Appendix J:
CEQA Analysis for the Mitchell Townhomes Project

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CEQA Analysis for the Mitchell Drive Townhome Project



Prepared for the City of Walnut Creek

Submitted by
W-Trans

August 14, 2025

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Introduction

The proposed project is located on multiple parcels on Mitchell Drive, Shadelands Drive and Oak Grove Road, and would result in the demolition of 357,463 square feet of partially occupied office buildings and the construction of 422 townhouse dwelling units located in the Shadelands area in the City of Walnut Creek. The City has requested that the applicant include as a project variant, the construction of additional transportation improvements as community benefits, including a new roundabout at Shadelands Drive/Via Monte and additional bicycle improvements, as described below.

Prelude

The purpose this study is to provide City staff and policy makers with data that they can use to make an informed decision regarding the potential transportation impacts of a proposed project, and any associated improvements that would be required to mitigate these impacts to an acceptable level under the California Environmental Quality Act (CEQA), the City's General Plan, or other policies. This report provides an analysis of those items that are identified as areas of environmental concern under CEQA, as described below.

Applied Criteria

The report starts with a discussion of background and project-specific data, followed by the assessment of potential CEQA impacts, and recommendations regarding proposed mitigation measures. The City uses the CEQA Appendix G transportation thresholds, listed below, which are the criteria evaluated in this report.

Would the project:

a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?
b. Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
d. Result in inadequate emergency access?

Project Description

The project site is located within the Walnut Creek Executive Park on multiple parcels at 2775-2855 Mitchell Drive, 2730-2880 Shadelands Drive, and a portion of 2125 Oak Grove Road in the City of Walnut Creek and includes the redevelopment of the site from the current eleven office buildings with 30,000 to 36,000 square feet of floor area each (for 357,463 square feet total), to 422 three-story multi-family dwelling units in townhome-style condominium configuration within approximately 82 building groups. Approximately 1,481 existing parking stalls would be replaced with 955 parking stalls for the project, consisting of 844 spaces located within two-car private garages for each townhouse unit and 111 guest parking spaces located on proposed internal roadways. The four existing driveways on Mitchell Drive and four existing driveways on Shadelands Drive would be replaced with two new driveways on each street. The proposed internal roadways would be 20 feet wide at minimum throughout the site and would provide emergency vehicle access to all parts of the project site. In addition, the proposed internal roadway would provide standard fire apparatus turnarounds, per Contra Costa County Fire Protection District (CCCFPD) requirements. The construction of new ten-foot-wide sidewalks along Mitchell Drive and Shadelands Drive is included with the proposed project.

Community Benefits Variant

The City has requested that the applicant include as a project variant, the construction of additional transportation improvements as community benefits ("Community Benefits Variant"). Variants are variations of the proposed project at the same project site, with the same objectives, background, and development controls but with a specific variation.

This report describes and analyzes the potential impacts associated with the proposed Community Benefits Variant. The Community Benefits Variant is not intended to reduce or mitigate potential environmental impacts and is not considered a project alternative. Instead, the Community Benefit Variant considers additional components which may be constructed as part of the project if selected by the City and applicant.

The proposed Community Benefits Variant includes two independent components which were be evaluated separately. Firstly, the construction of a single-lane traffic roundabout at Shadelands Drive/North Via Monte, immediately south of the project site ("Shadelands/Via Monte Roundabout"). The *Shadelands Multi-Modal Improvement Plan* recommends a roundabout for further evaluation at this intersection.

Currently, the intersection of Shadelands Drive and North Via Monte is a T-intersection with stop control along the Via Monte approach with pedestrian crossings on east and south legs only. The proposed Shadelands/Via Monte Roundabout would be located within the existing right-of-way, as shown in Appendix A. It would also include striped pedestrian crosswalks on all legs of the roundabout.

The second component of the Community Benefits Variant is the establishment of Class IV bicycle facilities along portions of Shadelands Drive and Mitchell Drive outside of the project's frontage. Each Class IV bikeway would be located within the existing public right-of-way and be comprised of a 5-foot-wide bikeway with 3-foot-wide painted buffer and flexible bollards or other vertical elements which is consistent with the illustrations shown in the *Shadelands Multi-Modal Improvement Plan*. A description of each segment is provided below.

1. Shadelands Drive ("Shadelands Bike Lane Extensions"):
    a. Along the north side of the street, from North Wiget Lane intersection to the western Project boundary;
    b. Along the north side of the street, from the eastern Project boundary to Oak Grove Road intersection; and
    c. Along the south side of the street, from the North Wiget Lane intersection to Via Monte intersection.

2. Mitchell Drive ("Mitchell Bike Lane Extensions"):
    a. On the north side of the street, from the western Project boundary to Oak Grove Road intersection; and
    b. On the south side of the street, from the eastern Project boundary to Oak Grove Road intersection.

The proposed bicycle facility improvements would be limited to pavement striping, installation of vertical delineators and signage installed within the existing public right-of-way to demarcate protected bike lanes. Implementation of these bicycle facilities would not require roadway widening or modifications to the curb and gutter.

Trip Generation

The anticipated trip generation for the proposed project was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual, 11th Edition*, 2021, for "Single Family Attached Housing" (ITE LU #215). Since the site is currently occupied by the Walnut Creek Executive Park, the trip generation of the offices was considered. "General Office Building" (ITE LU #710) rates were applied to the existing use. These trips were reduced by 20 percent since the existing office building occupancy was estimated to be 80 percent. Applying a 20-percent trip reduction is conservative since trip credits for a fully occupied office building could have been applied to reflect the entitled land use of the site, and the rates provided by ITE include offices that were not fully occupied at the time of data collection. ITE rates account for typical travel patterns, including commutes to work and school and shopping areas.

The proposed project would generate an average of 3,038 trips per day, including 203 trips during the a.m. peak hour and 241 p.m. peak hour trips. In comparison to the existing use (including the 20 percent trip reduction), the project would be expected to generate an average of 62 net fewer daily trips, including 231 fewer vehicle trips during the morning peak hour and 171 fewer vehicle trips during the evening peak hour, as summarized in Table 1. It is noted that while the project would have a net negative trip generation compared to the existing use for each peak hour, the change from employment to residential would result in a marked decrease in inbound traffic for the morning and outbound traffic in the evening, and a corresponding (but lesser) increase in outbound traffic in the morning and inbound traffic in the evening.

Table 1 – Trip Generation Summary

Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Existing											
Offices	-357.453 ksf	10.84	-3,875	1.52	-543	-478	-65	1.44	-515	-88	-427
Occupancy Adjustment (20%)			775		109	96	13		103	18	85
Subtotal (Occupied)			*-3,100*		*-434*	*-382*	*-52*		*-412*	*-70*	*-342*
Proposed											
Townhouses	422 du	7.20	3,038	0.48	203	63	140	0.57	241	137	104
Total New Trips			**-62**		**-231**	**-319**	**88**		**-171**	**67**	**-238**

Note: ksf = 1,000 square feet, du = dwelling units

Regulatory Setting

This section describes federal, State, regional, and local environmental laws and policies that are relevant to the California Environmental Quality Act (CEQA) review process for transportation and circulation. These policies provide a context for the impact discussion related to the proposed project's consistency with the applicable regulatory conditions.

Federal Regulations

The Americans with Disabilities Act (ADA) of 1990 provides comprehensive rights and protections to individuals with disabilities. The goal of the ADA is to assure equality of opportunity, full participation, independent living, and economic self-sufficiency for people with disabilities. To implement this goal, the US Access Board, an independent federal agency created in 1973 to ensure accessibility for people with disabilities, has created accessibility guidelines for public rights-of-way, which was adopted by the US Department of Transportation with an effective date of January 17, 2025. These guidelines, last revised in July 2011, address various issues, including roadway design practices, slope and terrain, and pedestrian access to streets, sidewalks, curb ramps, street furnishings, pedestrian signals, parking, public transit, and other components of public rights-of-way. These guidelines would apply to proposed roadways in the study area.

State Regulations

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law, supporting previous climate-focused and transportation legislation, including the Sustainable Communities and Climate Protection Act of 2008 (SB 375) and the California Global Warming Solutions Act of 2006 (Assembly Bill (AB) 32). SB 743 also supports implementation of the Complete Streets Act (AB 1358), which requires local governments to plan for a balanced, multimodal transportation network that meets the needs of all users. To further the State's commitment to the goals of SB 375, AB 32 and AB 1358, SB 743 added Chapter 2.7, Modernization of Transportation Analysis for Transit-Oriented Infill Projects, to Division 13 (Section 21099) of the Public Resources Code.

SB 743 introduced fundamental changes in the assessment of transportation impacts through the CEQA process. These changes include the elimination of auto delay (measured as Level of Service, or LOS) as a basis for determining significant transportation impacts. SB 743 included amendments that revised the definition of "infill opportunity zones" to allow cities and counties to opt out of traditional LOS standards established by congestion management programs (CMPs) and required the California Governor's Office of Planning and Research (OPR) to update the CEQA Guidelines and establish "criteria for determining the significance of transportation impacts of projects within transit priority areas." As part of the new CEQA guidelines, the new criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." SB 743-compliant CEQA analysis became mandatory on July 1, 2020.

In December 2018, OPR released a final advisory to guide lead agencies in implementing SB 743, the "Technical Advisory on Evaluating Transportation Impacts in CEQA." Key guidance includes the following.

- Vehicle Miles Traveled (VMT) is the most appropriate metric to evaluate a project's transportation impact under CEQA.
- Tour- and trip-based travel models are recommended for estimating VMT, but local agencies have the authority to select the tools they use.
- VMT for residential and office projects is generally assessed using efficiency metrics, i.e., on a "per rate" basis.
- The recommended thresholds of significance for residential and office projects are VMT per capita or per employee that is fifteen percent below the city or regional average (whichever is applied). In other words, an office project that generates VMT per employee that is more than 85 percent of the regional VMT per

employee could result in a significant impact. This threshold is in line with statewide GHG emission reduction targets.

- Lead agencies have the discretion to set or apply their own significance thresholds in lieu of those recommended in the advisory, provided they are based on substantial evidence.
- Cities and counties still have the ability to use metrics such as LOS for other plans, studies, or network monitoring. However, LOS and similar metrics cannot constitute the sole basis for CEQA impacts.

California Complete Streets Act of 2008 (Assembly Bill 1358)

Originally passed in 2008, California's Complete Streets Act came into force in 2011 and requires local jurisdictions to plan for land use transportation policies that reflect a "complete streets" approach to mobility. "Complete streets" comprises a suite of policies and street design guidelines which provide for the needs of all road users, including pedestrians, bicyclists, transit operators and riders, children, the elderly, and the disabled. From 2011 onward, any local jurisdiction, County or City, that undertakes a substantive update of the circulation element of its general plan must consider "complete streets" and incorporate corresponding policies and programs.

Regional Regulations

Bay Area Air District

The Bay Area Air District (Air District) is the public agency tasked with regulating air pollution in the nine-county Bay Area, including Contra County. As a primary source of air pollution in the Bay Area region is from motor vehicles, air district regulations affect transportation planning in the project study area. The Air District's goals include reducing health disparities due to air pollution, achieving, and maintaining air quality standards, and implementing exemplary regulatory programs and compliance with federal, State, and regional regulations.

Contra Costa Transportation Authority Technical Procedures

The Contra Costa Transportation Authority (CCTA) is responsible for planning, funding, and delivering transportation projects and programs in Contra Costa County. The technical procedures document establishes a uniform approach, methodology and tool set that public agencies in the county may apply to evaluate transportation impacts of land use decisions on the local and regional transportation system.

Metropolitan Transportation Commission

The Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating, and financing agency for the nine-county Bay Area, including Contra Costa County and the City of Walnut Creek. It also functions jointly as the federally mandated metropolitan planning organization (MPO) for the region along with the Association of Bay Area Governments (ABAG). It is responsible for regularly updating the Regional Transportation Plan (RTP), a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities.

Local Regulations

Walnut Creek General Plan

The City of Walnut Creek *General Plan* (adopted 2006) is a comprehensive revision of the City's 1989 *General Plan* which establishes a vision for long-range physical and economic development of the City, provides strategies and specific implementing actions, and establishes a basis for judging whether specific development proposals and public projects are consistent with the City's plans and policy standards.

Walnut Creek Vehicle Miles Traveled (VMT) Thresholds

In October 2020, the City of Walnut Creek adopted VMT-based analysis methods, which include VMT metrics, thresholds, and screening criteria for evaluating a project's VMT impact. Based on the City thresholds and screening criteria, a project can be screened out for a formal VMT analysis if certain criteria are met that would signify that a project would be presumed to result in a less-than-significant impact with respect to VMT. A project's impact on VMT is considered less than significant and should not require further VMT analysis if the project meets at least one of the following criteria.

Projects that:

- Generate or attract fewer than 110 daily vehicle trips;
- Projects of 10,000 square feet or less of non-residential space or 20 residential units or less or otherwise generating less than 836 VMT per day;
- Residential, retail, office projects, or mixed-use projects proposed within a half-mile of an existing major transit stop or an existing stop along a high-quality transit corridor; or
- Residential projects (home-based VMT) at 15 percent or below baseline County-wide homebased average VMT per capita, or employment projects (employee VMT) at 15 percent or below the baseline Bay Area average commute VMT per employee in areas with low VMT that incorporate similar VMT reducing features (i.e., density, mix of uses, transit accessibility).

Walnut Creek Citywide Transportation Demand Management (TDM) Requirements

In 2021, the City of Walnut Creek developed the *Citywide TDM Requirements* providing a list of project level and community level strategies intended to reduce traffic congestion and vehicle emissions by encouraging use of alternatives to driving alone, such as taking public transit, carpooling, biking and walking. It is noted that projects that satisfy the low VMT generating screening are required to prepare a TDM plan according to the Citywide TDM Requirements document.

