)	3.0	3.0	3.0		3.0		3.0	5.0	5.0	3.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	207	280	281		280		18	2170	880	49	2207	
v/s Ratio Prot		0.01					0.00	0.39		c0.02	c0.39	
v/s Ratio Perm	0.07		0.00		c0.10				0.03			
v/c Ratio	0.35	0.04	0.01		0.53		0.11	0.63	0.04	0.53	0.62	
Uniform Delay, d1	23.9	22.4	22.3		24.8		33.7	8.4	5.3	32.9	7.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.0	0.1	0.0		1.8		1.0	0.7	0.0	5.4	0.7	
Delay (s)	24.9	22.5	22.3		26.6		34.7	9.1	5.3	38.3	8.3	
Level of Service	C	C	С		C		С	A	A	D	A	
Approach Delay (s/veh)		24.1	U U		26.6			9.0		_	8.9	
Approach LOS		С			C			A			A	
Intersection Summary												
HCM 2000 Control Delay (s	/veh)		10.5	Н	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capa			0.60		2000							
Actuated Cycle Length (s)			68.8	S	um of lost	time (s)			11.0			
Intersection Capacity Utiliza	tion		57.0%			of Service			B			
Analysis Period (min)			15		, _,,				-			
c Critical Lano Croup												

HCM Signalized Intersection Capacity Analysis 6: Paramount Boulevard & Rex Rd

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			Ł	1	1	≜ †⊅		۲	≜ 1∌	
Traffic Volume (vph)	22	43	95	157	4	74	19	1268	101	80	1245	13
Future Volume (vph)	22	43	95	157	4	74	19	1268	101	80	1245	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0	4.0	5.5		4.0	5.5	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00	0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt		0.92			1.00	0.85	1.00	0.99		1.00	1.00	
Flt Protected		0.99			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1691			1716	1447	1399	3485		1703	3493	
Flt Permitted		0.94			0.48	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1593			872	1447	1399	3485		1703	3493	
Peak-hour factor, PHF	0.75	0.75	0.75	0.75	0.75	0.75	0.91	0.91	0.91	0.95	0.95	0.95
Adj. Flow (vph)	29	57	127	209	5	99	21	1393	111	84	1311	14
RTOR Reduction (vph)	0	38	0	0	0	35	0	3	0	0	0	0
Lane Group Flow (vph)	0	175	0	0	214	64	21	1501	0	84	1325	0
Confl. Peds. (#/hr)	3					3						
Heavy Vehicles (%)	2%	2%	3%	5%	29%	10%	29%	2%	8%	6%	3%	21%
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		33.7			33.7	33.7	3.6	62.8		8.9	68.1	
Effective Green, g (s)		33.7			33.7	33.7	3.6	62.8		8.9	68.1	
Actuated g/C Ratio		0.28			0.28	0.28	0.03	0.52		0.07	0.57	
Clearance Time (s)		5.0			5.0	5.0	4.0	5.5		4.0	5.5	
Vehicle Extension (s)		3.0			3.0	3.0	1.5	4.0		1.5	4.0	
Lane Grp Cap (vph)		447			245	406	42	1825		126	1983	
v/s Ratio Prot							0.02	c0.43		c0.05	0.38	
v/s Ratio Perm		0.11			c0.25	0.04						
v/c Ratio		0.39			0.87	0.16	0.50	0.82		0.67	0.67	
Uniform Delay, d1		34.8			41.1	32.4	57.3	23.9		54.1	18.0	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.6			27.2	0.2	3.4	3.3		9.9	1.0	
Delay (s)		35.4			68.3	32.6	60.6	27.2		63.9	19.0	
Level of Service		D			E	С	E	C		E	B	
Approach Delay (s/veh)		35.4			57.0			27.6			21.7	
Approach LOS		D			E			С			С	
Intersection Summary												
HCM 2000 Control Delay (s/			28.3	H	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capac	city ratio		0.83									
Actuated Cycle Length (s)			119.9		um of los				14.5			
Intersection Capacity Utilizat	tion		83.5%	IC	U Level	of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations	Y	2011	3	† ††	† 1 ₂	02.1			
Traffic Volume (vph)	114	90	43	1156	1126	103			
Future Volume (vph)	114	90	43	1156	1126	103			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Total Lost time (s)	4.5	1700	4.0	4.6	4.6	1700			
Lane Util. Factor	1.00		1.00	0.91	0.95				
Frpb, ped/bikes	1.00		1.00	1.00	1.00				
	1.00		1.00	1.00	1.00				
Flpb, ped/bikes Frt	0.94		1.00	1.00	0.99				
Flt Protected	0.97		0.95	1.00	1.00				
Satd. Flow (prot)	1738		1787	5085	3461				
Flt Permitted	0.97		0.95	1.00	1.00				
Satd. Flow (perm)	1738		1787	5085	3461				
Peak-hour factor, PHF	0.94	0.94	0.95	0.95	0.96	0.96			
Adj. Flow (vph)	121	96	45	1217	1173	107			
RTOR Reduction (vph)	37	0	0	0	7	0			
Lane Group Flow (vph)	180	0	45	1217	1273	0			
Confl. Peds. (#/hr)	9		5			5			
Heavy Vehicles (%)	0%	0%	1%	2%	3%	0%			
Turn Type	Prot		Prot	NA	NA				
Protected Phases	4		5	2	6				
Permitted Phases			Ũ	-	Ū				
Actuated Green, G (s)	13.9		2.4	32.9	26.5				
Effective Green, g (s)	13.9		2.4	32.9	26.5				
Actuated g/C Ratio	0.25		0.04	0.59	0.47				
Clearance Time (s)	4.5		4.0	4.6	4.6				
.,			4.0 0.2	2.0	2.0				
Vehicle Extension (s)	4.0								
Lane Grp Cap (vph)	432		76	2992	1640				
v/s Ratio Prot	c0.10		0.03	c0.24	c0.37				
v/s Ratio Perm									
v/c Ratio	0.42		0.59	0.41	0.78				
Uniform Delay, d1	17.6		26.3	6.2	12.2				
Progression Factor	1.00		1.00	1.00	1.00				
Incremental Delay, d2	0.9		8.0	0.0	2.2				
Delay (s)	18.5		34.2	6.3	14.4				
Level of Service	В		С	А	В				
Approach Delay (s/veh)	18.5			7.3	14.4				
Approach LOS	В			А	В				
Intersection Summary									
HCM 2000 Control Delay (s/veh)		11.4	Н	CM 2000	Level of Service		В	
HCM 2000 Volume to Capa			0.65						
Actuated Cycle Length (s)			55.9	S	um of lost	time (s)	1	3.1	
Intersection Capacity Utiliz	ation		55.1%		CU Level c			В	
Analysis Period (min)			15					5	
			15						

HCM Signalized Intersection Capacity Analysis 8: Rosemead Boulevard & Rex Rd

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	٦	↑	1	1	Þ		ሻሻ	≜ ⊅		1	^	1
Traffic Volume (vph)	136	108	169	53	50	62	39	1173	79	48	1257	26
Future Volume (vph)	136	108	169	53	50	62	39	1173	79	48	1257	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.0	6.0		4.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.99		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.92		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1881	1509	1805	1705		3367	3505		1805	3539	1378
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1881	1509	1805	1705		3367	3505		1805	3539	1378
Peak-hour factor, PHF	0.68	0.68	0.68	0.88	0.88	0.88	0.94	0.94	0.94	0.90	0.90	0.90
Adj. Flow (vph)	200	159	249	60	57	70	41	1248	84	53	1397	29
RTOR Reduction (vph)	0	0	121	0	42	0	0	2	0	0	0	14
Lane Group Flow (vph)	200	159	128	60	85	0	41	1330	0	53	1397	15
Confl. Peds. (#/hr)	8					8	3		4	4		3
Heavy Vehicles (%)	2%	1%	7%	0%	2%	0%	4%	2%	0%	0%	2%	14%
Turn Type	Split	NA	custom	Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4	4 5	3	3		5	2		1	6	
Permitted Phases			4									6
Actuated Green, G (s)	19.9	19.9	29.8	12.8	12.8		5.4	61.7		6.6	62.9	62.9
Effective Green, g (s)	19.9	19.9	29.8	12.8	12.8		5.4	61.7		6.6	62.9	62.9
Actuated g/C Ratio	0.17	0.17	0.25	0.11	0.11		0.05	0.51		0.06	0.52	0.52
Clearance Time (s)	4.5	4.5		4.5	4.5		4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		1.5	4.0		1.5	4.0	4.0
Lane Grp Cap (vph)	293	311	374	192	181		151	1802		99	1855	722
v/s Ratio Prot	c0.11	0.08	0.08	0.03	c0.05		0.01	0.38		c0.03	c0.39	
v/s Ratio Perm	00.11	0.00	0.00	0.00	00.00		0.01	0.00		00.00	00.07	0.01
v/c Ratio	0.68	0.51	0.34	0.31	0.47		0.27	0.74		0.54	0.75	0.02
Uniform Delay, d1	47.1	45.6	37.0	49.5	50.4		55.4	22.8		55.2	22.4	13.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.33	0.52		1.00	1.00	1.00
Incremental Delay, d2	6.4	1.4	0.5	0.9	1.9		0.2	1.9		2.8	2.9	0.1
Delay (s)	53.5	47.0	37.6	50.5	52.3		73.8	13.8		58.0	25.3	13.8
Level of Service	D	D	D	D	D		E	В		E	С	В
Approach Delay (s/veh)		45.3			51.7			15.6			26.3	_
Approach LOS		D			D			В			С	
Intersection Summary												
HCM 2000 Control Delay (s	s/veh)		26.7	Н	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capa			0.70									
Actuated Cycle Length (s)	· ·		120.0	S	um of lost	t time (s)			19.0			
Intersection Capacity Utiliza	ation		62.8%			of Service			В			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	<u></u> ↑↑₽		ሻሻ	ተተ ጮ		1	<u>↑</u> ↑₽		۳	***	1
Traffic Volume (vph)	208	1147	142	224	796	115	65	896	178	129	998	119
Future Volume (vph)	208	1147	142	224	796	115	65	896	178	129	998	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	5.5		4.0	5.5		4.0	6.0		4.0	6.0	4.5
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.98		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1719	4893		3367	4824		1671	4953		1626	5085	1514
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1719	4893		3367	4824		1671	4953		1626	5085	1514
Peak-hour factor, PHF	0.95	0.95	0.95	0.91	0.91	0.91	0.96	0.96	0.96	0.92	0.92	0.92
Adj. Flow (vph)	219	1207	149	246	875	126	68	933	185	140	1085	129
RTOR Reduction (vph)	0	13	0	0	16	0	0	24	0	0	0	55
Lane Group Flow (vph)	219	1343	0	246	985	0	68	1094	0	140	1085	74
Confl. Peds. (#/hr)	4		7	7		4	7		3	3		7
Heavy Vehicles (%)	5%	4%	4%	4%	6%	0%	8%	2%	1%	11%	2%	5%
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases	,	· ·		0	0		0	2			0	6
Actuated Green, G (s)	14.5	38.9		11.2	35.1		7.4	38.5		11.9	43.0	57.5
Effective Green, g (s)	14.5	38.9		11.2	35.1		7.4	38.5		11.9	43.0	57.5
Actuated g/C Ratio	0.12	0.32		0.09	0.29		0.06	0.32		0.10	0.36	0.48
Clearance Time (s)	4.5	5.5		4.0	5.5		4.0	6.0		4.0	6.0	4.5
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	4.0		1.5	4.0	1.5
Lane Grp Cap (vph)	207	1586		314	1411		103	1589		161	1822	725
v/s Ratio Prot	c0.13	c0.27		0.07	0.20		0.04	c0.22		c0.09	0.21	0.01
v/s Ratio Perm	0.15	CU.27		0.07	0.20		0.04	CU.22		0.09	0.21	0.01
v/c Ratio	1.06	0.85		0.78	0.70		0.66	0.69		0.87	0.60	0.04
Uniform Delay, d1	52.8	37.8		53.2	37.7		55.1	35.5		53.3	31.4	17.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.11	0.51	0.54
Incremental Delay, d2	78.7	4.6		11.2	1.00		11.6	2.5		27.4	1.0	0.04
5	131.4	4.0		64.4	39.4		66.7	38.0		86.7	17.1	9.2
Delay (s) Level of Service	131.4 F	42.3 D		04.4 E	59.4 D		00.7 E	30.0 D		60.7 F	17.1 B	9.2 A
	Г	54.7		E	44.3		E	39.6		Г	ъ 23.5	A
Approach Delay (s/veh)		54.7 D			44.3 D			39.0 D			23.5 C	
Approach LOS		D			D			D			U	
Intersection Summary												
HCM 2000 Control Delay (s			41.1	H	ICM 2000	Level of S	Service		D			
HCM 2000 Volume to Capa	acity ratio		0.83									
Actuated Cycle Length (s)			120.0		um of lost				20.0			
Intersection Capacity Utiliza	ation		76.5%	IC	CU Level o	of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u></u> ↑↑₽		1	†† ĵ,		ኘካ	††	7	ኘኘ	≜ 1⊅	
Traffic Volume (vph)	104	977	335	409	1632	67	398	503	295	103	554	182
Future Volume (vph)	104	977	335	409	1632	67	398	503	295	103	554	182
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.99		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1641	4538		1671	4867		3303	3406	1350	3433	3298	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1641	4538		1671	4867		3303	3406	1350	3433	3298	
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.85	0.85	0.85	0.92	0.92	0.92
Adj. Flow (vph)	121	1136	390	435	1736	71	468	592	347	112	602	198
RTOR Reduction (vph)	0	39	0	0	3	0	0	0	152	0	20	0
Lane Group Flow (vph)	121	1487	0	435	1804	0	468	592	195	112	780	0
Confl. Peds. (#/hr)	9		9	9		9	3		14	14		3
Heavy Vehicles (%)	10%	10%	7%	8%	6%	2%	6%	6%	16%	2%	4%	8%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			
Actuated Green, G (s)	25.0	50.0		25.0	50.0		20.0	48.2	48.2	11.2	39.4	
Effective Green, g (s)	25.0	50.0		25.0	50.0		20.0	48.2	48.2	11.2	39.4	
Actuated g/C Ratio	0.16	0.32		0.16	0.32		0.13	0.31	0.31	0.07	0.25	
Clearance Time (s)	4.5	6.0		4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	263	1455		267	1560		423	1053	417	246	833	
v/s Ratio Prot	0.07	c0.33		c0.26	c0.37		c0.14	0.17		0.03	c0.24	
v/s Ratio Perm									0.14			
v/c Ratio	0.46	1.02		1.63	1.16		1.11	0.56	0.47	0.46	0.94	
Uniform Delay, d1	59.3	53.0		65.5	53.0		68.0	45.0	43.5	69.4	57.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	29.2		299.6	78.2		75.8	1.0	1.4	0.5	17.9	
Delay (s)	59.8	82.2		365.1	131.1		143.8	46.0	44.9	69.9	74.9	
Level of Service	E	F		F	F		F	D	D	E	E	
Approach Delay (s/veh)		80.5			176.5			78.3			74.3	
Approach LOS		F			F			E			E	
Intersection Summary												
HCM 2000 Control Delay (s.			113.8	Н	CM 2000	Level of S	Service		F			
HCM 2000 Volume to Capa	city ratio		1.14									
Actuated Cycle Length (s)			155.9		um of lost				21.5			
Intersection Capacity Utiliza	tion		100.9%	IC	CU Level	of Service	•		G			
Analysis Period (min)			15									
c Critical Lano Croup												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	4111		ň	†† ĵ,			đ þ			4	
Traffic Volume (vph)	24	1244	83	206	1922	41	108	4	171	113	14	30
Future Volume (vph)	24	1244	83	206	1922	41	108	4	171	113	14	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		4.5	6.0			5.0			5.0	
Lane Util. Factor	1.00	0.86		1.00	0.91			0.95			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1805	5900		1752	4879			3102			1778	
Flt Permitted	0.95	1.00		0.95	1.00			0.76			0.52	
Satd. Flow (perm)	1805	5900		1752	4879			2396			952	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.84	0.84	0.84	0.72	0.72	0.72
Adj. Flow (vph)	25	1296	86	215	2002	43	129	5	204	157	19	42
RTOR Reduction (vph)	0	7	0	0	1	0	0	149	0	0	7	0
Lane Group Flow (vph)	25	1375	0	215	2044	0	0	189	0	0	211	0
Confl. Peds. (#/hr)	12		8	8		12	4		5	5		4
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	0%	10%	2%	3%	6%	2%	1%	0%	4%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	3.3	42.4		16.8	55.9			27.9			27.9	
Effective Green, g (s)	3.3	42.4		16.8	55.9			27.9			27.9	
Actuated g/C Ratio	0.03	0.41		0.16	0.54			0.27			0.27	
Clearance Time (s)	4.5	6.0		4.5	6.0			5.0			5.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5			3.0			3.0	
Lane Grp Cap (vph)	58	2438		286	2658			651			258	
v/s Ratio Prot	0.01	0.23		c0.12	c0.42							
v/s Ratio Perm								0.08			c0.22	
v/c Ratio	0.43	0.56		0.75	0.77			0.29			0.82	
Uniform Delay, d1	48.7	23.0		40.9	18.3			29.5			35.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.9	0.4		9.5	1.6			0.2			18.0	
Delay (s)	50.6	23.5		50.4	19.9			29.8			53.0	
Level of Service	D	С		D	В			С			D	
Approach Delay (s/veh)		23.9			22.8			29.8			53.0	
Approach LOS		С			С			С			D	
Intersection Summary												
HCM 2000 Control Delay (s	,		25.3	H	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capa	city ratio		0.80									
Actuated Cycle Length (s)			102.6		um of lost	• • •			15.5			
Intersection Capacity Utiliza	ition		88.6%	IC	CU Level	of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	^	*	1	<u>↑</u> ↑₽		2	<u>↑</u> ↑₽		1	<u></u> ↑↑î»	
Traffic Volume (vph)	198	969	326	233	1690	172	225	792	223	211	875	147
Future Volume (vph)	198	969	326	233	1690	172	225	792	223	211	875	147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.5	5.0	4.5	5.5		5.0	5.5		4.5	5.5	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1641	4715	1526	1736	4824		1787	4824		1770	4782	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1641	4715	1526	1736	4824		1787	4824		1770	4782	
Peak-hour factor, PHF	0.85	0.85	0.85	0.93	0.93	0.93	0.84	0.84	0.84	0.87	0.87	0.87
Adj. Flow (vph)	233	1140	384	251	1817	185	268	943	265	243	1006	169
RTOR Reduction (vph)	0	0	86	0	9	0	0	39	0	0	18	0
Lane Group Flow (vph)	233	1140	298	251	1993	0	268	1169	0	243	1157	0
Confl. Peds. (#/hr)	9		9	9		9	13	1107	2	2		13
Confl. Bikes (#/hr)	•		1			1			_	_		1
Heavy Vehicles (%)	10%	10%	4%	4%	6%	4%	1%	3%	6%	2%	5%	10%
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases	1	•	4	0	Ū		Ū	2		•	Ū	
Actuated Green, G (s)	13.0	37.7	48.7	21.3	45.5		11.0	32.5		18.5	39.5	
Effective Green, g (s)	13.0	37.7	48.7	21.3	45.5		11.0	32.5		18.5	39.5	
Actuated g/C Ratio	0.10	0.29	0.37	0.16	0.35		0.08	0.25		0.14	0.30	
Clearance Time (s)	5.0	5.5	5.0	4.5	5.5		5.0	5.5		4.5	5.5	
Vehicle Extension (s)	1.5	4.0	1.5	1.5	4.0		1.5	4.0		1.5	4.0	
Lane Grp Cap (vph)	164	1367	571	284	1688		151	1206		251	1452	
v/s Ratio Prot	c0.14	0.24	0.04	0.14	c0.41		c0.15	c0.24		c0.14	0.24	
v/s Ratio Perm	0.14	0.24	0.04	0.14	0.41		0.15	60.24		0.14	0.24	
v/c Ratio	1.42	0.83	0.13	0.88	1.18		1.77	0.97		0.97	0.80	
Uniform Delay, d1	58.5	43.2	31.6	53.1	42.3		59.5	48.3		55.5	41.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	221.1	4.7	0.4	25.4	87.7		374.1	18.8		47.1	3.3	
Delay (s)	279.6	48.0	32.0	78.6	130.0		433.6	67.1		102.6	44.9	
Level of Service	279.0 F	40.0 D	32.0 C	70.0 E	130.0 F		433.0 F	E		102.0 F	44.9 D	
Approach Delay (s/veh)	1	75.2	C	L	124.3		1	133.6		1	54.8	
Approach LOS		75.2 E			124.J F			F			54.0 D	
Intersection Summary												
HCM 2000 Control Delay (s	/veh)		99.5	H	CM 2000	Level of S	Service		F			
HCM 2000 Volume to Capa			1.17									
Actuated Cycle Length (s)	,		130.0	S	um of los	t time (s)			21.0			
Intersection Capacity Utiliza	ation		100.7%		CU Level		!		G			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u>↑</u> ↑₽		1	<u>↑</u> ↑₽		1	•	*	ሻሻ	≜ 1⊅	
Traffic Volume (vph)	176	1247	102	128	1579	159	92	340	75	300	348	114
Future Volume (vph)	176	1247	102	128	1579	159	92	340	75	300	348	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	6.0		3.5	6.0		3.5	5.0	5.0	3.5	5.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1787	4693		1770	4793		1770	1863	1520	3467	3383	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1787	4693		1770	4793		1770	1863	1520	3467	3383	
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.90	0.90	0.90	0.83	0.83	0.83
Adj. Flow (vph)	200	1417	116	147	1815	183	102	378	83	361	419	137
RTOR Reduction (vph)	0	7	0	0	9	0	0	0	0	0	28	0
Lane Group Flow (vph)	200	1526	0	147	1989	0	102	378	83	361	528	0
Confl. Peds. (#/hr)	6		12	12		6	37		14	14		37
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	1%	9%	9%	2%	7%	0%	2%	2%	3%	1%	1%	2%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases									4	-	-	
Actuated Green, G (s)	14.5	42.8		12.7	41.0		9.9	30.5	30.5	16.0	36.6	
Effective Green, g (s)	14.5	42.8		12.7	41.0		9.9	30.5	30.5	16.0	36.6	
Actuated g/C Ratio	0.12	0.36		0.11	0.34		0.08	0.25	0.25	0.13	0.31	
Clearance Time (s)	3.5	6.0		3.5	6.0		3.5	5.0	5.0	3.5	5.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5		1.5	4.0	4.0	1.5	4.0	
Lane Grp Cap (vph)	215	1673		187	1637		146	473	386	462	1031	
v/s Ratio Prot	c0.11	0.33		0.08	c0.41		0.06	c0.20	000	c0.10	0.16	
v/s Ratio Perm	00.11	0.00		0.00	00.11		0.00	00.20	0.05	00.10	0.10	
v/c Ratio	0.93	0.91		0.79	1.21		0.70	0.80	0.22	0.78	0.51	
Uniform Delay, d1	52.2	36.8		52.3	39.5		53.6	41.9	35.3	50.3	34.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	41.8	9.1		17.9	102.6		11.1	9.7	0.4	7.7	0.6	
Delay (s)	94.1	45.9		70.2	142.1		64.7	51.5	35.7	58.1	34.9	
Level of Service	F	D		, u.2	F		E	D	D	E	C	
Approach Delay (s/veh)		51.4		-	137.1		L	51.6	D		44.0	
Approach LOS		D			F			D			D	
Intersection Summary												
HCM 2000 Control Delay (s			84.5	H	CM 2000	Level of S	Service		F			
HCM 2000 Volume to Capa			0.98									
Actuated Cycle Length (s)	-		120.0	S	um of lost	time (s)			18.0			
Intersection Capacity Utiliza	ation		87.9%	IC	CU Level o	of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	2	Ť	*		4		2	††	۲	1	≜ 1⊅	
Traffic Volume (vph)	64	3	4	29	19	85	13	982	57	107	1012	101
Future Volume (vph)	64	3	4	29	19	85	13	982	57	107	1012	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0		3.0	5.0	5.0	3.0	5.0	
Lane Util. Factor	1.00	1.00	1.00		1.00		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99		0.99		1.00	1.00	0.96	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		0.91		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1236	1900	1216		1423		1640	3438	1456	1626	3385	
Flt Permitted	0.49	1.00	1.00		0.94		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	644	1900	1216		1357		1640	3438	1456	1626	3385	
Peak-hour factor, PHF	0.81	0.81	0.81	0.74	0.74	0.74	0.96	0.96	0.96	0.86	0.86	0.86
Adj. Flow (vph)	79	4	5	39	26	115	14	1023	59	124	1177	117
RTOR Reduction (vph)	0	0	4	0	64	0	0	0	23	0	4	0
Lane Group Flow (vph)	79	4	1	0	116	0	14	1023	36	124	1290	0
Confl. Peds. (#/hr)	1		2	2		1	1		9	9		1
Heavy Vehicles (%)	46%	0%	31%	8%	5%	27%	10%	5%	7%	11%	4%	15%
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA	Perm	Prot	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4		4	4					6			
Actuated Green, G (s)	13.2	13.2	13.2		13.2		0.9	36.9	36.9	8.3	44.3	
Effective Green, g (s)	13.2	13.2	13.2		13.2		0.9	36.9	36.9	8.3	44.3	
Actuated g/C Ratio	0.19	0.19	0.19		0.19		0.01	0.53	0.53	0.12	0.64	
Clearance Time (s)	3.0	3.0	3.0		3.0		3.0	5.0	5.0	3.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	122	361	231		258		21	1827	774	194	2160	
v/s Ratio Prot		0.00					0.01	0.30		c0.08	c0.38	
v/s Ratio Perm	c0.12		0.00		0.09				0.02			
v/c Ratio	0.65	0.01	0.00		0.45		0.67	0.56	0.05	0.64	0.60	
Uniform Delay, d1	26.0	22.8	22.8		24.9		34.1	10.8	7.8	29.1	7.3	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	11.2	0.0	0.0		1.2		47.8	0.6	0.0	5.0	0.6	
Delay (s)	37.2	22.8	22.8		26.1		81.9	11.4	7.8	34.1	7.9	
Level of Service	D	С	С		С		F	В	А	С	А	
Approach Delay (s/veh)		35.7			26.1			12.1			10.2	
Approach LOS		D			С			В			В	
Intersection Summary												
HCM 2000 Control Delay (s			12.8	H	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capa	city ratio		0.64									
Actuated Cycle Length (s)			69.4		um of lost	• •			11.0			
Intersection Capacity Utiliza	ition		60.1%	IC	CU Level o	of Service			В			
Analysis Period (min)			15									

HCM Signalized Intersection Capacity Analysis 6: Paramount Boulevard & Rex Rd

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		-	•	Ŧ			7	1	r		*	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	11	4	1/	104	4	100	10	†1	17	1	†	47
Traffic Volume (vph)	11	6	16	184	82	190	38	861	67	63	909	47
Future Volume (vph)	11	6	16	184	82	190	38	861	67	63	909	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0	4.0	5.5		4.0	5.5	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		0.99			1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt		0.93			1.00	0.85	1.00	0.99		1.00	0.99	_
Flt Protected		0.98			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1305			1734	1515	1556	3406		1736	3391	_
Flt Permitted		0.88			0.77	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1167			1375	1515	1556	3406		1736	3391	
Peak-hour factor, PHF	0.78	0.78	0.78	0.86	0.86	0.86	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	14	8	21	214	95	221	40	916	71	67	967	50
RTOR Reduction (vph)	0	14	0	0	0	35	0	4	0	0	2	0
Lane Group Flow (vph)	0	29	0	0	309	186	40	983	0	67	1015	0
Confl. Peds. (#/hr)	5		5	5		5	4		5	5		4
Heavy Vehicles (%)	23%	30%	40%	6%	5%	5%	16%	4%	13%	4%	5%	16%
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		27.8			27.8	27.8	5.2	37.1		7.8	39.7	
Effective Green, g (s)		27.8			27.8	27.8	5.2	37.1		7.8	39.7	
Actuated g/C Ratio		0.32			0.32	0.32	0.06	0.43		0.09	0.46	
Clearance Time (s)		5.0			5.0	5.0	4.0	5.5		4.0	5.5	
Vehicle Extension (s)		3.0			3.0	3.0	1.5	4.0		1.5	4.0	
Lane Grp Cap (vph)		372			438	482	92	1449		155	1543	
v/s Ratio Prot							0.03	0.29		c0.04	c0.30	
v/s Ratio Perm		0.02			c0.22	0.12						
v/c Ratio		0.08			0.71	0.39	0.43	0.68		0.43	0.66	
Uniform Delay, d1		20.7			26.1	23.1	39.6	20.2		37.6	18.5	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			5.1	0.5	1.2	1.4		0.7	1.1	
Delay (s)		20.8			31.2	23.6	40.8	21.6		38.3	19.6	
Level of Service		С			С	С	D	С		D	В	
Approach Delay (s/veh)		20.8			28.0			22.4			20.8	
Approach LOS		С			С			С			С	
Intersection Summary												
HCM 2000 Control Delay (s	/veh)		22.8	Н	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capa			0.67									
Actuated Cycle Length (s)	-		87.2	S	um of lost	t time (s)			14.5			
Intersection Capacity Utiliza	ition		70.2%			of Service	2		С			
Analysis Period (min)			15									
a Critical Lana Crown												

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Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	¥		*	†††	≜ î⊧	-		
Traffic Volume (vph)	50	62	156	987	1159	86		
Future Volume (vph)	50	62	156	987	1159	86		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Total Lost time (s)	4.5	1700	4.0	4.6	4.6	1700		
Lane Util. Factor	1.00		1.00	0.91	0.95			
Frpb, ped/bikes	1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00		1.00	1.00	1.00			
Frt	0.93		1.00	1.00	0.99			
Flt Protected	0.98		0.95	1.00	1.00			
Satd. Flow (prot)	1693		1770	4940	3435			
Flt Permitted	0.98		0.95	1.00	1.00			
Satd. Flow (perm)	1693		1770	4940	3435			
· · ·		0.00				0.07		
Peak-hour factor, PHF	0.83	0.83	0.88	0.88	0.87	0.87		
Adj. Flow (vph)	60	75	177	1122	1332	99		
RTOR Reduction (vph)	64	0	0	0	5	0		
Lane Group Flow (vph)	71	0	177	1122	1426	0		
Confl. Peds. (#/hr)	2		1	= 0.4		1		
Heavy Vehicles (%)	1%	2%	2%	5%	4%	2%	 	
Turn Type	Prot		Prot	NA	NA			
Protected Phases	4		5	2	6			
Permitted Phases								
Actuated Green, G (s)	8.7		5.6	40.7	31.1			
Effective Green, g (s)	8.7		5.6	40.7	31.1			
Actuated g/C Ratio	0.15		0.10	0.70	0.53			
Clearance Time (s)	4.5		4.0	4.6	4.6			
Vehicle Extension (s)	4.0		0.2	2.0	2.0			
Lane Grp Cap (vph)	251		169	3436	1826			
v/s Ratio Prot	c0.04		c0.10	0.23	c0.42			
v/s Ratio Perm				0.20				
v/c Ratio	0.28		1.05	0.33	0.78			
Uniform Delay, d1	22.1		26.5	3.5	11.0			
Progression Factor	1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.8		82.3	0.0	2.1			
Delay (s)	23.0		108.7	3.5	13.0			
Level of Service	23.0 C		F	3.5 A	В			
Approach Delay (s/veh)	23.0			17.9	13.0			
Approach LOS	23.0 C			В	13.0 B			
	C			U	D			
Intersection Summary	- /		15 7	, ,	014 2000		D	
HCM 2000 Control Delay (s			15.7	H	CM 2000	Level of Service	В	
HCM 2000 Volume to Capa	icity ratio		0.72	-			10.1	
Actuated Cycle Length (s)			58.5		um of lost		13.1	
Intersection Capacity Utiliza	ation		60.9%	IC	CU Level c	of Service	В	
Analysis Period (min)			15					
c Critical Lano Croup								

HCM Signalized Intersection Capacity Analysis 8: Rosemead Boulevard & Rex Rd

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	2	↑	*	2	f,		ሻሻ	≜ †₽		7	††	7
Traffic Volume (vph)	95	42	109	136	172	115	193	1101	41	52	1031	181
Future Volume (vph)	95	42	109	136	172	115	193	1101	41	52	1031	181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.0	6.0		4.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.99		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.94		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1467	1863	1346	1787	1754		3367	3479		1805	3471	1496
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1467	1863	1346	1787	1754		3367	3479		1805	3471	1496
Peak-hour factor, PHF	0.80	0.80	0.80	0.87	0.87	0.87	0.99	0.99	0.99	0.87	0.87	0.87
Adj. Flow (vph)	119	52	136	156	198	132	195	1112	41	60	1185	208
RTOR Reduction (vph)	0	0	101	0	21	0	0	2	0	0	0	68
Lane Group Flow (vph)	119	53	35	156	309	0	195	1151	0	60	1185	140
Confl. Peds. (#/hr)	6					6	3		2	2		3
Heavy Vehicles (%)	23%	2%	20%	1%	1%	1%	4%	3%	7%	0%	4%	5%
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4	45	3	3		5	2		1	6	
Permitted Phases			4									6
Actuated Green, G (s)	15.2	15.2	30.5	24.0	24.0		10.8	54.8		7.0	51.0	51.0
Effective Green, g (s)	15.2	15.2	30.5	24.0	24.0		10.8	54.8		7.0	51.0	51.0
Actuated g/C Ratio	0.13	0.13	0.25	0.20	0.20		0.09	0.46		0.06	0.43	0.43
Clearance Time (s)	4.5	4.5		4.5	4.5		4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		1.5	4.0		1.5	4.0	4.0
Lane Grp Cap (vph)	185	235	342	357	350		303	1588		105	1475	635
v/s Ratio Prot	c0.08	0.03	0.03	0.09	c0.18		c0.06	c0.33		0.03	c0.34	
v/s Ratio Perm												0.09
v/c Ratio	0.64	0.23	0.10	0.44	0.88		0.64	0.73		0.57	0.80	0.22
Uniform Delay, d1	49.8	47.1	34.3	42.1	46.6		52.7	26.5		55.0	30.1	21.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.37	0.75		1.00	1.00	1.00
Incremental Delay, d2	7.4	0.5	0.1	0.9	22.1		2.4	2.1		4.6	4.7	0.8
Delay (s)	57.3	47.6	34.4	42.9	68.8		75.0	22.0		59.6	34.9	22.7
Level of Service	E	D	С	D	E		E	С		E	С	С
Approach Delay (s/veh)		45.5			60.5			29.7			34.1	
Approach LOS		D			E			С			С	
Intersection Summary												
HCM 2000 Control Delay (s			37.0	Н	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capa	city ratio		0.77									
Actuated Cycle Length (s)			120.0		um of lost				19.0			
Intersection Capacity Utiliza	ation		73.3%	IC	CU Level o	of Service			D			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u></u> ↑↑₽		ሻሻ	<u>↑</u> ↑₽		1	<u>ተተ</u> ኈ		1	***	1
Traffic Volume (vph)	182	783	123	192	1264	78	98	872	181	139	843	212
Future Volume (vph)	182	783	123	192	1264	78	98	872	181	139	843	212
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	5.5		4.0	5.5		4.0	6.0		4.0	6.0	4.5
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1656	4540		3213	4697		1656	4833		1626	4940	1477
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1656	4540		3213	4697		1656	4833		1626	4940	1477
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.95	0.95	0.95	0.88	0.88	0.88
Adj. Flow (vph)	194	833	131	226	1487	92	103	918	191	158	958	241
RTOR Reduction (vph)	0	17	0	0	6	0	0	26	0	0	0	51
Lane Group Flow (vph)	194	947	0	226	1573	0	103	1083	0	158	958	190
Confl. Peds. (#/hr)	5		1	1		5	2		12	12		2
Heavy Vehicles (%)	9%	12%	10%	9%	9%	15%	9%	4%	4%	11%	5%	8%
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	8.5	31.7		12.3	35.0		9.6	48.0		8.5	46.9	55.4
Effective Green, g (s)	8.5	31.7		12.3	35.0		9.6	48.0		8.5	46.9	55.4
Actuated g/C Ratio	0.07	0.26		0.10	0.29		0.08	0.40		0.07	0.39	0.46
Clearance Time (s)	4.5	5.5		4.0	5.5		4.0	6.0		4.0	6.0	4.5
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	4.0		1.5	4.0	1.5
Lane Grp Cap (vph)	117	1199		329	1369		132	1933		115	1930	681
v/s Ratio Prot	c0.12	0.21		0.07	c0.33		0.06	c0.22		c0.10	0.19	0.02
v/s Ratio Perm												0.11
v/c Ratio	1.66	0.79		0.69	1.15		0.78	0.56		1.37	0.50	0.28
Uniform Delay, d1	55.8	41.1		52.0	42.5		54.2	27.8		55.8	27.6	20.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.25	0.42	0.37
Incremental Delay, d2	330.9	3.8		4.7	76.1		23.5	1.2		201.2	0.6	0.1
Delay (s)	386.6	44.8		56.7	118.6		77.6	29.0		270.8	12.1	7.5
Level of Service	F	D		E	F		E	С		F	В	A
Approach Delay (s/veh)		102.1			110.8			33.1			41.4	
Approach LOS		F			F			С			D	
Intersection Summary												
HCM 2000 Control Delay (s	•		75.0	Н	CM 2000	Level of S	Service		E			
HCM 2000 Volume to Capa	city ratio		0.93									
Actuated Cycle Length (s)			120.0		um of lost				20.0			
Intersection Capacity Utiliza	ation		81.7%	IC	CU Level o	of Service			D			
Analysis Period (min)			15									
a Critical Lana Crown												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u></u> ↑↑₽		3	≜ †₽́p		ሻሻ	††	1	ሻሻ	≜ î⊧	
Traffic Volume (vph)	118	1519	370	398	797	80	199	994	490	76	840	83
Future Volume (vph)	118	1519	370	398	797	80	199	994	490	76	840	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1703	4802		1687	4750		3367	3539	1522	3433	3429	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1703	4802		1687	4750		3367	3539	1522	3433	3429	
Peak-hour factor, PHF	0.93	0.93	0.93	0.94	0.94	0.94	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	127	1633	398	423	848	85	207	1035	510	79	875	86
RTOR Reduction (vph)	0	26	0	0	8	0	0	0	133	0	4	0
Lane Group Flow (vph)	127	2005	0	423	925	0	207	1035	377	79	957	0
Confl. Peds. (#/hr)	9	2000	7	7	, 20	9	3	1000	13	13	701	3
Confl. Bikes (#/hr)			1	•			0		1			1
Heavy Vehicles (%)	6%	4%	6%	7%	8%	2%	4%	2%	3%	2%	3%	11%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8	T OIIII	7	4	
Permitted Phases	Ū	-		•	U		Ū	U	8	•	•	
Actuated Green, G (s)	36.5	50.1		25.0	38.6		13.5	42.5	42.5	11.0	40.0	
Effective Green, g (s)	36.5	50.1		25.0	38.6		13.5	42.5	42.5	11.0	40.0	
Actuated g/C Ratio	0.24	0.33		0.17	0.26		0.09	0.28	0.28	0.07	0.27	
Clearance Time (s)	4.5	6.0		4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	414	1602		280	1221		302	1002	430	251	913	
v/s Ratio Prot	0.07	c0.42		c0.25	0.19		c0.06	c0.29	-100	0.02	0.28	
v/s Ratio Perm	0.07	00.42		00.20	0.17		0.00	00.27	0.25	0.02	0.20	
v/c Ratio	0.31	1.25		1.51	0.76		0.69	1.03	0.88	0.31	1.05	
Uniform Delay, d1	46.5	50.0		62.6	51.4		66.2	53.8	51.3	66.0	55.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.2	118.5		247.5	3.1		5.1	37.2	18.9	0.3	43.1	
Delay (s)	46.6	168.5		310.0	54.5		71.3	91.0	70.2	66.2	98.1	
Level of Service	D	F		F	D		E	F	E	E	F	
Approach Delay (s/veh)	D	161.4		•	134.2		-	82.6		_	95.7	
Approach LOS		F			F			F			F	
Intersection Summary												
HCM 2000 Control Delay (s	,		122.8	H	CM 2000	Level of S	Service		F			
HCM 2000 Volume to Capa	city ratio		1.19									
Actuated Cycle Length (s)			150.1		um of lost				21.5			
Intersection Capacity Utiliza	tion		115.0%	IC	CU Level of	of Service			Н			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	4111		٦	<u>↑</u> ↑₽			ፋጉ			4	
Traffic Volume (vph)	59	1589	79	107	1198	73	42	49	91	88	37	30
Future Volume (vph)	59	1589	79	107	1198	73	42	49	91	88	37	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		4.5	6.0			5.0			5.0	
Lane Util. Factor	1.00	0.86		1.00	0.91			0.95			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.93			0.97	_
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1805	6299		1787	4809			3256			1776	
Flt Permitted	0.95	1.00		0.95	1.00			0.85			0.70	
Satd. Flow (perm)	1805	6299		1787	4809			2797			1286	
Peak-hour factor, PHF	0.93	0.93	0.93	0.95	0.95	0.95	0.86	0.86	0.86	0.88	0.88	0.88
Adj. Flow (vph)	63	1709	85	113	1261	77	49	57	106	100	42	34
RTOR Reduction (vph)	0	5	0	0	5	0	0	80	0	0	8	0
Lane Group Flow (vph)	63	1789	0	113	1334	0	0	132	0	0	168	0
Confl. Peds. (#/hr)	9	00/	7	7	70/	9	7	00/	14	14	00/	7
Heavy Vehicles (%)	0%	3%	0%	1%	7%	3%	1%	0%	0%	1%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2		0	8			4	
Permitted Phases	0.1	10 (10.0	47.7		8	00.4		4	00.1	
Actuated Green, G (s)	8.1	42.6		12.2	46.7			23.1			23.1	_
Effective Green, g (s)	8.1	42.6		12.2	46.7			23.1			23.1	
Actuated g/C Ratio	0.09	0.46		0.13	0.50			0.25			0.25	
Clearance Time (s)	4.5 1 E	6.0		4.5	6.0			5.0			5.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5			3.0			3.0	
Lane Grp Cap (vph)	156	2872		233	2404			691			318	
v/s Ratio Prot	0.03	c0.28		c0.06	c0.28			0.05			-0.10	
v/s Ratio Perm	0.40	0.62		0.40	0.55			0.05 0.19			c0.13 0.53	
v/c Ratio	0.40			0.48	0.55 16.2						0.53 30.4	
Uniform Delay, d1 Progression Factor	40.4 1.00	19.3 1.00		37.7 1.00	16.2			27.8 1.00			30.4 1.00	
Incremental Delay, d2	0.6	0.5		0.6	0.4			0.1			1.00	
Delay (s)	41.0	0.5 19.8		38.3	16.6			27.9			32.0	
Level of Service	41.0 D	19.0 B		30.3 D	10.0 B			27.9 C			52.0 C	
Approach Delay (s/veh)	D	20.6		D	18.3			27.9			32.0	
Approach LOS		20.0 C			10.5 B			27.7 C			52.0 C	
		U			U			U			C	
Intersection Summary	(uob)		20.7		<u>CM 2000</u>	Louglof	Convigo		<u> </u>			
HCM 2000 Control Delay (s			20.6	H	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capa			0.57	C	um of lost	time (a)			1F F			
Actuated Cycle Length (s)	tion		93.4		um of lost CU Level (15.5			
Intersection Capacity Utiliza			82.8% 15	IC	O Level (JI Service	;		E			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	^	7	2	↑ ↑₽		1	<u>↑</u> ↑₽		۳	<u></u> ↑↑î>	
Traffic Volume (vph)	286	1048	346	237	851	247	247	877	212	257	992	219
Future Volume (vph)	286	1048	346	237	851	247	247	877	212	257	992	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.5	5.0	4.5	5.5		5.0	5.5		4.5	5.5	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	5036	1543	1736	4730		1787	4911		1770	4744	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1787	5036	1543	1736	4730		1787	4911		1770	4744	
Peak-hour factor, PHF	0.93	0.93	0.93	0.86	0.86	0.86	0.96	0.96	0.96	0.93	0.93	0.93
Adj. Flow (vph)	308	1127	372	276	990	287	257	914	221	276	1067	235
RTOR Reduction (vph)	0	0	25	0	31	0	0	24	0	0	21	0
Lane Group Flow (vph)	308	1127	347	276	1246	0	257	1111	0	276	1281	0
Confl. Peds. (#/hr)	21		18	18		21	26		14	14		26
Confl. Bikes (#/hr)						1						4
Heavy Vehicles (%)	1%	3%	2%	4%	6%	1%	1%	2%	1%	2%	5%	7%
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	25.0	49.5	74.5	25.0	49.0		25.0	49.8		25.0	49.3	
Effective Green, g (s)	25.0	49.5	74.5	25.0	49.0		25.0	49.8		25.0	49.3	
Actuated g/C Ratio	0.15	0.29	0.44	0.15	0.29		0.15	0.29		0.15	0.29	
Clearance Time (s)	5.0	5.5	5.0	4.5	5.5		5.0	5.5		4.5	5.5	
Vehicle Extension (s)	1.5	4.0	1.5	1.5	4.0		1.5	4.0		1.5	4.0	
Lane Grp Cap (vph)	263	1472	678	256	1368		263	1444		261	1381	
v/s Ratio Prot	c0.17	0.22	0.08	0.16	c0.26		0.14	0.23		c0.16	c0.27	
v/s Ratio Perm			0.15									
v/c Ratio	1.17	0.77	0.51	1.08	0.91		0.98	0.77		1.06	0.93	
Uniform Delay, d1	72.2	54.6	34.3	72.2	58.0		71.9	54.5		72.2	58.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	109.8	2.6	0.3	78.6	9.5		48.5	2.7		71.7	11.1	
Delay (s)	182.0	57.2	34.5	150.7	67.6		120.3	57.2		143.8	69.4	
Level of Service	F	E	С	F	E		F	E		F	E	
Approach Delay (s/veh)		73.8			82.4			68.9			82.4	
Approach LOS		E			F			E			F	
Intersection Summary												
HCM 2000 Control Delay (s	/veh)		77.0	Н	CM 2000	Level of S	Service		E			
HCM 2000 Volume to Capa	city ratio		0.98									
Actuated Cycle Length (s)			169.3	S	um of lost	t time (s)			21.0			
Intersection Capacity Utiliza	ition		98.3%	IC	CU Level of	of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u></u> ↑↑₽		٦	ተተኈ		1	1	7	ኘኘ	≜ 1⊅	
Traffic Volume (vph)	73	1304	82	129	1052	145	126	250	92	312	293	108
Future Volume (vph)	73	1304	82	129	1052	145	126	250	92	312	293	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	6.0		3.5	6.0		3.5	5.0	5.0	3.5	5.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	4950		1805	4814		1805	1881	1574	3502	3439	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	4950		1805	4814		1805	1881	1574	3502	3439	
Peak-hour factor, PHF	0.96	0.96	0.96	0.90	0.90	0.90	0.89	0.89	0.89	0.92	0.92	0.92
Adj. Flow (vph)	76	1358	85	143	1169	161	142	281	103	339	318	117
RTOR Reduction (vph)	0	5	0	0	14	0	0	0	0	0	31	0
Lane Group Flow (vph)	76	1438	0	143	1316	0	142	281	103	339	404	0
Confl. Peds. (#/hr)	7		2	2		7			3	3		
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	0%	4%	0%	0%	6%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases									4			
Actuated Green, G (s)	11.6	60.1		13.4	61.9		11.3	16.5	16.5	12.0	17.2	
Effective Green, g (s)	11.6	60.1		13.4	61.9		11.3	16.5	16.5	12.0	17.2	
Actuated g/C Ratio	0.10	0.50		0.11	0.52		0.09	0.14	0.14	0.10	0.14	
Clearance Time (s)	3.5	6.0		3.5	6.0		3.5	5.0	5.0	3.5	5.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5		1.5	4.0	4.0	1.5	4.0	
Lane Grp Cap (vph)	174	2479		201	2483		169	258	216	350	492	
v/s Ratio Prot	0.04	c0.29		c0.08	0.27		0.08	c0.15		c0.10	0.12	
v/s Ratio Perm									0.07			
v/c Ratio	0.44	0.58		0.71	0.53		0.84	1.09	0.48	0.97	0.82	
Uniform Delay, d1	51.1	21.1		51.4	19.4		53.5	51.8	47.8	53.8	49.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.6	1.0		9.5	0.8		28.5	81.9	2.3	39.1	11.1	
Delay (s)	51.8	22.1		60.9	20.2		82.0	133.6	50.0	92.9	61.0	
Level of Service	D	С		E	С		F	F	D	F	E	
Approach Delay (s/veh)		23.6			24.1			103.3			75.0	
Approach LOS		С			С			F			E	
Intersection Summary												
HCM 2000 Control Delay (s			42.8	Н	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capa	city ratio		0.72									
Actuated Cycle Length (s)			120.0		um of lost				18.0			
Intersection Capacity Utiliza	tion		73.0%	IC	CU Level of	of Service			С			
Analysis Period (min)			15									
c Critical Lane Group												

			13									
	٠	-	7	1	•	•	1	Ť	1	*	ŧ	-
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	٦	1	1		4 37		٦	^	7	۳.	≜ 1⊅	
Traffic Volume (vph)	47	48	10	22		143	2	1261	61	130	1413	34
Future Volume (vph)	47	48	10	22	37	143	2	1261	61	130	1413	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0		3.0	5.0	5.0	3.0	5.0	
Lane Util. Factor	1.00	1.00	1.00		1.00		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99		1.00		1.00	1.00	0.96	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		0.90		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00		0.99		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1719	1429	1436		1547		1805	3539	1429	1612	3449	
Flt Permitted	0.25	1.00	1.00		0.96		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	461	1429	1436		1494		1805	3539	1429	1612	3449	
Peak-hour factor, PHF	0.41	0.41	0.41	0.64	0.64	0.64	0.95	0.95	0.95	0.93	0.93	0.93
Adj. Flow (vph)	115	117	24	34	58	223	2	1327	64	140	1519	37
RTOR Reduction (vph)	0	0	19	0	85	0	0	0	20	0	1	0
Lane Group Flow (vph)	115	117	5	0	230	0	2	1327	44	140	1555	0
Confl. Peds. (#/hr)			1	1					7	7		
Heavy Vehicles (%)	5%	33%	11%	2%	25%	8%	0%	2%	9%	12%	3%	57%
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA	Perm	Prot	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4		4	4					6			
Actuated Green, G (s)	19.1	19.1	19.1		19.1		0.8	48.2	48.2	12.0	59.4	
Effective Green, g (s)	19.1	19.1	19.1		19.1		0.8	48.2	48.2	12.0	59.4	
Actuated g/C Ratio	0.21	0.21	0.21		0.21		0.01	0.53	0.53	0.13	0.66	
Clearance Time (s)	3.0	3.0	3.0		3.0		3.0	5.0	5.0	3.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	97	302	303		316		15	1889	762	214	2268	
v/s Ratio Prot		0.08					0.00	0.37		c0.09	c0.45	
v/s Ratio Perm	c0.25		0.00		0.15				0.03			
v/c Ratio	1.19	0.39	0.02		0.73		0.13	0.70	0.06	0.65	0.69	
Uniform Delay, d1	35.6	30.6	28.2		33.2		44.4	15.7	10.1	37.2	9.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	149.7	0.8	0.0		8.1		1.5	1.4	0.1	5.4	1.0	
Delay (s)	185.3	31.4	28.2		41.3		45.9	17.1	10.2	42.6	10.7	
Level of Service	F	С	С		D		D	В	В	D	В	
Approach Delay (s/veh)		100.2			41.3			16.8			13.3	
Approach LOS		F			D			В			В	
Intersection Summary												
HCM 2000 Control Delay (s			23.1	H	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capa	acity ratio		0.82									
Actuated Cycle Length (s)			90.3		um of lost				11.0			
Intersection Capacity Utiliza	ation		72.9%	IC	CU Level o	of Service			С			
Analysis Period (min)			15									

HCM Signalized Intersection Capacity Analysis 6: Paramount Boulevard & Rex Rd

Lane Configurations Image: Configurations <		٨	→	7	1	←	•	1	t	1	5	ţ	~
Traffic Volume (vph) 46 61 63 95 21 12 5 1308 94 96 1300 15 Ideal Flow (vphp) 1900 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 <th>Movement</th> <th>EBL</th> <th>EBT</th> <th>EBR</th> <th>WBL</th> <th>WBT</th> <th>WBR</th> <th>NBL</th> <th>NBT</th> <th>NBR</th> <th>SBL</th> <th>SBT</th> <th>SBR</th>	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph) 46 61 63 95 21 12 5 1308 94 96 1300 15 Ideal Flow (vphp) 1900 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 <td>Lane Configurations</td> <td></td> <td>4</td> <td></td> <td></td> <td>ଶ</td> <td>*</td> <td>1</td> <td>≜ts</td> <td></td> <td>۲.</td> <td>đβ</td> <td></td>	Lane Configurations		4			ଶ	*	1	≜t s		۲.	đβ	
Ideal Flow (pph) 1900 100 100 100	Traffic Volume (vph)	46		63	95	21	12	-	1308	94	96		15
Total Lost lime (s) 5.0 5.0 5.0 5.0 4.0 5.5 4.0 5.5 Lane Ulii Factor 1.00 1.00 1.00 1.00 0.99 1.00 0.00 0.95 1.00 0.95 1.00 0.95 1.00 0.00 1.00 <	Future Volume (vph)	46	61	63	95	21	12	5	1308	94	96	1300	15
Lane Util. Factor 100 100 100 0.95 100 0.95 Fripb, ped/bikes 1.00 1.00 1.00 0.99 1.00 1.00 1.00 1.00	Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Frpb, ped/bikes 1.00	Total Lost time (s)		5.0			5.0	5.0	4.0	5.5		4.0	5.5	
Fipb. ped/bikes 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Fit Protected 0.99 1.00 0.85 1.00 0.99 1.00 1.00 Sald Flow (prot) 1738 1.669 1.447 1.399 3490 1703 3492 Sald Flow (perm) 1377 846 1447 1.399 3490 1703 3492 Peak-hour factor, PHF 0.75 0.75 0.75 0.75 0.91 0.91 0.95 0.95 0.95 Adj, Flow (ph) 61 81 84 127 28 16 5 1437 103 101 1368 16 Rodicution (vph) 0 10 0 0 13 0	Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frit 0.95 1.00 0.85 1.00 0.99 1.00 1.00 Fil Protected 0.99 0.96 1.00 0.95 1.00 0.95 1.00 Stid. Flow (prot) 1733 1669 1447 1399 3490 1703 3492 Fit Permitted 0.79 0.49 1.00 0.95 1.00 0.95 1.00 Stad. Flow (perm) 1397 846 1447 1399 3490 1703 3492 Peak-hour factor, PHF 0.75 0.75 0.75 0.75 0.91 0.91 0.91 0.95 0.95 Adj, Flow (pch) 61 81 84 127 28 16 5 1437 103 101 1384 0 Confl. Peds. (#hr) 3 0 0 0 130 3 0 0 0 0 Lane Group Flow (vph) 0 296 2% 3% 5% 2% 8% 6% 3% 21% Turn Type Perm NA Perm NA Perm <td>Frpb, ped/bikes</td> <td></td> <td></td> <td></td> <td></td> <td>1.00</td> <td>0.99</td> <td>1.00</td> <td></td> <td></td> <td>1.00</td> <td>1.00</td> <td></td>	Frpb, ped/bikes					1.00	0.99	1.00			1.00	1.00	
Fit Protected 0.99 0.96 1.00 0.95 1.00 0.95 1.00 Sald. Flow (prot) 1738 1669 1447 1399 3490 1703 3492 Sald. Flow (perm) 1397 846 1447 1399 3490 1703 3492 Peak-hour factor, PHF 0.75 0.75 0.75 0.75 0.75 0.91 0.91 0.95 0.95 Adj, Flow (phph) 6.1 84 127 28 16 5 1437 103 101 1368 16 RTOR Reduction (vph) 0 17 0 0 13 0 3 0 0 0 0 1384 0 Confl. Peds. (#hn) 3 - - 3 5% 29% 10% 29% 2% 8% 6% 3% 21% Protected Phases 4 8 5 2 1 6 1118 74.2 Effective Green, G (s) 23.9 23.9 1.7 64.1 111.8 74.2 2 <	Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Satd. Flow (prot) 1738 1669 1447 1399 3490 1703 3492 FIR Permitted 0.79 0.49 1.00 0.95 1.00 0.95 0.100 Satd. Flow (perm) 1397 846 1447 1399 3490 1703 3492 Peak-hour factor, PHF 0.75 0.75 0.75 0.75 0.75 0.91 0.91 0.91 0.95 0.95 Adj. Flow (pph) 61 81 84 127 28 16 5 1337 101 1386 16 Lane Group Flow (vph) 0 17 0 0 13 5 1537 0 101 1384 0 Confl. Peds. (#hn) 3 - - - 3 5 1537 0 101 1384 0 Confl. Peds. (#hn) 3 - - - - 3 5 1537 0 101 1384 0 Confl. Peds. (#hn) 3 - - - 5 2 1 6 <t< td=""><td>Frt</td><td></td><td>0.95</td><td></td><td></td><td>1.00</td><td>0.85</td><td>1.00</td><td>0.99</td><td></td><td>1.00</td><td>1.00</td><td></td></t<>	Frt		0.95			1.00	0.85	1.00	0.99		1.00	1.00	
Fit Permitted 0.79 0.49 1.00 0.95 1.00 0.95 1.00 Sald. Flow (perm) 1397 846 1447 1399 3490 1703 3492 Peak-hour factor, PHF 0.75 0.75 0.75 0.75 0.75 0.91 0.91 0.95 0.95 0.95 Adj. Flow (ych) 61 81 84 127 28 16 5 1437 103 101 1386 16 Confl. Peds. (yth) 0 209 0 0 15 3 5 1537 0 101 1384 0 0 0 Confl. Peds. (yth) 3	Flt Protected		0.99			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm) 1397 846 1447 1399 3490 1703 3492 Peak-hour factor, PHF 0.75 0.75 0.75 0.75 0.75 0.91 0.91 0.95 0.95 0.95 0.95 Adj. Flow (vph) 61 81 84 127 28 16 5 1437 103 101 1368 16 RTOR Reduction (vph) 0 17 0 0 155 3 5 1537 0 101 1368 16 RTOR Reduction (vph) 0 209 0 0 155 3 5 1537 0 101 1384 0 Confl. Peds. (#/hr) 3 - - - 3 -<	Satd. Flow (prot)		1738			1669	1447	1399	3490		1703	3492	
Peak-hour factor, PHF 0.75 0.75 0.75 0.75 0.75 0.75 0.91 0.91 0.91 0.95 0.95 0.95 Adj. Flow (vph) 61 81 84 127 28 16 5 1437 103 101 1368 16 And Flow (vph) 0 17 0 0 13 0 3 0 0 0 0 Lane Group Flow (vph) 0 209 0 155 3 5 1537 0 101 1384 0 Confl. Peds. (#hr) 3 3 3 0 0 0 13 0 2% 8% 6% 3% 21% Turn Type Perm NA Perm NA Perm NA Prot NA Prot NA Protected Phases 4 8 8 5 2 1 6 6 6 11.18 74.2 Actuated Green, G (s) 23.9 23.9 23.9 1.7 64.1 11.18 74.2 Actuated g/C Ratio 0.	Flt Permitted		0.79			0.49	1.00	0.95	1.00		0.95	1.00	
Adj. Flow (vph) 61 81 84 127 28 16 5 1437 103 101 1368 16 RTOR Reduction (vph) 0 17 0 0 0 13 0 3 0 0 0 0 Lane Group Flow (vph) 0 209 0 0 155 3 5 1537 0 101 1384 0 Confl. Peds. (#/h/) 3	Satd. Flow (perm)		1397			846	1447	1399	3490		1703	3492	
RTOR Reduction (vph) 0 17 0 0 0 13 0 3 0 0 0 0 Lane Group Flow (vph) 0 209 0 0 155 3 5 1537 0 101 1384 0 Confl. Peds. (#/hr) 3 3 3 0 0 0 13 0 23 0 10 1384 0 Confl. Peds. (#/hr) 3 3 3 0 0 0 11384 0 Leavy Vehicles (%) 2% 2% 3% 5% 29% 10% 29% 2% 8% 6% 3% 21% Protected Phases 4 8 8 8 6 6 118. 74.2 Effective Green, G (S) 23.9 23.9 1.7 64.1 11.8 74.2 Clearance Time (s) 5.0 5.0 5.0 4.0 5.5 4.0 5.5 Vehicle Extension (s) 3.0 3.0 3.0 1.5 4.0 1.5 4.0	Peak-hour factor, PHF	0.75	0.75	0.75	0.75	0.75	0.75	0.91	0.91	0.91	0.95	0.95	0.95
Lane Group Flow (vph) 0 209 0 0 155 3 5 1537 0 101 1384 0 Confl. Peds. (#/hr) 3 3 3 3 3 3 101 1384 0 Confl. Peds. (#/hr) 3 3 5 1537 0 101 1384 0 Lum Type Perm NA Perm NA Perm NA Perm NA Prot NA Protected Phases 4 8 5 2 1 6 6 Permitted Phases 4 8 8 8 74.2 74.2 74.2 Actuated Green, G (s) 23.9 23.9 1.7 64.1 11.8 74.2 74.2 Actuated Grean (s) 5.0 5.0 5.0 4.0 5.5 4.0 5.5 Vehicle Extension (s) 3.0 3.0 3.0 1.5 4.0 1.5 4.0 Vic Ratio Prot 0.72 0.88 0.01 0.25 0.79 0.58 0.61	Adj. Flow (vph)	61	81	84	127	28	16	5	1437	103	101	1368	16
Confl. Peds. (#/hr) 3 3 Heavy Vehicles (%) 2% 2% 3% 5% 29% 10% 29% 2% 8% 6% 3% 21% Turn Type Perm NA Perm NA Perm NA Pern NA Sa <	RTOR Reduction (vph)	0	17	0	0	0	13	0	3	0	0	0	0
Heavy Vehicles (%) 2% 2% 3% 5% 29% 10% 29% 2% 8% 6% 3% 21% Turn Type Perm NA Perm NA Perm NA Perm NA Pernot NA Prot NA NA Prot NA NA NA Prot NA NA NA Prot NA NA NA	Lane Group Flow (vph)	0	209	0	0	155	3	5	1537	0	101	1384	0
Turn Type Perm NA Perm NA Perm Prot NA Prot NA Protected Phases 4 8 5 2 1 6 Permitted Phases 4 8 8 8 6 6 Permitted Phases 4 8 8 6	Confl. Peds. (#/hr)	3					3						
Protected Phases 4 8 5 2 1 6 Permitted Phases 4 8 8	Heavy Vehicles (%)	2%	2%	3%	5%	29%	10%	29%	2%	8%	6%	3%	21%
Protected Phases 4 8 5 2 1 6 Permitted Phases 4 8 8	Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Permitted Phases 4 8 8 Actuated Green, G (s) 23.9 23.9 23.9 1.7 64.1 11.8 74.2 Effective Green, g (s) 23.9 23.9 23.9 1.7 64.1 11.8 74.2 Actuated g/C Ratio 0.21 0.21 0.21 0.01 0.56 0.10 0.65 Clearance Time (s) 5.0 5.0 5.0 4.0 5.5 4.0 5.5 Vehicle Extension (s) 3.0 3.0 3.0 1.5 4.0 1.5 4.0 Lane Grp Cap (vph) 292 176 302 20 1957 175 2266 v/s Ratio Port 0.00 c0.44 c0.06 0.40 v/s 8 0.1 0.25 0.79 0.58 0.61 Uniform Delay, d1 42.1 43.8 35.8 55.7 19.7 48.9 11.7 Progression Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Protected Phases												
Effective Green, g (s) 23.9 23.9 23.9 1.7 64.1 11.8 74.2 Actuated g/C Ratio 0.21 0.21 0.21 0.01 0.56 0.10 0.65 Clearance Time (s) 5.0 5.0 5.0 5.0 4.0 5.5 4.0 5.5 Vehicle Extension (s) 3.0 3.0 3.0 1.5 4.0 1.5 4.0 Lane Grp Cap (vph) 292 176 302 20 1957 175 2266 v/s Ratio Prot 0.00 c0.44 c0.06 0.40 v/s Ratio Perm 0.15 c0.18 0.00 v/c Ratio 0.72 0.88 0.01 0.25 0.79 0.58 0.61 Uniform Delay, d1 42.1 43.8 35.8 55.7 19.7 48.9 11.7 Progression Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Intersection Summary E C D B B 11.7 HCM 2000 Volume to Capacity ratio 0.78 Actuated Cycle Length (s) 14.	Permitted Phases	4			8		8						
Effective Green, g (s) 23.9 23.9 23.9 1.7 64.1 11.8 74.2 Actuated g/C Ratio 0.21 0.21 0.21 0.01 0.56 0.10 0.65 Clearance Time (s) 5.0 5.0 5.0 4.0 5.5 4.0 5.5 Vehicle Extension (s) 3.0 3.0 3.0 1.5 4.0 1.5 4.0 Lane Grp Cap (vph) 292 176 302 20 1957 175 2266 v/s Ratio Prot 0.00 c0.44 c0.06 0.40 v/s katio Perm 0.15 c0.18 0.00 v/c Ratio 0.72 0.88 0.01 0.25 0.79 0.58 0.61 Uniform Delay, d1 42.1 43.8 35.8 55.7 19.7 48.9 11.7 Progression Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Intersection Summary 50.2 80.2 35.8 58.1 22.0 51.7 12.2 Level of Service D F	Actuated Green, G (s)		23.9			23.9	23.9	1.7	64.1		11.8	74.2	
Actuated g/C Ratio 0.21 0.21 0.21 0.01 0.56 0.10 0.65 Clearance Time (s) 5.0 5.0 5.0 4.0 5.5 4.0 5.5 Vehicle Extension (s) 3.0 3.0 3.0 1.5 4.0 1.5 4.0 Lane Grp Cap (vph) 292 176 302 20 1957 175 2266 v/s Ratio Prot 0.00 c0.44 c0.06 0.40	Effective Green, g (s)		23.9			23.9	23.9	1.7	64.1		11.8	74.2	
Vehicle Extension (s) 3.0 3.0 3.0 1.5 4.0 1.5 4.0 Lane Grp Cap (vph) 292 176 302 20 1957 175 2266 v/s Ratio Prot 0.00 c0.44 c0.06 0.40 v/s Ratio Perm 0.15 c0.18 0.00 c0.44 c0.06 0.40 v/s Ratio Perm 0.15 c0.18 0.00 c0.44 c0.06 0.40 v/s Ratio Perm 0.15 c0.18 0.00 c0.44 c0.06 0.40 v/s Ratio Perm 0.15 c0.18 0.00 c0.44 c0.05 0.40 uhiform Delay, d1 42.1 43.8 35.8 55.7 19.7 48.9 11.7 Progression Factor 1.00 1.	Actuated g/C Ratio		0.21			0.21	0.21	0.01	0.56		0.10	0.65	
Lane Grp Cap (vph) 292 176 302 20 1957 175 2266 v/s Ratio Prot 0.00 c0.44 c0.06 0.40 v/s Ratio Perm 0.15 c0.18 0.00 c0.44 c0.06 0.40 v/s Ratio Perm 0.15 c0.18 0.00 c0.44 c0.06 0.40 v/s Ratio 0.72 0.88 0.01 0.25 0.79 0.58 0.61 Uniform Delay, d1 42.1 43.8 35.8 55.7 19.7 48.9 11.7 Progression Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Incremental Delay, d2 8.1 36.4 0.0 2.4 2.3 2.8 0.6 Delay (s) 50.2 80.2 35.8 58.1 22.0 51.7 12.2 Level of Service D F D E C B Intersection Summary N E C B B </td <td>Clearance Time (s)</td> <td></td> <td>5.0</td> <td></td> <td></td> <td>5.0</td> <td>5.0</td> <td>4.0</td> <td>5.5</td> <td></td> <td>4.0</td> <td>5.5</td> <td></td>	Clearance Time (s)		5.0			5.0	5.0	4.0	5.5		4.0	5.5	
v/s Ratio Prot 0.00 c0.44 c0.06 0.40 v/s Ratio Perm 0.15 c0.18 0.00	Vehicle Extension (s)		3.0			3.0	3.0	1.5	4.0		1.5	4.0	
v/s Ratio Prot 0.00 c0.44 c0.06 0.40 v/s Ratio Perm 0.15 c0.18 0.00	Lane Grp Cap (vph)		292			176	302	20	1957		175	2266	
v/s Ratio Perm 0.15 c0.18 0.00 v/c Ratio 0.72 0.88 0.01 0.25 0.79 0.58 0.61 Uniform Delay, d1 42.1 43.8 35.8 55.7 19.7 48.9 11.7 Progression Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Incremental Delay, d2 8.1 36.4 0.0 2.4 2.3 2.8 0.6 Delay (s) 50.2 80.2 35.8 58.1 22.0 51.7 12.2 Level of Service D F D E C D B Approach Delay (s/veh) 50.2 76.0 22.1 14.9 Approach LOS D E C B Intersection Summary V/// Provide Service C B HCM 2000 Control Delay (s/veh) 23.5 HCM 2000 Level of Service C V/// Provide Service C HCM 2000 Volume to Capacity ratio 0.78 14.5 Intersection Capacity Utilization 177.4% ICU Level of Service D D	v/s Ratio Prot							0.00	c0.44		c0.06	0.40	
v/c Ratio 0.72 0.88 0.01 0.25 0.79 0.58 0.61 Uniform Delay, d1 42.1 43.8 35.8 55.7 19.7 48.9 11.7 Progression Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Incremental Delay, d2 8.1 36.4 0.0 2.4 2.3 2.8 0.6 Delay (s) 50.2 80.2 35.8 58.1 22.0 51.7 12.2 Level of Service D F D E C D B Approach LOS D E C B B 14.9 HCM 2000 Control Delay (s/veh) 23.5 HCM 2000 Level of Service C HCM Actuated Cycle Length (s) 114.3 Sum of lost time (s) 14.5 14.5 Intersection Capacity Utilization 77.4% ICU Level of Service D D Analysis Period (min) 15 15 14.5 14.5 14.5	v/s Ratio Perm		0.15			c0.18	0.00						
Progression Factor 1.00 <td>v/c Ratio</td> <td></td> <td>0.72</td> <td></td> <td></td> <td>0.88</td> <td>0.01</td> <td>0.25</td> <td>0.79</td> <td></td> <td>0.58</td> <td>0.61</td> <td></td>	v/c Ratio		0.72			0.88	0.01	0.25	0.79		0.58	0.61	
Normental Delay, d2 8.1 36.4 0.0 2.4 2.3 2.8 0.6 Delay (s) 50.2 80.2 35.8 58.1 22.0 51.7 12.2 Level of Service D F D E C D B Approach Delay (s/veh) 50.2 76.0 22.1 14.9 Approach LOS D E C B Intersection Summary D E C B HCM 2000 Control Delay (s/veh) 23.5 HCM 2000 Level of Service C C HCM 2000 Volume to Capacity ratio 0.78 14.5 14.5 Intersection Capacity Utilization 77.4% ICU Level of Service D 14.5 Analysis Period (min) 15 15 16 16 16 16	Uniform Delay, d1		42.1			43.8	35.8	55.7	19.7		48.9	11.7	
Delay (s) 50.2 80.2 35.8 58.1 22.0 51.7 12.2 Level of Service D F D E C D B Approach Delay (s/veh) 50.2 76.0 22.1 14.9 Approach LOS D E C B Intersection Summary V 23.5 HCM 2000 Level of Service C HCM 2000 Control Delay (s/veh) 23.5 HCM 2000 Level of Service C HCM 2000 Volume to Capacity ratio 0.78 Actuated Cycle Length (s) 114.3 Sum of lost time (s) 14.5 Intersection Capacity Utilization 77.4% ICU Level of Service D Analysis Period (min) 15	Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Level of ServiceDFDECDBApproach Delay (s/veh)50.276.022.114.9Approach LOSDECBIntersection SummaryHCM 2000 Control Delay (s/veh)23.5HCM 2000 Level of ServiceCHCM 2000 Volume to Capacity ratio0.78	Incremental Delay, d2		8.1			36.4	0.0	2.4	2.3		2.8	0.6	
Approach Delay (s/veh)50.276.022.114.9Approach LOSDECBIntersection SummaryHCM 2000 Control Delay (s/veh)23.5HCM 2000 Level of ServiceCHCM 2000 Volume to Capacity ratio0.78CActuated Cycle Length (s)114.3Sum of lost time (s)14.5Intersection Capacity Utilization77.4%ICU Level of ServiceDAnalysis Period (min)1515Intersection Capacity	Delay (s)		50.2			80.2	35.8	58.1	22.0		51.7	12.2	
Approach LOSDECBIntersection SummaryHCM 2000 Control Delay (s/veh)23.5HCM 2000 Level of ServiceCHCM 2000 Volume to Capacity ratio0.78CActuated Cycle Length (s)114.3Sum of lost time (s)14.5Intersection Capacity Utilization77.4%ICU Level of ServiceDAnalysis Period (min)1515C	Level of Service		D			F	D	E	С		D	В	
Intersection Summary HCM 2000 Control Delay (s/veh) 23.5 HCM 2000 Level of Service C HCM 2000 Volume to Capacity ratio 0.78 Actuated Cycle Length (s) 114.3 Sum of lost time (s) 14.5 Intersection Capacity Utilization 77.4% ICU Level of Service D Analysis Period (min) 15	Approach Delay (s/veh)		50.2			76.0			22.1			14.9	
HCM 2000 Control Delay (s/veh)23.5HCM 2000 Level of ServiceCHCM 2000 Volume to Capacity ratio0.78Actuated Cycle Length (s)114.3Sum of lost time (s)14.5Intersection Capacity Utilization77.4%ICU Level of ServiceDAnalysis Period (min)1515Intersection CapacityICU Level of Service	Approach LOS		D			E			С			В	
HCM 2000 Volume to Capacity ratio0.78Actuated Cycle Length (s)114.3Sum of lost time (s)14.5Intersection Capacity Utilization77.4%ICU Level of ServiceDAnalysis Period (min)151516	Intersection Summary												
Actuated Cycle Length (s)114.3Sum of lost time (s)14.5Intersection Capacity Utilization77.4%ICU Level of ServiceDAnalysis Period (min)1515D					Н	CM 2000	Level of S	Service		С			
Intersection Capacity Utilization 77.4% ICU Level of Service D Analysis Period (min) 15	•	city ratio											
Analysis Period (min) 15													
		tion			IC	CU Level	of Service			D			
				15									