Shadelands Multi-Modal Improvement Plan

In August of 2014, the Walnut Creek City Council approved the creation of the Shadelands Property & Business Improvement District (PBID), a unified group of Shadelands property owners who advocate for and direct the future of Shadelands. The Shadelands Steering Committee, in partnership with the City of Walnut Creek, have joined forces to improve the business climate, amenities, aesthetics, and value of Shadelands with the *Shadelands Multi-Modal Improvement Plan* as a key component. The *Shadelands Multi-Modal Improvement Plan*, adopted by the City Council in 2021, envisions better movement for everyone within Shadelands and its connection to the surrounding transportation network. The study delivers a comprehensive plan that identifies and prioritizes a set of improvement projects tailored to the needs of the Shadelands Business Park stakeholders.

Pedestrian Master Plan (PMP)

The *Pedestrian Master Plan* (PMP), City of Walnut Creek, 2016, is a comprehensive citywide plan designed to enhance pedestrian safety, convenience, and accessibility. This plan focuses on improving pedestrian infrastructure, particularly in areas around schools, transit hubs, open spaces, parks and downtown. The plan also aims to make walking more popular by providing guidelines for sidewalk, crosswalk and footpath design.

Walnut Creek Bicycle Master Plan

The Walnut Creek Bicycle Master Plan, 2011, was developed through a public process that included active participation from the Bicycle Plan Advisory Committee (BMPAC), the Bicycle Advisory Committee, the Transportation Commission, Planning Commission, City Council, Walnut Creek City staff and members of the general public. The goal of this plan is to create a comprehensive vision that supports bicycle use in Walnut Creek. The Plan emphasizes the policy direction established in the Walnut Creek General Plan 2025 to provide a safe and

attractive environment for bicycle travel, promote bicycle use as a sustainable and healthy mode of transportation, and to provide facilities that encourage and support bicycle use for travel and recreation in Walnut Creek.

Rethinking Mobility Transportation Strategic Plan

The *Rethinking Mobility Transportation Strategic Plan for the City of Walnut Creek*, 2020, is a five-year plan that includes thirteen actionable transportation and parking management strategies to reduce single-occupant automobile trips, manage parking demand, and enhance access for those walking, bike and using public transit.

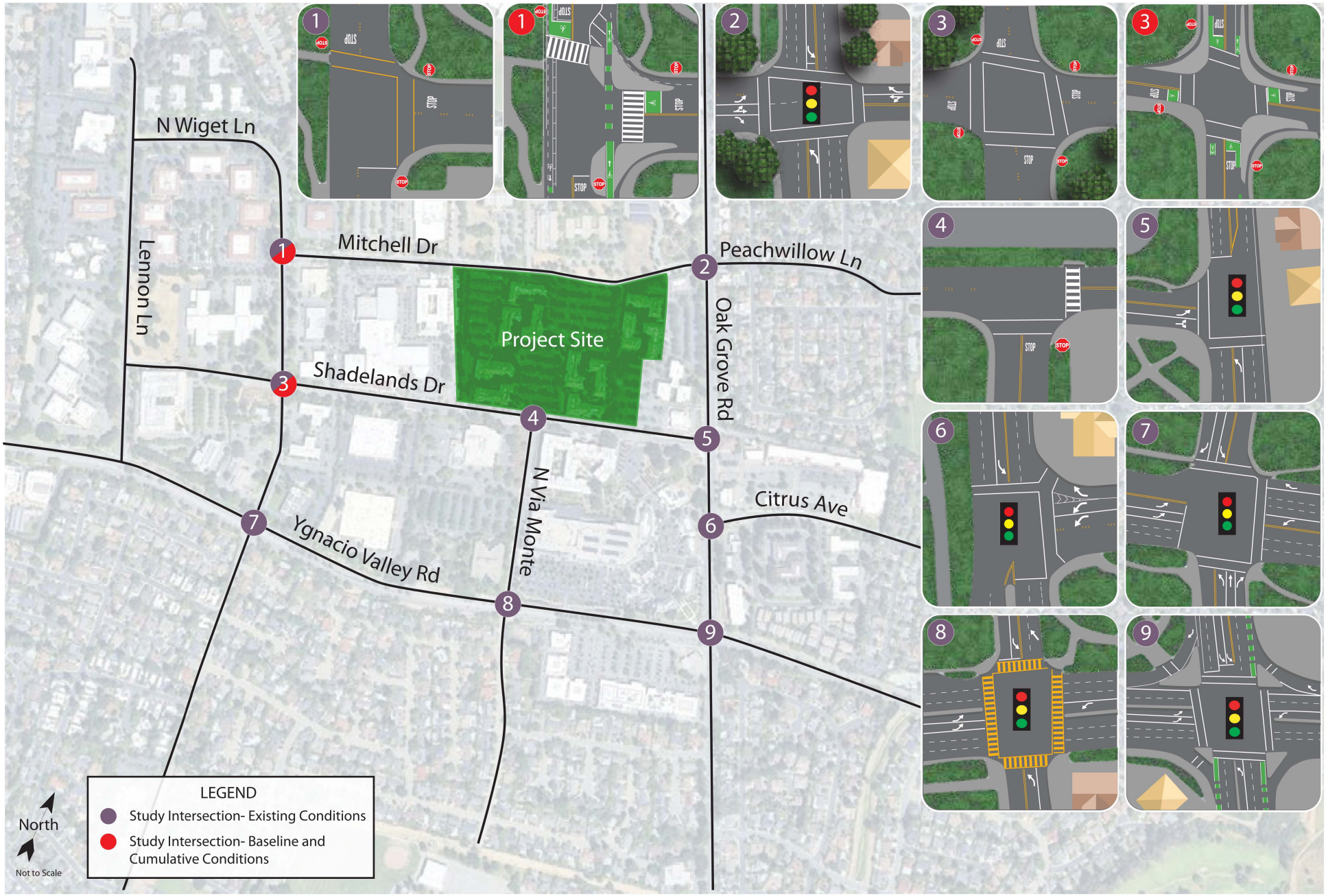
Transportation Setting

Study Area and Periods

A project's study area for purposes of a transportation analysis varies depending on the mode of transport. For motor vehicle trips it consists of both local and regional roadways within the nine county San Francisco Bay Area. For pedestrian trips it consists of all streets within a half-mile of the project site that would lie along primary routes of pedestrian travel, or those leading to nearby generators or attractors. For bicycle trips it consists of all streets within one mile of the project site that would lie along primary routes of bicycle travel. For the safety and operational analyses, it consists of the project frontage and the following intersections.

1. Mitchell Drive/North Wiget Lane
2. Mitchell Drive/Oak Grove Road
3. Shadelands Drive/North Wiget Lane
4. Shadelands Drive/North Via Monte
5. Shadelands Drive/Oak Grove Road
6. Oak Grove Road/Citrus Avenue
7. Ygnacio Valley Road/Wiget Lane
8. Ygnacio Valley Road/Via Monte
9. Ygnacio Valley Road/Oak Grove Road

The locations of the study intersections and the existing lane configurations and controls are shown in Figure 1.



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Traffic Operations Analysis for the Mitchell Townhomes Project

Figure 1 – Study Area and Existing Lane Configurations

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CEQA Checklist

Following is a discussion and analysis of the transportation related CEQA checklist items for both the proposed project and the Community Benefits Variant. The results are summarized in Table 2 and a discussion of each criterion follows.

Table 2 – XVII. TRANSPORTATION/TRAFFIC

Would the Project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			PP/CBV	
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			PP/CBV	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			PP/CBV	
d) Result in inadequate emergency access?			PP/CBV	

Notes: PP = Proposed Project; CBV = Community Benefits Variant

Discussion of CEQA Checklist Items

Circulation System

a. Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

The proposed project was evaluated to determine whether there would be conflicts with adopted policies, plans, or programs supporting existing roadways and alternative transportation (e.g., sidewalks, Class IV bikeways, etc.) since residents and visitors will have the option of driving, taking transit, walking, or cycling to and from the proposed project.

Roadways

Existing Roadways

Mitchell Drive, Shadelands Drive, Lennon Lane, North Wiget Lane and Via Monte are the internal roadways within the Shadelands area. These are all two-lane roads with unmarked on-street parking.

Planned Roadways

The *Shadelands Multi-Modal Improvement Plan* recommends several roadway improvements intended to benefit motorists by installing additional safety features such as protected left-turn phasing. These improvements, although planned, are currently unfunded and their anticipated implementation date is uncertain. It is noted that the *Shadelands Multi-Modal Improvement Plan* also recommends the evaluation of a single lane roundabout at the intersections of Shadelands Drive/North Via Monte, Mitchell Drive/North Wiget Lane and Shadelands Drive/North

Wiget Lane. These roundabouts are intended to improve the experience for all users by promoting better vehicle flow and comfort for pedestrians and bicyclists traveling through the intersections.

Findings Regarding Impacts to Roadway Facilities

Proposed Project – The proposed project includes modification of driveways with access between the project site and Mitchell Drive and Shadelands Drive. Roadway facilities serving the site would not conflict with any policies or strategies outlined in the *Shadelands Multi-Modal Improvement Plan* or any other applicable transportation policies or plans. Therefore, the proposed project would have a less-than-significant impact on roadway facilities.

> **Significance Finding –** Roadway facilities associated with the proposed project are presumed to have a less-than-significant impact since it would not conflict with any policies or strategies outlined in the Shadelands Multi-Modal Improvement Plan or any other appliable transportation policy or plans.

Community Benefits Variant – The Community Benefits Variant includes the construction of a single-lane roundabout at the intersection of Shadelands Drive/North Via Monte (Shadelands/Via Monte Roundabout). Evaluation of this roundabout is recommended within the *Shadelands Multi-Modal Improvement Plan* and as such would not conflict with any policies or strategies outlined in the plan. Roadway facilities related to the community benefits variant would not conflict with any policies or strategies outlined in the *Shadelands Multi-Modal Improvement Plan* or any other applicable transportation policies/plans. Therefore, the Community Benefits Variant would have a less-than-significant impact on roadway facilities.

> **Significance Finding –** The Community Benefits Variant and associated roadway facilities would not conflict with any existing policies or plans described in the Shadelands Multi-Modal Improvement Plan or any other applicable transportation policy or plans resulting in a less-than-significant impact.

Pedestrian Facilities

Existing Pedestrian Facilities

Given the proximity of commercial, retail, and school land uses to the surrounding site, it is reasonable to assume that some project patrons would want to walk, bicycle, and/or use transit to reach and exit the project site. Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. In general, a network of sidewalks, crosswalks, pedestrian signals, and curb ramps provide access for pedestrians in the vicinity of the proposed project site. However, intermittent sidewalk gaps are present along the project frontages on both Mitchell Drive and Shadelands Drive. Contra Costa Canal Trail runs east-west approximately 800 feet north of the project site with access from Oak Grove Road and North Wiget Lane. As described by the East Bay Regional Park District, this multi-use, whole-access trail (accessible to persons in wheelchairs) is a paved pathway suitable for bikers, runners and equestrians and provides an off-street corridor connecting the Cities of Martinez, Pleasant Hill, Walnut Creek and Concord.

- **Mitchell Drive** –Sidewalks exist on both sides of Mitchell Drive between North Wiget Lane and Oak Grove Road, except for a gap along the south side of the street that spans the extent of 2775-2855 Mitchell Drive. Marked crosswalks at and between side street approaches are present, though curb ramps are intermittent. Lighting is provided by overhead streetlights along the segment.
- **Oak Grove Road** – Continuous sidewalks are on both sides of Oak Grove Road between Mitchell Drive and Shadelands Drive, along with curb ramps and crosswalks on side street legs at intersections. Streetlighting is consistently provided.
- **Shadelands Drive** – There is intermittent sidewalk or pathway coverage on Shadelands Drive with several significant gaps on both sides of the street and a section in poor condition on the south side between North Wiget Lane and Oak Grove Road. Curb ramps and marked crosswalks are available at intersections and at three midblock locations. Lighting is provided by overhead streetlights.

- **North Wiget Lane** – Continuous sidewalk coverage is available on North Wiget Lane with between Mitchell Drive and Shadelands Drive. Crosswalks are present, but curb ramps are intermittent. Lighting is provided by streetlights along the roadway.

Planned Pedestrian Facilities

Future facilities as described in the *Shadelands Multi-Modal Improvement Plan*, include filling in sidewalk gaps, addressing current non-ADA-compliant curb ramps, striping more crosswalks on Mitchell Drive and Oak Grove Road, and adding a midblock pathway connecting Mitchell Drive and Oak Grove Road. Curb ramps are recommended at each marked crosswalk along North Wiget Lane in the *Shadelands Multi-Modal Improvement Plan* to improve pedestrian accessibility. However, as the project does not front on this road segment, this recommendation should not be interpreted as a project mitigation.

Findings Regarding Impacts on Pedestrian Facilities

Proposed Project – The project, as proposed, would include the construction of new ten-foot-wide sidewalks along the site frontages of Mitchell Drive and Shadelands Drive. These additions would further improve existing pedestrian facilities and access within and surrounding the project site and are consistent with recommendations in the *Shadelands Multi-Modal Improvement Plan*. Pedestrian facilities serving the project site are adequate, but some crosswalks could benefit from improvements to accommodate users with limited mobility. The installation of improvements as recommended in the *Shadelands Multi-Modal Improvement Plan,* would further improve upon the pedestrian facilities near the project site. The project-proposed pedestrian facilities would not conflict with any existing policies.

> **Significance Finding –**The project-proposed pedestrian facilities would not conflict with any existing policies or plans described in the *Shadelands Multi-Modal Improvement Plan* or any other applicable transportation policy or plans resulting in a less-than-significant impact.

Community Benefits Variant – The Community Benefits Variant would include sidewalks and marked crosswalks as part of the proposed Shadelands/Via Monte Roundabout. These additions would improve the pedestrian facilities within the vicinity of the project site and are consistent with the goals listed in the *Shadelands Multi-Modal Improvement Plan*. These pedestrian facilities would not conflict with any policies or strategies outlined in the *Shadelands Multi-Modal Improvement Plan*.

> **Significance Finding –** The pedestrian facilities proposed under the Community Benefits Variant is presumed to have a less-than-significant impact since it would not conflict with any policies or strategies outlined in the *Shadelands Multi-Modal Improvement Plan* or any other appliable transportation policy or plans.