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Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations	Y			†††	≜ î∌	-			
Traffic Volume (vph)	116	194	164	1232	1244	105			
Future Volume (vph)	116	194	164	1232	1244	105			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Total Lost time (s)	4.5	1700	4.0	4.6	4.6	1,00			
Lane Util. Factor	1.00		1.00	0.91	0.95				
Frpb, ped/bikes	1.00		1.00	1.00	1.00				
Flpb, ped/bikes	1.00		1.00	1.00	1.00				
Frt	0.92		1.00	1.00	0.99				
Flt Protected	0.98		0.95	1.00	1.00				
Satd. Flow (prot)	1707		1787	5085	3464				
Flt Permitted	0.98		0.95	1.00	1.00				
Satd. Flow (perm)	1707		1787	5085	3464				
		0.04				0.96			
Peak-hour factor, PHF	0.94	0.94	0.95 173	0.95	0.96 1204				
Adj. Flow (vph)	123 79	206		1297	1296	109			
RTOR Reduction (vph)		0	0 172	0	7	0			
Lane Group Flow (vph)	250	0	173	1297	1398	0			
Confl. Peds. (#/hr)	9	00/	5	20/	20/	5			
Heavy Vehicles (%)	0%	0%	1%	2%	3%	0%			
Turn Type	Prot		Prot	NA	NA				
Protected Phases	4		5	2	6				
Permitted Phases									
Actuated Green, G (s)	16.1		5.2	42.1	32.9				
Effective Green, g (s)	16.1		5.2	42.1	32.9				
Actuated g/C Ratio	0.24		0.08	0.63	0.49				
Clearance Time (s)	4.5		4.0	4.6	4.6				
Vehicle Extension (s)	4.0		0.2	2.0	2.0				
Lane Grp Cap (vph)	408		138	3180	1693				
v/s Ratio Prot	c0.15		c0.10	0.26	c0.40				
v/s Ratio Perm									
v/c Ratio	0.61		1.25	0.41	0.83				
Uniform Delay, d1	22.8		31.1	6.3	14.7				
Progression Factor	1.00		1.00	1.00	1.00				
Incremental Delay, d2	3.1		160.1	0.0	3.3				
Delay (s)	25.9		191.1	6.4	18.0				
Level of Service	С		F	А	В				
Approach Delay (s/veh)	25.9			28.1	18.0				
Approach LOS	С			С	В				
Intersection Summary									
HCM 2000 Control Delay (s	/veh)		23.5	H	CM 2000	Level of Service		<u> </u>	
HCM 2000 Volume to Capa			0.80						
Actuated Cycle Length (s)			67.3	S	um of lost	time (s)	13.	1	
Intersection Capacity Utiliza	ation		76.1%		CU Level c			D	
Analysis Period (min)			15					-	
c Critical Lano Croup			15						

HCM Signalized Intersection Capacity Analysis 8: Rosemead Boulevard & Rex Rd

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	•	*	۲	Þ		ሻሻ	đ₽		۲	††	1
Traffic Volume (vph)	151	108	166	53	50	159	63	1252	79	131	1153	107
Future Volume (vph)	151	108	166	53	50	159	63	1252	79	131	1153	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.0	6.0		4.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.98		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.89		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1881	1509	1805	1646		3367	3507		1805	3539	1378
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1881	1509	1805	1646		3367	3507		1805	3539	1378
Peak-hour factor, PHF	0.68	0.68	0.68	0.88	0.88	0.88	0.94	0.94	0.94	0.90	0.90	0.90
Adj. Flow (vph)	222	159	244	60	57	181	67	1332	84	146	1281	119
RTOR Reduction (vph)	0	0	116	0	107	0	0	3	0	0	0	47
Lane Group Flow (vph)	222	159	128	60	131	0	67	1413	0	146	1281	72
Confl. Peds. (#/hr)	8					8	3		4	4		3
Heavy Vehicles (%)	2%	1%	7%	0%	2%	0%	4%	2%	0%	0%	2%	14%
Turn Type	Split	NA	custom	Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4	4 5	3	3		5	2		1	6	
Permitted Phases			4									6
Actuated Green, G (s)	21.3	21.3	32.1	14.9	14.9		6.3	51.4		13.4	58.5	58.5
Effective Green, g (s)	21.3	21.3	32.1	14.9	14.9		6.3	51.4		13.4	58.5	58.5
Actuated g/C Ratio	0.18	0.18	0.27	0.12	0.12		0.05	0.43		0.11	0.49	0.49
Clearance Time (s)	4.5	4.5		4.5	4.5		4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		1.5	4.0		1.5	4.0	4.0
Lane Grp Cap (vph)	314	333	403	224	204		176	1502		201	1725	671
v/s Ratio Prot	c0.13	0.08	0.08	0.03	c0.08		0.02	c0.40		c0.08	0.36	071
v/s Ratio Perm	00110	0100	0100	0100	00100		0.02	00110		00100	0100	0.05
v/c Ratio	0.71	0.48	0.32	0.27	0.64		0.38	0.94		0.73	0.74	0.11
Uniform Delay, d1	46.4	44.3	35.2	47.6	50.0		55.0	32.8		51.5	24.7	16.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.35	0.58		1.00	1.00	1.00
Incremental Delay, d2	7.1	1.1	0.5	0.6	6.8		0.3	9.1		10.5	2.9	0.3
Delay (s)	53.5	45.4	35.6	48.3	56.8		74.3	28.0		62.0	27.6	17.0
Level of Service	D	D	D	D	E		E	С		E	С	В
Approach Delay (s/veh)	_	44.5	_	_	55.1		_	30.1		_	30.1	
Approach LOS		D			E			С			С	
Intersection Summary												
HCM 2000 Control Delay (s	/veh)		34.3	H	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capa			0.82						-			
Actuated Cycle Length (s)	· , ····		120.0	S	um of lost	t time (s)			19.0			
Intersection Capacity Utiliza	ation		83.5%			of Service			E			
Analysis Period (min)			15									
c Critical Lano Croup												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u></u> ↑↑₽		ሻሻ	<u>↑</u> ↑₽		1	<u>↑</u> ↑₽		۳	***	1
Traffic Volume (vph)	236	1147	142	224	796	132	65	954	178	108	998	33
Future Volume (vph)	236	1147	142	224	796	132	65	954	178	108	998	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	5.5		4.0	5.5		4.0	6.0		4.0	6.0	4.5
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.98		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1719	4893		3367	4815		1671	4960		1626	5085	1514
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1719	4893		3367	4815		1671	4960		1626	5085	1514
Peak-hour factor, PHF	0.95	0.95	0.95	0.91	0.91	0.91	0.96	0.96	0.96	0.92	0.92	0.92
Adj. Flow (vph)	248	1207	149	246	875	145	68	994	185	117	1085	36
RTOR Reduction (vph)	0	13	0	0	19	0	0	22	0	0	0	19
Lane Group Flow (vph)	248	1343	0	246	1001	0	68	1157	0	117	1085	17
Confl. Peds. (#/hr)	4		7	7		4	7		3	3		7
Heavy Vehicles (%)	5%	4%	4%	4%	6%	0%	8%	2%	1%	11%	2%	5%
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	14.5	38.9		11.2	35.1		7.4	39.3		11.1	43.0	57.5
Effective Green, g (s)	14.5	38.9		11.2	35.1		7.4	39.3		11.1	43.0	57.5
Actuated g/C Ratio	0.12	0.32		0.09	0.29		0.06	0.33		0.09	0.36	0.48
Clearance Time (s)	4.5	5.5		4.0	5.5		4.0	6.0		4.0	6.0	4.5
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	4.0		1.5	4.0	1.5
Lane Grp Cap (vph)	207	1586		314	1408		103	1624		150	1822	725
v/s Ratio Prot	c0.14	c0.27		0.07	0.21		0.04	c0.23		c0.07	c0.21	0.00
v/s Ratio Perm												0.01
v/c Ratio	1.20	0.85		0.78	0.71		0.66	0.71		0.78	0.60	0.02
Uniform Delay, d1	52.8	37.8		53.2	37.9		55.1	35.4		53.3	31.4	16.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.21	0.46	0.29
Incremental Delay, d2	126.3	4.6		11.2	1.8		11.6	2.7		16.2	1.1	0.0
Delay (s)	179.0	42.3		64.4	39.8		66.7	38.1		80.5	15.6	4.7
Level of Service	F	D		E	D		E	D		F	В	A
Approach Delay (s/veh)		63.5			44.5			39.7			21.4	
Approach LOS		E			D			D			С	
Intersection Summary												
HCM 2000 Control Delay (s			43.7	Н	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capa	icity ratio		0.84									
Actuated Cycle Length (s)			120.0		um of lost				20.0			
Intersection Capacity Utiliza	ation		76.7%	IC	CU Level o	of Service			D			
Analysis Period (min)			15									
c Critical Lano Croup												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u>↑</u> ↑₽		1	<u>↑</u> ↑₽		ሻሻ	† †	7	ሻሻ	¥î∌	
Traffic Volume (vph)	138	1078	418	162	1511	72	361	550	99	102	588	189
Future Volume (vph)	138	1078	418	162	1511	72	361	550	99	102	588	189
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.99		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1641	4523		1671	4863		3303	3406	1351	3433	3301	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1641	4523		1671	4863		3303	3406	1351	3433	3301	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	145	1135	440	171	1591	76	380	579	104	107	619	199
RTOR Reduction (vph)	0	44	0	0	3	0	0	0	71	0	20	0
Lane Group Flow (vph)	145	1531	0	171	1664	0	380	579	33	107	798	0
Confl. Peds. (#/hr)	9		9	9		9	3		14	14		3
Heavy Vehicles (%)	10%	10%	7%	8%	6%	2%	6%	6%	16%	2%	4%	8%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			
Actuated Green, G (s)	18.6	50.2		18.6	50.2		19.2	47.0	47.0	11.2	39.0	
Effective Green, g (s)	18.6	50.2		18.6	50.2		19.2	47.0	47.0	11.2	39.0	
Actuated g/C Ratio	0.13	0.34		0.13	0.34		0.13	0.32	0.32	0.08	0.26	
Clearance Time (s)	4.5	6.0		4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	205	1528		209	1643		427	1077	427	258	866	
v/s Ratio Prot	0.09	c0.34		0.10	c0.34		c0.12	0.17		0.03	c0.24	
v/s Ratio Perm									0.02			
v/c Ratio	0.71	1.00		0.82	1.01		0.89	0.54	0.08	0.41	0.92	
Uniform Delay, d1	62.3	49.2		63.3	49.2		63.6	41.8	35.6	65.5	53.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	8.8	23.5		20.4	25.4		19.2	0.8	0.1	0.4	15.4	
Delay (s)	71.1	72.7		83.7	74.5		82.9	42.6	35.7	65.9	68.6	
Level of Service	E	E		F	E		F	D	D	E	E	
Approach Delay (s/veh)		72.6			75.4			56.3			68.3	
Approach LOS		E			E			E			E	
Intersection Summary												
HCM 2000 Control Delay (s/			69.7	Н	CM 2000	Level of S	Service		E			
HCM 2000 Volume to Capac	city ratio		0.98									
Actuated Cycle Length (s)			148.5		um of lost				21.5			
Intersection Capacity Utiliza	tion		91.2%	IC	CU Level	of Service			F			
Analysis Period (min)			15									
c Critical Lano Croun												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	4111		1	<u>↑</u> ↑₽			4îÞ			\$	
Traffic Volume (vph)	27	1164	37	112	1612	38	37	4	48	98	12	22
Future Volume (vph)	27	1164	37	112	1612	38	37	4	48	98	12	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		4.5	6.0			5.0			5.0	
Lane Util. Factor	1.00	0.86		1.00	0.91			0.95			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.96	
Satd. Flow (prot)	1805	5921		1752	4878			3139			1783	
Flt Permitted	0.95	1.00		0.95	1.00			0.83			0.72	
Satd. Flow (perm)	1805	5921		1752	4878			2661			1329	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	28	1225	39	118	1697	40	39	4	51	103	13	23
RTOR Reduction (vph)	0	3	0	0	1	0	0	40	0	0	6	0
Lane Group Flow (vph)	28	1261	0	118	1736	0	0	54	0	0	133	0
Confl. Peds. (#/hr)	12		8	8		12	4		5	5		4
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	0%	10%	2%	3%	6%	2%	1%	0%	4%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	3.1	37.3		11.9	46.1			17.5			17.5	
Effective Green, g (s)	3.1	37.3		11.9	46.1			17.5			17.5	
Actuated g/C Ratio	0.04	0.45		0.14	0.56			0.21			0.21	
Clearance Time (s)	4.5	6.0		4.5	6.0			5.0			5.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5			3.0			3.0	
Lane Grp Cap (vph)	68	2686		253	2735			566			282	
v/s Ratio Prot	0.02	0.21		c0.07	c0.36							
v/s Ratio Perm								0.02			c0.10	
v/c Ratio	0.41	0.47		0.47	0.63			0.10			0.47	
Uniform Delay, d1	38.7	15.6		32.2	12.3			26.0			28.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.5	0.2		0.5	0.6			0.1			1.2	
Delay (s)	40.1	15.8		32.7	12.9			26.1			29.5	
Level of Service	D	В		С	В			С			С	
Approach Delay (s/veh)		16.3			14.2			26.1			29.5	
Approach LOS		В			В			С			С	
Intersection Summary												
HCM 2000 Control Delay (s			16.0	Н	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capa	city ratio		0.60									
Actuated Cycle Length (s)			82.2		um of lost				15.5			
Intersection Capacity Utiliza	ition		69.9%	IC	CU Level	of Service			С			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	^	*	۲	^†		٦	*††		۲.	4† Ъ	
Traffic Volume (vph)	96	906	251	318	1471	143	158	799	211	186	951	111
Future Volume (vph)	96	906	251	318	1471	143	158	799	211	186	951	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.5	5.0	4.5	5.5		5.0	5.5		4.5	5.5	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1641	4715	1527	1736	4826		1787	4833		1770	4824	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1641	4715	1527	1736	4826		1787	4833		1770	4824	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	101	954	264	335	1548	151	166	841	222	196	1001	117
RTOR Reduction (vph)	0	0	27	0	6	0	0	28	0	0	9	0
Lane Group Flow (vph)	101	954	237	335	1693	0	166	1035	0	196	1109	0
Confl. Peds. (#/hr)	9		9	9		9	13		2	2		13
Confl. Bikes (#/hr)			1			1						1
Heavy Vehicles (%)	10%	10%	4%	4%	6%	4%	1%	3%	6%	2%	5%	10%
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	13.9	40.8	58.3	25.3	51.7		17.5	40.4		19.9	42.3	
Effective Green, g (s)	13.9	40.8	58.3	25.3	51.7		17.5	40.4		19.9	42.3	
Actuated g/C Ratio	0.09	0.28	0.40	0.17	0.35		0.12	0.28		0.14	0.29	
Clearance Time (s)	5.0	5.5	5.0	4.5	5.5		5.0	5.5		4.5	5.5	
Vehicle Extension (s)	1.5	4.0	1.5	1.5	4.0		1.5	4.0		1.5	4.0	
Lane Grp Cap (vph)	155	1314	608	300	1704		213	1333		240	1393	
v/s Ratio Prot	0.06	0.20	0.05	c0.19	c0.35		0.09	0.21		c0.11	c0.23	
v/s Ratio Perm			0.11									
v/c Ratio	0.65	0.73	0.39	1.12	0.99		0.78	0.78		0.82	0.80	
Uniform Delay, d1	63.9	47.7	31.4	60.6	47.2		62.6	48.8		61.5	48.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.3	2.2	0.2	87.1	20.1		15.0	3.1		18.0	3.4	
Delay (s)	71.2	49.9	31.5	147.7	67.3		77.6	51.9		79.5	51.5	
Level of Service	Е	D	С	F	E		E	D		E	D	
Approach Delay (s/veh)		47.9			80.5			55.4			55.7	
Approach LOS		D			F			E			Е	
Intersection Summary												
HCM 2000 Control Delay (s/	,		62.4	Н	CM 2000	Level of S	Service		E			
HCM 2000 Volume to Capac	ity ratio		0.97									
Actuated Cycle Length (s)			146.4		um of lost	• •			21.0			
Intersection Capacity Utilizati	on		89.8%	IC	CU Level of	of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u>↑</u> ↑₽		1	<u>↑</u> ↑₽		1	↑	7	ኘሻ	≜ 1⊅	
Traffic Volume (vph)	159	1174	79	127	1493	153	77	347	75	302	368	104
Future Volume (vph)	159	1174	79	127	1493	153	77	347	75	302	368	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	6.0		3.5	6.0		3.5	5.0	5.0	3.5	5.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1787	4704		1770	4793		1770	1863	1520	3467	3403	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1787	4704		1770	4793		1770	1863	1520	3467	3403	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	167	1236	83	134	1572	161	81	365	79	318	387	109
RTOR Reduction (vph)	0	6	0	0	9	0	0	0	0	0	23	0
Lane Group Flow (vph)	167	1313	0	134	1724	0	81	365	79	318	473	0
Confl. Peds. (#/hr)	6		12	12		6	37		14	14		37
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	1%	9%	9%	2%	7%	0%	2%	2%	3%	1%	1%	2%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases									4			
Actuated Green, G (s)	14.6	44.5		12.2	42.1		8.0	30.5	30.5	14.8	37.3	
Effective Green, g (s)	14.6	44.5		12.2	42.1		8.0	30.5	30.5	14.8	37.3	
Actuated g/C Ratio	0.12	0.37		0.10	0.35		0.07	0.25	0.25	0.12	0.31	
Clearance Time (s)	3.5	6.0		3.5	6.0		3.5	5.0	5.0	3.5	5.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5		1.5	4.0	4.0	1.5	4.0	
Lane Grp Cap (vph)	217	1744		179	1681		118	473	386	427	1057	
v/s Ratio Prot	c0.09	0.28		0.08	c0.36		0.05	c0.20		c0.09	0.14	
v/s Ratio Perm									0.05			
v/c Ratio	0.77	0.75		0.75	1.03		0.69	0.77	0.20	0.74	0.45	
Uniform Delay, d1	51.1	33.0		52.4	39.0		54.8	41.5	35.2	50.8	33.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	13.7	3.1		13.9	28.7		12.4	8.1	0.4	6.1	0.4	
Delay (s)	64.8	36.0		66.3	67.7		67.2	49.6	35.6	56.9	33.5	
Level of Service	E	D		E	E		E	D	D	E	С	
Approach Delay (s/veh)		39.2			67.6			50.2			42.6	
Approach LOS		D			E			D			D	
Intersection Summary												
HCM 2000 Control Delay (s			52.3	Н	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capa	city ratio		0.87									
Actuated Cycle Length (s)			120.0	S	um of lost	t time (s)			18.0			
Intersection Capacity Utiliza	tion		85.4%	IC	CU Level o	of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲.	↑	1		4		۲.	^	7	۳.	¥1≽	
Traffic Volume (vph)	16	4	9	44	16	41	21	932	44	50	993	51
Future Volume (vph)	16	4	9	44	16	41	21	932	44	50	993	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0		3.0	5.0	5.0	3.0	5.0	
Lane Util. Factor	1.00	1.00	1.00		1.00		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99		0.99		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
Frt Flt Ducto stud	1.00	1.00	0.85		0.95		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.98		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1236	1900	1216		1517		1641	3438	1459	1626	3424	_
Flt Permitted	0.69	1.00	1.00		0.88		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	903	1900	1216	0.05	1364	0.05	1641	3438	1459	1626	3424	0.05
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	17	4	9	46	17	43	22	981	46	53	1045	54
RTOR Reduction (vph)	0	0	8	0	25	0	0	0	17	0	2	0
Lane Group Flow (vph)	17	4	1	0	81	0	22	981	29	53	1097	0
Confl. Peds. (#/hr)	1	00/	2	2	Γ0/	1	1	Γ0/	9	9	40/	1
Heavy Vehicles (%)	46%	0%	31%	8%	5%	27%	10%	5%	7%	11%	4%	15%
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	4	4	4	Λ	4		1	6	1	5	2	
Permitted Phases	4 9.1	0.1	4 9.1	4	9.1		1.0	35.5	6 35.5	4.0	37.6	
Actuated Green, G (s) Effective Green, g (s)	9.1	9.1 9.1	9.1		9.1		1.9 1.9	35.5	35.5	4.0 4.0	37.6	
Actuated g/C Ratio	0.15	9.1 0.15	0.15		9.1 0.15		0.03	0.60	0.60	0.07	0.63	
Clearance Time (s)	3.0	3.0	3.0		3.0		3.0	5.0	5.0	3.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	137	290	185		208		52	2047	869	109	2160	
v/s Ratio Prot	137	0.00	100		200		0.01	0.29	009	c0.03	c0.32	
v/s Ratio Perm	0.02	0.00	0.00		c0.06		0.01	0.27	0.02	0.05	C0.32	
v/c Ratio	0.02	0.01	0.00		0.39		0.42	0.48	0.02	0.49	0.51	
Uniform Delay, d1	21.8	21.4	21.4		22.7		28.3	6.8	5.0	26.8	6.0	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.4	0.0	0.0		1.00		2.0	0.3	0.0	1.2	0.3	
Delay (s)	22.2	21.5	21.4		23.9		30.3	7.1	5.0	28.1	6.3	
Level of Service	C	C	C		C		C	A	A	C	A	
Approach Delay (s/veh)	Ŭ	21.9	Ŭ		23.9		Ŭ	7.5		0	7.3	
Approach LOS		C			С			A			A	
Intersection Summary		-			-							
HCM 2000 Control Delay (s	(veh)		8.3	Ц	CM 2000	Level of S	Service		A			
HCM 2000 Volume to Capa			0.3	Π		Lever Ur			A			
Actuated Cycle Length (s)			0.49 59.6	C.	um of lost	time (s)			11.0			
Intersection Capacity Utiliza	tion		56.0%			of Service			B			
Analysis Period (min)			15	ic.					U			
			15									

HCM Signalized Intersection Capacity Analysis 6: Paramount Boulevard & Rex Rd

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4	7	٦	≜ 1≽		۲	≜ †⊅	
Traffic Volume (vph)	10	7	24	186	82	177	71	866	87	55	929	28
Future Volume (vph)	10	7	24	186	82	177	71	866	87	55	929	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0	4.0	5.5		4.0	5.5	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		0.99			1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt		0.92			1.00	0.85	1.00	0.99		1.00	1.00	
Flt Protected		0.99			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1277			1734	1515	1556	3388		1736	3410	
Flt Permitted		0.91			0.77	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1177			1374	1515	1556	3388		1736	3410	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	11	7	25	196	86	186	75	912	92	58	978	29
RTOR Reduction (vph)	0	17	0	0	0	34	0	5	0	0	1	0
Lane Group Flow (vph)	0	26	0	0	282	152	75	999	0	58	1006	0
Confl. Peds. (#/hr)	5	20	5	5	202	5	4		5	5		4
Heavy Vehicles (%)	23%	30%	40%	6%	5%	5%	16%	4%	13%	4%	5%	16%
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	1 Unit	4		1 Onn	8	1 Onn	5	2		1	6	
Permitted Phases	4			8	Ū	8	0	2			U	
Actuated Green, G (s)	•	25.6		Ū	25.6	25.6	8.3	36.6		7.7	36.0	
Effective Green, g (s)		25.6			25.6	25.6	8.3	36.6		7.7	36.0	
Actuated g/C Ratio		0.30			0.30	0.30	0.10	0.43		0.09	0.43	
Clearance Time (s)		5.0			5.0	5.0	4.0	5.5		4.0	5.5	
Vehicle Extension (s)		3.0			3.0	3.0	1.5	4.0		1.5	4.0	
Lane Grp Cap (vph)		357			416	459	153	1469		158	1454	
v/s Ratio Prot		557			10	-107	c0.05	0.29		0.03	c0.29	
v/s Ratio Perm		0.02			c0.21	0.10	0.05	0.27		0.05	0.27	
v/c Ratio		0.02			0.68	0.33	0.49	0.68		0.37	0.69	
Uniform Delay, d1		20.9			25.8	22.8	36.0	19.2		36.1	19.7	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			4.3	0.4	0.9	1.00		0.5	1.6	
Delay (s)		21.0			30.1	23.2	36.9	20.6		36.6	21.2	
Level of Service		21.0 C			50.1 C	23.2 C	50.7 D	20.0 C		50.0 D	21.2 C	
Approach Delay (s/veh)		21.0			27.4	0	U	21.7		U	22.1	
Approach LOS		C			C			C			C	
Intersection Summary												
HCM 2000 Control Delay (s	(veh)		22.8	Н	CM 2000	Level of	Service		С			
HCM 2000 Volume to Capa			0.66	11	2000				0			
Actuated Cycle Length (s)			84.4	S	um of los	t time (s)			14.5			
Intersection Capacity Utiliza	ation		70.4%			of Service			14.J C			
Analysis Period (min)			15	IC.					0			
Critical Lano Croup			10									

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Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	Y		3	† ††	≜ î∌	-	
Traffic Volume (vph)	51	45	33	955	1179	87	
Future Volume (vph)	51	45	33	955	1179	87	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	4.5		4.0	4.6	4.6		
Lane Util. Factor	1.00		1.00	0.91	0.95		
Frpb, ped/bikes	1.00		1.00	1.00	1.00		
Flpb, ped/bikes	1.00		1.00	1.00	1.00		
Frt	0.94		1.00	1.00	0.99		
Flt Protected	0.97		0.95	1.00	1.00		
Satd. Flow (prot)	1709		1770	4940	3435		
Flt Permitted	0.97		0.95	1.00	1.00		
Satd. Flow (perm)	1709		1770	4940	3435		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	
Adj. Flow (vph)	54	47	35	1005	1241	92	
RTOR Reduction (vph)	39	0	0	0	5	0	
Lane Group Flow (vph)	62	0	35	1005	1328	0	
Confl. Peds. (#/hr)	2	Ū	1	1000	1020	1	
Heavy Vehicles (%)	1%	2%	2%	5%	4%	2%	
Turn Type	Prot	1.0	Prot	NA	NA		
Protected Phases	4		5	2	6		
Permitted Phases	· ·		0	2	U		
Actuated Green, G (s)	8.1		1.4	32.4	27.0		
Effective Green, g (s)	8.1		1.4	32.4	27.0		
Actuated g/C Ratio	0.16		0.03	0.65	0.54		
Clearance Time (s)	4.5		4.0	4.6	4.6		
Vehicle Extension (s)	4.0		0.2	2.0	2.0		
Lane Grp Cap (vph)	279		49	3226	1869		
v/s Ratio Prot	c0.04		c0.02	0.20	c0.39		
v/s Ratio Perm	TO:07		00.0Z	0.20	00.07		
v/c Ratio	0.22		0.71	0.31	0.71		
Uniform Delay, d1	18.0		23.9	3.7	8.4		
Progression Factor	1.00		1.00	1.00	1.00		
Incremental Delay, d2	0.5		33.5	0.0	1.1		
Delay (s)	18.6		57.4	3.8	9.5		
Level of Service	B		E	A	A		
Approach Delay (s/veh)	18.6		_	5.6	9.5		
Approach LOS	B			A	A		
Intersection Summary							
HCM 2000 Control Delay	(s/veh)		8.2	н	CM 2000	Level of Service	A
HCM 2000 Volume to Cap			0.2	11			A
Actuated Cycle Length (s)			49.6	S	um of lost	time (s)	13.1
Intersection Capacity Utiliz			48.5%			of Service	A
Analysis Period (min)			15				7.1
			10				

HCM Signalized Intersection Capacity Analysis 8: Rosemead Boulevard & Rex Rd

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	•	7	۲.	Þ		ኘኘ	đ₽		٦	^	1
Traffic Volume (vph)	38	43	78	140	176	122	149	1083	42	59	1001	125
Future Volume (vph)	38	43	78	140	176	122	149	1083	42	59	1001	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.0	6.0		4.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.99		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.94		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1467	1863	1346	1787	1751		3367	3477		1805	3471	1496
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1467	1863	1346	1787	1751		3367	3477		1805	3471	1496
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	45	82	147	185	128	157	1140	44	62	1054	132
RTOR Reduction (vph)	0	0	67	0	21	0	0	1	0	0	0	45
Lane Group Flow (vph)	40	45	15	147	292	0	157	1183	0	62	1054	87
Confl. Peds. (#/hr)	6			10/	10/	6	3		2	2		3
Heavy Vehicles (%)	23%	2%	20%	1%	1%	1%	4%	3%	7%	0%	4%	5%
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4	4 5	3	3		5	2		1	6	
Permitted Phases			4									6
Actuated Green, G (s)	7.6	7.6	21.6	23.5	23.5		9.5	62.8		7.1	60.4	60.4
Effective Green, g (s)	7.6	7.6	21.6	23.5	23.5		9.5	62.8		7.1	60.4	60.4
Actuated g/C Ratio	0.06	0.06	0.18	0.20	0.20		0.08	0.52		0.06	0.50	0.50
Clearance Time (s)	4.5	4.5		4.5	4.5		4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		1.5	4.0		1.5	4.0	4.0
Lane Grp Cap (vph)	92	117	242	349	342		266	1819		106	1747	752
v/s Ratio Prot	c0.03	0.02	0.01	0.08	c0.17		c0.05	c0.34		0.03	0.30	
v/s Ratio Perm												0.06
v/c Ratio	0.43	0.38	0.06	0.42	0.85		0.59	0.65		0.58	0.60	0.12
Uniform Delay, d1	54.1	54.0	40.8	42.3	46.6		53.4	20.7		55.0	21.3	15.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.34	0.72		1.00	1.00	1.00
Incremental Delay, d2	3.3	2.1	0.1	0.8	18.3		1.9	1.5		5.2	1.6	0.3
Delay (s)	57.4	56.1	40.9	43.1	64.9		73.5	16.4		60.2	22.8	16.0
Level of Service	E	E	D	D	E		E	B		E	С	В
Approach Delay (s/veh)		48.9			57.9			23.1			24.0	
Approach LOS		D			E			С			С	
Intersection Summary												
HCM 2000 Control Delay (s			29.8	Н	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capa	city ratio		0.68									
Actuated Cycle Length (s)			120.0		um of lost				19.0			
Intersection Capacity Utiliza	tion		71.5%	IC	U Level o	of Service			С			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u></u> ↑↑₽		ሻሻ	<u>↑</u> ↑₽		1	<u> ተተ</u> ኈ		۳	***	1
Traffic Volume (vph)	167	860	203	192	1264	66	159	820	182	110	777	185
Future Volume (vph)	167	860	203	192	1264	66	159	820	182	110	777	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	5.5		4.0	5.5		4.0	6.0		4.0	6.0	4.5
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1656	4502		3213	4706		1656	4824		1626	4940	1477
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1656	4502		3213	4706		1656	4824		1626	4940	1477
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	176	905	214	202	1331	69	167	863	192	116	818	195
RTOR Reduction (vph)	0	31	0	0	5	0	0	29	0	0	0	52
Lane Group Flow (vph)	176	1088	0	202	1395	0	167	1026	0	116	818	143
Confl. Peds. (#/hr)	5	1001	1	1		5	2		12	12	= 0.4	2
Heavy Vehicles (%)	9%	12%	10%	9%	9%	15%	9%	4%	4%	11%	5%	8%
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	8.5	32.6		11.4	35.0		10.5	48.0		8.5	46.0	54.5
Effective Green, g (s)	8.5	32.6		11.4	35.0		10.5	48.0		8.5	46.0	54.5
Actuated g/C Ratio	0.07	0.27		0.10	0.29		0.09	0.40		0.07	0.38	0.45
Clearance Time (s)	4.5	5.5		4.0	5.5		4.0	6.0		4.0	6.0	4.5
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	4.0		1.5	4.0	1.5
Lane Grp Cap (vph)	117	1223		305	1372		144	1929		115	1893	670
v/s Ratio Prot	c0.11	0.24		0.06	c0.30		c0.10	c0.21		0.07	0.17	0.02
v/s Ratio Perm	. = .											0.08
v/c Ratio	1.50	0.89		0.66	1.02		1.16	0.53		1.01	0.43	0.21
Uniform Delay, d1	55.8	42.0		52.4	42.5		54.8	27.4		55.8	27.3	19.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.03	0.61	0.89
Incremental Delay, d2	266.1	8.4		4.1	28.6		124.3	1.1		79.6	0.6	0.0
Delay (s)	321.8	50.4		56.6	71.1		179.1	28.5		136.9	17.3	17.6
Level of Service	F	D		E	E		F	C		F	B	В
Approach Delay (s/veh)		87.3			69.2			49.1			29.7	
Approach LOS		F			E			D			С	
Intersection Summary												
HCM 2000 Control Delay (s			60.5	Н	CM 2000	Level of S	Service		E			
HCM 2000 Volume to Capa	icity ratio		0.85									
Actuated Cycle Length (s)			120.0		um of lost				20.0			
Intersection Capacity Utiliza	ation		84.0%	IC	CU Level o	of Service	;		E			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	<u></u> ↑↑₽		3	<u>ተተ</u> ጉ		ሻሻ	††	7	ሻሻ	∱1 ≽	
Traffic Volume (vph)	201	1342	333	119	865	121	230	992	414	144	889	150
Future Volume (vph)	201	1342	333	119	865	121	230	992	414	144	889	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1703	4800		1687	4732		3367	3539	1524	3433	3383	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1703	4800		1687	4732		3367	3539	1524	3433	3383	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	212	1413	351	125	911	127	242	1044	436	152	936	158
RTOR Reduction (vph)	0	26	0	0	12	0	0	0	110	0	9	0
Lane Group Flow (vph)	212	1738	0	125	1026	0	242	1044	326	152	1085	0
Confl. Peds. (#/hr)	9		7	7		9	3		13	13		3
Confl. Bikes (#/hr)			1						1			1
Heavy Vehicles (%)	6%	4%	6%	7%	8%	2%	4%	2%	3%	2%	3%	11%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			
Actuated Green, G (s)	26.0	51.3		15.1	40.4		14.4	42.8	42.8	11.8	40.2	
Effective Green, g (s)	26.0	51.3		15.1	40.4		14.4	42.8	42.8	11.8	40.2	
Actuated g/C Ratio	0.18	0.36		0.11	0.28		0.10	0.30	0.30	0.08	0.28	
Clearance Time (s)	4.5	6.0		4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	310	1728		178	1341		340	1062	457	284	954	
v/s Ratio Prot	0.12	c0.36		0.07	c0.22		c0.07	c0.29		0.04	c0.32	
v/s Ratio Perm									0.21			
v/c Ratio	0.68	1.01		0.70	0.76		0.71	0.98	0.71	0.54	1.14	
Uniform Delay, d1	54.4	45.6		61.5	46.7		62.0	49.5	44.4	62.7	51.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.9	23.1		9.8	3.0		5.8	23.5	5.9	1.0	74.9	
Delay (s)	59.3	68.7		71.3	49.7		67.8	73.0	50.3	63.7	126.0	
Level of Service	E	E		E	D		E	E	D	E	F	
Approach Delay (s/veh)		67.7			52.0			66.5			118.4	
Approach LOS		E			D			E			F	
Intersection Summary												
HCM 2000 Control Delay (si	/veh)		74.7	H	CM 2000	Level of	Service		E			
HCM 2000 Volume to Capa			1.00		_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				_			
Actuated Cycle Length (s)			142.5	S	um of lost	time (s)			21.5			
Intersection Capacity Utiliza	tion		99.2%		CU Level				F			
Analysis Period (min)			15			20.000						
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	4111		1	†† ĵa			ፈ լթ			4	
Traffic Volume (vph)	48	1486	60	178	1021	62	123	32	128	75	21	20
Future Volume (vph)	48	1486	60	178	1021	62	123	32	128	75	21	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		4.5	6.0			5.0			5.0	
Lane Util. Factor	1.00	0.86		1.00	0.91			0.95			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.93			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1805	6308		1787	4810			3242			1774	
Flt Permitted	0.95	1.00		0.95	1.00			0.78			0.60	
Satd. Flow (perm)	1805	6308		1787	4810			2578			1090	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	51	1564	63	187	1075	65	129	34	135	79	22	21
RTOR Reduction (vph)	0	4	0	0	4	0	0	104	0	0	6	0
Lane Group Flow (vph)	51	1623	0	187	1136	0	0	194	0	0	116	0
Confl. Peds. (#/hr)	9		7	7		9	7		14	14		7
Heavy Vehicles (%)	0%	3%	0%	1%	7%	3%	1%	0%	0%	1%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	5.5	42.8		15.3	52.6			21.7			21.7	
Effective Green, g (s)	5.5	42.8		15.3	52.6			21.7			21.7	
Actuated g/C Ratio	0.06	0.45		0.16	0.55			0.23			0.23	
Clearance Time (s)	4.5	6.0		4.5	6.0			5.0			5.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5			3.0			3.0	
Lane Grp Cap (vph)	104	2832		286	2654			587			248	
v/s Ratio Prot	0.03	c0.26		c0.10	0.24							
v/s Ratio Perm								0.08			c0.11	
v/c Ratio	0.49	0.57		0.65	0.43			0.33			0.47	
Uniform Delay, d1	43.5	19.5		37.5	12.5			30.7			31.8	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.3	0.4		4.1	0.2			0.3			1.4	
Delay (s)	44.9	19.9		41.6	12.7			31.1			33.2	
Level of Service	D	В		D	В			С			С	
Approach Delay (s/veh)		20.6			16.8			31.1			33.2	
Approach LOS		С			В			С			С	
Intersection Summary					01105		- ·		-			
HCM 2000 Control Delay (s			20.5	H	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capa	city ratio		0.56									
Actuated Cycle Length (s)			95.3		um of lost				15.5			
Intersection Capacity Utiliza	tion		81.7%	IC	CU Level o	ot Service			D			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	^	1	۲	↑ ↑₽		1	≜ ≜‡		1	≜ ≜î;	
Traffic Volume (vph)	249	1148	278	259	880	209	191	911	216	184	996	136
Future Volume (vph)	249	1148	278	259	880	209	191	911	216	184	996	136
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.5	5.0	4.5	5.5		5.0	5.5		4.5	5.5	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	5036	1544	1736	4756		1787	4915		1770	4811	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1787	5036	1544	1736	4756		1787	4915		1770	4811	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	262	1208	293	273	926	220	201	959	227	194	1048	143
RTOR Reduction (vph)	0	0	26	0	24	0	0	23	0	0	11	0
Lane Group Flow (vph)	262	1208	267	273	1122	0	201	1163	0	194	1180	0
Confl. Peds. (#/hr)	21		18	18		21	26		14	14		26
Confl. Bikes (#/hr)						1						4
Heavy Vehicles (%)	1%	3%	2%	4%	6%	1%	1%	2%	1%	2%	5%	7%
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4		-							
Actuated Green, G (s)	25.3	45.7	66.7	25.3	45.2		21.0	46.7		20.6	45.8	
Effective Green, g (s)	25.3	45.7	66.7	25.3	45.2		21.0	46.7		20.6	45.8	
Actuated g/C Ratio	0.16	0.29	0.42	0.16	0.29		0.13	0.30		0.13	0.29	
Clearance Time (s)	5.0	5.5	5.0	4.5	5.5		5.0	5.5		4.5	5.5	
Vehicle Extension (s)	1.5	4.0	1.5	1.5	4.0		1.5	4.0		1.5	4.0	
Lane Grp Cap (vph)	285	1453	650	277	1357		237	1449		230	1391	
v/s Ratio Prot	0.15	c0.24	0.05	c0.16	0.24		c0.11	0.24		0.11	c0.25	
v/s Ratio Perm	0110	00121	0.12	00110	0.2.			0.2.		0.1.1	00.20	
v/c Ratio	0.92	0.83	0.41	0.99	0.83		0.85	0.80		0.84	0.85	
Uniform Delay, d1	65.5	52.7	32.0	66.3	52.9		67.1	51.5		67.3	53.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	32.0	4.4	0.2	49.6	4.5		22.7	3.5		22.7	5.2	
Delay (s)	97.5	57.1	32.2	115.9	57.4		89.8	55.0		90.0	58.2	
Level of Service	F	E	C	F	E		F	E		F	E	
Approach Delay (s/veh)	•	59.0	Ū		68.6			60.1		•	62.7	
Approach LOS		E			E			E			E	
Intersection Summary												
HCM 2000 Control Delay (s/	veh)		62.4	H	CM 2000	Level of S	Service		E			
HCM 2000 Volume to Capac	city ratio		0.87									
Actuated Cycle Length (s)			158.3	S	um of lost	t time (s)			21.0			
Intersection Capacity Utilizat	ion		92.9%	IC	CU Level o	of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u></u> ↑↑₽		1	<u>↑</u> ↑₽		1	1	7	ሻሻ	≜ 1⊅	
Traffic Volume (vph)	79	1358	91	130	1057	145	150	295	119	329	306	102
Future Volume (vph)	79	1358	91	130	1057	145	150	295	119	329	306	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	6.0		3.5	6.0		3.5	5.0	5.0	3.5	5.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	4948		1805	4814		1805	1881	1574	3502	3449	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	4948		1805	4814		1805	1881	1574	3502	3449	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	83	1429	96	137	1113	153	158	311	125	346	322	107
RTOR Reduction (vph)	0	5	0	0	14	0	0	0	0	0	27	0
Lane Group Flow (vph)	83	1520	0	137	1252	0	158	311	125	346	402	0
Confl. Peds. (#/hr)	7		2	2		7			3	3		
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	0%	4%	0%	0%	6%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases									4			
Actuated Green, G (s)	11.6	60.5		13.0	61.9		11.7	16.5	16.5	12.0	16.8	
Effective Green, g (s)	11.6	60.5		13.0	61.9		11.7	16.5	16.5	12.0	16.8	
Actuated g/C Ratio	0.10	0.50		0.11	0.52		0.10	0.14	0.14	0.10	0.14	
Clearance Time (s)	3.5	6.0		3.5	6.0		3.5	5.0	5.0	3.5	5.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5		1.5	4.0	4.0	1.5	4.0	
Lane Grp Cap (vph)	174	2494		195	2483		175	258	216	350	482	
v/s Ratio Prot	0.05	c0.31		c0.08	0.26		0.09	c0.17		c0.10	0.12	
v/s Ratio Perm									0.08			
v/c Ratio	0.48	0.61		0.70	0.50		0.90	1.21	0.58	0.99	0.83	
Uniform Delay, d1	51.3	21.3		51.6	19.0		53.6	51.8	48.5	53.9	50.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.8	1.1		9.0	0.7		40.6	123.2	4.5	44.5	12.3	
Delay (s)	52.1	22.4		60.6	19.7		94.2	174.9	52.9	98.4	62.6	
Level of Service	D	С		E	В		F	F	D	F	E	
Approach Delay (s/veh)		23.9			23.7			127.8			78.6	
Approach LOS		С			С			F			Е	
Intersection Summary												
HCM 2000 Control Delay (s/			47.6	Н	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capac	city ratio		0.76									
Actuated Cycle Length (s)			120.0		um of lost	. ,			18.0			
Intersection Capacity Utiliza	tion		76.9%	IC	CU Level of	of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	↑	*		4		1	††	7	۳.	≜ 1⊅	
Traffic Volume (vph)	31	6	9	61	0	63	3	1393	48	25	1329	14
Future Volume (vph)	31	6	9	61	0	63	3	1393	48	25	1329	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0		3.0	5.0	5.0	3.0	5.0	
Lane Util. Factor	1.00	1.00	1.00		1.00		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99		1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		0.93		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00		0.98		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1719	1429	1436		1644		1805	3539	1434	1612	3480	
Flt Permitted	0.63	1.00	1.00		0.86		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1140	1429	1436		1443		1805	3539	1434	1612	3480	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	33	6	9	64	0	66	3	1466	51	26	1399	15
RTOR Reduction (vph)	0	0	8	0	41	0	0	0	10	0	0	0
Lane Group Flow (vph)	33	6	1	0	89	0	3	1466	41	26	1414	0
Confl. Peds. (#/hr)			1	1					7	7		
Heavy Vehicles (%)	5%	33%	11%	2%	25%	8%	0%	2%	9%	12%	3%	57%
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA	Perm	Prot	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4		4	4					6			
Actuated Green, G (s)	11.0	11.0	11.0		11.0		0.7	46.5	46.5	2.1	47.9	
Effective Green, g (s)	11.0	11.0	11.0		11.0		0.7	46.5	46.5	2.1	47.9	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.01	0.66	0.66	0.03	0.68	
Clearance Time (s)	3.0	3.0	3.0		3.0		3.0	5.0	5.0	3.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	177	222	223		224		17	2330	944	47	2361	
v/s Ratio Prot		0.00					0.00	c0.41		c0.02	0.41	
v/s Ratio Perm	0.03		0.00		c0.06				0.03			
v/c Ratio	0.19	0.03	0.01		0.40		0.18	0.63	0.04	0.55	0.60	
Uniform Delay, d1	25.9	25.3	25.2		26.8		34.7	7.0	4.2	33.8	6.1	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.0	0.0		1.2		1.8	0.7	0.0	7.8	0.6	
Delay (s)	26.4	25.3	25.2		28.0		36.5	7.7	4.3	41.5	6.7	
Level of Service	С	С	С		С		D	А	А	D	А	
Approach Delay (s/veh)		26.1			28.0			7.6			7.3	
Approach LOS		С			С			А			А	
Intersection Summary												
HCM 2000 Control Delay (s			8.6	Н	CM 2000	Level of S	Service		А			
HCM 2000 Volume to Capa	city ratio		0.57									
Actuated Cycle Length (s)			70.6		um of lost				11.0			
Intersection Capacity Utiliza	ition		59.9%	IC	U Level	of Service			В			
Analysis Period (min)			15									

HCM Signalized Intersection Capacity Analysis 6: Paramount Boulevard & Rex Rd

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$			Ł	1	1	≜ †⊅		7	≜ †⊅	
Traffic Volume (vph)	23	44	98	161	5	76	20	1365	104	82	1313	14
Future Volume (vph)	23	44	98	161	5	76	20	1365	104	82	1313	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0	4.0	5.5		4.0	5.5	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00	0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt		0.92			1.00	0.85	1.00	0.99		1.00	1.00	
Flt Protected		0.99			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1691			1714	1447	1399	3487		1703	3493	
Flt Permitted		0.94			0.51	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1602			912	1447	1399	3487		1703	3493	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	24	46	103	169	5	80	21	1437	109	86	1382	15
RTOR Reduction (vph)	0	41	0	0	0	38	0	3	0	0	0	0
Lane Group Flow (vph)	0	132	0	0	174	42	21	1543	0	86	1397	0
Confl. Peds. (#/hr)	3					3						
Heavy Vehicles (%)	2%	2%	3%	5%	29%	10%	29%	2%	8%	6%	3%	21%
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		25.2			25.2	25.2	3.5	62.8		8.8	68.1	
Effective Green, g (s)		25.2			25.2	25.2	3.5	62.8		8.8	68.1	
Actuated g/C Ratio		0.23			0.23	0.23	0.03	0.56		0.08	0.61	
Clearance Time (s)		5.0			5.0	5.0	4.0	5.5		4.0	5.5	
Vehicle Extension (s)		3.0			3.0	3.0	1.5	4.0		1.5	4.0	
Lane Grp Cap (vph)		362			206	327	43	1967		134	2137	
v/s Ratio Prot							0.02	c0.44		c0.05	0.40	
v/s Ratio Perm		0.08			c0.19	0.03						
v/c Ratio		0.36			0.84	0.13	0.49	0.78		0.64	0.65	
Uniform Delay, d1		36.3			41.2	34.3	53.0	19.0		49.7	14.0	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.6			25.8	0.2	3.2	2.3		7.6	0.8	
Delay (s)		36.9			67.0	34.5	56.2	21.2		57.4	14.8	
Level of Service		D			E	С	E	С		E	В	
Approach Delay (s/veh)		36.9			56.8			21.7			17.2	
Approach LOS		D			E			С			В	
Intersection Summary												
HCM 2000 Control Delay (s			23.1	H	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capa	city ratio		0.79									
Actuated Cycle Length (s)			111.3		um of losi				14.5			
Intersection Capacity Utiliza	tion		86.8%	IC	U Level	of Service			E			
Analysis Period (min)			15									
c Critical Lano Croun												

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Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	¥		3	† ††	≜ ‡₽	-	
Traffic Volume (vph)	117	93	44	1298	1208	106	
Future Volume (vph)	117	93	44	1298	1208	106	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	4.5		4.0	4.6	4.6		
Lane Util. Factor	1.00		1.00	0.91	0.95		
Frpb, ped/bikes	1.00		1.00	1.00	1.00		
Flpb, ped/bikes	1.00		1.00	1.00	1.00		
Frt	0.94		1.00	1.00	0.99		
Flt Protected	0.97		0.95	1.00	1.00		
Satd. Flow (prot)	1738		1787	5085	3462		
Flt Permitted	0.97		0.95	1.00	1.00		
Satd. Flow (perm)	1738		1787	5085	3462		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	
Adj. Flow (vph)	123	98	46	1366	1272	112	
RTOR Reduction (vph)	37	0	0	0	7	0	
Lane Group Flow (vph)	184	0	46	1366	1377	0	
Confl. Peds. (#/hr)	9		5			5	
Heavy Vehicles (%)	0%	0%	1%	2%	3%	0%	
Turn Type	Prot		Prot	NA	NA		
Protected Phases	4		5	2	6		
Permitted Phases							
Actuated Green, G (s)	14.2		2.4	36.1	29.7		
Effective Green, g (s)	14.2		2.4	36.1	29.7		
Actuated g/C Ratio	0.24		0.04	0.61	0.50		
Clearance Time (s)	4.5		4.0	4.6	4.6		
Vehicle Extension (s)	4.0		0.2	2.0	2.0		
Lane Grp Cap (vph)	415		72	3090	1731		
v/s Ratio Prot	c0.11		0.03	c0.27	c0.40		
v/s Ratio Perm							
v/c Ratio	0.44		0.64	0.44	0.80		
Uniform Delay, d1	19.2		28.1	6.2	12.3		
Progression Factor	1.00		1.00	1.00	1.00		
Incremental Delay, d2	1.0		12.9	0.0	2.4		
Delay (s)	20.3		40.9	6.3	14.8		
Level of Service	C		D	A	B		
Approach Delay (s/veh)	20.3			7.4	14.8		
Approach LOS	20.0 C			A	B		
Intersection Summary					_		
HCM 2000 Control Delay (s	s/vob)		11.7	Ц	CM 2000	Level of Service	
HCM 2000 Collume to Capa			0.68	П		Level of Service	
Actuated Cycle Length (s)	acity ratio		0.08 59.4	C,	um of lost	time (s)	
Intersection Capacity Utiliza	ation		59.4 56.6%		ULEVELO		
Analysis Period (min)			50.0% 15	iC			
Analysis Penou (min)			15				

HCM Signalized Intersection Capacity Analysis 8: Rosemead Boulevard & Rex Rd

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	↑	1	<u>۲</u>	12		ሻሻ	đ₽		۳	††	1
Traffic Volume (vph)	140	111	173	55	52	97	40	1192	81	55	1268	27
Future Volume (vph)	140	111	173	55	52	97	40	1192	81	55	1268	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.0	6.0		4.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.98		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.90		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1881	1509	1805	1677		3367	3505		1805	3539	1378
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1881	1509	1805	1677		3367	3505		1805	3539	1378
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	117	182	58	55	102	42	1255	85	58	1335	28
RTOR Reduction (vph)	0	0	126	0	63	0	0	2	0	0	0	12
Lane Group Flow (vph)	147	117	56	58	94	0	42	1338	0	58	1335	16
Confl. Peds. (#/hr)	8		=0/			8	3		4	4		3
Heavy Vehicles (%)	2%	1%	7%	0%	2%	0%	4%	2%	0%	0%	2%	14%
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4	4 5	3	3		5	2		1	6	
Permitted Phases			4									6
Actuated Green, G (s)	15.8	15.8	25.8	13.2	13.2		5.5	65.1		6.9	66.5	66.5
Effective Green, g (s)	15.8	15.8	25.8	13.2	13.2		5.5	65.1		6.9	66.5	66.5
Actuated g/C Ratio	0.13	0.13	0.22	0.11	0.11		0.05	0.54		0.06	0.55	0.55
Clearance Time (s)	4.5	4.5		4.5	4.5		4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		1.5	4.0		1.5	4.0	4.0
Lane Grp Cap (vph)	233	247	324	198	184		154	1901		103	1961	763
v/s Ratio Prot	c0.08	0.06	0.04	0.03	c0.06		0.01	c0.38		c0.03	0.38	
v/s Ratio Perm												0.01
v/c Ratio	0.63	0.47	0.17	0.29	0.51		0.27	0.70		0.56	0.68	0.02
Uniform Delay, d1	49.3	48.2	38.4	49.1	50.3		55.3	20.3		55.1	19.2	12.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.40	0.43		1.00	1.00	1.00
Incremental Delay, d2	5.5	1.4	0.3	0.8	2.2		0.2	1.5		4.1	1.9	0.0
Delay (s)	54.8	49.7	38.7	49.9	52.6		77.9	10.3		59.2	21.1	12.1
Level of Service	D	D	D	D	D		E	B		E	С	В
Approach Delay (s/veh)		46.9			51.9			12.3			22.5	
Approach LOS		D			D			В			С	
Intersection Summary	,											
HCM 2000 Control Delay (s			23.4	H	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capa	city ratio		0.66	-					10.0			
Actuated Cycle Length (s)			120.0		um of lost				19.0			
Intersection Capacity Utiliza	tion		74.4%	IC	U Level o	of Service			D			_
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u>↑</u> ↑₽		ሻሻ	<u>↑</u> ↑₽		2	<u>ተተ</u> ኈ		1	***	1
Traffic Volume (vph)	231	1122	216	184	864	69	124	946	165	88	1065	167
Future Volume (vph)	231	1122	216	184	864	69	124	946	165	88	1065	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	5.5		4.0	5.5		4.0	6.0		4.0	6.0	4.5
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1719	4849		3367	4853		1671	4967		1626	5085	1515
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1719	4849		3367	4853		1671	4967		1626	5085	1515
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	243	1181	227	194	909	73	131	996	174	93	1121	176
RTOR Reduction (vph)	0	23	0	0	8	0	0	20	0	0	0	32
Lane Group Flow (vph)	243	1385	0	194	974	0	131	1150	0	93	1121	144
Confl. Peds. (#/hr)	4		7	7		4	7		3	3		7
Heavy Vehicles (%)	5%	4%	4%	4%	6%	0%	8%	2%	1%	11%	2%	5%
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	14.5	39.8		10.3	35.1		10.4	40.4		10.0	40.0	54.5
Effective Green, g (s)	14.5	39.8		10.3	35.1		10.4	40.4		10.0	40.0	54.5
Actuated g/C Ratio	0.12	0.33		0.09	0.29		0.09	0.34		0.08	0.33	0.45
Clearance Time (s)	4.5	5.5		4.0	5.5		4.0	6.0		4.0	6.0	4.5
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	4.0		1.5	4.0	1.5
Lane Grp Cap (vph)	207	1608		289	1419		144	1672		135	1695	688
v/s Ratio Prot	c0.14	c0.29		0.06	0.20		c0.08	c0.23		0.06	0.22	0.03
v/s Ratio Perm												0.07
v/c Ratio	1.17	0.86		0.67	0.69		0.91	0.69		0.69	0.66	0.21
Uniform Delay, d1	52.8	37.5		53.2	37.6		54.3	34.4		53.5	34.2	19.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.09	0.58	0.62
Incremental Delay, d2	117.4	5.2		4.8	1.5		47.6	2.3		8.8	1.6	0.0
Delay (s)	170.1	42.7		58.0	39.1		101.9	36.7		67.1	21.4	12.2
Level of Service	F	D		E	D		F	D		E	С	В
Approach Delay (s/veh)		61.4			42.2			43.3			23.3	
Approach LOS		E			D			D			С	
Intersection Summary												
HCM 2000 Control Delay (s			43.4	Н	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capa	acity ratio		0.87									
Actuated Cycle Length (s)			120.0		um of lost				20.0			
Intersection Capacity Utiliza	ation		78.3%	IC	CU Level o	of Service)		D			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u></u> ↑↑₽		1	†† ĵø		ኘኘ	††	۲	ኘኘ	≜ 1⊅	
Traffic Volume (vph)	121	1173	389	431	1640	76	378	550	309	113	578	161
Future Volume (vph)	121	1173	389	431	1640	76	378	550	309	113	578	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.99		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1641	4543		1671	4863		3303	3406	1350	3433	3319	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1641	4543		1671	4863		3303	3406	1350	3433	3319	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	127	1235	409	454	1726	80	398	579	325	119	608	169
RTOR Reduction (vph)	0	38	0	0	3	0	0	0	147	0	16	0
Lane Group Flow (vph)	127	1606	0	454	1803	0	398	579	178	119	761	0
Confl. Peds. (#/hr)	9		9	9		9	3		14	14		3
Heavy Vehicles (%)	10%	10%	7%	8%	6%	2%	6%	6%	16%	2%	4%	8%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			
Actuated Green, G (s)	25.0	50.0		25.0	50.0		19.7	47.4	47.4	11.3	39.0	
Effective Green, g (s)	25.0	50.0		25.0	50.0		19.7	47.4	47.4	11.3	39.0	
Actuated g/C Ratio	0.16	0.32		0.16	0.32		0.13	0.31	0.31	0.07	0.25	
Clearance Time (s)	4.5	6.0		4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	264	1463		269	1566		419	1040	412	249	834	
v/s Ratio Prot	0.08	c0.35		c0.27	c0.37		c0.12	0.17		0.03	c0.23	
v/s Ratio Perm									0.13			
v/c Ratio	0.48	1.10		1.69	1.15		0.95	0.56	0.43	0.48	0.91	
Uniform Delay, d1	59.2	52.6		65.1	52.6		67.3	45.1	43.1	69.1	56.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	55.0		325.1	75.8		30.7	1.0	1.3	0.5	14.6	
Delay (s)	59.7	107.6		390.2	128.4		98.0	46.1	44.4	69.6	71.0	
Level of Service	E	F		F	F		F	D	D	E	E	
Approach Delay (s/veh)		104.2			181.0			61.5			70.8	
Approach LOS		F			F			E			E	
Intersection Summary	,						<u> </u>					
HCM 2000 Control Delay (s			118.4	Н	CM 2000	Level of S	Service		F			
HCM 2000 Volume to Capa	city ratio		1.13	_					0.1 -			
Actuated Cycle Length (s)			155.2		um of lost				21.5			
Intersection Capacity Utiliza	tion		106.1%	IC	CU Level o	ot Service			G			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	٦	4111		1	^†			ፋጉ			4	
Traffic Volume (vph)	27	1441	87	205	1904	40	108	4	173	116	14	30
Future Volume (vph)	27	1441	87	205	1904	40	108	4	173	116	14	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		4.5	6.0			5.0			5.0	
Lane Util. Factor	1.00	0.86		1.00	0.91			0.95			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1805	5903		1752	4879			3100			1779	
Flt Permitted	0.95	1.00		0.95	1.00			0.78			0.54	
Satd. Flow (perm)	1805	5903		1752	4879			2456			997	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	28	1517	92	216	2004	42	114	4	182	122	15	32
RTOR Reduction (vph)	0	6	0	0	1	0	0	140	0	0	7	0
Lane Group Flow (vph)	28	1603	0	216	2045	0	0	160	0	0	162	0
Confl. Peds. (#/hr)	12		8	8		12	4		5	5		4
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	0%	10%	2%	3%	6%	2%	1%	0%	4%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	5.2	43.8		16.7	55.3			22.5			22.5	
Effective Green, g (s)	5.2	43.8		16.7	55.3			22.5			22.5	
Actuated g/C Ratio	0.05	0.44		0.17	0.56			0.23			0.23	
Clearance Time (s)	4.5	6.0		4.5	6.0			5.0			5.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5			3.0			3.0	
Lane Grp Cap (vph)	95	2624		297	2739			561			227	
v/s Ratio Prot	0.02	0.27		c0.12	c0.42						/	
v/s Ratio Perm	0.02	0.27		00112	00112			0.06			c0.16	
v/c Ratio	0.29	0.61		0.73	0.75			0.28			0.71	
Uniform Delay, d1	44.9	20.9		38.7	16.3			31.4			35.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.6	0.5		7.3	1.3			0.3			10.2	
Delay (s)	45.5	21.4		46.1	17.6			31.6			45.2	
Level of Service	D	С		D	В			С			D	
Approach Delay (s/veh)		21.8			20.3			31.6			45.2	
Approach LOS		С			С			С			D	
Intersection Summary												
HCM 2000 Control Delay (s/	/veh)		22.6	Н	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capac	city ratio		0.76									
Actuated Cycle Length (s)			98.5	S	um of lost	time (s)			15.5			
Intersection Capacity Utiliza	tion		88.3%	IC	CU Level o	of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	^	1	۲	↑ ↑₽		۲	*††		۲	4† Ъ	
Traffic Volume (vph)	213	1079	394	253	1658	161	236	811	223	211	969	149
Future Volume (vph)	213	1079	394	253	1658	161	236	811	223	211	969	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.5	5.0	4.5	5.5		5.0	5.5		4.5	5.5	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1641	4715	1526	1736	4825		1787	4826		1770	4790	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1641	4715	1526	1736	4825		1787	4826		1770	4790	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	224	1136	415	266	1745	169	248	854	235	222	1020	157
RTOR Reduction (vph)	0	0	25	0	6	0	0	29	0	0	12	0
Lane Group Flow (vph)	224	1136	390	266	1908	0	248	1060	0	222	1165	0
Confl. Peds. (#/hr)	9		9	9		9	13		2	2		13
Confl. Bikes (#/hr)			1			1						1
Heavy Vehicles (%)	10%	10%	4%	4%	6%	4%	1%	3%	6%	2%	5%	10%
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	24.1	49.7	74.0	25.0	50.1		24.3	48.9		23.0	47.1	
Effective Green, g (s)	24.1	49.7	74.0	25.0	50.1		24.3	48.9		23.0	47.1	
Actuated g/C Ratio	0.14	0.30	0.44	0.15	0.30		0.15	0.29		0.14	0.28	
Clearance Time (s)	5.0	5.5	5.0	4.5	5.5		5.0	5.5		4.5	5.5	
Vehicle Extension (s)	1.5	4.0	1.5	1.5	4.0		1.5	4.0		1.5	4.0	
Lane Grp Cap (vph)	237	1406	677	260	1450		260	1416		244	1354	
v/s Ratio Prot	0.14	0.24	0.08	c0.15	c0.40		c0.14	0.22		0.13	c0.24	
v/s Ratio Perm			0.17									
v/c Ratio	0.95	0.81	0.58	1.02	1.32		0.95	0.75		0.91	0.86	
Uniform Delay, d1	70.6	54.0	34.6	70.8	58.2		70.6	53.3		70.8	56.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	42.7	3.7	0.7	61.9	147.0		42.6	2.4		33.5	6.0	
Delay (s)	113.3	57.8	35.3	132.7	205.3		113.2	55.6		104.2	62.6	
Level of Service	F	E	D	F	F		F	E		F	E	
Approach Delay (s/veh)		59.5			196.4			66.3			69.2	
Approach LOS		E			F			E			E	
Intersection Summary												
HCM 2000 Control Delay (s	,		107.5	Н	CM 2000	Level of S	Service		F			
HCM 2000 Volume to Capa	city ratio		1.06									
Actuated Cycle Length (s)			166.6		um of los	• •			21.0			
Intersection Capacity Utiliza	ition		102.4%	IC	CU Level	of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u>↑</u> ↑₽		1	<u>↑</u> ↑₽		1	1	7	ኘሻ	≜ 1⊅	
Traffic Volume (vph)	189	1322	110	127	1558	153	9 5	347	75	302	368	119
Future Volume (vph)	189	1322	110	127	1558	153	95	347	75	302	368	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	6.0		3.5	6.0		3.5	5.0	5.0	3.5	5.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1787	4692		1770	4795		1770	1863	1520	3467	3384	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1787	4692		1770	4795		1770	1863	1520	3467	3384	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	199	1392	116	134	1640	161	100	365	79	318	387	125
RTOR Reduction (vph)	0	7	0	0	8	0	0	0	0	0	29	0
Lane Group Flow (vph)	199	1501	0	134	1793	0	100	365	79	318	483	0
Confl. Peds. (#/hr)	6		12	12		6	37		14	14		37
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	1%	9%	9%	2%	7%	0%	2%	2%	3%	1%	1%	2%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases									4			
Actuated Green, G (s)	14.6	45.2		12.2	42.8		9.9	29.8	29.8	14.8	34.7	
Effective Green, g (s)	14.6	45.2		12.2	42.8		9.9	29.8	29.8	14.8	34.7	
Actuated g/C Ratio	0.12	0.38		0.10	0.36		0.08	0.25	0.25	0.12	0.29	
Clearance Time (s)	3.5	6.0		3.5	6.0		3.5	5.0	5.0	3.5	5.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5		1.5	4.0	4.0	1.5	4.0	
Lane Grp Cap (vph)	217	1767		179	1710		146	462	377	427	978	
v/s Ratio Prot	c0.11	0.32		0.08	c0.37		0.06	c0.20		c0.09	0.14	
v/s Ratio Perm									0.05			
v/c Ratio	0.92	0.85		0.75	1.05		0.68	0.79	0.21	0.74	0.49	
Uniform Delay, d1	52.1	34.3		52.4	38.6		53.5	42.2	35.8	50.8	35.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	38.1	5.3		13.9	35.7		10.1	9.4	0.4	6.1	0.5	
Delay (s)	90.2	39.6		66.3	74.3		63.6	51.6	36.1	56.9	35.9	
Level of Service	F	D		E	E		E	D	D	E	D	
Approach Delay (s/veh)		45.5			73.7			51.6			43.9	
Approach LOS		D			E			D			D	
Intersection Summary												
HCM 2000 Control Delay (s			56.8	H	CM 2000	Level of S	Service		E			
HCM 2000 Volume to Capa	city ratio		0.91									
Actuated Cycle Length (s)			120.0		um of lost				18.0			
Intersection Capacity Utiliza	ntion		88.3%	IC	CU Level o	of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	↑	1		4		3	^	7	۳.	∱1 ≽	
Traffic Volume (vph)	65	4	5	30	20	86	14	1025	58	109	1113	103
Future Volume (vph)	65	4	5	30	20	86	14	1025	58	109	1113	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0		3.0	5.0	5.0	3.0	5.0	
Lane Util. Factor	1.00	1.00	1.00		1.00		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99		0.99		1.00	1.00	0.96	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		0.91		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1236	1900	1216		1425		1640	3438	1456	1626	3391	_
Flt Permitted	0.55	1.00	1.00		0.94		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	721	1900	1216		1361		1640	3438	1456	1626	3391	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	68	4	5	32	21	91	15	1079	61	115	1172	108
RTOR Reduction (vph)	0	0	4	0	62	0	0	0	22	0	4	0
Lane Group Flow (vph)	68	4	1	0	82	0	15	1079	39	115	1276	0
Confl. Peds. (#/hr)	1		2	2		1	1		9	9		1
Heavy Vehicles (%)	46%	0%	31%	8%	5%	27%	10%	5%	7%	11%	4%	15%
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA	Perm	Prot	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4		4	4					6			
Actuated Green, G (s)	12.5	12.5	12.5		12.5		0.9	38.7	38.7	8.1	45.9	
Effective Green, g (s)	12.5	12.5	12.5		12.5		0.9	38.7	38.7	8.1	45.9	
Actuated g/C Ratio	0.18	0.18	0.18		0.18		0.01	0.55	0.55	0.12	0.65	
Clearance Time (s)	3.0	3.0	3.0		3.0		3.0	5.0	5.0	3.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	128	337	216		241		20	1892	801	187	2214	
v/s Ratio Prot		0.00					0.01	0.31		c0.07	c0.38	
v/s Ratio Perm	c0.09		0.00		0.06				0.03			
v/c Ratio	0.53	0.01	0.00		0.34		0.75	0.57	0.05	0.61	0.58	
Uniform Delay, d1	26.2	23.8	23.8		25.3		34.6	10.4	7.3	29.6	6.8	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.2	0.0	0.0		0.8		83.6	0.6	0.0	4.2	0.5	
Delay (s)	30.4	23.8	23.8		26.1		118.2	10.9	7.3	33.8	7.3	
Level of Service	С	С	С		С		F	В	А	С	А	
Approach Delay (s/veh)		29.7			26.1			12.1			9.5	
Approach LOS		С			С			В			А	
Intersection Summary												
HCM 2000 Control Delay (s			12.0	H	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capa	icity ratio		0.60									
Actuated Cycle Length (s)			70.3		um of lost				11.0			
Intersection Capacity Utiliza	ation		63.2%	IC	U Level o	of Service			В			
Analysis Period (min)			15									