Bicycle Facilities

Existing and Planned Bicycle Facilities

The *Highway Design Manual*, Caltrans, 2020, classifies bikeways into four categories:

- **Class I Multi-Use Path** – a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- **Class II Bike Lane** – a striped and signed lane for one-way bike travel on a street or highway.
- **Class III Bike Route** – signing only for shared use with motor vehicles within the same travel lane on a street or highway.
- **Class IV Bikeway** – also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

Table 3 summarizes the existing and planned bicycle facilities in the project vicinity, as contained in either the *Shadelands Multi-Modal Improvement Plan* or *City of Walnut Creek Bicycle Master Plan*.

Table 3 – Bicycle Facility Summary

Status Location	Class	Length (miles)	Begin Point	End Point
Existing				
The Orchards Perimeter	I	0.75	Shadelands Dr	Ygnacio Valley Rd
Contra Costa Canal Trl	I	3.60	Ygnacio Canal Trl	Western City Limits
N Via Monte	I	0.2	Shadelands Dr	Ygnacio Valley Rd
Oak Grove Rd	I	0.2	Shadelands Dr	Ygnacio Valley Rd
Shadelands Dr	I	0.2	N Via Monte	Oak Grove Rd
Ygnacio Valley Rd	I	0.2	N Via Monte	Oak Grove Rd
Oak Grove Rd	II	3.40	Monument Blvd	Walnut Ave
Lennon Ln	IV	0.40	North Terminus	Ygnacio Valley Rd
Wiget Ln	IV	0.55	Shadelands Dr	Ygnacio Valley Rd
Planned				
Ygnacio Valley Rd	I	0.70	Lennon Ln	Oak Grove Rd
Oak Grove Road	I	0.40	Ygnacio Valley Rd	Mitchell Dr
Shadelands Dr	IV	0.67	Lennon Ln	Oak Grove Rd
Mitchell Dr	IV	0.50	North Wiget Ln	Oak Grove Rd

Source: *Shadelands Multi Modal Improvement Plan*, 2021; City of Walnut Creek Bicycle Master Plan, 2011; Google Maps, 2022.

Findings Regarding Project Impacts on Bicycle Facilities

Proposed Project – The project would not result in the alteration of existing bicycle facilities within the project vicinity. Therefore, the project would not conflict with any existing policies or strategies outlined in the City's *Transportation Strategic Plan* or *Shadelands Multi-Modal Improvement Plan* or any other applicable transportation policy or plans since no changes to these facilities are included.

> **Significance Finding –** The proposed project would be presumed to have a less-than-significant impact since no alterations to existing bicycle facilities are proposed and no conflict with existing policies or plans are identified.

Community Benefits Variant – Community Benefits Variant would improve the network of bicycle facilities already present in the study area. It is noted that the remaining portions of the planned bicycle facilities along Shadelands Drive between Lennon Lane and North Wiget Lane and along Mitchell Drive between North Wiget Lane and the western project boundary would be completed by others and is not included as part of this project. These bike lane extensions are consistent with the goals listed in the *Shadelands Multi-Modal Improvement Plan*. The Shadelands Bike Lane Extensions and Mitchell Bike Lane Extensions do not conflict with any policies or strategies outlined in the City's *Transportation Strategic Plan* or *Shadelands Multi-Modal Improvement Plan* assuming the Mitchell Drive and Shadelands Drive Bike Lane Extensions are implemented, and approval of the final design is granted from City staff.

> **Significance Finding –** The bike lane extensions proposed under the Community Benefits Variant would not conflict with any policies or plans described in the *Shadelands Multi-Modal Improvement Plan* or any other applicable transportation policy or plans resulting in a less-than-significant impact.

Transit Facilities

Existing Transit Facilities

Regional and local, fixed-route bus transit service is provided by the County of Contra Costa through County Connection. Two bicycles can be carried on most County Connection buses. Bike rack space is on a first-come, first-served basis. Transit route operations are summarized in Table 4.

Table 4 – Transit Routes

Transit Agency Route	Distance to Stop (mi)[1]	Service			Connection
		Days of Operation	Time	Frequency	
County Connection					
Route 1	0.10	Mon-Fri	6:00AM-8:00PM	60 min	Rossmoor Shopping Center
Route 7	0.10	Mon-Fri	6:30AM-10:30AM 3:00PM-7:45PM	20 min	Contra Costa Transit Village, Pleasant Hill BART
Route 92X	0.10	Mon-Fri	5:30AM-7:30AM 3:30PM-7:45PM	One AM trip Three PM trips	San Ramon Transit Center, Pleasanton Train Station
Route 93X	0.10	Mon-Fri	4:30AM-8:00AM 3:00PM-8:00PM	Six AM trips Seven PM trips	Walnut Creek BART
Route 301	0.40	Sat-Sun	8:15AM-6:30PM	60 min	Walnut Creek BART, John Muir Medical Center

Note: [1] Defined as the shortest walking distance between the project site and the nearest bus stop or station
Source: County Connection, http://countyconnection.org, 2025

On-demand private taxi services are available in Walnut Creek 24 hours a day. Taxis can be used within the study area and adjacent destinations, including nearby airports. Other Transportation Network Companies (TNC) are also available in Walnut Creek and provide transportation throughout the Bay Area.

Findings Regarding Project Impact on Transit Facilities

Proposed Project – The project includes the relocation of an existing County Connection bus stop which is currently located at the same location as the proposed project's easterly driveway on Shadelands Drive. As part of the project, the stop would be relocated approximately 260 feet to the west to the northwest corner of Shadelands Drive/North Via Monte. The proposed bus stop relocation would have a less-than-significant impact since there would be no conflict with any plans or policies for transportation facilities if approved by both City and County Connection Staff.

> **Significance Finding –** Assuming approval of the proposed bus stop relocation by City and County Connection staff, the proposed project would have a less-than-significant impact since there would be no conflict with any plans or policies for transportation facilities.

Community Benefits Variant – The preliminary site plan showing the Shadelands/Via Monte Roundabout includes the relocated bus stop just west of Shadelands Drive/North Via Monte. The proposed bus stop relocation would have a less-than-significant impact on transit facilities since there would be no conflict with any plans or policies for transportation facilities if approved by both City and County Connection Staff. Transit facilities serving the site associated with the Community Benefits Variant would not conflict with any policies or strategies outlined in the *Shadelands Multi-Modal Improvement Plan* or any other applicable transportation policy or plan.

Significance Finding – The Community Benefits Variant would have a less-than-significant impact since there would be no conflict with any plans or policies for transportation facilities if approved by City and County Connection staff.

Vehicle Miles Traveled (VMT)

b. Would the Project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision(b)?

The potential for the project or its Community Benefits Variant to conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b) was evaluated based the project's anticipated Vehicle Miles Traveled (VMT). Senate Bill (SB) 743 established the potential increase in VMT associated with a project as the basis for determining transportation impacts of development projects. Guidance provided by both the California Governor's Office of Planning and Research (OPR) in the publication *Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory* (2018), City of Walnut Creek VMT-based analysis methods, and City of Walnut Creek's *Citywide TDM Requirements*, 2021 was used. Guidance provided in these documents recommends the use of screening thresholds to quickly identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study. City Resolution 20-70 (October 2020) states that housing projects located within areas identified by the CCTA that have an existing home-based VMT per capita that is 85-percent or less of the existing Countywide average can be presumed to have a less-than-significant VMT impact.

Proposed Project – According to the screening maps published in City of Walnut Creek's *Citywide TDM Requirements* document, this project is located within a traffic analysis zone (TAZ) which has a projected Home-Based VMT per Resident at 85 percent or less than the countywide average. Because the VMT per capita for this TAZ is lower than the significance threshold, the project would be considered to have a less-than-significant VMT impact. The project includes development of a TDM plan and implementation of various TDM measures described in the City's *Citywide TDM Requirements* document which would further reduce the project's potential effect on VMT. A copy of the *Citywide TDM Requirements* document is included in Appendix B.

Significance Finding – The proposed project is presumed to have a less-than-significant impact on VMT since it would be located with a low-VMT area. It is noted that the project would also include a TDM plan which would further reduce the project's potential effect on VMT.

Community Benefits Variant – It is reasonable to assume that these improvements would reduce local motor vehicle use and increase the instances of walking and biking since comfort for pedestrians and bicyclists traveling through the Shadelands/Via Monte Roundabout, Shadelands Bike Lane Extensions and the Mitchell Drive Bike Lane Extensions would be improved. However, any changes in VMT associated with these improvements would be nominal and would not result in a measurable change in VMT for the project. Therefore, the project elements associated with the Community Benefits Variant would not result in a measurable change in VMT when compared to the proposed project, and would be located within a low-VMT area and is therefore presumed to have a less-than-significant VMT impact.

Significance Finding – The Community Benefits Variant would not notably alter the project's calculated VMT and would therefore be presumed to have a less-than-significant VMT impact since the location would be within a low-VMT area.

Geometric Design Features

c. Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project as designed includes driveways, internal roadways, sidewalks, crosswalks, and curb ramps. Final designs will be subject to City staff review, and required to meet or exceed City design standards in terms of placement and configuration of pedestrian and bicycle pathways and also vehicle access roads and approach

lanes. As described below, the project, including the Community Benefits Variant, will not increase hazards due to a geometric design feature or incompatible use.

Vehicular Site Access

Vehicle access to the site is currently provided via eight full-access driveways; four on Mitchell Drive and four on Shadelands Drive. The proposed project would include the removal of all eight driveways and the construction of four new driveways, two on Mitchell Drive and two on Shadelands Drive. All four driveways would be full access allowing both left- and right-turn movements into and out of the project site. The easterly driveway on Mitchell Drive would be located approximately 450 feet west of Oak Grove Road in place of the existing driveway, while the westerly driveway on Mitchell Drive would be located across from the Springfield Montessori School driveway. On Shadelands Drive, the westerly driveway would create a north leg at the existing tee intersection with North Via Monte, and the easterly driveway would be located approximately 300 feet east of North Via Monte, in the place of the existing County Connection bus stop. The easternmost driveway on Shadelands Drive is proposed to be constructed across from an existing driveway serving the Sequoia Living facility, slightly offset to the east.

Sight Distance

At driveways, a substantially clear line of sight should be maintained between the driver of a vehicle waiting to enter the street and the driver of an approaching vehicle. Sight distances along Mitchell Drive and Shadelands Drive at the proposed driveways were evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. Although sight distance requirements are not applicable to urban driveways, for evaluation purposes the stopping sight distance criterion was applied, which uses the approach travel speed as the basis for determining the recommended sight distance. Mitchell Drive and Shadelands Drive both have a posted speed limit of 30 miles per hour (mph). A spot speed survey was also conducted on January 15, 2025, to verify prevailing speeds. The observed 85th-percentile speeds on each street were generally reflective of the posted speed limit. Based on these speed limits, the minimum stopping sight distance required would be 200 feet along each street.

Proposed Project – Shadelands Drive and Mitchell Drive are relatively flat and straight with favorable sight lines along both project frontages. A review of publicly available aerial photographs shows that sight distances of at least 200 feet in each direction exist at each proposed project driveway location, which would satisfy the requirements for a road with a prevailing speed of up to 30 miles per hour and are therefore adequate.

The easterly project driveway on Shadelands Drive was also analyzed with respect to the driveway for the Sequoia Living facility which is located opposite of the easterly project driveway and determined that conflicts due to inadequate visibility are not present since drivers exiting each driveway have an unobstructed sight line for vehicles exiting the other driveway.

For a motorist traveling along either Shadelands Drive or Mitchell Drive and intending to turn left into a project driveway, the stopping sight distance for a following driver also extends to at least 225 feet, which exceeds the required distances and is more than adequate for the posted speed limits.

> **Recommendation –** To maintain the sight distance at each driveway, it is suggested that in accordance with the Federal Highway Administration's guide on *Vegetation Control for Safety*, 2008, any vegetation planted near the project's driveways and within the driveway's sight distance triangle should be trimmed to an appropriate height of three feet or less and trees should be trimmed so that nothing hangs below a height of seven feet from the surface of the roadway. This provides a gap in vegetation for drivers to observe oncoming traffic and safely maneuver from a driveway.
>
> Additionally, it is recommended that on-street parking be restricted for 20 feet on both sides of the project driveway on Mitchell Drive and Shadelands Drive, which is consistent with intersection design guidance from the American Association of State Highway and Transportation Officials' *A Policy on Geometric Design of Highways and Streets* and the National Association of City Transportation Officials' *Urban Street Design Guide*. The parking restriction can be implemented via painting the curbs red or adding equivalent signage. While

these locations are driveways and not an intersection, the driveways would nonetheless benefit from parking being restricted for 20 feet on either side.

Significance Finding – Adequate sight distance is available at each proposed driveway location for all turning movements entering and exiting the site. It is noted that the presence of on-street parking or landscaping has the potential to restrict sight lines for drivers using these driveways. Therefore, the project would not result in significant impacts with respect to design hazards or incompatible uses.

Community Benefits Variant – At roundabouts, there are generally three locations where stopping sight distances should be reviewed: approach sight distance, sight distance on the circulatory roadway, and sight distance to the crosswalk upon exit. The finalized design would need to be consistent with the guidance and performance criteria established in the *Guide for Roundabouts, NCHRP Report 1043*, 2023. Design of the Shadelands/Via Monte Roundabout is being considered and will be reviewed by City Staff, if selected.

Significance Finding – The finalized design would have to meet or exceed applicable design standards in terms of geometric design and layout including for stopping sight distances. This Community Benefits Variant would be presumed not to increase hazards due to a geometric design feature or incompatible use since the finalized design would meet or exceed industry standards which would result in a less-than-significant impact.

Internal Circulation

Conflicts between vehicles, pedestrians and bicyclists traveling through the site may occur along the internal roadways and aisles of the project site. However, the potential for conflicts or collisions would not result in an identified safety issue given that vehicle speeds within these areas would be relatively slow and typical for shared-use spaces such as an access driveway or parking lot where vehicle operators, pedestrians and bicyclists have unobstructed sight lines along their respective paths of travel.

Proposed Project – The internal roadway circulation proposed for the project site would have relatively slow vehicle operating speeds and be typical for shared-use spaces. Walking and biking facilities including internal pathways would be integrated into the project site without any identified safety issues regarding conflicts with motorized vehicles. Therefore, the proposed project would have a less-than-significant impact regarding safety and internal circulation.

Significance Finding – The proposed project's internal circulation would not increase hazards due to geometric design features and would have a less-than-significant impact regarding geometric design features or incompatible uses.

Community Benefits Variant – The Community Benefits Variant would be comprised of the same internal circulation features as the proposed project. As is the case with the proposed project, there would be a less-than-significant impact regarding safety and internal circulation.

Significance Finding – The Community Benefits Variant and associated internal circulation facilities are presumed to have a less-than-significant impact since it would not increase hazards due to geometric design features.

Access Analysis

Left-Turn Lane Warrants

The need for a left-turn lane on Mitchell Drive and/or Shadelands Drive into the project site was evaluated based on criteria contained in the *Intersection Channelization Design Guide*, National Cooperative Highway Research Program (NCHRP) Report No. 279, Transportation Research Board, 1985, as well as an update of the methodology developed by the Washington State Department of Transportation and published in the *Method For Prioritizing*

Intersection Improvements, 1997. The NCHRP report references a methodology developed by M. D. Harmelink that includes equations that can be applied to expected or actual traffic volumes to determine the need for a left-turn pocket based on safety issues.

The need for left-turn channelization on Mitchell Drive or Shadelands Drive was evaluated based on "Baseline plus Project" volumes as well as the above listed safety criteria. As the Baseline scenarios include traffic from approved but not yet constructed projects in the study area, turn-lane warrants under Baseline plus Project conditions indicate whether volumes are high enough in the near-term for the installation of turn lanes.

Proposed Project – Under Baseline plus Project conditions, left-turn lanes into the project site are not warranted at any of the four project driveways on Mitchell Drive or Shadelands Drive. Due to the relatively small growth in volume between the Baseline and Cumulative scenarios, evaluation of warrants under Baseline conditions only was considered sufficient. Copies of the warrant spreadsheets are provided in Appendix C.

> **Significance Finding –** The proposed project's left turn lane access would not increase hazards due to geometric design features and would have a less-than-significant impact regarding geometric design features or incompatible uses.

Community Benefits Variant – Separate left-turn lanes are not necessary at roundabouts because the design inherently manages left turns differently than traditional intersections. The design of the Shadelands/Via Monte Roundabout eliminates the need for dedicated left-turn lanes. Therefore, a left-turn lane evaluation is not needed for the Community Benefits Variant.

> **Significance Finding –** The Community Benefits Variant and associated left turn lane facilities are presumed to have a less-than-significant impact since it would not increase hazards due to geometric design features.

Right-Turn Lane Warrants

The need for a right-turn lane or taper was also evaluated based on criteria contained in the NCHRP *Intersection Channelization Design Guide*. A right-turn lane would consist of a lane installed to the right of the travel lane and would be a minimum of ten feet wide, plus a shoulder where not adjacent to a curb. A right-turn taper is a shoulder area that gets progressively wider as the motorist drives toward the intersection. Both improvements are meant to provide an area for motorists turning right to move out of the traffic lane without impeding through traffic.

Proposed Project – The need for a right-turn lane or taper was evaluated for Mitchell Drive and Shadelands Drive at the project driveways. Using the same criteria contained in the *Intersection Channelization Design Guide*, the warrants were evaluated using Baseline plus Project volumes. Based on these assumptions, no additional facilities in the form of either a right-turn lane or right-turn taper would be warranted. No left-turn lanes, right-turn lanes, or right-turn tapers into the project site are warranted under Baseline plus Project conditions.

> **Significance Finding –** The proposed project's right turn lane access would not increase hazards due to geometric design features and would have a less-than-significant impact regarding geometric design features or incompatible uses.

Community Benefits Variant – As previously discussed, separate turn lanes are not necessary at roundabouts since their design eliminates the need for dedicated turn lanes. Therefore, a right-turn lane evaluation is not needed for the Community Benefits Variant.

> **Significance Finding –** The Community Benefits Variant and associated right turn lane facilities are presumed to have a less-than-significant impact since it would not increase hazards due to geometric design features.

Queuing

The City's *Transportation Analysis Guidelines* specifies the following regarding queuing:

Recommendations should be provided for 95th-percentile queues under existing or future conditions that exceed the available queue storage capacity at locations where the resulting spillover into through traffic lanes or upstream intersections would cause a substantial hazard. Queue lengths exceeding available storage lengths in the Downtown area are not typically considered significant impacts because the prevailing low speeds of traffic would not result in a substantial hazard related to queue spillover conditions.

Consistent with the above guidelines and in the absence of adopted specific thresholds, the following criteria were developed in consultation with City staff based on the thresholds used in the *North Downtown Specific Plan*, Fehr & Peers, 2019, and applied to this analysis to evaluate potential queuing impacts. The proposed project's impact would be considered significant if it caused either of the following.

1. *Where the project causes the 95th percentile queue length to exceed the available storage, and the project added trips increase the queue length by 25 feet or more, the resulting spillover into through traffic lanes or upstream intersections would cause a substantial hazard.*

2. *Where the 95th percentile queue length exceeds the available storage without the project, if the project-added trips increase the queue length by 25 feet or more, the resulting spillover into through traffic lanes or upstream intersections would cause a substantial hazard. The collision history at such locations should also be reviewed to identify any existing trends that could be exacerbated by the addition of project-generated traffic.*

Under each scenario, the projected 95th percentile queues in turn pockets at the study intersections were determined using the SimTraffic application of Synchro and averaging the 95th percentile projected queue for each of ten runs. SimTraffic model results were compared against existing condition observations to confirm reasonableness. Summarized in Table 5 are the predicted queue lengths for approaches to intersections where queues are expected to exceed the existing available storage capacity. A complete list of queues exported from SimTraffic are contained in Appendix D.

Table 5 – 95th Percentile Turn Queues

Study Intersection ***Movement***	Avail. Storage	95th Percentile Queue Length											
		AM Peak Hour						PM Peak Hour					
		E	E+P	B	B+P	C	C+P	E	E+P	B	B+P	C	C+P
2. Mitchell Dr-Peachwillow Ln/Oak Grove Rd													
Northbound Left Turn	200	238	192	234	211	242	203	101	84	114	101	116	108
Southbound Left Turn	105	108	98	103	106	117	116	132	122	136	128	139	127
Eastbound Left Turn	200	105	104	103	111	117	114	215	211	217	210	220	212
Westbound Right Turn	60	106	104	103	103	106	103	83	80	82	85	84	88
5. Shadelands Dr/Oak Grove Rd													
Northbound Left Turn	150	177	190	176	188	179	179	137	141	135	143	141	133
Eastbound Left/Right Turn	200	106	102	107	99	103	101	234	222	237	226	236	222
6. Oak Grove Rd/Citrus Ave													
Southbound Left Turn	120	112	106	116	118	122	121	121	104	135	123	139	130
Westbound Left Turn	190	223	226	225	229	238	236	112	112	147	137	151	141

Table 5 – 95th Percentile Turn Queues

Study Intersection *Movement*	Avail. Storage	95th Percentile Queue Length											
		AM Peak Hour						PM Peak Hour					
		E	E+P	B	B+P	C	C+P	E	E+P	B	B+P	C	C+P
7. Ygnacio Valley Rd/Wiget Ln													
Northbound Left Turn	145	148	129	136	143	150	156	91	96	105	95	99	96
Northbound Right Turn	100	104	90	107	96	119	101	74	83	79	88	84	86
Southbound Left Turn	150	61	66	59	56	74	74	138	134	126	131	165	157
Westbound Left Turn	165	157	143	149	162	163	**166**	109	107	113	113	118	120
9. Ygnacio Valley Rd/Oak Grove Rd													
Northbound Left-Turn	155	206	201	216	207	197	191	212	209	210	209	208	214
Eastbound Left-Turn	330	217	141	254	146	416	223	377	358	386	380	371	365
Westbound Left-Turn	155	227	224	225	222	225	218	210	207	209	214	211	206

Note: 95th Percentile Queue based on the average of the output from ten SimTraffic runs; all distances are measured in feet; E = Existing Conditions; E+P = Existing plus Project Conditions; B = Baseline Conditions; B+P = Baseline plus Project Conditions; C = Cumulative Conditions; C+P = Cumulative plus Project Conditions; **Bold** text = queue deficiency resulting from the addition of project traffic; Per City standard, a project impact would not occur where an already deficient queue would increase fewer than 25 feet with the addition of project traffic

For several locations and scenarios, the addition of project traffic and removal of the existing office uses results in a decrease in the 95th percentile queue length. This is because the removal of existing office traffic on particular movements may reduce queues on those same movements (where the proposed residential use would generate less traffic than the existing offices), and the decreases in volume could benefit the intersection's overall operation.

Proposed Project – At Shadelands Drive/Oak Grove Road, the proposed project would subtract about 10 percent of the existing traffic volume from the northbound left-turn movement during the a.m. peak hour, but the existing northbound left-turning queue was projected to increase slightly by a length equivalent to less than one passenger car length (assumed to be 25 feet from front bumper to the next car's front bumper) with the project; this is partially attributed to the stochastic nature of SimTraffic simulations, as each model run results in marginally different queuing results even when model inputs remain the same. Additionally, the northbound left-turning queue at the intersection is dependent on the signal coordination on Oak Grove Road between Shadelands Drive and Citrus Avenue and is less sensitive to changes in traffic volumes, since there is generally sufficient green time at Oak Grove Road/Shadelands Drive for northbound left-turning volumes with or without the project. Due to the coordination between signals, drivers departing from Citrus Avenue and intending to turn left at Shadelands Drive were observed in SimTraffic to consistently arrive on red during each signal cycle, resulting in queue build-ups before a northbound left-turn phase begins.

At the Ygnacio Valley Road/Wiget Lane intersection, the proposed project would increase the queue length at the westbound left-turn lane beyond its current storage capacity by three feet, which is less than the length of a typical passenger vehicle. Per the thresholds utilized in this analysis, the increases in queues due to the proposed project are considered a less-than-significant impact.

The project would not be expected to cause any queues to increase by 25 feet and exceed available storage, so the impact is considered less-than-significant.

Significance Finding – The project must be designed to meet applicable Federal, State and City codes and regulations, and as a result would not introduce any new hazards in terms of its design. Adequate driver sight lines would be provided at each of the proposed project access points. All roadway modifications proposed

by the project would be designed and constructed to meet current City standards and therefore would have no impact in terms of potentially increasing hazards related to design features. The project also proposes to modify various elements of the transportation network including changes to adjacent sidewalks, crosswalks, bicycle facilities and travel lanes within the study area. However, the proposed project would not increase hazards due to geometric design features and would have a less-than-significant impact regarding geometric design features or incompatible uses.

Community Benefits Variant – Final designs for the Shadelands/Via Monte Roundabout will be refined and subject to City review to confirm consistency with the guidance and performance criteria established in the *Guide for Roundabouts, NCHRP Report 1043*, 2023.

Preliminary site plans depicting the Community Benefits Variant include a relocated bus stop on the north side of Shadelands Drive just west of the Shadelands/Via Monte Roundabout. The location of the bus stop would have a nominal effect on traffic operations (including queueing) since there are relatively few buses arriving at or departing the stop during peak traffic hours. Detailed design of the bus stop will be reviewed by City and County Connection staff to confirm conformance with appliable standards ensuring the bus stop will not substantially increase hazards due to a geometric design feature or incompatible use.

The Shadelands Bike Lane Extensions and Mitchell Bike Lane Extensions does not alter any of the previously discussed vehicle queuing findings. Final designs of these improvements will be reviewed by City staff as part of the plan review process and will be required to comply with applicable design standards to ensure they do not substantially increase hazards due to a geometric design feature or incompatible use.

Significance Finding – The Community Benefits Variant roundabout and bike lane extensions must be designed to meet applicable Federal, State and City codes and regulations, and as a result would not introduce any new hazards in terms of its design. All roadway modifications proposed by the project would be designed and constructed to meet current City standards and therefore would have no impact in terms of potentially increasing hazards related to design features. The proposed Community Benefit Variant would not increase hazards due to geometric design features and would have a less-than-significant impact regarding geometric design features or incompatible uses.

Emergency Access

d. Would the Project result in inadequate emergency access?

The Contra Costa County Fire Protection District (CCCFPD) provides rapid response to fires, medical emergencies, rescues, and other emergency calls for service in Walnut Creek and throughout the County. There are four fire stations (Stations 1, 3, 4, and 7) in Walnut Creek. The nearest station to the project site, however, is Station 10 in the City of Concord, located one mile away at 2955 Treat Boulevard.

Police service is provided by the Walnut Creek Police Department with personnel located at its headquarters at 1666 North Main Street. Response times to various places in the City can vary depending on time of day and the available resources.

Proposed Project - Emergency response vehicles would be able to access the site via Mitchell Drive, Shadelands Drive and the network of internal aisles. All of the proposed internal aisles would be at least 22 feet wide, which exceeds the minimum width of 20 feet for fire access required by the *California Fire Code (CFC), Section 503.2.1,* which states, "fire apparatus access roads shall have an unobstructed width of not less than 20 feet, exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than thirteen feet and six inches." Since all roadway users must yield the right-of-way to emergency vehicles when using their sirens and lights, the added project-generated traffic would not impact access for emergency vehicles. Therefore, access and on-site circulation would be adequate to accommodate turning movements for emergency vehicles.

It is noted that the Contra Costa County Fire Protection District has reviewed and accepted the adequacy of the project site for adequate fire apparatus vehicle access.

> **Significance Finding** – The project would result in a less-than-significant impact regarding adequacy of emergency access since all driveways and internal roadways would be designed to accommodate emergency vehicles and all roadway users must yield to emergency vehicles when using their lights and sirens.