HCM Signalized Intersection Capacity Analysis 6: Paramount Boulevard & Rex Rd

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4	*	٦	≜ î,		۲.	đ₽	
Traffic Volume (vph)	12	7	17	189	84	194	40	904	69	65	1010	48
Future Volume (vph)	12	7	17	189	84	194	40	904	69	65	1010	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0	4.0	5.5		4.0	5.5	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		0.99			1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt		0.94			1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected		0.98			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1310			1734	1515	1556	3407		1736	3394	
Flt Permitted		0.88			0.77	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1172			1380	1515	1556	3407		1736	3394	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	13	7	18	199	88	204	42	952	73	68	1063	51
RTOR Reduction (vph)	0	13	0	0	0	36	0	4	0	0	2	0
Lane Group Flow (vph)	0	25	0	0	287	168	42	1021	0	68	1112	0
Confl. Peds. (#/hr)	5		5	5		5	4		5	5		4
Heavy Vehicles (%)	23%	30%	40%	6%	5%	5%	16%	4%	13%	4%	5%	16%
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		27.1			27.1	27.1	5.2	40.4		7.9	43.1	
Effective Green, g (s)		27.1			27.1	27.1	5.2	40.4		7.9	43.1	
Actuated g/C Ratio		0.30			0.30	0.30	0.06	0.45		0.09	0.48	
Clearance Time (s)		5.0			5.0	5.0	4.0	5.5		4.0	5.5	
Vehicle Extension (s)		3.0			3.0	3.0	1.5	4.0		1.5	4.0	
Lane Grp Cap (vph)		353			415	456	90	1531		152	1627	
v/s Ratio Prot							0.03	0.30		c0.04	c0.33	
v/s Ratio Perm		0.02			c0.21	0.11						
v/c Ratio		0.07			0.69	0.37	0.47	0.67		0.45	0.68	
Uniform Delay, d1		22.4			27.7	24.7	41.0	19.5		38.9	18.1	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			4.9	0.5	1.4	1.2		0.8	1.3	
Delay (s)		22.5			32.6	25.2	42.4	20.7		39.7	19.4	
Level of Service		С			С	С	D	С		D	В	
Approach Delay (s/veh)		22.5			29.5			21.5			20.6	
Approach LOS		С			С			С			С	
Intersection Summary												
HCM 2000 Control Delay (s/			22.6	Н	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capac	city ratio		0.68									
Actuated Cycle Length (s)			89.9		um of lost				14.5			
Intersection Capacity Utilizat	tion		73.4%	IC	CU Level o	of Service			D			
Analysis Period (min)			15									

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Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	¥		3	†††	≜ î,		
Traffic Volume (vph)	52	63	157	1012	1253	88	
Future Volume (vph)	52	63	157	1012	1253	88	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	4.5		4.0	4.6	4.6		
Lane Util. Factor	1.00		1.00	0.91	0.95		
Frpb, ped/bikes	1.00		1.00	1.00	1.00		
Flpb, ped/bikes	1.00		1.00	1.00	1.00		
Frt	0.93		1.00	1.00	0.99		
Flt Protected	0.98		0.95	1.00	1.00		
Satd. Flow (prot)	1695		1770	4940	3436		
Flt Permitted	0.98		0.95	1.00	1.00		
Satd. Flow (perm)	1695		1770	4940	3436		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	
Adj. Flow (vph)	55	66	165	1065	1319	93	
RTOR Reduction (vph)	56	0	0	0	5	0	
Lane Group Flow (vph)	65	0	165	1065	1407	0	
Confl. Peds. (#/hr)	2		1			1	
Heavy Vehicles (%)	1%	2%	2%	5%	4%	2%	
Turn Type	Prot		Prot	NA	NA		
Protected Phases	4		5	2	6		
Permitted Phases							
Actuated Green, G (s)	8.5		5.6	39.9	30.3		
Effective Green, g (s)	8.5		5.6	39.9	30.3		
Actuated g/C Ratio	0.15		0.10	0.69	0.53		
Clearance Time (s)	4.5		4.0	4.6	4.6		
Vehicle Extension (s)	4.0		0.2	2.0	2.0		
Lane Grp Cap (vph)	250		172	3427	1810		
v/s Ratio Prot	c0.04		c0.09	0.22	c0.41		
v/s Ratio Perm							
v/c Ratio	0.26		0.96	0.31	0.78		
Uniform Delay, d1	21.7		25.8	3.4	10.9		
Progression Factor	1.00		1.00	1.00	1.00		
Incremental Delay, d2	0.8		55.6	0.0	2.0		
Delay (s)	22.5		81.4	3.5	12.9		
Level of Service	С		F	А	В		
Approach Delay (s/veh)	22.5			13.9	12.9		
Approach LOS	С			В	В		
Intersection Summary							
HCM 2000 Control Delay (s/veh)		13.8	H	CM 2000	Level of Service	
HCM 2000 Volume to Capa			0.70				
Actuated Cycle Length (s)	, 		57.5	Si	um of lost	time (s)	
Intersection Capacity Utiliz	ation		63.8%			of Service	
Analysis Period (min)			15				
a Crittianal Lana Crayer							

HCM Signalized Intersection Capacity Analysis 8: Rosemead Boulevard & Rex Rd

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	4	1	۲	ţ,		ሻሻ	đ₽		3	† †	1
Traffic Volume (vph)	97	43	111	140	176	122	197	1148	42	59	1130	201
Future Volume (vph)	97	43	111	140	176	122	197	1148	42	59	1130	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.0	6.0		4.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.99		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.94		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1467	1863	1346	1787	1751		3367	3479		1805	3471	1496
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1467	1863	1346	1787	1751		3367	3479		1805	3471	1496
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	102	45	117	147	185	128	207	1208	44	62	1189	212
RTOR Reduction (vph)	0	0	88	0	21	0	0	2	0	0	0	68
Lane Group Flow (vph)	102	45	29	147	292	0	207	1250	0	62	1189	144
Confl. Peds. (#/hr)	6					6	3		2	2		3
Heavy Vehicles (%)	23%	2%	20%	1%	1%	1%	4%	3%	7%	0%	4%	5%
Turn Type	Split	NA	custom	Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4	45	3	3		5	2		1	6	
Permitted Phases			4									6
Actuated Green, G (s)	13.7	13.7	29.5	23.5	23.5		11.3	56.7		7.1	52.5	52.5
Effective Green, g (s)	13.7	13.7	29.5	23.5	23.5		11.3	56.7		7.1	52.5	52.5
Actuated g/C Ratio	0.11	0.11	0.25	0.20	0.20		0.09	0.47		0.06	0.44	0.44
Clearance Time (s)	4.5	4.5		4.5	4.5		4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		1.5	4.0		1.5	4.0	4.0
Lane Grp Cap (vph)	167	212	330	349	342		317	1643		106	1518	654
v/s Ratio Prot	c0.07	0.02	0.02	0.08	c0.17		c0.06	c0.36		0.03	0.34	
v/s Ratio Perm												0.10
v/c Ratio	0.61	0.21	0.09	0.42	0.85		0.65	0.76		0.58	0.78	0.22
Uniform Delay, d1	50.6	48.3	34.9	42.3	46.6		52.5	26.1		55.0	28.9	21.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.38	0.77		1.00	1.00	1.00
Incremental Delay, d2	6.5	0.5	0.1	0.8	18.3		2.7	2.5		5.2	4.1	0.8
Delay (s)	57.1	48.8	35.0	43.1	64.9		74.8	22.6		60.2	33.0	21.8
Level of Service	E	D	С	D	E		E	С		E	С	С
Approach Delay (s/veh)		45.9			57.9			30.0			32.5	
Approach LOS		D			E			С			С	
Intersection Summary			05 7		014 0000		_					
HCM 2000 Control Delay (s	•		35.7	H	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capa	city ratio		0.77	~					40.0			_
Actuated Cycle Length (s)			120.0		um of lost				19.0			
Intersection Capacity Utiliza	ition		75.7%	IC	U Level o	of Service			D			_
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u></u> ↑↑₽		ሻሻ	<u>↑</u> ↑₽		3	<u>ተተ</u> ኈ		۳	***	1
Traffic Volume (vph)	198	860	203	192	1264	78	159	888	182	139	866	228
Future Volume (vph)	198	860	203	192	1264	78	159	888	182	139	866	228
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	5.5		4.0	5.5		4.0	6.0		4.0	6.0	4.5
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1656	4502		3213	4697		1656	4834		1626	4940	1477
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1656	4502		3213	4697		1656	4834		1626	4940	1477
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	208	905	214	202	1331	82	167	935	192	146	912	240
RTOR Reduction (vph)	0	31	0	0	6	0	0	26	0	0	0	52
Lane Group Flow (vph)	208	1088	0	202	1407	0	167	1101	0	146	912	188
Confl. Peds. (#/hr)	5		1	1		5	2		12	12		2
Heavy Vehicles (%)	9%	12%	10%	9%	9%	15%	9%	4%	4%	11%	5%	8%
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	8.5	32.6		11.4	35.0		10.5	48.0		8.5	46.0	54.5
Effective Green, g (s)	8.5	32.6		11.4	35.0		10.5	48.0		8.5	46.0	54.5
Actuated g/C Ratio	0.07	0.27		0.10	0.29		0.09	0.40		0.07	0.38	0.45
Clearance Time (s)	4.5	5.5		4.0	5.5		4.0	6.0		4.0	6.0	4.5
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	4.0		1.5	4.0	1.5
Lane Grp Cap (vph)	117	1223		305	1369		144	1933		115	1893	670
v/s Ratio Prot	c0.13	0.24		0.06	c0.30		c0.10	c0.23		0.09	0.18	0.02
v/s Ratio Perm												0.11
v/c Ratio	1.78	0.89		0.66	1.03		1.16	0.57		1.27	0.48	0.28
Uniform Delay, d1	55.8	42.0		52.4	42.5		54.8	28.0		55.8	28.0	20.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.22	0.43	0.45
Incremental Delay, d2	382.2	8.4		4.1	31.8		124.3	1.2		160.5	0.6	0.1
Delay (s)	438.0	50.4		56.6	74.3		179.1	29.2		228.2	12.7	9.4
Level of Service	F	D		E	E		F	С		F	В	A
Approach Delay (s/veh)		111.1			72.0			48.5			36.3	
Approach LOS		F			E			D			D	
Intersection Summary												
HCM 2000 Control Delay (s	•		67.5	Н	CM 2000	Level of S	Service		E			
HCM 2000 Volume to Capa	city ratio		0.90									
Actuated Cycle Length (s)			120.0		um of lost				20.0			
Intersection Capacity Utiliza	tion		86.0%	IC	CU Level o	of Service	•		E			
Analysis Period (min)			15									
c Critical Lano Croun												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	4† ‡		۲	↑ ↑₽		ሻሻ	††	1	ሻሻ	đ₽	
Traffic Volume (vph)	118	1519	384	401	932	80	262	1003	511	76	889	110
Future Volume (vph)	118	1519	384	401	932	80	262	1003	511	76	889	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1703	4797		1687	4757		3367	3539	1522	3433	3411	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1703	4797		1687	4757		3367	3539	1522	3433	3411	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	124	1599	404	422	981	84	276	1056	538	80	936	116
RTOR Reduction (vph)	0	28	0	0	6	0	0	0	135	0	6	0
Lane Group Flow (vph)	124	1975	0	422	1059	0	276	1056	403	80	1046	0
Confl. Peds. (#/hr)	9		7	7		9	3		13	13		3
Confl. Bikes (#/hr)			1						1			1
Heavy Vehicles (%)	6%	4%	6%	7%	8%	2%	4%	2%	3%	2%	3%	11%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8	1 01111	7	4	
Permitted Phases		-		•			Ū	Ū	8		•	
Actuated Green, G (s)	31.6	50.1		25.0	43.5		16.1	45.1	45.1	11.0	40.0	
Effective Green, g (s)	31.6	50.1		25.0	43.5		16.1	45.1	45.1	11.0	40.0	
Actuated g/C Ratio	0.21	0.33		0.16	0.28		0.11	0.30	0.30	0.07	0.26	
Clearance Time (s)	4.5	6.0		4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	352	1573		276	1355		355	1045	449	247	893	
v/s Ratio Prot	0.07	c0.41		c0.25	0.22		c0.08	c0.30	117	0.02	c0.31	
v/s Ratio Perm	0.07	00.11		00.20	0.22		00.00	00.00	0.27	0.02	00.01	
v/c Ratio	0.35	1.26		1.53	0.78		0.78	1.01	0.90	0.32	1.17	
Uniform Delay, d1	51.8	51.3		63.9	50.2		66.6	53.8	51.6	67.3	56.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.2	120.5		255.6	3.4		9.4	30.5	21.1	0.3	89.1	
Delay (s)	52.0	171.8		319.4	53.6		75.9	84.3	72.7	67.6	145.4	
Level of Service	D	F		F	D		E	F	E	E	F	
Approach Delay (s/veh)	5	164.8		·	129.0		_	79.7	_	_	139.9	
Approach LOS		F			F			E			F	
Intersection Summary												
HCM 2000 Control Delay (s	/veh)		128.5	Н	CM 2000	Level of S	Service		F			
HCM 2000 Volume to Capa	city ratio		1.23									
Actuated Cycle Length (s)			152.7	S	um of lost	time (s)			21.5			
Intersection Capacity Utiliza	tion		115.6%	IC	CU Level o	of Service			Н			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	▼ WBL	WBT	WBR	NBL	I NBT	NBR	SBL	▼ SBT	SBR
Lane Configurations		4111	LDK	VVDL	***	WDR	INDL	41)	NDK	JDL		JDK
Traffic Volume (vph)	61	1589	81	111	1337	75	45	50	94	90	38	31
Future Volume (vph)	61	1589	81	111	1337	75	45	50	94	90	38	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0	1700	4.5	6.0	1700	1,00	5.0	1700	1700	5.0	1700
Lane Util. Factor	1.00	0.86		1.00	0.91			0.95			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.93			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1805	6298		1787	4812			3256			1775	
Flt Permitted	0.95	1.00		0.95	1.00			0.85			0.71	
Satd. Flow (perm)	1805	6298		1787	4812			2809			1300	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	64	1673	85	117	1407	79	47	53	99	95	40	33
RTOR Reduction (vph)	0	5	0	0	4	0	0	75	0	0	8	0
Lane Group Flow (vph)	64	1753	0	117	1482	0	0	124	0	0	160	0
Confl. Peds. (#/hr)	9		7	7		9	7		14	14		7
Heavy Vehicles (%)	0%	3%	0%	1%	7%	3%	1%	0%	0%	1%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2		1 0111	8		1 01111	4	
Permitted Phases	•	0		Ŭ	_		8	U		4		
Actuated Green, G (s)	8.3	43.0		12.2	46.9		Ū	22.7		•	22.7	
Effective Green, g (s)	8.3	43.0		12.2	46.9			22.7			22.7	
Actuated g/C Ratio	0.09	0.46		0.13	0.50			0.24			0.24	
Clearance Time (s)	4.5	6.0		4.5	6.0			5.0			5.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5			3.0			3.0	
Lane Grp Cap (vph)	160	2899		233	2416			682			315	
v/s Ratio Prot	0.04	0.28		c0.07	c0.31			002			0.0	
v/s Ratio Perm	0.01	0.20		00.07	00.01			0.04			c0.12	
v/c Ratio	0.40	0.60		0.50	0.61			0.18			0.51	
Uniform Delay, d1	40.2	18.8		37.8	16.7			28.0			30.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.6	0.6			0.1			1.3	
Delay (s)	40.8	19.3		38.4	17.3			28.1			31.8	
Level of Service	D	В		D	В			С			С	
Approach Delay (s/veh)		20.1			18.9			28.1			31.8	
Approach LOS		С			В			С			С	
Intersection Summary												
HCM 2000 Control Delay (s	/veh)		20.5	Н	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capa			0.58									
Actuated Cycle Length (s)			93.4	S	um of lost	time (s)			15.5			
Intersection Capacity Utiliza	ition		85.7%		CU Level of				E			
Analysis Period (min)			15		3 _ 3. 61 (_			

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	^	1	٦	<u>↑</u> ↑₽		۲	**		۲	4† Ъ	
Traffic Volume (vph)	305	1013	356	259	956	272	267	975	212	257	1058	232
Future Volume (vph)	305	1013	356	259	956	272	267	975	212	257	1058	232
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.5	5.0	4.5	5.5		5.0	5.5		4.5	5.5	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	5036	1543	1736	4733		1787	4925		1770	4745	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1787	5036	1543	1736	4733		1787	4925		1770	4745	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	321	1066	375	273	1006	286	281	1026	223	271	1114	244
RTOR Reduction (vph)	0	0	25	0	30	0	0	20	0	0	20	0
Lane Group Flow (vph)	321	1066	350	273	1262	0	281	1229	0	271	1338	0
Confl. Peds. (#/hr)	21		18	18		21	26		14	14		26
Confl. Bikes (#/hr)						1						4
Heavy Vehicles (%)	1%	3%	2%	4%	6%	1%	1%	2%	1%	2%	5%	7%
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	25.0	49.8	74.8	25.0	49.3		25.0	50.5		25.0	50.0	
Effective Green, g (s)	25.0	49.8	74.8	25.0	49.3		25.0	50.5		25.0	50.0	
Actuated g/C Ratio	0.15	0.29	0.44	0.15	0.29		0.15	0.30		0.15	0.29	
Clearance Time (s)	5.0	5.5	5.0	4.5	5.5		5.0	5.5		4.5	5.5	
Vehicle Extension (s)	1.5	4.0	1.5	1.5	4.0		1.5	4.0		1.5	4.0	
Lane Grp Cap (vph)	262	1472	677	254	1370		262	1460		259	1393	
v/s Ratio Prot	c0.18	0.21	0.08	0.16	c0.27		c0.16	0.25		0.15	c0.28	
v/s Ratio Perm			0.15									
v/c Ratio	1.23	0.72	0.52	1.07	0.92		1.07	0.84		1.05	0.96	
Uniform Delay, d1	72.7	54.1	34.6	72.7	58.6		72.7	56.2		72.7	59.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	130.4	1.9	0.3	77.7	10.5		76.2	4.8		68.6	15.7	
Delay (s)	203.0	56.0	34.9	150.4	69.1		148.8	60.9		141.2	74.9	
Level of Service	F	E	С	F	E		F	E		F	E	
Approach Delay (s/veh)		78.3			83.3			77.1			85.9	
Approach LOS		E			F			E			F	
Intersection Summary												
HCM 2000 Control Delay (s	,		81.1	Н	CM 2000	Level of S	Service		F			
HCM 2000 Volume to Capa	icity ratio		1.01									
Actuated Cycle Length (s)			170.3		um of lost				21.0			
Intersection Capacity Utiliza	ation		102.4%	IC	CU Level	of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u>↑</u> ↑₽		٦	<u>↑</u> ↑₽		۲	1	7	ሻሻ	≜ 1⊅	
Traffic Volume (vph)	62	1261	78	130	1134	145	167	295	119	329	306	119
Future Volume (vph)	62	1261	78	130	1134	145	167	295	119	329	306	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	6.0		3.5	6.0		3.5	5.0	5.0	3.5	5.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	4951		1805	4818		1805	1881	1574	3502	3434	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	4951		1805	4818		1805	1881	1574	3502	3434	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	65	1327	82	137	1194	153	176	311	125	346	322	125
RTOR Reduction (vph)	0	5	0	0	13	0	0	0	0	0	35	0
Lane Group Flow (vph)	65	1404	0	137	1334	0	176	311	125	346	413	0
Confl. Peds. (#/hr)	7		2	2		7			3	3		
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	0%	4%	0%	0%	6%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases									4			
Actuated Green, G (s)	11.6	60.5		13.0	61.9		12.0	16.5	16.5	12.0	16.5	
Effective Green, g (s)	11.6	60.5		13.0	61.9		12.0	16.5	16.5	12.0	16.5	
Actuated g/C Ratio	0.10	0.50		0.11	0.52		0.10	0.14	0.14	0.10	0.14	
Clearance Time (s)	3.5	6.0		3.5	6.0		3.5	5.0	5.0	3.5	5.0	
Vehicle Extension (s)	1.5	4.5		1.5	4.5		1.5	4.0	4.0	1.5	4.0	
Lane Grp Cap (vph)	174	2496		195	2485		180	258	216	350	472	
v/s Ratio Prot	0.04	c0.28		c0.08	0.28		0.10	c0.17		c0.10	0.12	
v/s Ratio Perm									0.08			
v/c Ratio	0.37	0.56		0.70	0.54		0.98	1.21	0.58	0.99	0.87	
Uniform Delay, d1	50.8	20.6		51.6	19.5		53.9	51.8	48.5	53.9	50.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.9		9.0	0.8		59.7	123.2	4.5	44.5	16.7	
Delay (s)	51.3	21.5		60.6	20.3		113.6	174.9	52. 9	98.4	67.4	
Level of Service	D	С		E	С		F	F	D	F	E	
Approach Delay (s/veh)		22.8			24.0			132.4			80.9	
Approach LOS		С			С			F			F	
Intersection Summary												
HCM 2000 Control Delay (sa			49.2	H	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capa	city ratio		0.73									
Actuated Cycle Length (s)			120.0		um of lost				18.0			
Intersection Capacity Utiliza	tion		74.7%	IC	CU Level	of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

Uniform Delay, d1 33.6 31.8 30.6 33.4 41.6 12.1 7.4 34.9 6.6 Progression Factor 1.00		٨	_	>	1	+	•	•	t	*	5	1	1
Lane Configurations A	Movomont	FRI	FRT	FRD	▼ WRI	W/RT	WRD	NRI		NRD	SBI	▼ SRT	SBD
Traffic Volume (vph) 48 49 11 24 37 145 3 1359 63 131 1480 36 Ideal Flow (vphp) 1900 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100					VVDL		WDI						
Fulure Volume (vph) 48 49 11 24 37 145 3 1359 63 131 1480 36 ideal Flow (vphp) 1900 100			49		24	37	145		1359				36
Ideal Flow (vph) 1900													
Total Lost time (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 5.0 5.0 5.0 3.0 0.95 Lane Ulii, Factor 1.00 1.00 1.00 1.00 0.95 1.00 1.00 0.975 Fipb, ped/bikes 1.00 <td>· · /</td> <td></td>	· · /												
Lane Util. Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.95 Fipb, pedbikes 1.00 1					1700		1,00						1700
Frpb, ped/bikes 1.00													
Fips, ped/bikes 1.00 0.95 1.00 0.00 0.95 1.00 0.00 0.95 1.00 0.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95													
Fri 1.00 1.00 0.85 0.90 1.00 1.00 0.85 1.00 1.00 FIP rotected 0.95 1.00 1.00 0.99 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 0.30													
Fil Protected 0.95 1.00 1.00 0.99 0.95 1.00 1.00 0.95 1.00 Said. Flow (prot) 1719 1429 1436 1549 1805 3539 1430 1612 3449 Filt Permitted 0.31 1.00 0.97 0.95 1.00 100 0.95 1.00 1612 3449 Said. Flow (perm) 570 1429 1436 1504 1805 3539 1430 1612 3449 Peak-hour factor, PHF 0.95 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>													
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Said. Flow (perm) 570 1429 1436 1504 1805 3539 1430 1612 3449 Peak-hour factor, PHF 0.95 0.13 10 1 0 Lane Group Flow (vph) 51 52 2 0 127 0.8 49.8 11.2 60.2 127 12.7 12.7 12.7 12.7 0.8 49.8 41.2 60.2 4cutated Green, G (s) 1.0 </td <td></td>													
Peak-hour factor, PHF 0.95													
Adj. Flow (vph) 51 52 12 25 39 153 3 1431 66 138 1558 38 RTOR Reduction (vph) 0 0 10 0 90 0 0 16 0 1 0 Lane Group Flow (vph) 51 52 2 0 127 0 3 1431 50 138 1595 0 Confl. Peds. (#/hr) 1 1 -7 8 49.8 49.8 11.2 60.2 2 2 60.2 2 2 7 12.7 12.7 12.7 12.7 0.8 49.8 49.8 11.2 60.2 2 2 13.0 3.0 3.0 3.0 3.0 3.0 <					0.95		0.95						0.95
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Lane Group Flow (vph) 51 52 2 0 127 0 3 1431 50 138 1595 0 Confl. Peds. (#/hr) 1 1 7 7 7 7 7 Heavy Vehicles (%) 5% 33% 11% 2% 25% 8% 0% 2% 9% 12% 3% 57% Turn Type Perm NA Perm Perm NA													
Confl. Peds. (#/hr) 1 1 7 7 Heary Vehicles (%) 5% 33% 11% 2% 25% 8% 0% 2% 9% 12% 3% 57% Turn Type Perm NA So So So So So So So So So <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td></t<>												-	
Heavy Vehicles (%) 5% 33% 11% 2% 25% 8% 0% 2% 9% 12% 3% 57% Turn Type Perm NA Perm NA Prot NA Perm NA Prot NA Perm Perm NA Perm Perm NA Perm Perm NA Perm A 4 4 1 6 5 2 Perm NA Perm NA Perm NA Perm NA Perm NA Perm NA Na 3 Na Na Na Na Na							-	-					
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Protected Phases 4 4 1 6 5 2 Permitted Phases 4 4 4 6 6 Actuated Green, G (s) 12.7 12.7 12.7 12.7 0.8 49.8 49.8 11.2 60.2 Effective Green, g (s) 12.7 12.7 12.7 0.8 49.8 49.8 11.2 60.2 Actuated g/C Ratio 0.15 0.15 0.15 0.01 0.59 0.50 3.0 3.0 Clearance Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 5.0 5.0 5.0 5.0 Lane Grp Cap (vph) 85 214 215 225 17 2080 840 213 2451 v/s Ratio Prot 0.04 0.00 c0.40 c0.09 0.46 v/s Ratio Prot 0.04 c0.09 0.06 0.65 0.65 Uniform Delay, d1 33.6 31.8 30.6 33.4 41.6 12.1 7.4 34.9 6.6 Progression Factor 1.00 1.00 1.00													
Permitted Phases 4 4 4 6 Actuated Green, G (s) 12.7 12.7 12.7 0.8 49.8 49.8 11.2 60.2 Effective Green, g (s) 12.7 12.7 12.7 0.8 49.8 49.8 11.2 60.2 Actuated g/C Ratio 0.15 0.15 0.15 0.17 0.59 0.59 0.13 0.71 Clearance Time (s) 3.0 3.0 3.0 3.0 3.0 5.0 5.0 3.0 5.0 Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 2451 V/s Ratio Prot 0.04 0.00 0.08 0.03 0.65 0.65 V/s Ratio Perm 0.09 0.00 0.08 0.03 0.06 0.65 0.65 Uniform Delay, d1 33.6 31.8 30.6 33.4 41.6 12.1 7.4 34.9 6.6 Progression Factor 1.00 1.00 1.00 <td></td>													
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Actuated g/C Ratio 0.15 0.15 0.15 0.01 0.59 0.59 0.13 0.71 Clearance Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 5.0 5.0 3.0 5.0 Vehicle Extension (s) 3.0 3.0 3.0 3.0 1.5 4.5 4.5 1.5 4.5 Lane Grp Cap (vph) 85 214 215 225 17 2080 840 213 2451 v/s Ratio Prot 0.04 0.00 0.08 0.03													
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Vehicle Extension (s) 3.0 3.0 3.0 1.5 4.5 4.5 1.5 4.5 Lane Grp Cap (vph) 85 214 215 225 17 2080 840 213 2451 v/s Ratio Prot 0.04 0.00 c0.40 c0.09 0.46 v/s Ratio Perm c0.09 0.00 0.08 0.03													
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Uniform Delay, d1 33.6 31.8 30.6 33.4 41.6 12.1 7.4 34.9 6.6 Progression Factor 1.00	v/c Ratio		0.24					0.18	0.69		0.65	0.65	
Progression Factor 1.00 1													
Incremental Delay, d2 11.4 0.6 0.0 3.2 1.8 1.1 0.1 5.0 0.8 Delay (s) 45.0 32.4 30.7 36.6 43.4 13.2 7.5 39.9 7.4 Level of Service D C C D D B A D A Approach Delay (s/veh) 37.8 36.6 13.0 9.9 Approach LOS D D B A A Intersection Summary HCM 2000 Control Delay (s/veh) 13.8 HCM 2000 Level of Service B 4 HCM 2000 Volume to Capacity ratio 0.67 0.67 11.0 11.0 11.0 Intersection Capacity Utilization 75.1% ICU Level of Service D 11.0 11.0	3												
Delay (s) 45.0 32.4 30.7 36.6 43.4 13.2 7.5 39.9 7.4 Level of Service D C C D D B A D A Approach Delay (s/veh) 37.8 36.6 13.0 9.9 Approach LOS D D B A Intersection Summary D D A HCM 2000 Control Delay (s/veh) 13.8 HCM 2000 Level of Service B HCM 2000 Volume to Capacity ratio 0.67													
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Approach LOSDDBAIntersection SummaryHCM 2000 Control Delay (s/veh)13.8HCM 2000 Level of ServiceBHCM 2000 Volume to Capacity ratio0.67Actuated Cycle Length (s)84.7Sum of lost time (s)11.0Intersection Capacity Utilization75.1%ICU Level of ServiceD		D		С					В		D	А	
Intersection Summary Intersection Summary HCM 2000 Control Delay (s/veh) 13.8 HCM 2000 Level of Service B HCM 2000 Volume to Capacity ratio 0.67	Approach Delay (s/veh)		37.8			36.6			13.0			9.9	
HCM 2000 Control Delay (s/veh)13.8HCM 2000 Level of ServiceBHCM 2000 Volume to Capacity ratio0.6711.0Actuated Cycle Length (s)84.7Sum of lost time (s)11.0Intersection Capacity Utilization75.1%ICU Level of ServiceD	Approach LOS		D			D			В			А	
HCM 2000 Volume to Capacity ratio0.67Actuated Cycle Length (s)84.7Sum of lost time (s)11.0Intersection Capacity Utilization75.1%ICU Level of ServiceD	Intersection Summary												
HCM 2000 Volume to Capacity ratio0.67Actuated Cycle Length (s)84.7Sum of lost time (s)11.0Intersection Capacity Utilization75.1%ICU Level of ServiceD	HCM 2000 Control Delay (s	/veh)		13.8	H	CM 2000	Level of S	Service		В			
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Intersection Capacity Utilization 75.1% ICU Level of Service D	Actuated Cycle Length (s)	, 			S	um of lost	t time (s)			11.0			
	J 0 ()	ation											
	Analysis Period (min)			15									