Community Benefits Variant Significance Finding – The design of the Shadelands/Via Monte Roundabout and bike lane extensions will be reviewed and approved by the City as part of the plan review process and will be required to meet the established design requirements defined by City and Contra Costa County Fire Protection District staff.

> **Significance Finding –** As a result, the project's Community Benefits Variant would be presumed to result in a less-than-significant impact regarding the adequacy of emergency access.

Conclusions and Recommendations

- The proposed project is expected to generate 3,038 trips each day which includes 203 trips during the morning peak hour and 241 trips during the evening peak hour. With trip reductions applied for the removal of the existing office use (including a conservative 20% reduction for existing vacancies), the anticipated net trip generation would include an average decrease of 62 daily trips with 231 fewer morning peak hour trips and 171 fewer evening peak hour trips.

- The proposed project and Community Benefits Variant, including the proposed sidewalks, curb ramps and bicycle facility improvements, would not conflict with any plans for transportation facilities and would therefore have a less-than-significant impact on these facilities, assuming approval is granted from the City and County Connection to relocate the bus stop on Shadelands Drive.

- For added benefit, the project includes ten-foot-wide sidewalks at all applicable locations along the project frontage to improve pedestrian accessibility, as shown in the *Shadelands Multi-Modal Improvement Plan*.

- The project as proposed, including the Community Benefits Variant, is expected to have a less-than-significant impact on VMT since it would be located within a low-VMT area.

- The proposed project, including the Community Benefits Variant, would not increase hazards due to geometric design features and therefore would have a less-than-significant impact to safety. Since driver sight lines would be adequate at each of the proposed project access points and new roadway, pedestrian and bicycle facilities would be designed to satisfy applicable standards. To maintain adequate sight lines, it is recommended that parking be prohibited, and vegetation is trimmed near each driveway.

- The proposed project, including the Community Benefits Variant, would have a less-than-significant impact on emergency access and emergency vehicle response times.

Study Participants and References

Study Participants

Principal in Charge	Mark E. Spencer, PE (Traffic)
Senior Traffic Engineer	Kenny Jeong, PE (Traffic)
Assistant Engineer	Nathan Sharafian, EIT
Editing/Formatting	Jessica Bender, Erika Totanes
Quality Control	Kevin Carstens, PE (Civil, Traffic)

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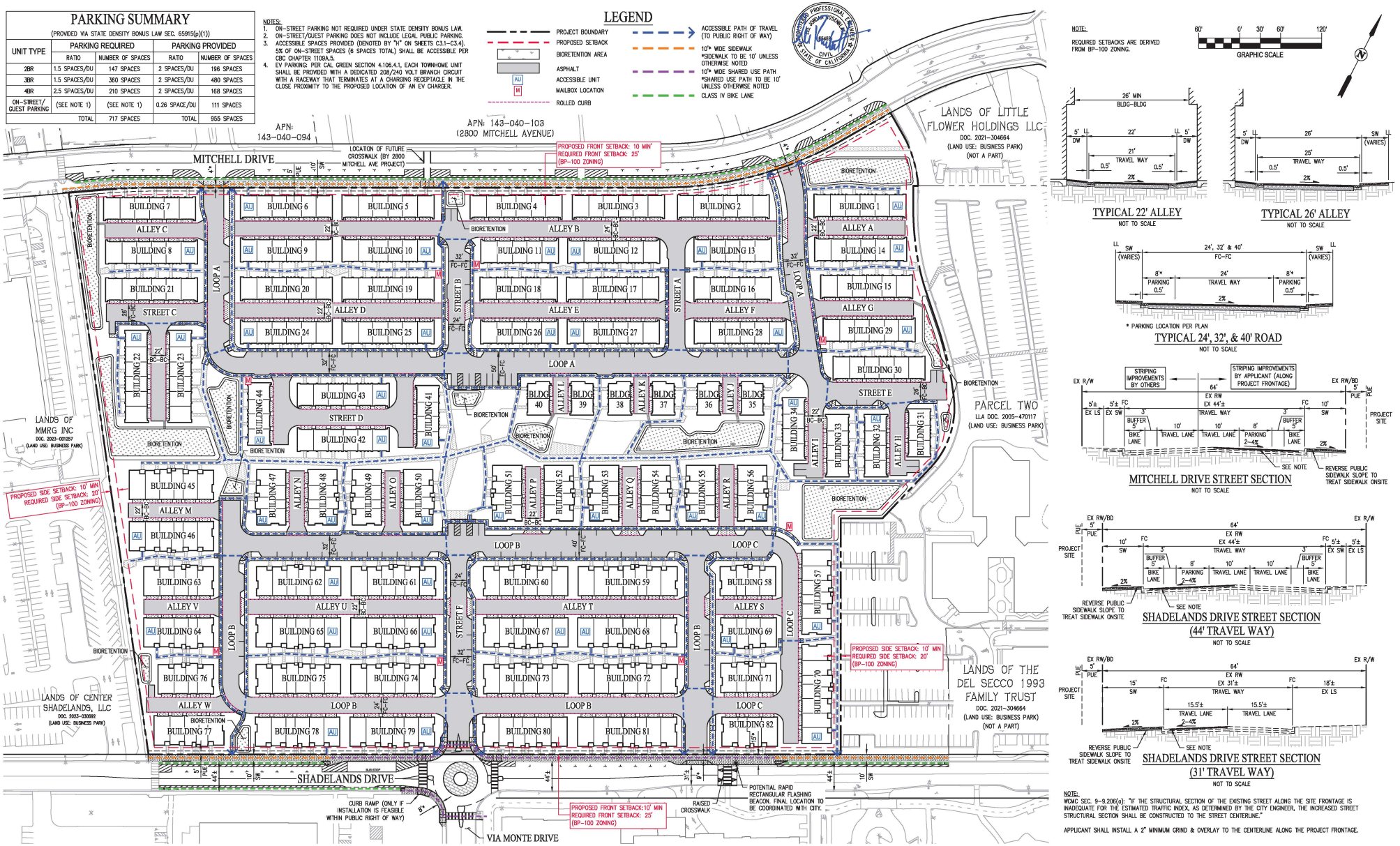
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Appendix A

Community Benefits Variant Plan Sheet

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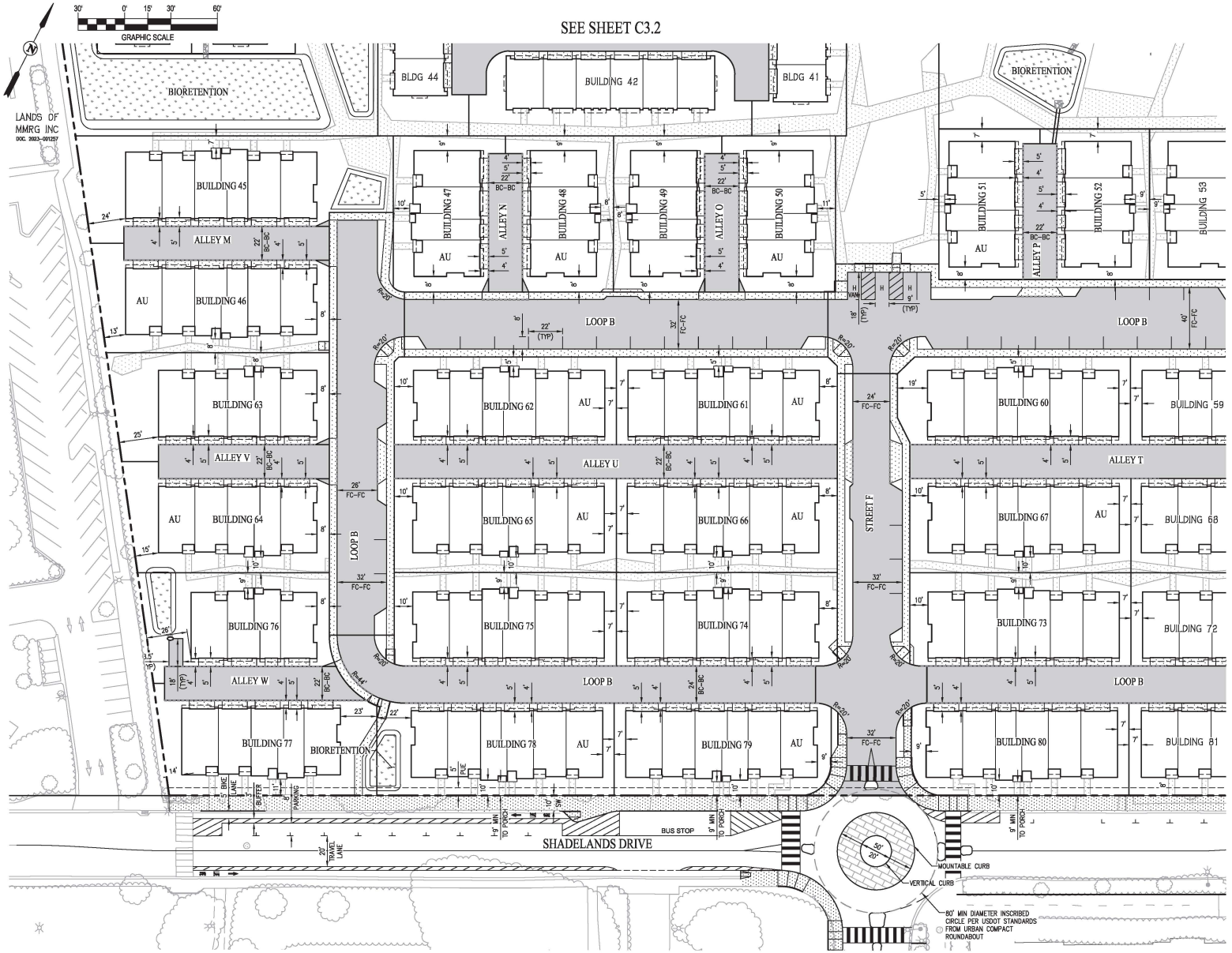
SIGNATURE DEVELOPMENT GROUP | ktgy | cbg | TGP

Mitchell Drive Townhomes
Walnut Creek, CA

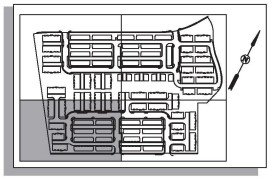
PROJECT SUBMITTAL
APRIL 22, 2025

SUBDIVISION #9683
VESTING TENTATIVE MAP FOR CONDOMINIUM PURPOSES
OVERALL SITE & DEVELOPMENT PLAN

C3.0



SEE SHEET C3.4



KEY MAP
NOT TO SCALE

NOTES:

1. SECOND STORY OVERHANG MAY ENCROACH UP TO 3' INTO SETBACK SHOWN. MINIMUM SECOND STORY SEPARATION WITHIN DRIVE AISLE SHALL BE 24'.
2. SETBACKS MAY BE MINIMUMS. GREATER SETBACKS ARE ALLOWED WITH FINAL DESIGN.
3. ALL PATHS OF TRAVEL, EXCEPT TO NON-ACCESSIBLE UNITS, WILL BE ON AN ACCESSIBLE PATH OF TRAVEL PER CBC CHAPTER 11A.

LEGEND

ROLLED CURB

SIGNATURE DEVELOPMENT GROUP

ktgy

cbg

TGP

Mitchell Drive Townhomes
Walnut Creek, CA

PROJECT SUBMITTAL
APRIL 22, 2025

SUBDIVISION #9683
VESTING TENTATIVE MAP FOR CONDOMINIUM PURPOSES
SITE & DEVELOPMENT PLAN

REGISTERED PROFESSIONAL ENGINEER
CIVIL
STATE OF CALIFORNIA

C3.3

Appendix B

Citywide TDM Requirements

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City of Walnut Creek

Citywide TDM Requirements

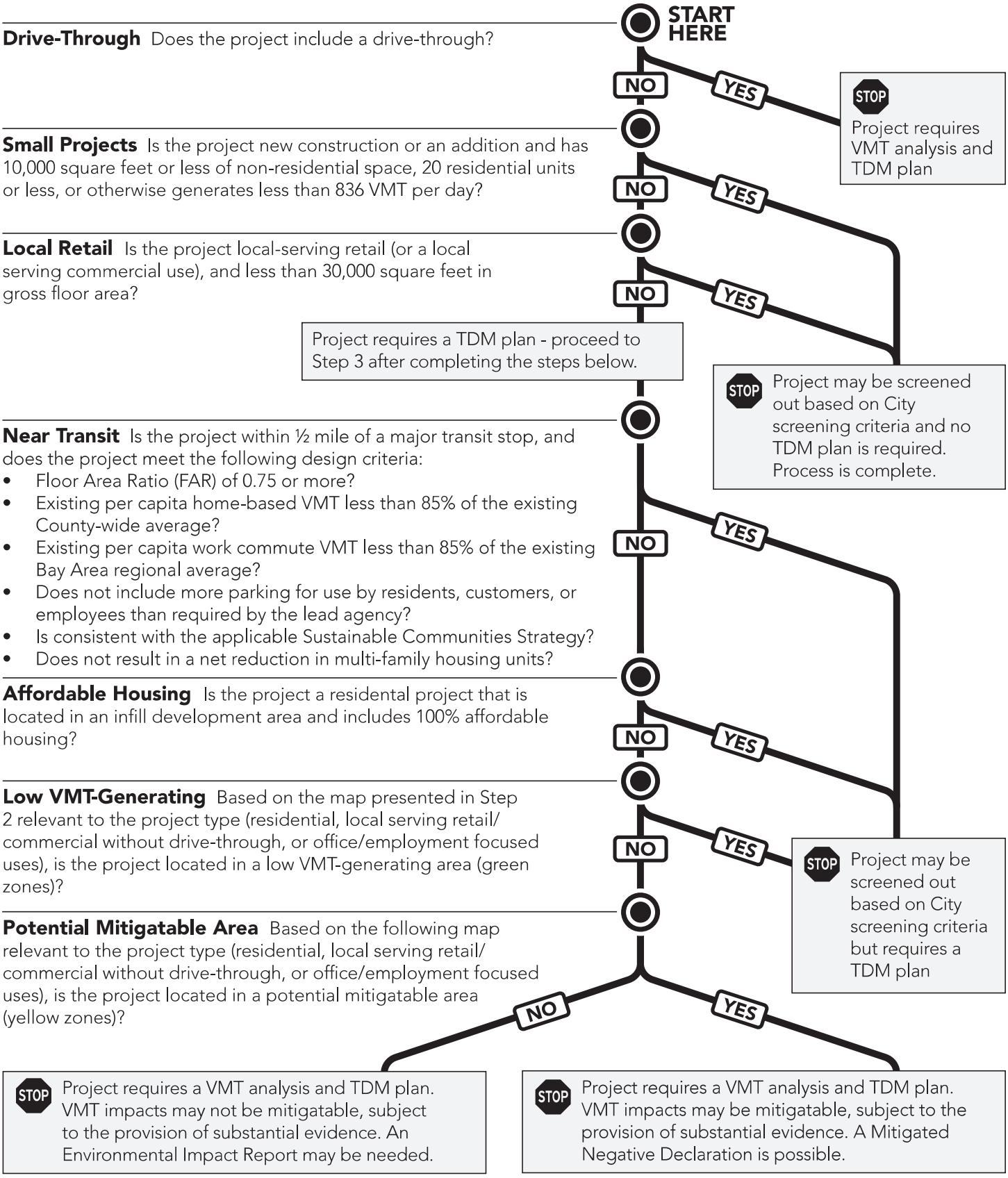
October 2021

prepared by

FEHR & PEERS

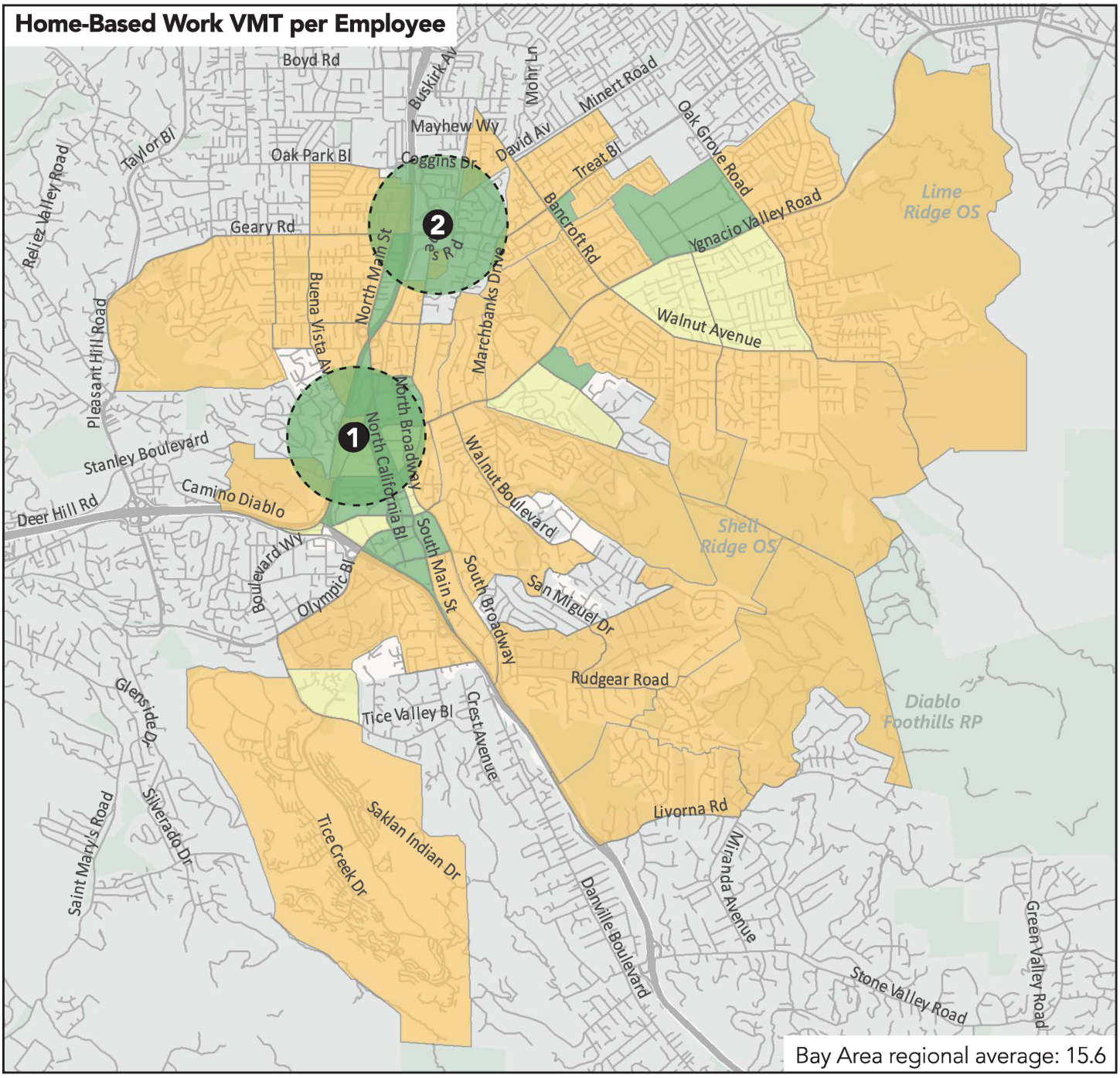


Step 1: Transportation CEQA Process



***** See City of Walnut Creek's *Transportation Analysis Guidelines* for more information on these steps

Step 2: VMT Maps (Employee)



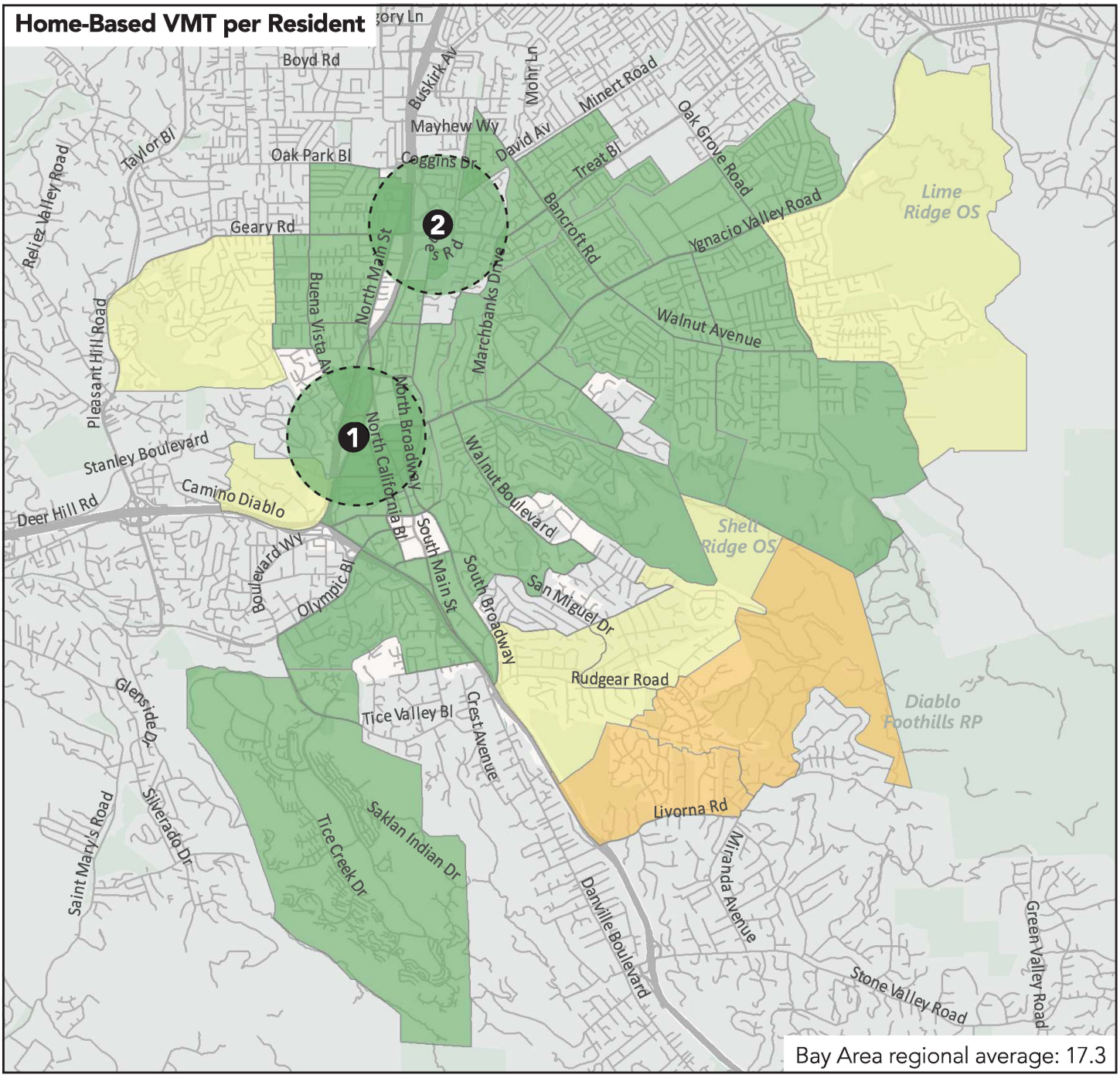
Legend

Data from Contra Costa County Travel Demand Model

- 85% or less than regional/countywide average
- Between 85% and 100% of regional/countywide average
- Above average
- ❶ Walnut Creek BART
- ❷ Pleasant Hill BART
- ½-mile station buffer

*These values were calculated using the 2020 base year if the August 2020 version of the Contra Costa County Transportation Authority (CCTA) travel demand model. This model incorporates 'Big Data' to account for inter-model trips. **These values should be updated with new baseline CCTA model information as it becomes available.**

Step 2: VMT Map (Resident)



Legend

Data from Contra Costa County Travel Demand Model

- 85% or less than regional/countywide average
- Between 85% and 100% of regional/countywide average
- Above average
- 1 Walnut Creek BART
- 2 Pleasant Hill BART
- ½-mile station buffer

*These values were calculated using the 2020 base year if the August 2020 version of the Contra Costa County Transportation Authority (CCTA) travel demand model. This model incorporates 'Big Data' to account for inter-model trips. **These values should be updated with new baseline CCTA model information as it becomes available.**

Step 3: Draft Menu of TDM Measures

Key

Effectiveness of Measure
Measures are sorted by effectiveness (***HIGH*** ●●●, ***MEDIUM*** ●●, or ***LOW*** ●) ***(SUPPORTIVE)*** denotes measures that meet planning best practices, but whose effectiveness is unknown for a setting like Walnut Creek; additional study is required to establish their effectiveness.



Measure Applicability Based on Location
All measures may be applicable throughout the City, but marked as most appropriate for areas in green, yellow, or gold in the maps from Step 2.

Project/Site Level Strategies

These strategies can influence travel behavior for residents, employees, and visitors to a project.

- HIGH ●●● Increase diversity of land uses
- HIGH ●●● Increase density
- HIGH ●●● Increase transit accessibility
- MEDIUM ●● Encourage tele-commuting
- LOW ● Implement car-sharing program
- LOW ● Subsidize transit passes
- (SUPPORTIVE) Reduce parking supply and un-bundle parking
- (SUPPORTIVE) On-site TDM Coordinator
- (SUPPORTIVE) Support micro-mobility and bike sharing
- (SUPPORTIVE) Provide real-time transit information
- (SUPPORTIVE) Way-finding Signage
- (SUPPORTIVE) Improve existing pathways to meet design standards
- (SUPPORTIVE) Collaborate with app-based ridehail services for first/last mile connections
- (SUPPORTIVE) Implement employee parking "cash-out"
- (SUPPORTIVE) Provide short- and long-term bike parking and supporting services
- (SUPPORTIVE) Implement a commute trip reduction program (commercial uses only)
- (SUPPORTIVE) Add affordable housing
- (SUPPORTIVE) Provide on-site childcare
- (SUPPORTIVE) Provide delivery services

Community Level Strategies

Individual development projects have limited ability to implement these strategies, but may be able to contribute to established strategies through site design or off-site measures via citywide fee programs. These strategies generally have a low effectiveness, which increases when applied to a large population/neighborhood.

- MEDIUM ●● Market price public parking (on-street)
- LOW ● Increase transit service frequency and speed
- LOW ● Micro-mobility share program
- LOW ● Incentivize trips by active transportation
- LOW ● Traffic calming measures and low-stress bike network improvements
- LOW ● Subsidize transit passes
- (SUPPORTIVE) Vision Zero education strategies
- (SUPPORTIVE) Incentivize non-vehicular tourism

* Additional information on measures with quantifiable VMT reductions is provided in *Senate Bill 743 Vehicle Miles Traveled Implementation Guidelines* (May 2021).