HCM Signalized Intersection Capacity Analysis 6: Paramount Boulevard & Rex Rd

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4	1	٦.	↑ Ъ		<u> </u>	đ₽	
Traffic Volume (vph)	47	62	66	99	22	14	6	1405	97	98	1368	16
Future Volume (vph)	47	62	66	99	22	14	6	1405	97	98	1368	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0	4.0	5.5		4.0	5.5	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00	0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt		0.95			1.00	0.85	1.00	0.99		1.00	1.00	
Flt Protected		0.99			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1737			1669	1447	1399	3492		1703	3492	
Flt Permitted		0.87			0.52	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1527			902	1447	1399	3492		1703	3492	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	49	65	69	104	23	15	6	1479	102	103	1440	17
RTOR Reduction (vph)	0	18	0	0	0	12	0	3	0	0	0	0
Lane Group Flow (vph)	0	165	0	0	127	3	6	1578	0	103	1457	0
Confl. Peds. (#/hr)	3					3						
Heavy Vehicles (%)	2%	2%	3%	5%	29%	10%	29%	2%	8%	6%	3%	21%
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	1 01111	4		1 Onn	8	1 Onn	5	2		1	6	
Permitted Phases	4			8	0	8	0	2			Ū	
Actuated Green, G (s)		20.2		U	20.2	20.2	1.6	64.2		11.8	74.4	
Effective Green, g (s)		20.2			20.2	20.2	1.6	64.2		11.8	74.4	
Actuated g/C Ratio		0.18			0.18	0.18	0.01	0.58		0.11	0.67	
Clearance Time (s)		5.0			5.0	5.0	4.0	5.5		4.0	5.5	
Vehicle Extension (s)		3.0			3.0	3.0	1.5	4.0		1.5	4.0	
Lane Grp Cap (vph)		278			164	264	20	2025		181	2346	
v/s Ratio Prot		270			104	204	0.00	c0.45		c0.06	0.42	
v/s Ratio Perm		0.11			c0.14	0.00	0.00	0.45		0.00	0.42	
v/c Ratio		0.11			0.77	0.00	0.30	0.78		0.57	0.62	
Uniform Delay, d1		41.5			43.1	37.1	54.0	17.8		47.0	10.2	
Progression Factor		1.00			43.1	1.00	1.00	1.00		1.00	1.00	
0		3.4			20.1	0.0	3.1	2.1		2.4	0.6	
Incremental Delay, d2		3.4 44.9			63.1	37.1	57.1	19.9		2.4 49.5	10.8	
Delay (s) Level of Service		44.9 D			03.1 E	57.1 D	57.1 E	19.9 B		49.5 D	10.8 B	
		44.9				U	E			U	ы 13.4	
Approach Delay (s/veh)		44.9 D			60.4 E			20.1 C				
Approach LOS		D			E			U			В	
Intersection Summary	(uob)		20.0		CM 2000	Lough of (Convice		D			
HCM 2000 Control Delay (s			20.0	H		Level of S	Service		В			
HCM 2000 Volume to Capa	city fallo		0.75	C.	um of los	time (a)			14 5			
Actuated Cycle Length (s)	tion		110.7		um of los				14.5			
Intersection Capacity Utiliza	lion		80.9%	IC	U Level (of Service			D			
Analysis Period (min)			15									

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Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	¥		3	†††	≜ ‡}		
Traffic Volume (vph)	119	197	165	1374	1326	108	
Future Volume (vph)	119	197	165	1374	1326	108	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	4.5		4.0	4.6	4.6		
Lane Util. Factor	1.00		1.00	0.91	0.95		
Frpb, ped/bikes	1.00		1.00	1.00	1.00		
Flpb, ped/bikes	1.00		1.00	1.00	1.00		
Frt	0.92		1.00	1.00	0.99		
Flt Protected	0.98		0.95	1.00	1.00		
Satd. Flow (prot)	1708		1787	5085	3465		
Flt Permitted	0.98		0.95	1.00	1.00		
Satd. Flow (perm)	1708		1787	5085	3465		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	
Adj. Flow (vph)	125	207	174	1446	1396	114	
RTOR Reduction (vph)	79	0	0	0	6	0	
Lane Group Flow (vph)	253	0	174	1446	1504	0	
Confl. Peds. (#/hr)	9		5			5	
Heavy Vehicles (%)	0%	0%	1%	2%	3%	0%	
Turn Type	Prot		Prot	NA	NA		
Protected Phases	4		5	2	6		
Permitted Phases			Ū	_	Ŭ		
Actuated Green, G (s)	16.5		5.1	45.9	36.8		
Effective Green, g (s)	16.5		5.1	45.9	36.8		
Actuated g/C Ratio	0.23		0.07	0.64	0.51		
Clearance Time (s)	4.5		4.0	4.6	4.6		
Vehicle Extension (s)	4.0		0.2	2.0	2.0		
Lane Grp Cap (vph)	394		127	3264	1783		
v/s Ratio Prot	c0.15		c0.10	0.28	c0.43		
v/s Ratio Perm	00.10		00110	0.20	00.10		
v/c Ratio	0.64		1.37	0.44	0.84		
Uniform Delay, d1	24.8		33.2	6.4	14.9		
Progression Factor	1.00		1.00	1.00	1.00		
Incremental Delay, d2	4.0		208.5	0.0	3.7		
Delay (s)	28.8		241.7	6.4	18.6		
Level of Service	C		F	A	В		
Approach Delay (s/veh)	28.8		•	31.7	18.6		
Approach LOS	С			С	В		
Intersection Summary							
HCM 2000 Control Delay (s/veh)		25.7	H	CM 2000	Level of Service	
HCM 2000 Volume to Capa			0.83	11	2000		
Actuated Cycle Length (s)			71.5	S	um of lost	time (s)	
Intersection Capacity Utiliz	ation		78.9%		U Level a		
Analysis Period (min)			15				
c Critical Lano Croup			15				

HCM Signalized Intersection Capacity Analysis 8: Rosemead Boulevard & Rex Rd

Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBI Traffic Volume (vph) 155 111 170 55 52 194 64 1271 81 138 1164 Inter Volume (vph) 155 111 170 55 52 194 64 1271 81 138 1164 Ideal Lost time (vph) 1900 1100 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	~
Traffic Volume (vph) 155 111 170 55 52 194 64 1271 81 138 114 Future Volume (vph) 155 111 170 55 52 194 64 1271 81 138 1164 Geal Flow (vphp) 1900 1338 110 100	SBR
Traffic Volume (vph) 155 111 170 55 52 194 64 1271 81 138 114 Future Volume (vph) 155 111 170 55 52 194 64 1271 81 138 1164 Ideal Flow (vphp) 1900 1200 100 1.00 1	1
Ideal Flow (vphp)19001	108
Total Lost time (s) 4.5 4.5 4.5 4.5 4.5 4.6 6.0 4.0 6.0 Lane Ulli. Factor 1.00 1.00 1.00 1.00 0.98 1.00 1.00 0.95 Frpb, ped/bikes 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 <	108
Lane Util. Factor 1.00 1.00 1.00 1.00 1.00 0.95 1.00 0.95 Frpb, ped/bikes 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95	1900
Frpb, ped/bikes 1.00 1.0	6.0
Flpb, ped/bikes1.001.001.001.001.001.001.001.001.00Frt1.001.000.851.000.881.000.991.001.00Flt Protected0.951.001.000.951.000.951.000.951.00Std. Flow (prot)177018811509180516383367350718053539Flt Permitted0.951.001.000.951.000.951.000.951.00Satd. Flow (perm)177018811509180516383367350718053539Peak-hour factor, PHF0.950.950.950.950.950.950.950.950.950.950.950.95RTOR Reduction (vph)001210124003000Laes (roup Flow (vph)1631175858135067142001451225Confl. Peds. (#hr)8-834445335216666666666<	1.00
Frt 1.00 1.00 0.85 1.00 0.08 1.00 0.99 1.00 1.00 FIt Protected 0.95 1.00 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 <td>0.97</td>	0.97
Fit Protected 0.95 1.00 1.00 0.95 1.00 0.95 1.00 0.95 1.00 Satd. Flow (ptrot) 1770 1881 1509 1805 1638 33367 3507 1805 3539 Fit Permitted 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 Satd. Flow (perm) 1770 1881 1509 1805 1638 3367 3507 1805 3539 Peak-hour factor, PHF 0.95	1.00
Satd. Flow (prot) 1770 1881 1509 1805 1638 3367 3507 1805 3539 Flt Permitted 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 0.	0.85
Fit Permitted 0.95 1.00 1.00 0.95 1.00 0.95 1.00 0.95 1.00 Satd. Flow (perm) 1770 1881 1509 1805 1638 3367 3507 1805 3539 Peak-hour factor, PHF 0.95 <t< td=""><td>1.00</td></t<>	1.00
Satd. Flow (perm) 1770 1881 1509 1805 1638 3367 3507 1805 3539 Peak-hour factor, PHF 0.95	1378
Peak-hour factor, PHF 0.95	1.00
Adj. Flow (vph) 163 117 179 58 55 204 67 1338 85 145 1225 RTOR Reduction (vph) 0 0 121 0 124 0 0 3 0 0 0 Lane Group Flow (vph) 163 117 58 58 135 0 67 1420 0 145 1225 Confl. Peds. (#/hr) 8	1378
RTOR Reduction (vph) 0 0 121 0 124 0 0 3 0 0 0 Lane Group Flow (vph) 163 117 58 58 135 0 67 1420 0 145 1225 Confl. Peds. (#hr) 8 3 4 4 4 4 Heavy Vehicles (%) 2% 1% 7% 0% 2% 0% 4% 2% 0% 0% 2% Turn Type Split NA custom Split NA Prot NA Prot NA Permitted Phases 4 4 5 3 3 5 2 1 6 Actuated Green, G (s) 16.9 16.7 15.0 15.0 6.3 55.5 13.6 62.8 Effective Green, g (s) 16.9 27.7 15.0 15.0 6.3 55.5 13.6 62.8 Actuated g/C Ratio 0.14 0.14 0.23	0.95
Lane Group Flow (vph) 163 117 58 58 135 0 67 1420 0 145 1225 Confl. Peds. (#hr) 8 3 4 4 4 Heavy Vehicles (%) 2% 1% 7% 0% 2% 0% 4% 2% 0% 0% 2% Turn Type Split NA custom Split NA Prot NA Prot NA Permitted Phases 4 4 4.5 3 3 5 2 1 6 Actuated Green, G (s) 16.9 16.9 27.7 15.0 15.0 6.3 55.5 13.6 62.8 Effective Green, g (s) 16.9 16.9 27.7 15.0 15.0 6.3 55.5 13.6 62.8 Actuated g/C Ratio 0.14 0.14 0.23 0.13 0.13 0.05 0.46 0.11 0.52 Clearance Time (s) 4.5 4.5 4.5 <td>114</td>	114
Confl. Peds. (#/hr) 8 3 4 4 Heavy Vehicles (%) 2% 1% 7% 0% 2% 0% 4% 2% 0% 0% 2% Turn Type Split NA custom Split NA Prot NA Prot NA Protected Phases 4 4 4 5 3 3 5 2 1 6 Permitted Phases 4 4 4 5 3 3 5 2 1 6 Permitted Phases 4 4 4 5 3 3 5 2 1 6 Protected Phases 4 4 4 5 3 3 5 2 1 6 Permitted Phases 4 4 4 5 3 3 5 5 13.6 62.8 Effective Green, g (s) 16.9 16.9 27.7 15.0 15.0 0.6.0	43
Heavy Vehicles (%) 2% 1% 7% 0% 2% 0% 4% 2% 0% 0% 2% Turn Type Split NA custom Split NA Prot NA Prot NA Protected Phases 4 4 4.5 3 3 5 2 1 66 Permitted Phases 4 4.5 3 3 5 2 1 66 Permitted Phases 4 4.5 3 3 5.5 13.6 62.8 Effective Green, g (s) 16.9 16.9 27.7 15.0 15.0 6.3 55.5 13.6 62.8 Actuated g/C Ratio 0.14 0.14 0.23 0.13 0.13 0.05 0.46 0.11 0.52 Clearance Time (s) 4.5 4.5 4.5 4.0 6.0 4.0 6.0 Vehicle Extension (s) 3.0 3.0 3.0 1.5 4.0 1.5 4	71
Turn Type Split NA custom Split NA Prot NA Prot NA Protected Phases 4 4 4 5 3 3 5 2 1 6 Permitted Phases 4 4 4 5 3 3 5 2 1 6 Permitted Phases 4 4 5 3 3 5 2 1 6 Actuated Green, G (s) 16.9 16.9 27.7 15.0 15.0 6.3 55.5 13.6 62.8 Actuated g/C Ratio 0.14 0.14 0.23 0.13 0.13 0.05 0.46 0.11 0.52 Clearance Time (s) 4.5 4.5 4.5 4.5 4.0 6.0 4.0 6.0 Vehicle Extension (s) 3.0 3.0 3.0 3.0 1.5 4.0 1.5 4.0 Lane Grp Cap (vph) 249 264 348 225	3
Protected Phases 4 4 4 5 3 3 5 2 1 66 Permitted Phases 4 4 4 5 3 3 5 2 1 66 Actuated Green, G (s) 16.9 16.9 27.7 15.0 15.0 6.3 55.5 13.6 62.8 Effective Green, g (s) 16.9 16.9 27.7 15.0 15.0 6.3 55.5 13.6 62.8 Actuated g/C Ratio 0.14 0.14 0.23 0.13 0.13 0.05 0.46 0.11 0.52 Clearance Time (s) 4.5 4.5 4.5 4.5 4.0 6.0 4.0 6.0 Vehicle Extension (s) 3.0 3.0 3.0 3.0 1.5 4.0 1.5 4.0 Lane Grp Cap (vph) 249 264 348 225 204 176 1621 204 1852 v/s Ratio Perm	14%
Permitted Phases4Actuated Green, G (s)16.916.927.715.015.06.355.513.662.8Effective Green, g (s)16.916.927.715.015.06.355.513.662.8Actuated g/C Ratio0.140.140.230.130.130.050.460.110.52Clearance Time (s)4.54.54.54.54.06.04.06.0Vehicle Extension (s)3.03.03.03.01.54.01.54.0Lane Grp Cap (vph)24926434822520417616212041852v/s Ratio Protc0.090.060.040.03c0.080.02c0.41c0.080.35v/c Ratio0.650.440.170.260.660.380.880.710.66Uniform Delay, d148.847.236.947.550.155.029.151.320.9Progression Factor1.001.001.001.001.420.511.001.00Incremental Delay, d26.11.20.20.67.80.34.59.31.9Delay (s)54.948.437.248.157.878.219.360.622.7Level of ServiceDDDEEBECCApproach Delay (s/veh)46.356.122.025.825.825.8 <td>Perm</td>	Perm
Actuated Green, G (s)16.916.927.715.015.06.355.513.662.8Effective Green, g (s)16.916.927.715.015.06.355.513.662.8Actuated g/C Ratio0.140.140.230.130.130.050.460.110.52Clearance Time (s)4.54.54.54.54.06.04.06.0Vehicle Extension (s)3.03.03.03.01.54.01.54.0Lane Grp Cap (vph)24926434822520417616212041852v/s Ratio Protc0.090.060.040.03c0.080.02c0.41c0.080.35v/c Ratio0.650.440.170.260.660.380.880.710.66Uniform Delay, d148.847.236.947.550.155.029.151.320.9Progression Factor1.001.001.001.001.420.511.001.00Incremental Delay, d26.11.20.20.67.80.34.59.31.9Delay (s)54.948.437.248.157.878.219.360.622.7Level of ServiceDDDEEBECCApproach LOSDECC22.025.825.825.925.8	
Effective Green, g (s) 16.9 16.9 27.7 15.0 15.0 6.3 55.5 13.6 62.8 Actuated g/C Ratio 0.14 0.14 0.23 0.13 0.13 0.05 0.46 0.11 0.52 Clearance Time (s) 4.5 4.5 4.5 4.5 4.0 6.0 4.0 6.0 Vehicle Extension (s) 3.0 3.0 3.0 3.0 1.5 4.0 1.5 4.0 Lane Grp Cap (vph) 249 264 348 225 204 176 1621 204 1852 v/s Ratio Prot c0.09 0.06 0.04 0.03 c0.08 0.02 c0.41 c0.08 0.35 v/s Ratio Perm v/c Ratio 0.65 0.44 0.17 0.26 0.66 0.38 0.88 0.71 0.66 Uniform Delay, d1 48.8 47.2 36.9 47.5 50.1 55.0 29.1 51.3 20.9 Progression Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	6
Actuated g/C Ratio 0.14 0.14 0.23 0.13 0.13 0.05 0.46 0.11 0.52 Clearance Time (s) 4.5 4.5 4.5 4.5 4.5 4.0 6.0 4.0 6.0 Vehicle Extension (s) 3.0 3.0 3.0 3.0 1.5 4.0 1.5 4.0 Lane Grp Cap (vph) 249 264 348 225 204 176 1621 204 1852 v/s Ratio Prot c0.09 0.06 0.04 0.03 c0.08 0.02 c0.41 c0.08 0.35 v/s Ratio Perm v/c Ratio 0.65 0.44 0.17 0.26 0.66 0.38 0.88 0.71 0.66 Uniform Delay, d1 48.8 47.2 36.9 47.5 50.1 55.0 29.1 51.3 20.9 Progression Factor 1.00 1.00 1.00 1.00 1.42 0.51 1.00 1.00 Incremental Delay, d2 6.1 1.2 0.2 0.6 7.8 0.3 4.5 9.3 1.9	62.8
Clearance Time (s) 4.5 4.5 4.5 4.5 4.0 6.0 4.0 6.0 Vehicle Extension (s) 3.0 3.0 3.0 3.0 1.5 4.0 1.5 4.0 Lane Grp Cap (vph) 249 264 348 225 204 176 1621 204 1852 v/s Ratio Prot c0.09 0.06 0.04 0.03 c0.08 0.02 c0.41 c0.08 0.35 v/s Ratio Perm v/c Ratio 0.65 0.44 0.17 0.26 0.66 0.38 0.88 0.71 0.66 Uniform Delay, d1 48.8 47.2 36.9 47.5 50.1 55.0 29.1 51.3 20.9 Progression Factor 1.00<	62.8
Vehicle Extension (s) 3.0 3.0 3.0 3.0 1.5 4.0 1.5 4.0 Lane Grp Cap (vph) 249 264 348 225 204 176 1621 204 1852 v/s Ratio Prot c0.09 0.06 0.04 0.03 c0.08 0.02 c0.41 c0.08 0.35 v/s Ratio Perm v/c Ratio 0.65 0.44 0.17 0.26 0.66 0.38 0.88 0.71 0.66 Uniform Delay, d1 48.8 47.2 36.9 47.5 50.1 55.0 29.1 51.3 20.9 Progression Factor 1.00 1.00 1.00 1.00 1.42 0.51 1.00 1.00 Incremental Delay, d2 6.1 1.2 0.2 0.6 7.8 0.3 4.5 9.3 1.9 Delay (s) 54.9 48.4 37.2 48.1 57.8 78.2 19.3 60.6 22.7 Level of Service D	0.52
Lane Grp Cap (vph) 249 264 348 225 204 176 1621 204 1852 v/s Ratio Prot c0.09 0.06 0.04 0.03 c0.08 0.02 c0.41 c0.08 0.35 v/s Ratio Perm v/c Ratio 0.65 0.44 0.17 0.26 0.66 0.38 0.88 0.71 0.66 Uniform Delay, d1 48.8 47.2 36.9 47.5 50.1 55.0 29.1 51.3 20.9 Progression Factor 1.00 1.00 1.00 1.00 1.00 1.42 0.51 1.00 1.00 Incremental Delay, d2 6.1 1.2 0.2 0.6 7.8 0.3 4.5 9.3 1.9 Delay (s) 54.9 48.4 37.2 48.1 57.8 78.2 19.3 60.6 22.7 Level of Service D D D E E B E C Approach Delay (s/veh) 46.3 <td>6.0</td>	6.0
v/s Ratio Prot c0.09 0.06 0.04 0.03 c0.08 0.02 c0.41 c0.08 0.35 v/s Ratio Perm v/c Ratio 0.65 0.44 0.17 0.26 0.66 0.38 0.88 0.71 0.66 Uniform Delay, d1 48.8 47.2 36.9 47.5 50.1 55.0 29.1 51.3 20.9 Progression Factor 1.00 1.00 1.00 1.00 1.00 1.42 0.51 1.00 1.00 Incremental Delay, d2 6.1 1.2 0.2 0.6 7.8 0.3 4.5 9.3 1.9 Delay (s) 54.9 48.4 37.2 48.1 57.8 78.2 19.3 60.6 22.7 Level of Service D D D E E B E C Approach Delay (s/veh) 46.3 56.1 22.0 25.8 Approach LOS D E C C C	4.0
v/s Ratio Perm v/c Ratio 0.65 0.44 0.17 0.26 0.66 0.38 0.88 0.71 0.66 Uniform Delay, d1 48.8 47.2 36.9 47.5 50.1 55.0 29.1 51.3 20.9 Progression Factor 1.00 1.00 1.00 1.00 1.42 0.51 1.00 1.00 Incremental Delay, d2 6.1 1.2 0.2 0.6 7.8 0.3 4.5 9.3 1.9 Delay (s) 54.9 48.4 37.2 48.1 57.8 78.2 19.3 60.6 22.7 Level of Service D D D E E B E C Approach Delay (s/veh) 46.3 56.1 22.0 25.8 2	721
v/c Ratio 0.65 0.44 0.17 0.26 0.66 0.38 0.88 0.71 0.66 Uniform Delay, d1 48.8 47.2 36.9 47.5 50.1 55.0 29.1 51.3 20.9 Progression Factor 1.00 1.00 1.00 1.00 1.42 0.51 1.00 1.00 Incremental Delay, d2 6.1 1.2 0.2 0.6 7.8 0.3 4.5 9.3 1.9 Delay (s) 54.9 48.4 37.2 48.1 57.8 78.2 19.3 60.6 22.7 Level of Service D D D E E B E C Approach Delay (s/veh) 46.3 56.1 22.0 25.8 C C C C	
Uniform Delay, d1 48.8 47.2 36.9 47.5 50.1 55.0 29.1 51.3 20.9 Progression Factor 1.00 1.00 1.00 1.00 1.00 1.42 0.51 1.00 1.00 Incremental Delay, d2 6.1 1.2 0.2 0.6 7.8 0.3 4.5 9.3 1.9 Delay (s) 54.9 48.4 37.2 48.1 57.8 78.2 19.3 60.6 22.7 Level of Service D D D E E B E C Approach Delay (s/veh) 46.3 56.1 22.0 25.8 25.8 Approach LOS D E E C C C	0.05
Progression Factor 1.00 <td>0.10</td>	0.10
Incremental Delay, d2 6.1 1.2 0.2 0.6 7.8 0.3 4.5 9.3 1.9 Delay (s) 54.9 48.4 37.2 48.1 57.8 78.2 19.3 60.6 22.7 Level of Service D D D E E B E C Approach Delay (s/veh) 46.3 56.1 22.0 25.8 Approach LOS D E C C C	14.4
Delay (s) 54.9 48.4 37.2 48.1 57.8 78.2 19.3 60.6 22.7 Level of Service D D D E E B E C Approach Delay (s/veh) 46.3 56.1 22.0 25.8 Approach LOS D E C C	1.00
Level of ServiceDDDDEEBECApproach Delay (s/veh)46.356.122.025.8Approach LOSDECC	
Approach Delay (s/veh) 46.3 56.1 22.0 25.8 Approach LOS D E C C	14.6
Approach LOS D E C C	В
Intersection Cummon	
Intersection Summary	
HCM 2000 Control Delay (s/veh) 29.3 HCM 2000 Level of Service C	
HCM 2000 Volume to Capacity ratio 0.78	
Actuated Cycle Length (s)120.0Sum of lost time (s)19.0	
Intersection Capacity Utilization 86.4% ICU Level of Service E	
Analysis Period (min) 15	

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u></u> ↑↑₽		ሻሻ	<u>↑</u> ↑₽		1	<u>↑</u> ↑₽		۳	***	1
Traffic Volume (vph)	259	1122	216	184	864	86	124	1004	165	67	1065	81
Future Volume (vph)	259	1122	216	184	864	86	124	1004	165	67	1065	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	5.5		4.0	5.5		4.0	6.0		4.0	6.0	4.5
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1719	4849		3367	4844		1671	4973		1626	5085	1515
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1719	4849		3367	4844		1671	4973		1626	5085	1515
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	273	1181	227	194	909	91	131	1057	174	71	1121	85
RTOR Reduction (vph)	0	23	0	0	10	0	0	17	0	0	0	32
Lane Group Flow (vph)	273	1385	0	194	990	0	131	1214	0	71	1121	53
Confl. Peds. (#/hr)	4		7	7		4	7		3	3		7
Heavy Vehicles (%)	5%	4%	4%	4%	6%	0%	8%	2%	1%	11%	2%	5%
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	14.5	39.8		10.3	35.1		10.4	42.4		8.0	40.0	54.5
Effective Green, g (s)	14.5	39.8		10.3	35.1		10.4	42.4		8.0	40.0	54.5
Actuated g/C Ratio	0.12	0.33		0.09	0.29		0.09	0.35		0.07	0.33	0.45
Clearance Time (s)	4.5	5.5		4.0	5.5		4.0	6.0		4.0	6.0	4.5
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	4.0		1.5	4.0	1.5
Lane Grp Cap (vph)	207	1608		289	1416		144	1757		108	1695	688
v/s Ratio Prot	c0.16	c0.29		0.06	0.20		c0.08	c0.24		0.04	0.22	0.01
v/s Ratio Perm												0.03
v/c Ratio	1.32	0.86		0.67	0.70		0.91	0.69		0.66	0.66	0.08
Uniform Delay, d1	52.8	37.5		53.2	37.8		54.3	33.2		54.7	34.2	18.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.20	0.54	0.48
Incremental Delay, d2	173.3	5.2		4.8	1.7		47.6	2.3		8.5	1.6	0.0
Delay (s)	226.0	42.7		58.0	39.4		101.9	35.4		74.0	20.2	8.9
Level of Service	F	D		E	D		F	D		E	С	A
Approach Delay (s/veh)		72.4			42.4			41.8			22.4	
Approach LOS		E			D			D			С	
Intersection Summary												
HCM 2000 Control Delay (s			46.8	Н	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capa	city ratio		0.89									
Actuated Cycle Length (s)			120.0		um of lost				20.0			
Intersection Capacity Utiliza	ation		79.9%	IC	CU Level o	of Service	;		D			
Analysis Period (min)			15									
c Critical Lana Croup												

c Critical Lane Group

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	***	7	ሻሻ	<u>↑</u> ↑₽		ኘኘ	† †	7	ኘኘ	≜ 1⊅	
Traffic Volume (vph)	104	977	335	409	1632	67	398	503	295	103	554	182
Future Volume (vph)	104	977	335	409	1632	67	398	503	295	103	554	182
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0	6.0	4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1641	4715	1473	3242	4867		3303	3406	1350	3433	3298	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1641	4715	1473	3242	4867		3303	3406	1350	3433	3298	
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.85	0.85	0.85	0.92	0.92	0.92
Adj. Flow (vph)	121	1136	390	435	1736	71	468	592	347	112	602	198
RTOR Reduction (vph)	0	0	144	0	3	0	0	0	163	0	21	0
Lane Group Flow (vph)	121	1136	246	435	1804	0	468	592	184	112	779	0
Confl. Peds. (#/hr)	9		9	9		9	3		14	14		3
Heavy Vehicles (%)	10%	10%	7%	8%	6%	2%	6%	6%	16%	2%	4%	8%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Actuated Green, G (s)	12.7	51.3	51.3	23.4	62.0		22.9	48.9	48.9	11.0	37.0	
Effective Green, g (s)	12.7	51.3	51.3	23.4	62.0		22.9	48.9	48.9	11.0	37.0	
Actuated g/C Ratio	0.08	0.33	0.33	0.15	0.40		0.15	0.31	0.31	0.07	0.24	
Clearance Time (s)	4.5	6.0	6.0	4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	133	1549	484	485	1933		484	1066	422	241	781	
v/s Ratio Prot	c0.07	0.24		0.13	c0.37		c0.14	0.17		0.03	c0.24	
v/s Ratio Perm			0.17						0.14			
v/c Ratio	0.91	0.73	0.51	0.90	0.93		0.97	0.56	0.43	0.46	1.00	
Uniform Delay, d1	71.1	46.4	42.2	65.2	45.1		66.2	44.6	42.6	69.7	59.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	50.1	2.1	1.4	18.5	9.1		32.0	0.9	1.2	0.5	31.5	
Delay (s)	121.2	48.4	43.7	83.7	54.2		98.2	45.5	43.9	70.2	91.0	
Level of Service	F	D	D	F	D		F	D	D	E	F	
Approach Delay (s/veh)		52.7			59.9			62.6			88.5	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay (s	s/veh)		62.8	Н	CM 2000	Level of S	Service		E			
HCM 2000 Volume to Capa			0.95									
Actuated Cycle Length (s)	, 		156.1	S	um of lost	t time (s)			21.5			
Intersection Capacity Utiliza	ation		93.5%		CU Level o				F			
Analysis Period (min)			15									
c Critical Lano Croup												