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Appendix C

Turn Lane Warrant Spreadsheet

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Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: Mitchell Dr/NW Dwy
Study Scenario: AM Baseline plus Project

Direction of Analysis Street: East/West
Cross Street Intersects: From the South

Mitchell Dr

Eastbound Volumes (veh/hr)

Through Volume = 234
Right Turn Volume = 7

Eastbound Speed Limit: 30 mph
Eastbound Configuration: 2 Lanes - Undivided

Northwest Dwy

Mitchell Dr

Westbound Volumes (veh/hr)

740 = Through Volume
4 = Left Turn Volume

Westbound Speed Limit: 30 mph
Westbound Configuration: 2 Lanes - Undivided

Eastbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane

Advancing Volume Threshold	AV =	997.6
Advancing Volume	Va =	241
If AV<Va then warrant is met		No

Right Turn Lane Warranted: **NO**

Eastbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

NOT WARRANTED - Less than 20 vehicles

2. Check advance volume threshold criteria for taper

Advancing Volume Threshold	AV =	-
Advancing Volume	Va =	241
If AV<Va then warrant is met		-

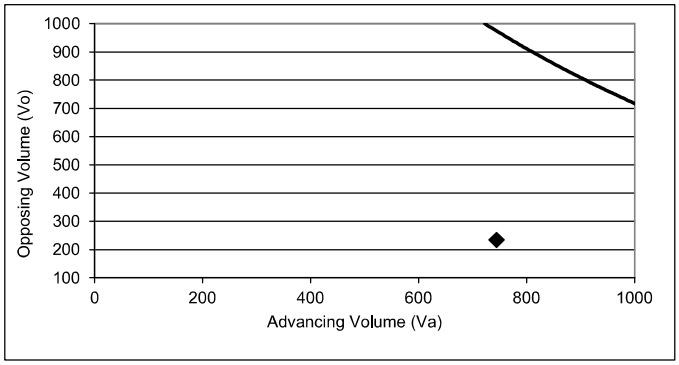
Right Turn Taper Warranted: **NO**

Westbound Left Turn Lane Warrants

Percentage Left Turns %lt 0.5 %

Advancing Volume Threshold AV 1744 veh/hr

If AV<Va then warrant is met



◆ Study Intersection

Two lane roadway warrant threshold for: 30 mph

Turn lane warranted if point falls to right of warrant threshold line

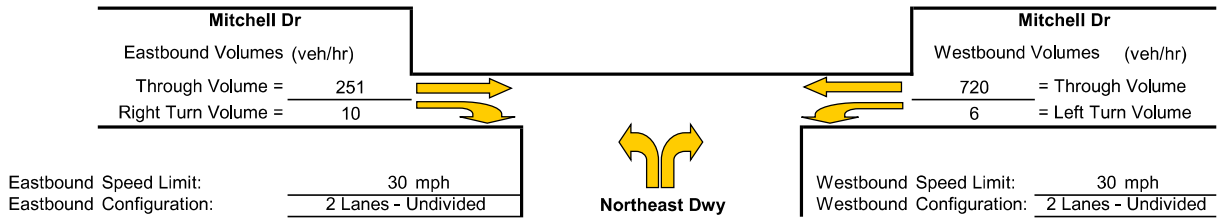
Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: Mitchell Dr/NE Dwy
Study Scenario: AM Baseline plus Project

Direction of Analysis Street: East/West
Cross Street Intersects: From the South



Eastbound Speed Limit: 30 mph
Eastbound Configuration: 2 Lanes - Undivided

Westbound Speed Limit: 30 mph
Westbound Configuration: 2 Lanes - Undivided

Eastbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane

Advancing Volume Threshold	AV =	975.1
Advancing Volume	Va =	261
If AV<Va then warrant is met		No

Right Turn Lane Warranted: **NO**

Eastbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

NOT WARRANTED - Less than 20 vehicles

2. Check advance volume threshold criteria for taper

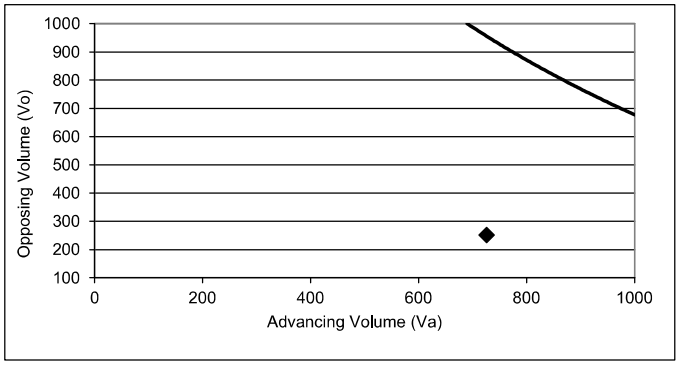
Advancing Volume Threshold	AV =	-
Advancing Volume	Va =	261
If AV<Va then warrant is met		-

Right Turn Taper Warranted: **NO**

Westbound Left Turn Lane Warrants

Percentage Left Turns	%lt	0.8 %
Advancing Volume Threshold	AV	1633 veh/hr

If AV<Va then warrant is met



◆ Study Intersection
Two lane roadway warrant threshold for: 30 mph
Turn lane warranted if point falls to right of warrant threshold line

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: Shadelands Dr/SE Dwy
Study Scenario: AM Baseline plus Project

Direction of Analysis Street: East/West
Cross Street Intersects: From the North

Shadelands Dr

Westbound Volumes (veh/hr)
Through Volume = 615
Right Turn Volume = 2

Westbound Speed Limit: 30 mph
Westbound Configuration: 2 Lanes - Undivided

Southeast Dwy

Shadelands Dr

Eastbound Volumes (veh/hr)
126 = Through Volume
3 = Left Turn Volume

Eastbound Speed Limit: 30 mph
Eastbound Configuration: 2 Lanes - Undivided

Westbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane

Advancing Volume Threshold	AV =	1035.1
Advancing Volume	Va =	617
If AV<Va then warrant is met		No

Right Turn Lane Warranted: **NO**

Westbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

NOT WARRANTED - Less than 20 vehicles

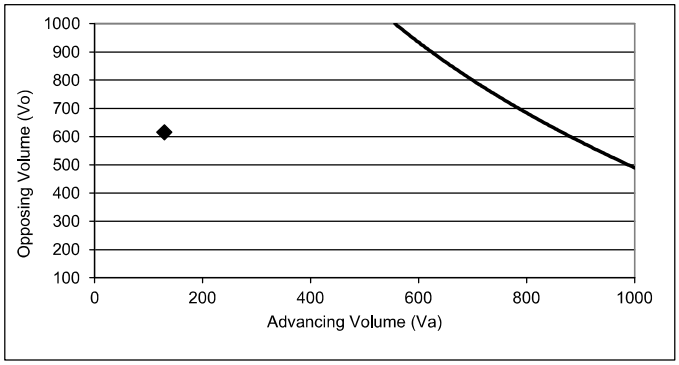
2. Check advance volume threshold criteria for taper

Advancing Volume Threshold	AV =	-
Advancing Volume	Va =	617
If AV<Va then warrant is met		-

Right Turn Taper Warranted: **NO**

Eastbound Left Turn Lane Warrants

Percentage Left Turns %lt 2.3 %
Advancing Volume Threshold AV 866 veh/hr
If AV<Va then warrant is met



◆ Study Intersection
Two lane roadway warrant threshold for: 30 mph
Turn lane warranted if point falls to right of warrant threshold line

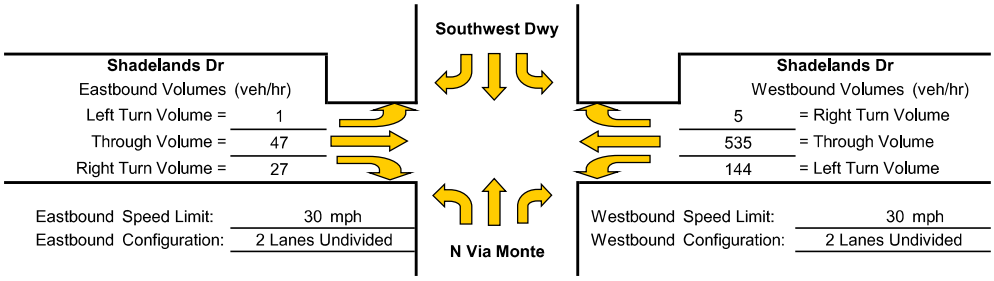
Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - 4 Legged Intersections

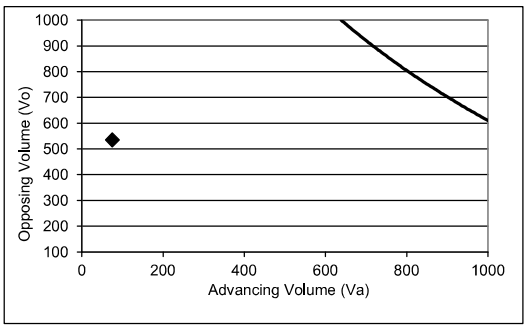
Study Intersection: Shadelands Dr/N Via Monte
Study Scenario: AM Baseline plus Project

Direction of Analysis Street: East/West



Eastbound Left Turn Lane Warrants

Percentage Left Turns %lt 1.3 %
Advancing Volume Threshold AV 1090 veh/hr
If AV<Va then warrant is met

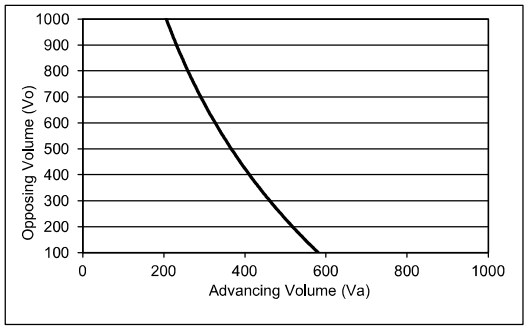


◆ Study Intersection
——— Two lane roadway warrant threshold for: 30 mph
Turn lane warranted if point falls to right of warrant threshold line

Left Turn Lane Warranted: **NO**

Westbound Left Turn Lane Warrants

Percentage Left Turns %lt 21.1 %
Advancing Volume Threshold AV 617 veh/hr
If AV<Va then warrant is met



◆ Study Intersection
——— Two lane roadway warrant threshold for: 30 mph
Turn lane warranted if point falls to right of warrant threshold line

Left Turn Lane Warranted: **YES**

Note: If one direction has a left turn lane warranted, a left turn lane should be installed on the other side as well

Eastbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold: AV = -
   Advancing Volume Va = 75
   If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Westbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold: AV = 1013
   Advancing Volume Va = 684
   If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Eastbound Right Turn Taper Warrants

(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 433.3
   Advancing Volume Va = 75
   If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Westbound Right Turn Taper Warrants

(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

NOT WARRANTED - Less than 20 vehicles

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 684
   If AV<Va then warrant is met -

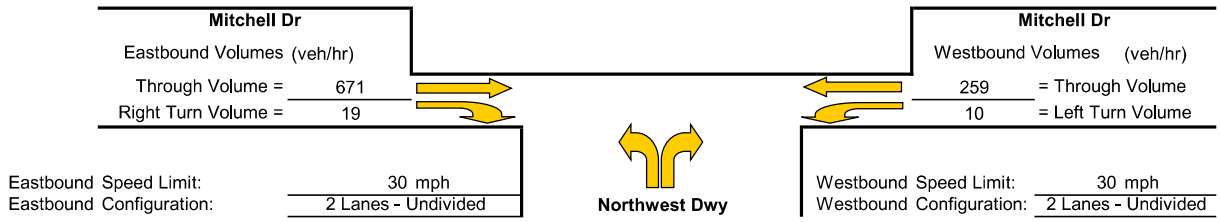
Right Turn Taper Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements* , Jan. 1997. The right turn lane and taper analysis is based on work conducted by Cottrell in 1981. The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: Mitchell Dr/NW Dwy
Study Scenario: PM Baseline plus Project

Direction of Analysis Street: East/West
Cross Street Intersects: From the South



Eastbound Speed Limit: 30 mph
Eastbound Configuration: 2 Lanes - Undivided

Westbound Speed Limit: 30 mph
Westbound Configuration: 2 Lanes - Undivided

Eastbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane

Advancing Volume Threshold	AV =	907.6
Advancing Volume	Va =	690
If AV<Va then warrant is met		No

Right Turn Lane Warranted: **NO**

Eastbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

NOT WARRANTED - Less than 20 vehicles

2. Check advance volume threshold criteria for taper

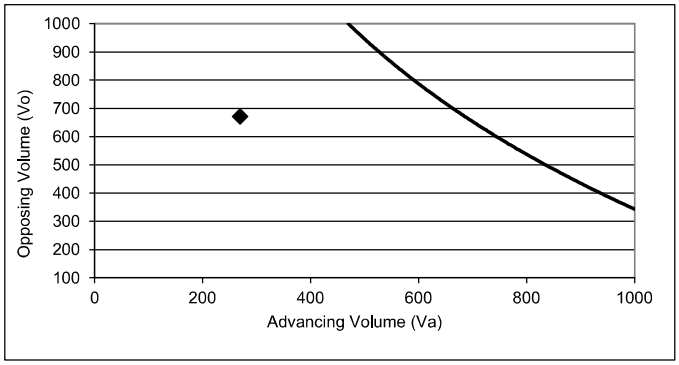
Advancing Volume Threshold	AV =	-
Advancing Volume	Va =	690
If AV<Va then warrant is met		-

Right Turn Taper Warranted: **NO**

Westbound Left Turn Lane Warrants

Percentage Left Turns	%lt	3.7 %
Advancing Volume Threshold	AV	686 veh/hr

If AV<Va then warrant is met



◆ Study Intersection
Two lane roadway warrant threshold for: 30 mph
Turn lane warranted if point falls to right of warrant threshold line

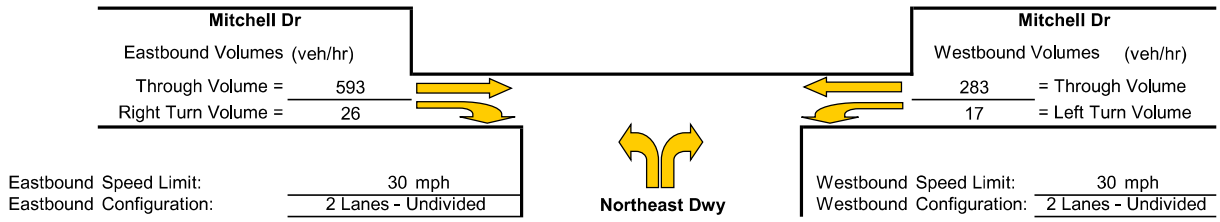
Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: Mitchell Dr/NE Dwy
Study Scenario: PM Baseline plus Project

Direction of Analysis Street: East/West
Cross Street Intersects: From the South



Eastbound Speed Limit: 30 mph
Eastbound Configuration: 2 Lanes - Undivided

Westbound Speed Limit: 30 mph
Westbound Configuration: 2 Lanes - Undivided

Eastbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane

Advancing Volume Threshold	AV =	855.1
Advancing Volume	Va =	619
If AV<Va then warrant is met		No