c Critical Lane Group

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	^	*	ኘኘ	^	۲	2	^	1	ኘሻ	***	1
Traffic Volume (vph)	198	969	326	233	1690	172	225	792	223	211	875	147
Future Volume (vph)	198	969	326	233	1690	172	225	792	223	211	875	147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.5	5.0	4.5	5.5	5.5	5.0	5.5	5.5	4.5	5.5	5.5
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3183	4715	1525	3367	4893	1517	1787	5036	1501	3433	4940	1429
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3183	4715	1525	3367	4893	1517	1787	5036	1501	3433	4940	1429
Peak-hour factor, PHF	0.85	0.85	0.85	0.93	0.93	0.93	0.84	0.84	0.84	0.87	0.87	0.87
Adj. Flow (vph)	233	1140	384	251	1817	185	268	943	265	243	1006	169
RTOR Reduction (vph)	0	0	76	0	0	90	0	0	195	0	0	119
Lane Group Flow (vph)	233	1140	308	251	1817	95	268	943	70	243	1006	50
Confl. Peds. (#/hr)	9		9	9		9	13		2	2		13
Confl. Bikes (#/hr)			1			1						1
Heavy Vehicles (%)	10%	10%	4%	4%	6%	4%	1%	3%	6%	2%	5%	10%
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	12.0	44.8	55.8	13.4	45.7	45.7	11.0	32.5	32.5	13.0	34.0	34.0
Effective Green, g (s)	12.0	44.8	55.8	13.4	45.7	45.7	11.0	32.5	32.5	13.0	34.0	34.0
Actuated g/C Ratio	0.10	0.36	0.45	0.11	0.37	0.37	0.09	0.26	0.26	0.11	0.27	0.27
Clearance Time (s)	5.0	5.5	5.0	4.5	5.5	5.5	5.0	5.5	5.5	4.5	5.5	5.5
Vehicle Extension (s)	1.5	4.0	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0
Lane Grp Cap (vph)	308	1707	687	364	1807	560	158	1323	394	360	1357	392
v/s Ratio Prot	0.07	0.24	0.04	c0.07	c0.37		c0.15	0.19		0.07	c0.20	
v/s Ratio Perm			0.16			0.06			0.05			0.04
v/c Ratio	0.76	0.67	0.45	0.69	1.01	0.17	1.70	0.71	0.18	0.68	0.74	0.13
Uniform Delay, d1	54.4	33.2	23.4	53.1	39.0	26.2	56.4	41.4	35.3	53.3	40.8	33.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.1	1.1	0.2	4.3	22.5	0.2	338.9	2.0	0.3	3.9	2.4	0.2
Delay (s)	63.5	34.3	23.5	57.5	61.5	26.4	395.3	43.3	35.6	57.2	43.2	33.9
Level of Service	E	С	С	E	E	С	F	D	D	E	D	С
Approach Delay (s/veh)		35.8			58.2			105.8			44.5	
Approach LOS		D			E			F			D	
Intersection Summary												
HCM 2000 Control Delay (s			59.9	Н	CM 2000	Level of	Service		E			
HCM 2000 Volume to Capa	city ratio		0.96									
Actuated Cycle Length (s)			123.7		um of los	• • •			21.0			
Intersection Capacity Utiliza	tion		91.9%	IC	CU Level	of Service	;		F			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	†††	7	1	^	1	1	•	*	ኘካ	≜ 1⊅	
Traffic Volume (vph)	176	1247	102	128	1579	159	92	340	75	300	348	114
Future Volume (vph)	176	1247	102	128	1579	159	92	340	75	300	348	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	6.0	6.0	3.5	6.0	6.0	3.5	5.0	5.0	3.5	5.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.96	1.00	1.00	0.97	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1787	4759	1432	1770	4848	1554	1770	1863	1520	3467	3383	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1787	4759	1432	1770	4848	1554	1770	1863	1520	3467	3383	
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.90	0.90	0.90	0.83	0.83	0.83
Adj. Flow (vph)	200	1417	116	147	1815	183	102	378	83	361	419	137
RTOR Reduction (vph)	0	0	73	0	0	90	0	0	0	0	28	0
Lane Group Flow (vph)	200	1417	43	147	1815	93	102	378	83	361	528	0
Confl. Peds. (#/hr)	6		12	12		6	37		14	14		37
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	1%	9%	9%	2%	7%	0%	2%	2%	3%	1%	1%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			
Actuated Green, G (s)	14.5	42.8	42.8	12.7	41.0	41.0	9.9	30.5	30.5	16.0	36.6	
Effective Green, g (s)	14.5	42.8	42.8	12.7	41.0	41.0	9.9	30.5	30.5	16.0	36.6	
Actuated g/C Ratio	0.12	0.36	0.36	0.11	0.34	0.34	0.08	0.25	0.25	0.13	0.31	
Clearance Time (s)	3.5	6.0	6.0	3.5	6.0	6.0	3.5	5.0	5.0	3.5	5.0	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5	4.5	1.5	4.0	4.0	1.5	4.0	
Lane Grp Cap (vph)	215	1697	510	187	1656	530	146	473	386	462	1031	
v/s Ratio Prot	c0.11	0.30		0.08	c0.37		0.06	c0.20		c0.10	0.16	
v/s Ratio Perm			0.03			0.06			0.05			
v/c Ratio	0.93	0.84	0.08	0.79	1.10	0.18	0.70	0.80	0.22	0.78	0.51	
Uniform Delay, d1	52.2	35.4	25.6	52.3	39.5	27.7	53.6	41.9	35.3	50.3	34.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	41.8	5.0	0.3	17.9	53.3	0.7	11.1	9.7	0.4	7.7	0.6	
Delay (s)	94.1	40.4	25.9	70.2	92.8	28.4	64.7	51.5	35.7	58.1	34.9	
Level of Service	F	D	С	E	F	С	E	D	D	E	С	
Approach Delay (s/veh)		45.6			85.7			51.6			44.0	
Approach LOS		D			F			D			D	
Intersection Summary												
HCM 2000 Control Delay (s			62.0	H	CM 2000	Level of S	Service		E			
HCM 2000 Volume to Capa	city ratio		0.93									
Actuated Cycle Length (s)			120.0		um of los				18.0			
Intersection Capacity Utiliza	tion		84.3%	IC	CU Level	of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	† ††	1	ኘኘ	^†		ሻሻ	††	7	ሻሻ	≜ †⊅	
Traffic Volume (vph)	118	1519	370	398	797	80	199	994	490	76	840	83
Future Volume (vph)	118	1519	370	398	797	80	199	994	490	76	840	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0	6.0	4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1703	4988	1491	3273	4750		3367	3539	1523	3433	3429	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1703	4988	1491	3273	4750		3367	3539	1523	3433	3429	
Peak-hour factor, PHF	0.93	0.93	0.93	0.94	0.94	0.94	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	127	1633	398	423	848	85	207	1035	510	79	875	86
RTOR Reduction (vph)	0	0	101	0	8	0	0	0	132	0	4	0
Lane Group Flow (vph)	127	1633	297	423	925	0	207	1035	378	79	957	0
Confl. Peds. (#/hr)	9		7	7		9	3		13	13		3
Confl. Bikes (#/hr)			1						1			1
Heavy Vehicles (%)	6%	4%	6%	7%	8%	2%	4%	2%	3%	2%	3%	11%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Actuated Green, G (s)	34.1	50.1	50.1	22.0	38.0		13.4	42.5	42.5	11.0	40.1	
Effective Green, g (s)	34.1	50.1	50.1	22.0	38.0		13.4	42.5	42.5	11.0	40.1	
Actuated g/C Ratio	0.23	0.34	0.34	0.15	0.26		0.09	0.29	0.29	0.07	0.27	
Clearance Time (s)	4.5	6.0	6.0	4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	394	1698	507	489	1227		306	1022	440	256	934	
v/s Ratio Prot	0.07	c0.33		c0.13	0.19		c0.06	c0.29		0.02	0.28	
v/s Ratio Perm			0.20						0.25			
v/c Ratio	0.32	0.96	0.59	0.87	0.75		0.68	1.01	0.86	0.31	1.02	
Uniform Delay, d1	46.9	47.6	40.0	61.1	50.2		64.8	52.3	49.5	64.4	53.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.2	14.0	2.4	14.3	3.0		4.6	31.3	16.6	0.3	35.8	
Delay (s)	47.1	61.6	42.3	75.4	53.3		69.4	83.6	66.1	64.7	89.3	
Level of Service	D	E	D	E	D		E	F	Е	E	F	
Approach Delay (s/veh)		57.2			60.2			76.8			87.4	
Approach LOS		E			E			E			F	
Intersection Summary												
HCM 2000 Control Delay (s/	/veh)		68.3	Н	CM 2000	Level of S	Service		E			
HCM 2000 Volume to Capac	,		0.95									
Actuated Cycle Length (s)	,		147.1	S	um of lost	time (s)			21.5			
Intersection Capacity Utilizat	tion		95.9%			of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	^	*	ሻሻ	^	۲	1	^	۲	ሻሻ	***	7
Traffic Volume (vph)	286	1048	346	237	851	247	247	877	212	257	992	219
Future Volume (vph)	286	1048	346	237	851	247	247	877	212	257	992	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.5	5.0	4.5	5.5	5.5	5.0	5.5	5.5	4.5	5.5	5.5
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	5036	1549	3367	4893	1533	1787	5085	1545	3433	4940	1437
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	5036	1549	3367	4893	1533	1787	5085	1545	3433	4940	1437
Peak-hour factor, PHF	0.93	0.93	0.93	0.86	0.86	0.86	0.96	0.96	0.96	0.93	0.93	0.93
Adj. Flow (vph)	308	1127	372	276	990	287	257	914	221	276	1067	235
RTOR Reduction (vph)	0	0	24	0	0	153	0	0	130	0	0	115
Lane Group Flow (vph)	308	1127	348	276	990	134	257	914	91	276	1067	120
Confl. Peds. (#/hr)	21		18	18		21	26		14	14		26
Confl. Bikes (#/hr)						1						4
Heavy Vehicles (%)	1%	3%	2%	4%	6%	1%	1%	2%	1%	2%	5%	7%
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	17.4	42.3	67.3	16.4	40.8	40.8	25.0	51.7	51.7	16.1	42.3	42.3
Effective Green, g (s)	17.4	42.3	67.3	16.4	40.8	40.8	25.0	51.7	51.7	16.1	42.3	42.3
Actuated g/C Ratio	0.12	0.29	0.46	0.11	0.28	0.28	0.17	0.35	0.35	0.11	0.29	0.29
Clearance Time (s)	5.0	5.5	5.0	4.5	5.5	5.5	5.0	5.5	5.5	4.5	5.5	5.5
Vehicle Extension (s)	1.5	4.0	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0
Lane Grp Cap (vph)	411	1454	711	376	1362	426	304	1794	545	377	1426	414
v/s Ratio Prot	c0.09	c0.22	0.08	0.08	0.20		c0.14	0.18		0.08	c0.22	
v/s Ratio Perm			0.14			0.09			0.06			0.08
v/c Ratio	0.75	0.78	0.49	0.73	0.73	0.31	0.85	0.51	0.17	0.73	0.75	0.29
Uniform Delay, d1	62.4	47.7	27.6	62.9	47.8	41.8	58.9	37.4	32.6	63.1	47.3	40.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.4	2.8	0.2	6.3	2.1	0.6	18.3	0.3	0.2	6.2	2.3	0.5
Delay (s)	68.9	50.6	27.8	69.2	49.9	42.4	77.1	37.7	32.8	69.3	49.6	41.0
Level of Service	E	D	С	E	D	D	E	D	С	E	D	D
Approach Delay (s/veh)		49.0			51.9			44.2			51.8	_
Approach LOS		D			D			D			D	
Intersection Summary												
HCM 2000 Control Delay (s	,		49.4	H	CM 2000	Level of	Service		D			
HCM 2000 Volume to Capa	city ratio		0.78									
Actuated Cycle Length (s)			146.5		um of los	• •			21.0			
Intersection Capacity Utiliza	ation		87.5%	IC	CU Level	of Service	;		E			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	***	1	۲.	<u> </u>	1	1	1	7	ኘኘ	≜ 1⊅	
Traffic Volume (vph)	73	1304	82	129	1052	145	126	250	92	312	293	108
Future Volume (vph)	73	1304	82	129	1052	145	126	250	92	312	293	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	6.0	6.0	3.5	6.0	6.0	3.5	5.0	5.0	3.5	5.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.96	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	4988	1590	1805	4893	1548	1805	1881	1574	3502	3439	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	4988	1590	1805	4893	1548	1805	1881	1574	3502	3439	
Peak-hour factor, PHF	0.96	0.96	0.96	0.90	0.90	0.90	0.89	0.89	0.89	0.92	0.92	0.92
Adj. Flow (vph)	76	1358	85	143	1169	161	142	281	103	339	318	117
RTOR Reduction (vph)	0	0	41	0	0	75	0	0	0	0	31	0
Lane Group Flow (vph)	76	1358	44	143	1169	86	142	281	103	339	404	0
Confl. Peds. (#/hr)	7		2	2		7			3	3		
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	0%	4%	0%	0%	6%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			
Actuated Green, G (s)	11.6	60.1	60.1	13.4	61.9	61.9	11.3	16.5	16.5	12.0	17.2	
Effective Green, g (s)	11.6	60.1	60.1	13.4	61.9	61.9	11.3	16.5	16.5	12.0	17.2	
Actuated g/C Ratio	0.10	0.50	0.50	0.11	0.52	0.52	0.09	0.14	0.14	0.10	0.14	
Clearance Time (s)	3.5	6.0	6.0	3.5	6.0	6.0	3.5	5.0	5.0	3.5	5.0	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5	4.5	1.5	4.0	4.0	1.5	4.0	
Lane Grp Cap (vph)	174	2498	796	201	2523	798	169	258	216	350	492	
v/s Ratio Prot	0.04	c0.27	770	c0.08	0.24	170	0.08	c0.15	210	c0.10	0.12	
v/s Ratio Perm	0.01	00.27	0.03	00.00	0.21	0.06	0.00	00.10	0.07	00.10	0.12	
v/c Ratio	0.44	0.54	0.06	0.71	0.46	0.11	0.84	1.09	0.48	0.97	0.82	
Uniform Delay, d1	51.1	20.5	15.4	51.4	18.5	14.9	53.5	51.8	47.8	53.8	49.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.6	0.9	0.1	9.5	0.6	0.3	28.5	81.9	2.3	39.1	11.1	
Delay (s)	51.8	21.4	15.5	60.9	19.1	15.2	82.0	133.6	50.0	92.9	61.0	
Level of Service	D	C	B	E	B	В	62.0 F	F	D	, <u>2</u> .,	E	
Approach Delay (s/veh)	D	22.6	U		22.7	D		103.3	U		75.0	
Approach LOS		C			C			F			E	
Intersection Summary												
HCM 2000 Control Delay (s/	veh)		42.0	H	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capac	,		0.70									
Actuated Cycle Length (s)			120.0	Si	um of lost	t time (s)			18.0			
Intersection Capacity Utilizat	tion		71.1%			of Service			С			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	<u>↑</u> ↑↑	1	ኘኘ	^	7	1	^	7	ሻሻ	***	1
Traffic Volume (vph)	213	1079	394	253	1658	161	236	811	223	211	969	149
Future Volume (vph)	213	1079	394	253	1658	161	236	811	223	211	969	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.5	5.0	4.5	5.5	5.5	5.0	5.5	5.5	4.5	5.5	5.5
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3183	4715	1527	3367	4893	1514	1787	5036	1500	3433	4940	1424
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3183	4715	1527	3367	4893	1514	1787	5036	1500	3433	4940	1424
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	224	1136	415	266	1745	169	248	854	235	222	1020	157
RTOR Reduction (vph)	0	0	23	0	0	48	0	0	151	0	0	82
Lane Group Flow (vph)	224	1136	392	266	1745	121	248	854	84	222	1020	75
Confl. Peds. (#/hr)	9		9	9		9	13		2	2		13
Confl. Bikes (#/hr)			1			1						1
Heavy Vehicles (%)	10%	10%	4%	4%	6%	4%	1%	3%	6%	2%	5%	10%
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	14.7	50.0	74.0	16.0	50.8	50.8	24.0	51.2	51.2	14.0	40.7	40.7
Effective Green, g (s)	14.7	50.0	74.0	16.0	50.8	50.8	24.0	51.2	51.2	14.0	40.7	40.7
Actuated g/C Ratio	0.10	0.33	0.49	0.11	0.34	0.34	0.16	0.34	0.34	0.09	0.27	0.27
Clearance Time (s)	5.0	5.5	5.0	4.5	5.5	5.5	5.0	5.5	5.5	4.5	5.5	5.5
Vehicle Extension (s)	1.5	4.0	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0
Lane Grp Cap (vph)	309	1559	747	356	1643	508	283	1705	507	317	1329	383
v/s Ratio Prot	0.07	0.24	0.08	c0.08	c0.36		c0.14	0.17		0.06	c0.21	
v/s Ratio Perm			0.17			0.08			0.06			0.05
v/c Ratio	0.72	0.73	0.52	0.75	1.06	0.24	0.88	0.50	0.16	0.70	0.77	0.20
Uniform Delay, d1	66.3	44.6	26.5	65.6	50.2	36.2	62.1	39.8	35.0	66.6	50.9	42.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.0	1.9	0.3	7.3	40.8	0.3	24.1	0.3	0.2	5.6	2.9	0.3
Delay (s)	73.3	46.5	26.8	72.9	91.0	36.6	86.2	40.1	35.2	72.2	53.8	43.0
Level of Service	E	D	С	E	F	D	F	D	D	E	D	D
Approach Delay (s/veh)		45.3			84.6			47.8			55.5	
Approach LOS		D			F			D			E	
Intersection Summary												
HCM 2000 Control Delay (s			60.7	Н	CM 2000	Level of	Service		E			
HCM 2000 Volume to Capa	city ratio		0.91									
Actuated Cycle Length (s)			151.2	S	um of los	time (s)			21.0			
Intersection Capacity Utiliza	ition		93.0%	IC	CU Level	of Service	:		F			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	† ††	7	2	^	1	1	•	7	ኘኘ	≜ 1⊅	
Traffic Volume (vph)	189	1322	110	127	1558	153	95	347	75	302	368	119
Future Volume (vph)	189	1322	110	127	1558	153	95	347	75	302	368	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	6.0	6.0	3.5	6.0	6.0	3.5	5.0	5.0	3.5	5.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.96	1.00	1.00	0.97	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1787	4759	1432	1770	4848	1554	1770	1863	1520	3467	3384	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1787	4759	1432	1770	4848	1554	1770	1863	1520	3467	3384	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	199	1392	116	134	1640	161	100	365	79	318	387	125
RTOR Reduction (vph)	0	0	71	0	0	87	0	0	0	0	29	0
Lane Group Flow (vph)	199	1392	45	134	1640	74	100	365	79	318	483	0
Confl. Peds. (#/hr)	6		12	12		6	37		14	14		37
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	1%	9%	9%	2%	7%	0%	2%	2%	3%	1%	1%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			
Actuated Green, G (s)	14.6	45.2	45.2	12.2	42.8	42.8	9.9	29.8	29.8	14.8	34.7	
Effective Green, g (s)	14.6	45.2	45.2	12.2	42.8	42.8	9.9	29.8	29.8	14.8	34.7	
Actuated g/C Ratio	0.12	0.38	0.38	0.10	0.36	0.36	0.08	0.25	0.25	0.12	0.29	
Clearance Time (s)	3.5	6.0	6.0	3.5	6.0	6.0	3.5	5.0	5.0	3.5	5.0	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5	4.5	1.5	4.0	4.0	1.5	4.0	
Lane Grp Cap (vph)	217	1792	539	179	1729	554	146	462	377	427	978	
v/s Ratio Prot	c0.11	0.29		0.08	c0.34	001	0.06	c0.20	0.77	c0.09	0.14	
v/s Ratio Perm		0.27	0.03	0.00	00101	0.05	0.00	00.20	0.05	00107		
v/c Ratio	0.92	0.78	0.08	0.75	0.95	0.13	0.68	0.79	0.21	0.74	0.49	
Uniform Delay, d1	52.1	33.0	24.1	52.4	37.5	26.1	53.5	42.2	35.8	50.8	35.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	38.1	3.4	0.3	13.9	12.5	0.5	10.1	9.4	0.4	6.1	0.5	
Delay (s)	90.2	36.3	24.4	66.3	50.0	26.6	63.6	51.6	36.1	56.9	35.9	
Level of Service	F	D	С	E	D	С	E	D	D	E	D	
Approach Delay (s/veh)		41.8			49.2			51.6			43.9	
Approach LOS		D			D			D			D	
Intersection Summary												
HCM 2000 Control Delay (s	/veh)		46.1	Н	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capa	city ratio		0.87									
Actuated Cycle Length (s)			120.0	S	um of lost	time (s)			18.0			
Intersection Capacity Utiliza	ition		84.9%	IC	CU Level of	of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	† ††	1	ኘኘ	†† ĵø		ሻሻ	††	۲	ሻሻ	≜ 1₽	
Traffic Volume (vph)	118	1519	384	401	932	80	262	1003	511	76	889	110
Future Volume (vph)	118	1519	384	401	932	80	262	1003	511	76	889	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0	6.0	4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1703	4988	1491	3273	4757		3367	3539	1522	3433	3411	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1703	4988	1491	3273	4757		3367	3539	1522	3433	3411	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	124	1599	404	422	981	84	276	1056	538	80	936	116
RTOR Reduction (vph)	0	0	105	0	6	0	0	0	134	0	6	0
Lane Group Flow (vph)	124	1599	299	422	1059	0	276	1056	404	80	1046	0
Confl. Peds. (#/hr)	9		7	7		9	3		13	13		3
Confl. Bikes (#/hr)			1						1			1
Heavy Vehicles (%)	6%	4%	6%	7%	8%	2%	4%	2%	3%	2%	3%	11%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Actuated Green, G (s)	29.4	50.1	50.1	22.1	42.8		15.9	45.0	45.0	11.0	40.1	
Effective Green, g (s)	29.4	50.1	50.1	22.1	42.8		15.9	45.0	45.0	11.0	40.1	
Actuated g/C Ratio	0.20	0.33	0.33	0.15	0.29		0.11	0.30	0.30	0.07	0.27	
Clearance Time (s)	4.5	6.0	6.0	4.5	6.0		5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	334	1669	498	483	1360		357	1063	457	252	913	
v/s Ratio Prot	0.07	c0.32		c0.13	0.22		c0.08	c0.30		0.02	c0.31	
v/s Ratio Perm			0.20						0.27			
v/c Ratio	0.37	0.96	0.60	0.87	0.78		0.77	0.99	0.88	0.32	1.15	
Uniform Delay, d1	52.1	48.8	41.5	62.4	49.1		65.1	52.2	49.9	65.8	54.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3	13.5	2.7	15.5	3.2		9.1	25.9	19.0	0.3	78.6	
Delay (s)	52.4	62.3	44.1	77.9	52.3		74.3	78.1	68.9	66.1	133.4	
Level of Service	D	E	D	E	D		E	E	E	E	F	
Approach Delay (s/veh)		58.3			59.6			74.9			128.6	
Approach LOS		E			E			E			F	
Intersection Summary												
HCM 2000 Control Delay (s/	,		75.3	H	CM 2000	Level of S	Service		E			
HCM 2000 Volume to Capac	city ratio		0.98									
Actuated Cycle Length (s)			149.7		um of lost	• •			21.5			
Intersection Capacity Utilization	tion		96.1%	IC	CU Level	of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	^	1	ሻሻ	^	7	1	^	۲	ሻሻ	***	1
Traffic Volume (vph)	305	1013	356	259	956	272	267	975	212	257	1058	232
Future Volume (vph)	305	1013	356	259	956	272	267	975	212	257	1058	232
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.5	5.0	4.5	5.5	5.5	5.0	5.5	5.5	4.5	5.5	5.5
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	5036	1548	3367	4893	1533	1787	5085	1545	3433	4940	1436
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	5036	1548	3367	4893	1533	1787	5085	1545	3433	4940	1436
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	321	1066	375	273	1006	286	281	1026	223	271	1114	244
RTOR Reduction (vph)	0	0	24	0	0	151	0	0	116	0	0	113
Lane Group Flow (vph)	321	1066	351	273	1006	135	281	1026	107	271	1114	131
Confl. Peds. (#/hr)	21		18	18		21	26		14	14		26
Confl. Bikes (#/hr)						1						4
Heavy Vehicles (%)	1%	3%	2%	4%	6%	1%	1%	2%	1%	2%	5%	7%
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	18.1	43.4	68.8	16.4	41.2	41.2	25.4	53.3	53.3	16.1	43.5	43.5
Effective Green, g (s)	18.1	43.4	68.8	16.4	41.2	41.2	25.4	53.3	53.3	16.1	43.5	43.5
Actuated g/C Ratio	0.12	0.29	0.46	0.11	0.28	0.28	0.17	0.36	0.36	0.11	0.29	0.29
Clearance Time (s)	5.0	5.5	5.0	4.5	5.5	5.5	5.0	5.5	5.5	4.5	5.5	5.5
Vehicle Extension (s)	1.5	4.0	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0
Lane Grp Cap (vph)	420	1464	713	370	1351	423	304	1816	551	370	1440	418
v/s Ratio Prot	c0.09	c0.21	0.08	0.08	0.21		c0.16	0.20		0.08	c0.23	
v/s Ratio Perm			0.14			0.09			0.07			0.09
v/c Ratio	0.76	0.73	0.49	0.74	0.74	0.32	0.92	0.56	0.19	0.73	0.77	0.31
Uniform Delay, d1	63.5	47.6	28.0	64.3	49.2	42.9	61.0	38.6	33.1	64.5	48.3	41.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.3	2.0	0.2	6.5	2.4	0.6	31.9	0.5	0.2	6.3	2.8	0.6
Delay (s)	70.8	49.6	28.2	70.8	51.6	43.5	92.9	39.1	33.3	70.8	51.2	41.8
Level of Service	E	D	С	E	D	D	F	D	С	E	D	D
Approach Delay (s/veh)		48.9	-		53.5		-	48.1	-		53.0	
Approach LOS		D			D			D			D	
Intersection Summary												
HCM 2000 Control Delay (s	,		50.9	H	CM 2000	Level of	Service		D			_
HCM 2000 Volume to Capa	city ratio		0.80									
Actuated Cycle Length (s)			149.2	S	um of los	t time (s)			21.0			
Intersection Capacity Utiliza	ation		88.8%	IC	CU Level	of Service	;		E			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	***	1	1	<u> </u>	7	1	1	7	ሻሻ	≜ 1⊅	
Traffic Volume (vph)	62	1261	78	130	1134	145	167	295	119	329	306	119
Future Volume (vph)	62	1261	78	130	1134	145	167	295	119	329	306	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	6.0	6.0	3.5	6.0	6.0	3.5	5.0	5.0	3.5	5.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.96	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	4988	1590	1805	4893	1548	1805	1881	1574	3502	3434	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	4988	1590	1805	4893	1548	1805	1881	1574	3502	3434	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	65	1327	82	137	1194	153	176	311	125	346	322	125
RTOR Reduction (vph)	0	0	41	0	0	70	0	0	0	0	35	0
Lane Group Flow (vph)	65	1327	41	137	1194	83	176	311	125	346	413	0
Confl. Peds. (#/hr)	7		2	2		7			3	3		
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	0%	4%	0%	0%	6%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			
Actuated Green, G (s)	11.6	60.5	60.5	13.0	61.9	61.9	12.0	16.5	16.5	12.0	16.5	
Effective Green, g (s)	11.6	60.5	60.5	13.0	61.9	61.9	12.0	16.5	16.5	12.0	16.5	
Actuated g/C Ratio	0.10	0.50	0.50	0.11	0.52	0.52	0.10	0.14	0.14	0.10	0.14	
Clearance Time (s)	3.5	6.0	6.0	3.5	6.0	6.0	3.5	5.0	5.0	3.5	5.0	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5	4.5	1.5	4.0	4.0	1.5	4.0	
Lane Grp Cap (vph)	174	2514	801	195	2523	798	180	258	216	350	472	
v/s Ratio Prot	0.04	c0.27	001	c0.08	0.24		0.10	c0.17	2.0	c0.10	0.12	
v/s Ratio Perm	0.01	00.27	0.03		0.2.	0.05	0.10		0.08		0.12	
v/c Ratio	0.37	0.53	0.05	0.70	0.47	0.10	0.98	1.21	0.58	0.99	0.87	
Uniform Delay, d1	50.8	20.1	15.1	51.6	18.6	14.9	53.9	51.8	48.5	53.9	50.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.8	0.1	9.0	0.6	0.3	59.7	123.2	4.5	44.5	16.7	
Delay (s)	51.3	20.9	15.3	60.6	19.2	15.1	113.6	174.9	52.9	98.4	67.4	
Level of Service	D	С	В	E	В	В	F	F	D	F	E	
Approach Delay (s/veh)		21.9			22.6			132.4			80.9	
Approach LOS		С			С			F			F	
Intersection Summary												
HCM 2000 Control Delay (s			48.4	Н	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capa	city ratio		0.71									
Actuated Cycle Length (s)			120.0		um of lost				18.0			
Intersection Capacity Utiliza	tion		73.0%	IC	CU Level of	of Service	!		С			
Analysis Period (min)			15									
c Critical Lane Group												

APPENDIX D – NOP AND SCOPING MEETING MATERIALS



Notice of Preparation and Public Scoping Meeting Notice of a Draft Environmental Impact Report

Date:	September 21, 2023
То:	Interested Parties
Subject:	Notice of Preparation of a Draft Environmental Impact Report and Scoping Meeting for the Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan
Review Period:	September 25, 2023 – October 25, 2023

The City of Pico Rivera (City) will be the lead agency and will prepare an Environmental Impact Report (EIR) for the proposed Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan (Project). This Notice of Preparation (NOP) initiates the environmental scoping process in accordance with CEQA Guidelines (14 California Code of Regulations [CCR] Section 15082). The purpose of an NOP is to provide sufficient information about the proposed project and its potential environmental effects to allow public agencies, organizations, tribes, and interested members of the public the opportunity to provide a meaningful response related to the scope and content of the EIR, including feasible mitigation measures and project alternatives that should be considered in the EIR (CEQA Guidelines, 14 CCR Section 15082[b]). The proposed project and location are briefly described below.

Providing Comments

The City of Pico Rivera is soliciting written comments from public agencies, organizations, tribes, and interested members of the public regarding the scope and content of the EIR. Because of time limits mandated by State law, comments should be provided as soon as possible, but no later than 5:00 p.m. on Wednesday, October 25, 2023. Please send all comments to:

Jazmin Faccuseh, Senior Analyst City of Pico Rivera 6615 Passons Boulevard Pico Rivera, CA 90660 Email: communitydevelopment@pico-rivera.org ORIGINAL FILED

SEP 2 2 2023

LOS ANGELES, COUNTY CLERK

Project Location

The Project area is generally located in the southern portion of the City of Pico Rivera within the southwest portion of the County of Los Angeles. The Project area is generally bounded by Washington Boulevard to the north, railway to the South, Rosemead Boulevard to the east and Crider Avenue to the west. The Project area includes approximately 90 legal parcels with commercial uses and existing residential neighborhoods to the north, light industrial facilities and railways to the south, existing residential neighborhoods to the east and light industrial facilities to the west. Figure 1, Project Area and Regional Location.

Cortese List Notice: Pursuant to Public Resources Code 21092.6(a), the Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (California Department of Toxic Substances Control list of various hazardous sites).¹

Existing Setting

The Project area is completely developed except for one vacant parcel located on the northeast boundary. The northern portion includes retail commercial services, restaurants, lodging and residential uses. The northern and eastern portion are primarily developed with single-family residential uses. The southern portion includes business parks and light industrial uses. The southern and western portion consists primarily of warehouse and light industrial uses. The western portion includes open space and trail amenities adjacent to the Rio Hondo River. The current zoning for the Project area includes General Industrial (I-G), Specific Plan (SP), General Commercial (C-G), Community Commercial (C-C), and Multiple-Family Residential (R-M). The current uses for the Project area includes approximately 254,968 SF of residential (R-M) uses, approximately 282,653 SF of commercial (C-G and C-C) uses, approximately 79,292 SF of Professional and Administrative (P-A) uses, approximately 926,127 SF of General Industrial (G-I) uses, and approximately 5,959 SF of Public Facilities (P-F) uses. The Project area also includes a 76-acre portion of the Rancho De Bartolo Specific Plan (SP-400).

¹ DTSC. 2022. EnviroStor Hazardous Waste and Substances Site List (Cortese). <u>https://dtsc.ca.gov/dtscs-cortese-list/</u> (Accessed August 09, 2023)

Project Description

The Project is the Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan (Specific Plan). The Specific Plan encompasses approximately 327 acres, with the primary goal of promoting the future revitalization and reuse the Specific Plan area into a vibrant, multi-modal, mixed use, commercial, residential, and open space attraction in the City of Pico Rivera. The Specific Plan will be used as a policy and regulatory guide for subsequent Project-specific reviews and approvals when Project-level proposals within the Specific Plan area are submitted to the City. The Specific Plan assumes a maximum buildout of approximately 31,589 SF of new mixed use residential development and approximately 1,743,685 SF of new non-residential (mixed-use commercial, among other uses).

Additionally, the Specific Plan includes regulations to encourage improvements that update and improve facilities for pedestrians, bicyclists, transit riders, and drivers. The Specific Plan considers pedestrian circulation and amenities to improve access to/from the Specific Plan area. This may include a combination of multi-use pathways, separated bike lanes, and sidewalk and crosswalk enhancements. In addition, new landscaping, pedestrian amenities, and other public improvements are envisioned under the Specific Plan.

EIR Scope

The following issues are anticipated to be addressed in the EIR (note that some issues, following EIR research and in light of responses to this NOP, may be screened out from detailed analysis and instead discussed in the Effects Found Not to be Significant (EFNTBS) section of the EIR, pursuant to CEQA Guidelines Section 15128):

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality

- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Scoping Meeting

In accordance with Section 21083.9(a)(2) of the Public Resources Code and CEQA guidelines Section 15082(c), the City will hold a public scoping meeting where agencies, organizations, and members of the public will receive a brief presentation on the Project. Although the primary purpose of the scoping meeting is to meet with representatives of involved agencies to assist the lead agency in determining the scope and content of the environmental information that responsible or trustee agencies may require, members of the public will be provided with an opportunity to submit brief oral comments at this scoping meeting not exceeding three minutes. However, members of the public and relevant agencies are requested to provide their comments in writing, via email or mail, to the contact address shown above. The scoping meeting will be held:

October 25, 2023 at 5:00 PM Pico Rivera City Council Chambers 6615 Passons Blvd., Pico Rivera, CA 90660

Upon request and in compliance with the Americans with Disabilities Act of 1990, any person with a disability who requires a modification or accommodation to participate in a meeting should direct such request to (562) 801-4389 at least 72 hours before the meeting. The 72-hour notification will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

The NOP is available for public review at Pico Rivera City Hall and on the City's website at: <u>https://www.pico-rivera.org/index.php/notice-of-preparation/</u>

Attachments:

Figure 1 – Project Area and Regional Location

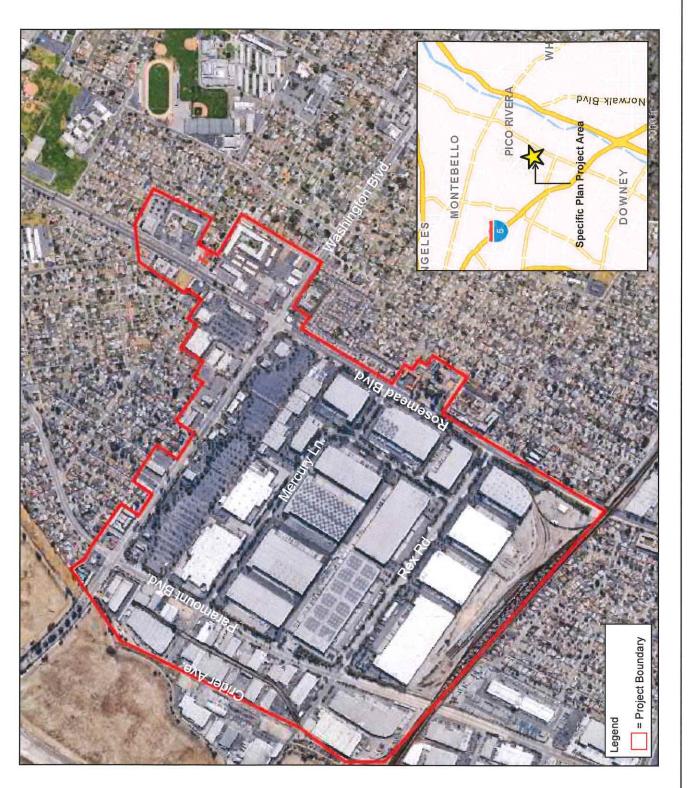


FIGURE 1: Project Area and Regional Location Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan, City of Pico Rivera

Kimley » Horn

Not to scale

Dean C. Logan Los Angeles County Registrar / Recorder 12400 Imperial Highway, Norwalk, CA (800)201-8999

BUSINESS FILINGS REGISTRATION

NORWALK DEPARTMENT HEADQUARTER

Cashier: T. MORILLO *202309221220001*

Friday, September 22, 2023 8:23 AM

Item(s)

Fee Qty	Total
NoP - County Posting Fee 1 2023208354	\$0.00
Total	\$0.00
Total Documents:	1
Customer payment(s):	



BUILDING A STRONGER L.A.

Board of Commissioners Cynthia McClain-Hill, President Nicole Neeman Brady, Vice President Nurit Katz Mia Lehrer George S. McGraw Chante L. Mitchell, Secretary

Karen Bass, Mayor

Martin L. Adams, General Manager and Chief Engineer

October 11, 2023

Ms. Jazmin Faccuseh, Senior Analyst City of Pico Rivera 6615 Passons Boulevard Pico Rivera, CA 90660 Email: communitydevelopment@pico-rivera.org

Dear Ms. Faccuseh:

Subject: City of Pico Rivera – Notice of Preparation of a Draft Environmental Impact Report and Scoping Meeting for the Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan

The Los Angeles Department of Water and Power (LADWP) is in receipt of City of Pico Rivera's Notice of Preparation of a Draft Environmental Impact Report and Scoping Meeting dated September 21, 2023, and appreciates the opportunity to provide comments on the Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan (Project). The mission of LADWP is to provide clean, reliable water and power to the City of Los Angeles. Based on our review of the Project we respectfully submit the below comments.

City of Pico Rivera shall provide additional information before any developments are authorized adjacent and/or within LADWP's Transmission Line Rights-of-Way (TLRW) and are subject to the following comments and conditions:

Comments:

- City of Pico Rivera referenced herein shall pertain to its employees, agents, consultants, contractors, officers, patrons or invitees of City of Pico Rivera's, or by any other of City of Pico Rivera's affiliated entities.
- 2) The information provided, to date, is inadequate for properly reviewing the proposed improvements within sections of LADWP's TLRW. We therefore reserve the right to comment until more detailed information is provided regarding the proposed project. Provide plans illustrating the LADWP TLRW boundaries within the proposed project. Include towers and clearances from the proposed transmission line. Also, provide grading plans and utility plans, including any other plans illustrating the impacts to LADWP's TLRW. If access roads are proposed, provide plans illustrating impacts to LADWP's access roads. The plans should include APNs, state plane coordinates, or use the Public Land Survey System to locate the developments impacting LADWP's TLRW.

- Plans may be submitted for review to the LADWP Real Estate Services Office via the following email: <u>RE.Office@ladwp.com</u> and copy LADWP's Environmental Affairs at <u>environmental@ladwp.com</u>.
- 4) Any temporary work within or immediately adjacent to LADWP's TLRW requires approval from LADWP.

Conditions:

- 1) City of Pico Rivera shall acknowledge the LADWP TLRW are integral components of the transmission line system, which provides electric power to the City of Los Angeles and other local communities. Their use is under the jurisdiction of the North American Electric Reliability Corporation, an organization of the Federal Energy Regulatory Commission. Safety and protection of critical facilities are the primary factors used to evaluate secondary land use proposals. The rights-of-way serve as platforms for access, construction, maintenance, facility expansion and emergency operations. Therefore, the proposed use may, from time to time, be subject to temporary disruption caused by such operations.
- 2) City of Pico Rivera shall be responsible for the maintenance of the Project area and shall keep the area in a neat and clean condition within LADWP's TLRW. It is our understanding that City of Pico Rivera will assume responsibility for the maintenance of the project improvements, and for all the risks and liabilities associated with the proposed improvements. LADWP will not be liable for any damage to the proposed project during LADWP's operation and maintenance activities.
- 3) No improvements or construction activities of any kind whatsoever will be allowed within the LADWP TLRW without the prior written approval of the LADWP.
- 4) No equipment with the height over 14-feet shall be allowed to travel within the LADWP TLRW without the written approval of LADWP.
- 5) No grading or structures shall be constructed within the LADWP TLRW without prior written approval of the LADWP.
- 6) Vehicle and/or truck repair, refueling, washing, and change of oil, are prohibited within the TLRW.
- 7) Additional conditions may be required following review of detailed site plans, grading/drainage plans, etc.

This response shall not be construed as an approval to begin construction activities, project improvements, nor approval of this project

Ms. Jazmin Faccuseh Page 3 October 11, 2023

For any questions regarding the above comments, please contact Ms. Jazmin Martin of my staff at (213) 367-1768 or <u>Jazmin.Martin@ladwp.com</u>.

Sincerely,

· R D. the

Katherine Rubin Director of Corporate Environmental Affairs

JM:mr c: Ms. Jazmin Martin Ms. Jane Hauptman Ms. Maria Depaz Mr. Michael Hanson

Stakeholder List

Adriana Raza, Customer Service Specialist La County Sanitation District Facilities Management Department 1955 Workman Mill Road Whittier, CA 90601

Southern California Edison Attn: Design Support/UND 9901 Geary Avenue Santa Fe Springs, CA 90670

Dr. Marcos Villegas Superintendent El Rancho Unified School District 9333 Loch Lomond Drive Pico Rivera, CA 90660

Joe Basulto General Manager Pico Water District 4843 S. Church Street Pico Rivera, CA 90660

Los Angeles County Fire Department Public Information Office 1320 N. Eastern Ave Los Angeles, CA 90063

LA County Library Administrative Office 7400 E. Imperial Highway Downey, CA 90242

Los Angeles County Sheriff's Department Pico Rivera Station 6631 Passons Boulevard Pico Rivera, 90660

Julia Emerson Public Affairs Manager 9420 E. Firestone Blvd, ERC-1 Downey, CA 90241 jemerson@socalgas.com Pamela Yugar Parks and Recreation Department City of Pico Rivera 6767 Passons Boulevard Pico Rivera, CA 90660

Noe Negrete Public Works Department City of Pico Rivera 6615 Passons Boulevard Pico Rivera, CA 90660

Montebello Bus Lines 400 S. Taylor Avenue Montebello, CA 90640

BNSF Railway Pico Rivera Yard 7599 Rosemead Blvd #7425 Pico Rivera, CA 90660

Union Pacific – Los Nietos Yard Los Nietos Rd, Santa Fe Springs, CA 90670

Union Pacific – Montebello Yard 329 Van Norman Rd, Montebello, CA 90640

Los Angeles County Flood Control District 900 S. Fremont Avenue, Alhambra, CA 91803

South Coast AQMD Stephano Padilla 21865 Copley Dr, Diamond Bar, CA 91765

Planning Division Montebello City Hall 1600 W. Beverly Boulevard Montebello, CA 90640

Planning Division Downey City Hall 1111 Brookshire Avenue Downey, CA 90241

Planning Division Whittier City Hall 13230 Penn Street Whittier, CA 90602 Planning Division Santa Fe Springs City Hall 11710 Telegraph Road Santa Fe Springs, CA 90670

Native American Heritage Commission Tribal Consultation List

Gabrieleno Band of Mission

Indians - Kizh Nation

Andrew Salas, Chairperson P.O. Box 393 Covina, CA, 91723 Phone: (626) 926 - 4131 admin@gabrielenoindians.org

Gabrieleno/Tongva San Gabriel

Band of Mission Indians Anthony Morales, Chairperson P.O. Box 693 San Gabriel, CA, 91778 Phone: (626) 483 - 3564 Fax: (626) 286-1262 GTTribalcouncil@aol.com

Gabrielino /Tongva Nation

Sandonne Goad, Chairperson 106 1/2 Judge John Aiso St., #231 Los Angeles, CA, 90012 Phone: (951) 807 - 0479 sgoad@gabrielino-tongva.com

Gabrielino Tongva Indians of

California Tribal Council Robert Dorame, Chairperson P.O. Box 490 Bellflower, CA, 90707 Phone: (562) 761 - 6417 Fax: (562) 761-6417 gtongva@gmail.com

Gabrielino-Tongva Tribe

Charles Alvarez, 23454 Vanowen Street West Hills, CA, 91307 Phone: (310) 403 - 6048 roadkingcharles@aol.com

Santa Rosa Band of Cahuilla Indians

Lovina Redner, Tribal Chair P.O. Box 391820 Anza, CA, 92539 Phone: (951) 659 - 2700 Fax: (951) 659-2228 Isaul@santarosa-nsn.gov

Soboba Band of Luiseno

Indians Isaiah Vivanco, Chairperson P. O. Box 487 San Jacinto, CA, 92581 Phone: (951) 654 - 5544 Fax: (951) 654-4198 ivivanco@soboba-nsn.gov

Stakeholder List 2022

Adriana Raza, Customer Service Specialist La County Sanitation District Facilities Management Department 1955 Workman Mill Road Whittier, CA 90601

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jemerson@socalgas.com

Pam Yugar c/o Kaili Torres Parks and Recreation Department City of Pico Rivera 6767 Passons Boulevard Pico Rivera, CA 90660

Planning Division Montebello City Hall 1600 W. Beverly Boulevard Montebello, CA 90640

Planning Division Downey City Hall 1111 Brookshire Avenue Downey, CA 90241

Planning Division Whittier City Hall 13230 Penn Street Whittier, CA 90602

Planning Division Santa Fe Springs City Hall 11710 Telegraph Road Santa Fe Springs, CA 90670

UTILITIES CONTACT SHEET

ATTDSOUTH AT&T – DISTRIBUTION Substructure Records Request Construction & Engineering Call for Mailing Address, CA

(510) 645-2929 <u>Ma2797@att.com</u> 600 East Green Street Room 300 Pasadena, CA 91101

LACOTS LA COUNTY PUBLIC WORKS Gus Nakhoul 900 South Fremont Avenue Construction Division 8th Floor Alhambra, CA 91803 (626) 458-3124 Gnakhoul@dpw.lacounty.gov

LCDPWSSO LA COUNTY DEPARTMENT OF PUBLIC WORKS SEWER PUMP STATIONS Jeffrey Bouse 900 South Fremont Avenue Alhambra, CA 91803 (626) 300-3373 Jbouse@dpw.lacounty.gov

LA COUNTY DEPARTMENT OF PUBLIC WORKS – SOUTH STORM WATER MAINTENANCE DIVISION Ron Lacayo

(562) 861-0316 <u>Rlacayo@dpw.lacounty.gov</u>

LA COUNTY DEPARTMENT OF PUBLIC WORKS – PUBLIC UTILITIES/STORM DRAINS Daryl Chenoweth

(626) 458-3109 Dchenoweth@dpw.lacounty.gov LA COUNTY DEPARTMENT OF PUBLIC WORKS – ELECTRO MECHANIC WORKING SUPERVISOR Edward E. Carmona Leon (626) 458-1709 ext. 1633 Eleon@dpw.lacounty.gov

LAF54

LA COUNTY PUBLIC WORKS – STORM WATER MAINTENANCE DIVISION Area Engineer Imperial Yard Ask for Eduardo Ibasan or Ahmet Tatlilioglu 5525 East Imperial Highway South Gate, CA 90280 (562) 861-0316 Eibasan@dpw.lacounty.gov Atatlilioglu@dpw.lacounty.gov

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COMMENT SHEET

PUBLIC SCOPING MEETING Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan Wednesday, October 25, 2023, at 5:00 PM

(PLEASE	PRINT)
NAME	EMAIL

ADDRESS

REPRESENTING

(This identification will be placed on the City's mailing list for this project, unless otherwise noted.)

*Provide your comment on the back of this card.

I have the following comment(s) regarding the scope of the environmental analysis, alternatives evaluation, or mitigation measures that should be addressed in the Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan Draft Environmental Impact Report (EIR).

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Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan

Environmental Impact Report Scoping Meeting

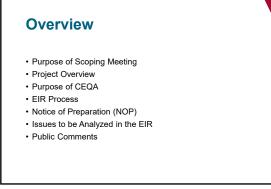
Public Scoping Meeting October 25, 2023 / 5:00 – 6:00 PM Pico Rivera City Council Chambers 6615 Passons Blvd., Pico Rivera, CA 90660



1

Project Team City of Pico Rivera (Planning Department) Avaro Betancourt - Community Development Director Jazmin Faccuseh - Senior Analyst Miney-Horn and Associates (CEQA Consultants) Avein Thomas - Environmental Project Manager Buben Salas - Environmental Assistant Project Manager Dave Barquist - Land Use Planning

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Purpose of Scoping Meeting

Purpose is to:

4

- Provide a general project description
- Solicit comments to refine and/or expand the "scope" of the Environmental Impact Report (EIR)

The scope is determined by:

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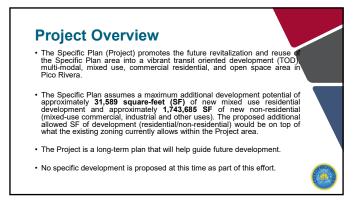
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Project Location and Overview

- The 327-acre Project area is a developed portion of the City of Pico Rivera
- Generally bounded south of Washington Boulevard, west of Rosemead Boulevard, east of Crider Avenue, and north of railway.





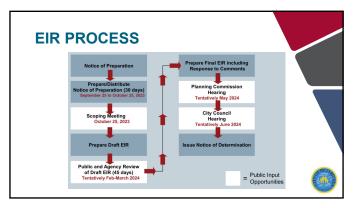


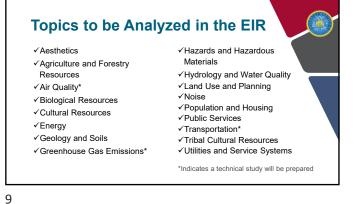
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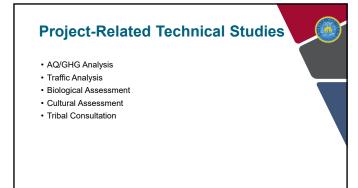
Purpose of CEQA

- California Environmental Quality Act (CEQA)
- Disclose project impacts to public and decision makers
- · Identify ways to avoid or reduce environmental impacts
- Analyze alternatives
- Foster inter-agency coordination and review









10



Opportunities to Provide Input

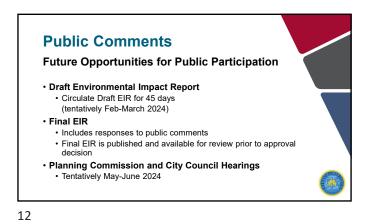
Notice of Preparation

 30-day public comment period began on September 25, 2023 and will end on October 25, 2023

Scoping Meeting

- Submit comments today to Jazmin Faccuseh
- (comment cards provided)
- Please include your name and address





Public Comments

- Any environmental issues you would like to see addressed in the EIR
- Comments may be submitted to Jazmin Faccuseh, Senior Analyst, City of Pico Rivera via:
 Email: <u>jfaccuseh@pico-rivera.org</u>

 - In person: Using a comment card in today's scoping meeting
 - Mail: Community and Economic Development Department 6615 Passons Blvd. Pico Rivera, CA 90660

13



Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan Wednesday, October 25, 2023, at 5:00 PM PUBLIC SCOPING MEETING

Please print your name, address, and email address below to receive future notices regarding the Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan Environmental Impact Report (EIR).

10. òò თ <u></u> (9. Jorge JOSUS M FAILE 0 JULIAN BADSERF 1 250' Cherina C NAME 24' Stephen 01100 Martinez. Nahas Bank Rod S C/2 CHANDOR CRRIE LEN Barra (If applicable) ORGANIZATION Ò Page 1 NO[MM] 9rs. mrtn za3 (June il com 6739 Meltonucco Dr 13 1 Le 1 Winnbalderasephonix achamber and Jeffren, Stephense core, com rue das 1904 @ vericoninat WSWULL COM Bennetto Vico EMAIL and war 6313 7775 Birchleaf Ave. 6312 13 59 31 AU 6710 Windsey Ave 9605 Vashington Blut 71 Runus Sand Tre ave CHOCK Hope & SOLL PALLENT PR OF POLIN ADDRESS



Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan Wednesday, October 25, 2023, at 5:00 PM PUBLIC SCOPING MEETING

Oriented Development Specific Plan Environmental Impact Report (EIR). Please print your name, address, and email address below to receive future notices regarding the Washington and Rosemead Boulevards Transit-

20. 19. 18. 16. 55 14. 13. 12. 17. Lism Fisher John Kwok VERONIQUE UNDREZ avar 201 NAME John N LOWIA LEENA Krr d y S VIPME 10082 ORGANIZATION (If applicable) PPOINCESSLISSA @ Kahoo.com pecoso926/24ahoo.com 100me auro @ gmail.com rue 2 4 561897 @msn. Low Power loades (dy alles Vohn jijn@gmail.com 101 Mizo VALIZZ John@ mdbmail.com EMAIL MII WEE Blue 9041 Dambridgery JOOS LINDEILAN 8700 REx RD. Pico gou Datose Blod Washing Ly Bibrorda es Angenter ADDRESS

Page 2

PUBLIC SCOPING PUBLIC COMMENT NOTES

Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan

Wednesday, October 25, 2023, at 5:00 PM

 <u>Traffic/Roadway Concerns</u> Parking and traffic concerns on Washington Blvd. • 	<u>Air Quality Concerns</u>
<u> Cultural Resources Concerns</u> •	 <u>General Safety Concerns</u> Metro hazard for pedestrians and homelessness
 <u>All Other Topics</u> Crime concerns Crime concerns due on existing BNSF grounds and adjacent residential communities. Provide Metro information and meetings on the rail line. Underground rail preferred as above rail is considered to be 	 Noise concerns due to new Metro Line. •

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COMMENT CARD

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(PLEASE PRINT) EMAIL power load foold NAME

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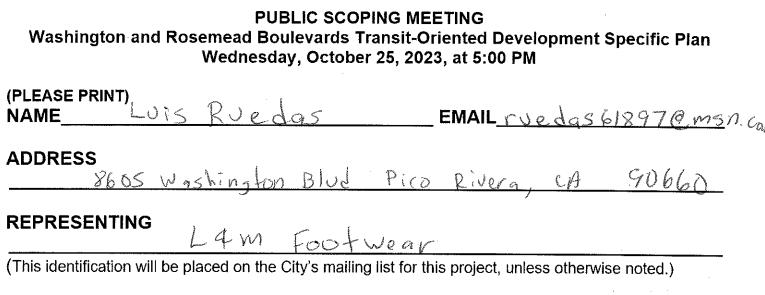
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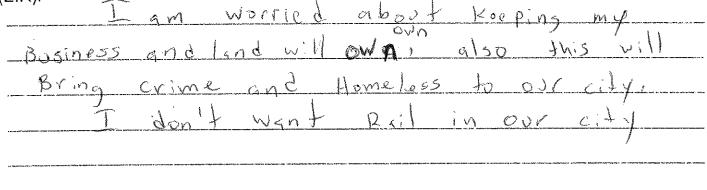
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COMMENT CARD



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BUILDING A STRONGER L.A.

Board of Commissioners Cynthia McClain-Hill, President Nicole Neeman Brady, Vice President Nurit Katz Mia Lehrer George S. McGraw Chante L. Mitchell, Secretary

Karen Bass, Mayor

Martin L. Adams, General Manager and Chief Engineer

October 11, 2023

Ms. Jazmin Faccuseh, Senior Analyst City of Pico Rivera 6615 Passons Boulevard Pico Rivera, CA 90660 Email: communitydevelopment@pico-rivera.org

Dear Ms. Faccuseh:

Subject: City of Pico Rivera – Notice of Preparation of a Draft Environmental Impact Report and Scoping Meeting for the Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan

The Los Angeles Department of Water and Power (LADWP) is in receipt of City of Pico Rivera's Notice of Preparation of a Draft Environmental Impact Report and Scoping Meeting dated September 21, 2023, and appreciates the opportunity to provide comments on the Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan (Project). The mission of LADWP is to provide clean, reliable water and power to the City of Los Angeles. Based on our review of the Project we respectfully submit the below comments.

City of Pico Rivera shall provide additional information before any developments are authorized adjacent and/or within LADWP's Transmission Line Rights-of-Way (TLRW) and are subject to the following comments and conditions:

Comments:

- City of Pico Rivera referenced herein shall pertain to its employees, agents, consultants, contractors, officers, patrons or invitees of City of Pico Rivera's, or by any other of City of Pico Rivera's affiliated entities.
- 2) The information provided, to date, is inadequate for properly reviewing the proposed improvements within sections of LADWP's TLRW. We therefore reserve the right to comment until more detailed information is provided regarding the proposed project. Provide plans illustrating the LADWP TLRW boundaries within the proposed project. Include towers and clearances from the proposed transmission line. Also, provide grading plans and utility plans, including any other plans illustrating the impacts to LADWP's TLRW. If access roads are proposed, provide plans illustrating impacts to LADWP's access roads. The plans should include APNs, state plane coordinates, or use the Public Land Survey System to locate the developments impacting LADWP's TLRW.

- Plans may be submitted for review to the LADWP Real Estate Services Office via the following email: <u>RE.Office@ladwp.com</u> and copy LADWP's Environmental Affairs at <u>environmental@ladwp.com</u>.
- 4) Any temporary work within or immediately adjacent to LADWP's TLRW requires approval from LADWP.

Conditions:

- 1) City of Pico Rivera shall acknowledge the LADWP TLRW are integral components of the transmission line system, which provides electric power to the City of Los Angeles and other local communities. Their use is under the jurisdiction of the North American Electric Reliability Corporation, an organization of the Federal Energy Regulatory Commission. Safety and protection of critical facilities are the primary factors used to evaluate secondary land use proposals. The rights-of-way serve as platforms for access, construction, maintenance, facility expansion and emergency operations. Therefore, the proposed use may, from time to time, be subject to temporary disruption caused by such operations.
- 2) City of Pico Rivera shall be responsible for the maintenance of the Project area and shall keep the area in a neat and clean condition within LADWP's TLRW. It is our understanding that City of Pico Rivera will assume responsibility for the maintenance of the project improvements, and for all the risks and liabilities associated with the proposed improvements. LADWP will not be liable for any damage to the proposed project during LADWP's operation and maintenance activities.
- 3) No improvements or construction activities of any kind whatsoever will be allowed within the LADWP TLRW without the prior written approval of the LADWP.
- 4) No equipment with the height over 14-feet shall be allowed to travel within the LADWP TLRW without the written approval of LADWP.
- 5) No grading or structures shall be constructed within the LADWP TLRW without prior written approval of the LADWP.
- 6) Vehicle and/or truck repair, refueling, washing, and change of oil, are prohibited within the TLRW.
- 7) Additional conditions may be required following review of detailed site plans, grading/drainage plans, etc.

This response shall not be construed as an approval to begin construction activities, project improvements, nor approval of this project

Ms. Jazmin Faccuseh Page 3 October 11, 2023

For any questions regarding the above comments, please contact Ms. Jazmin Martin of my staff at (213) 367-1768 or <u>Jazmin.Martin@ladwp.com</u>.

Sincerely,

· R D. the

Katherine Rubin Director of Corporate Environmental Affairs

JM:mr c: Ms. Jazmin Martin Ms. Jane Hauptman Ms. Maria Depaz Mr. Michael Hanson

Stakeholder List

Adriana Raza, Customer Service Specialist La County Sanitation District Facilities Management Department 1955 Workman Mill Road Whittier, CA 90601

Southern California Edison Attn: Design Support/UND 9901 Geary Avenue Santa Fe Springs, CA 90670

Dr. Marcos Villegas Superintendent El Rancho Unified School District 9333 Loch Lomond Drive Pico Rivera, CA 90660

Joe Basulto General Manager Pico Water District 4843 S. Church Street Pico Rivera, CA 90660

Los Angeles County Fire Department Public Information Office 1320 N. Eastern Ave Los Angeles, CA 90063

LA County Library Administrative Office 7400 E. Imperial Highway Downey, CA 90242

Los Angeles County Sheriff's Department Pico Rivera Station 6631 Passons Boulevard Pico Rivera, 90660

Julia Emerson Public Affairs Manager 9420 E. Firestone Blvd, ERC-1 Downey, CA 90241 jemerson@socalgas.com Pamela Yugar Parks and Recreation Department City of Pico Rivera 6767 Passons Boulevard Pico Rivera, CA 90660

Noe Negrete Public Works Department City of Pico Rivera 6615 Passons Boulevard Pico Rivera, CA 90660

Montebello Bus Lines 400 S. Taylor Avenue Montebello, CA 90640

BNSF Railway Pico Rivera Yard 7599 Rosemead Blvd #7425 Pico Rivera, CA 90660

Union Pacific – Los Nietos Yard Los Nietos Rd, Santa Fe Springs, CA 90670

Union Pacific – Montebello Yard 329 Van Norman Rd, Montebello, CA 90640

Los Angeles County Flood Control District 900 S. Fremont Avenue, Alhambra, CA 91803

South Coast AQMD Stephano Padilla 21865 Copley Dr, Diamond Bar, CA 91765

Planning Division Montebello City Hall 1600 W. Beverly Boulevard Montebello, CA 90640

Planning Division Downey City Hall 1111 Brookshire Avenue Downey, CA 90241

Planning Division Whittier City Hall 13230 Penn Street Whittier, CA 90602 Planning Division Santa Fe Springs City Hall 11710 Telegraph Road Santa Fe Springs, CA 90670

Native American Heritage Commission Tribal Consultation List

Gabrieleno Band of Mission

Indians - Kizh Nation

Andrew Salas, Chairperson P.O. Box 393 Covina, CA, 91723 Phone: (626) 926 - 4131 admin@gabrielenoindians.org

Gabrieleno/Tongva San Gabriel

Band of Mission Indians Anthony Morales, Chairperson P.O. Box 693 San Gabriel, CA, 91778 Phone: (626) 483 - 3564 Fax: (626) 286-1262 GTTribalcouncil@aol.com

Gabrielino /Tongva Nation

Sandonne Goad, Chairperson 106 1/2 Judge John Aiso St., #231 Los Angeles, CA, 90012 Phone: (951) 807 - 0479 sgoad@gabrielino-tongva.com

Gabrielino Tongva Indians of

California Tribal Council Robert Dorame, Chairperson P.O. Box 490 Bellflower, CA, 90707 Phone: (562) 761 - 6417 Fax: (562) 761-6417 gtongva@gmail.com

Gabrielino-Tongva Tribe

Charles Alvarez, 23454 Vanowen Street West Hills, CA, 91307 Phone: (310) 403 - 6048 roadkingcharles@aol.com

Santa Rosa Band of Cahuilla Indians

Lovina Redner, Tribal Chair P.O. Box 391820 Anza, CA, 92539 Phone: (951) 659 - 2700 Fax: (951) 659-2228 Isaul@santarosa-nsn.gov

Soboba Band of Luiseno

Indians Isaiah Vivanco, Chairperson P. O. Box 487 San Jacinto, CA, 92581 Phone: (951) 654 - 5544 Fax: (951) 654-4198 ivivanco@soboba-nsn.gov

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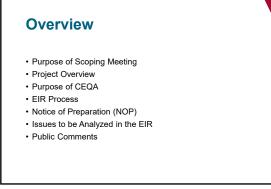
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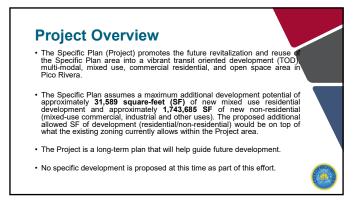
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- Generally bounded south of Washington Boulevard, west of Rosemead Boulevard, east of Crider Avenue, and north of railway.





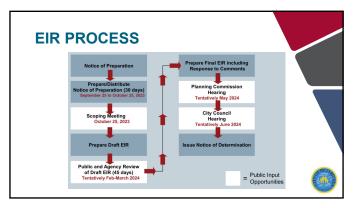


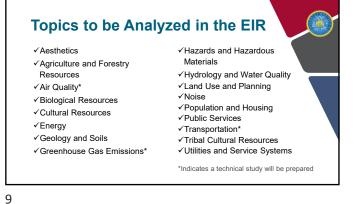
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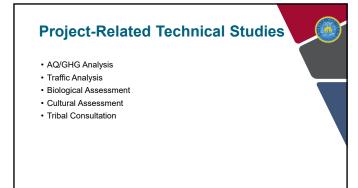
Purpose of CEQA

- California Environmental Quality Act (CEQA)
- Disclose project impacts to public and decision makers
- · Identify ways to avoid or reduce environmental impacts
- Analyze alternatives
- Foster inter-agency coordination and review









10



Opportunities to Provide Input

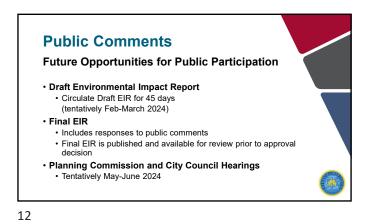
Notice of Preparation

 30-day public comment period began on September 25, 2023 and will end on October 25, 2023

Scoping Meeting

- Submit comments today to Jazmin Faccuseh
- (comment cards provided)
- Please include your name and address





Public Comments

- Any environmental issues you would like to see addressed in the EIR
- Comments may be submitted to Jazmin Faccuseh, Senior Analyst, City of Pico Rivera via:
 Email: <u>jfaccuseh@pico-rivera.org</u>

 - In person: Using a comment card in today's scoping meeting
 - Mail: Community and Economic Development Department 6615 Passons Blvd. Pico Rivera, CA 90660

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Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan Wednesday, October 25, 2023, at 5:00 PM PUBLIC SCOPING MEETING

Please print your name, address, and email address below to receive future notices regarding the Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan Environmental Impact Report (EIR).

10. òò თ <u>,</u> (9. Jorge JOSUS M FAILE 0 JULIAN BADSERF 1 250' Cherina C NAME 24' Stephen 01100 Martinez. Nahas Bank Rod S C/2 CHANDOR CRRIE LEN Barra (If applicable) ORGANIZATION Ò Page 1 NO[MM] 9rs. mrtn za3 (June il com 6739 Meltonucco Dr 13 1 Le 1 Winnbalderasephonix achamber and Jeffren, Stephense core, com rue das 1904 @ vericoninat WSWULL COM Bennetto Vico EMAIL and war 6313 7775 Birchleaf Ave. 6312 13 59 31 AU 6710 Windsey Ave 9605 Vashington Blut 71 Runus Sand Tre ave CHOCK Hope & SOLL PALLENT PR OF POLIN ADDRESS



Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan Wednesday, October 25, 2023, at 5:00 PM PUBLIC SCOPING MEETING

Oriented Development Specific Plan Environmental Impact Report (EIR). Please print your name, address, and email address below to receive future notices regarding the Washington and Rosemead Boulevards Transit-

20. 19. 18. 16. 55 14. 13. 12. 17. Lism Fisher John Kwok VERONIQUE UNDREZ avar 201 NAME John N LOWIA LEENA Krr d y S VIPME 10082 ORGANIZATION (If applicable) PPOINCESSLISSA @ Kahoo.com pecoso926/24ahoo.com 100me auro @ gmail.com rue 2 4 561897 @msn. Low Power loades (dy alles Vohn jijn@gmail.com 101 Mizo VALIZZ John@ mdbmail.com EMAIL MII WEE Blue 9041 Dambridgery JOOS LINDEILAN 8700 REx RD. Pico gou Datose Blod Washing Ly Bibrorda Con Angenter ADDRESS

Page 2

PUBLIC SCOPING PUBLIC COMMENT NOTES

Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan

Wednesday, October 25, 2023, at 5:00 PM

 <u>Traffic/Roadway Concerns</u> Parking and traffic concerns on Washington Blvd. • 	<u>Air Quality Concerns</u>
<u> Cultural Resources Concerns</u> •	 <u>General Safety Concerns</u> Metro hazard for pedestrians and homelessness
 <u>All Other Topics</u> Crime concerns Crime concerns due on existing BNSF grounds and adjacent residential communities. Provide Metro information and meetings on the rail line. Underground rail preferred as above rail is considered to be 	 Noise concerns due to new Metro Line. •

TEPIC COMMENT · CRIME/POLIANE HOW AFFECT OPING AVOS AND AFTERS. · CPIME/payang SIENERCONTROT - IMPACTS · PUPINE PRIME PARLADY/ CPINE, WEVE ORLIEP PAUPORP (HEHUEHING) · DRAVES/CALLINE COPS . I LOT MORE POINE OPIMES · NOPOPE 13 POUCING. · PELABP TO METPO. MER THAT ON. · WHAT 13 SPEAC & WHAT WILL SPECIFIC PLAN PIAN AREA \$ D07 WHAT DOGSIT · WHAT DOBS IT. MBAN ?.

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COMMENT CARD

PUBLIC SCOPING MEETING

Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan Wednesday, October 25, 2023, at 5:00 PM

(PLEASE PRINT) EMAIL power load foold NAME

ADDRESS

REPRESENTING

(This identification will be placed on the City's mailing list for this project, unless otherwise noted.)

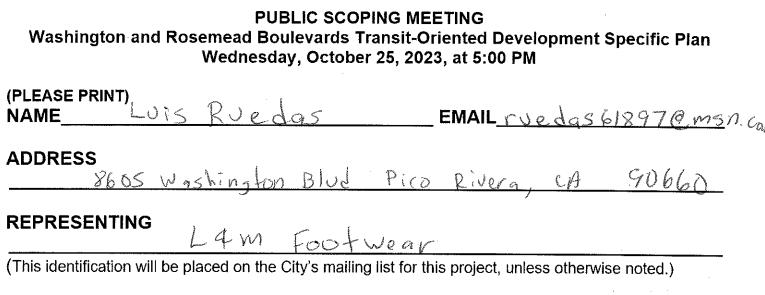
*Provide your comment on the back of this card.

I have the following comment(s) regarding the scope of the environmental analysis, alternatives evaluation, or mitigation measures that should be addressed in the Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan Draft Environmental Impact Report (EIR).

uchies a 6pm so more people could

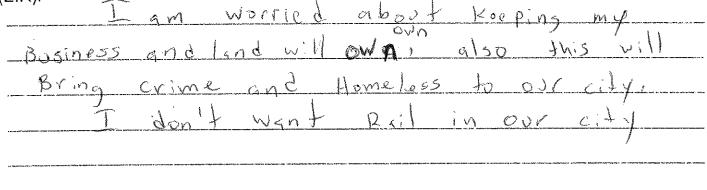
If you have comments and do not wish to speak during the Scoping Meeting, please take the opportunity to fill out this Comment Sheet. Comment Sheets will be collected at the end of this Scoping Meeting.

COMMENT CARD



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I have the following comment(s) regarding the scope of the environmental analysis, alternatives evaluation, or mitigation measures that should be addressed in the Washington and Rosemead Boulevards Transit-Oriented Development Specific Plan Draft Environmental Impact Report (EIR).



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