Right Turn Lane Warranted: **NO**

Eastbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper

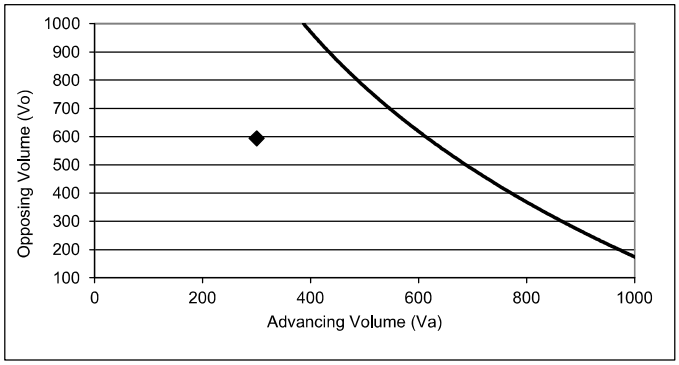
Advancing Volume Threshold	AV =	640
Advancing Volume	Va =	619
If AV<Va then warrant is met		No

Right Turn Taper Warranted: **NO**

Westbound Left Turn Lane Warrants

Percentage Left Turns	%lt	5.7 %
Advancing Volume Threshold	AV	618 veh/hr

If AV<Va then warrant is met



◆ Study Intersection
Two lane roadway warrant threshold for: 30 mph
Turn lane warranted if point falls to right of warrant threshold line

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: Shadelands Dr/SE Dwy
Study Scenario: PM Baseline plus Project

Direction of Analysis Street: East/West
Cross Street Intersects: From the North

Shadelands Dr

Westbound Volumes (veh/hr)
Through Volume = 165
Right Turn Volume = 5

Westbound Speed Limit: 30 mph
Westbound Configuration: 2 Lanes - Undivided

Southeast Dwy

Shadelands Dr

Eastbound Volumes (veh/hr)
432 = Through Volume
9 = Left Turn Volume

Eastbound Speed Limit: 30 mph
Eastbound Configuration: 2 Lanes - Undivided

Westbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane

Advancing Volume Threshold	AV =	1012.6
Advancing Volume	Va =	170
If AV<Va then warrant is met		No

Right Turn Lane Warranted: **NO**

Westbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

NOT WARRANTED - Less than 20 vehicles

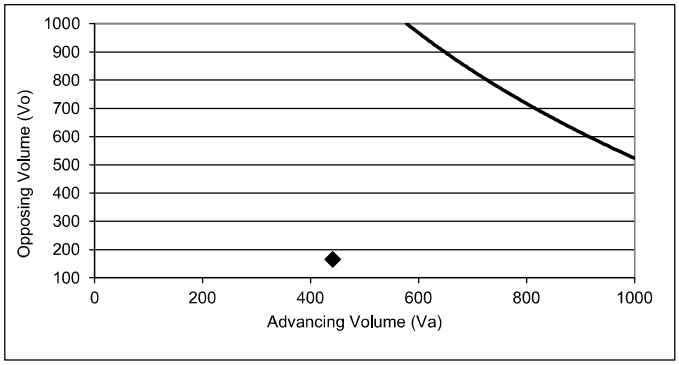
2. Check advance volume threshold criteria for taper

Advancing Volume Threshold	AV =	-
Advancing Volume	Va =	170
If AV<Va then warrant is met		-

Right Turn Taper Warranted: **NO**

Eastbound Left Turn Lane Warrants

Percentage Left Turns %lt 2.0 %
Advancing Volume Threshold AV 1510 veh/hr
If AV<Va then warrant is met



◆ Study Intersection
Two lane roadway warrant threshold for: 30 mph
Turn lane warranted if point falls to right of warrant threshold line

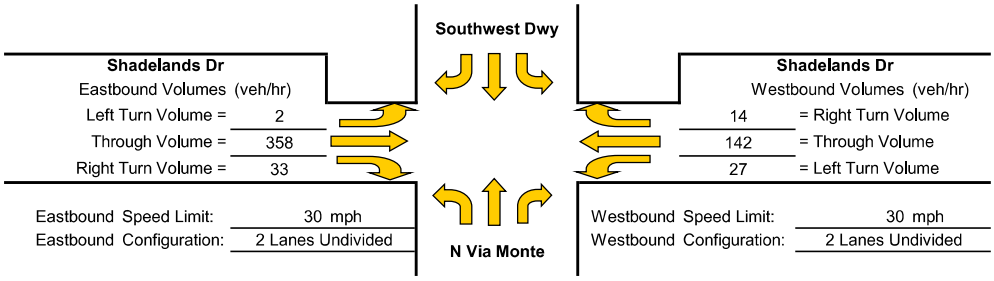
Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - 4 Legged Intersections

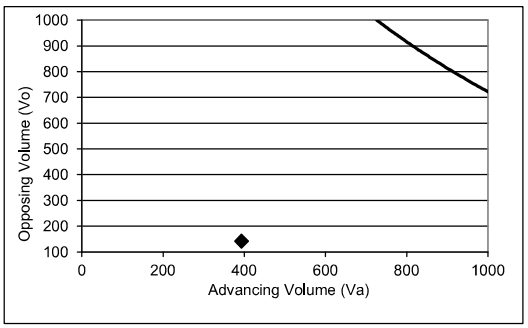
Study Intersection: Shadelands Dr/N Via Monte
Study Scenario: PM Baseline plus Project

Direction of Analysis Street: East/West



Eastbound Left Turn Lane Warrants

Percentage Left Turns %lt 0.5 %
Advancing Volume Threshold AV 1948 veh/hr
If AV<Va then warrant is met

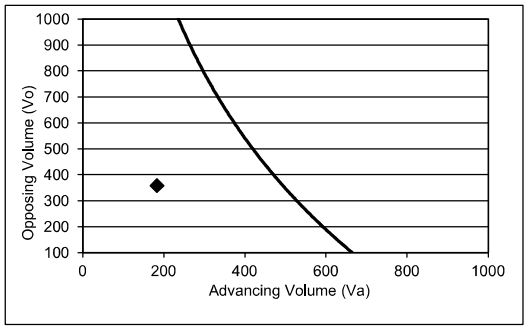


◆ Study Intersection
——— Two lane roadway warrant threshold for: 30 mph
Turn lane warranted if point falls to right of warrant threshold line

Left Turn Lane Warranted: **NO**

Westbound Left Turn Lane Warrants

Percentage Left Turns %lt 14.8 %
Advancing Volume Threshold AV 494 veh/hr
If AV<Va then warrant is met



◆ Study Intersection
——— Two lane roadway warrant threshold for: 30 mph
Turn lane warranted if point falls to right of warrant threshold line

Left Turn Lane Warranted: **NO**

Note: If one direction has a left turn lane warranted, a left turn lane should be installed on the other side as well

Eastbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold: AV = -
   Advancing Volume Va = 393
   If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Eastbound Right Turn Taper Warrants

(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 233.3
   Advancing Volume Va = 393
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Westbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold: AV = 945.1
   Advancing Volume Va = 183
   If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Westbound Right Turn Taper Warrants

(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

NOT WARRANTED - Less than 20 vehicles

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 183
   If AV<Va then warrant is met -

Right Turn Taper Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements* , Jan. 1997. The right turn lane and taper analysis is based on work conducted by Cottrell in 1981. The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Appendix D

Queuing Reports

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Intersection: 1: N Wiget Ln & Mitchell Dr

Movement	WB	WB	NB	NB	SB
Directions Served	L	R	T	R	LT
Maximum Queue (ft)	130	75	64	71	56
Average Queue (ft)	59	49	30	38	27
95th Queue (ft)	102	84	53	57	50
Link Distance (ft)	2452		725		687
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		50		100	
Storage Blk Time (%)	7	2	0		
Queuing Penalty (veh)	12	5	0		

Intersection: 2: Oak Grove Rd & Mitchell Dr/Peachwillow Ln

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	134	141	67	293	85	224	329	251	128	594	688
Average Queue (ft)	52	78	28	148	52	146	115	117	43	283	397
95th Queue (ft)	105	125	57	261	106	238	264	221	108	539	660
Link Distance (ft)		2452		570			1000	1000		1087	1087
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	200		215		60	200			105		
Storage Blk Time (%)				38	1	8	0		1	22	
Queuing Penalty (veh)				30	1	16	1		3	9	

Intersection: 3: N Wiget Ln & Shadelands Dr

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	LT	R	LT	R
Maximum Queue (ft)	102	35	248	85	243	125	103	40
Average Queue (ft)	46	13	93	42	107	62	54	17
95th Queue (ft)	79	34	181	95	196	131	85	41
Link Distance (ft)	774		1458		434		725	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		60		60		100		100
Storage Blk Time (%)	3	0	20	0	8	0	0	
Queuing Penalty (veh)	1	0	15	1	9	0	0	

Intersection: 4: N Via Monte & Shadelands Dr

Movement	EB	WB	NB	NB
Directions Served	LTR	LTR	LT	R
Maximum Queue (ft)	25	125	88	78
Average Queue (ft)	1	35	38	31
95th Queue (ft)	12	94	75	62
Link Distance (ft)	1458	958	706	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				100
Storage Blk Time (%)			0	0
Queuing Penalty (veh)			0	0

Intersection: 5: Oak Grove Rd & Shadelands Dr

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LR	L	T	T	T	TR
Maximum Queue (ft)	119	137	175	361	286	317	428
Average Queue (ft)	46	55	174	345	37	140	215
95th Queue (ft)	94	106	177	406	174	277	384
Link Distance (ft)	958			346	346	1000	1000
Upstream Blk Time (%)				26	0		
Queuing Penalty (veh)				169	1		
Storage Bay Dist (ft)		200	150				
Storage Blk Time (%)	0	0	44	0			
Queuing Penalty (veh)	0	0	155	0			

Intersection: 6: Oak Grove Rd & Citrus Ave

Movement	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	TR	L	T	T
Maximum Queue (ft)	214	321	103	646	690	131	162	167
Average Queue (ft)	127	175	37	539	525	55	39	58
95th Queue (ft)	223	268	82	744	865	112	109	135
Link Distance (ft)		1151		603	603		346	346
Upstream Blk Time (%)				14	13			
Queuing Penalty (veh)				100	98			
Storage Bay Dist (ft)	190		870			120		
Storage Blk Time (%)	0	6				2	1	
Queuing Penalty (veh)	0	14				6	1	

Intersection: 7: Wiget Ln/N Wiget Ln & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	T	R	L	T
Maximum Queue (ft)	201	215	209	191	239	184	392	420	451	207	158	235
Average Queue (ft)	110	119	81	67	86	74	172	192	206	25	79	90
95th Queue (ft)	176	189	170	157	192	157	364	393	416	122	148	179
Link Distance (ft)			830	830	830		1524	1524	1524			477
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	465	465				165				200	145	
Storage Blk Time (%)						0	10		11	0	1	7
Queuing Penalty (veh)						2	6		3	0	3	13

Intersection: 7: Wiget Ln/N Wiget Ln & Ygnacio Valley Rd.

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	125	88	155	183
Average Queue (ft)	47	22	74	89
95th Queue (ft)	104	61	134	162
Link Distance (ft)			164	164
Upstream Blk Time (%)		0	0	1
Queuing Penalty (veh)		0	0	2
Storage Bay Dist (ft)	100	150		
Storage Blk Time (%)	0	0	1	
Queuing Penalty (veh)	0	0	0	

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	L	T	T	TR	L	T	T	TR	LT	R	L
Maximum Queue (ft)	113	108	168	175	196	148	458	486	356	168	104	189
Average Queue (ft)	48	49	66	60	77	43	138	155	158	63	35	36
95th Queue (ft)	91	96	143	139	162	108	384	399	354	133	86	111
Link Distance (ft)			1524	1524	1524		1114	1114	1114	751		195
Upstream Blk Time (%)							0	0				0
Queuing Penalty (veh)							0	0				1
Storage Bay Dist (ft)	430	430				165					90	
Storage Blk Time (%)						0	6			7	0	0
Queuing Penalty (veh)						0	3			4	0	1

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	177
Average Queue (ft)	90
95th Queue (ft)	155
Link Distance (ft)	
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	230
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	R	L	T	T
Maximum Queue (ft)	260	217	249	244	222	180	3377	3442	1025	180	518	446
Average Queue (ft)	110	73	86	101	114	142	1468	1586	749	139	208	136
95th Queue (ft)	217	182	217	194	203	227	3975	4067	1303	206	431	357
Link Distance (ft)			1114	1114	1114		5461	5461			1064	1064
Upstream Blk Time (%)							3	3				
Queuing Penalty (veh)							0	0				
Storage Bay Dist (ft)	330	330				155			1000	155		
Storage Blk Time (%)	0	1	0			8	35	1	37	13	15	12
Queuing Penalty (veh)	0	2	0			45	86	9	205	21	26	29

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd.

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R
Maximum Queue (ft)	125	81	116	247	254	106
Average Queue (ft)	37	24	52	138	144	6
95th Queue (ft)	128	62	94	223	225	72
Link Distance (ft)				603	603	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100	300	300			245
Storage Blk Time (%)	0			0	0	0
Queuing Penalty (veh)	0			0	1	0

Intersection: 90: N Via Monte & Dwy

Movement	WB	NB	NB	SB
Directions Served	LR	T	R	T
Maximum Queue (ft)	24	20	24	12
Average Queue (ft)	9	1	1	0
95th Queue (ft)	28	10	11	8
Link Distance (ft)	134	195	195	706
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 91: N Wiget Ln

Movement	NB	NB	SB
Directions Served	T	T	T
Maximum Queue (ft)	141	129	3
Average Queue (ft)	42	34	0
95th Queue (ft)	108	96	3
Link Distance (ft)	164	164	
Upstream Blk Time (%)	0	0	
Queuing Penalty (veh)	0	0	
Storage Bay Dist (ft)			410
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 1111

Intersection: 1: N Wiget Ln & Mitchell Dr

Movement	WB	WB	NB	NB	SB
Directions Served	L	R	T	R	LT
Maximum Queue (ft)	98	52	65	92	96
Average Queue (ft)	45	13	19	48	52
95th Queue (ft)	77	38	50	77	81
Link Distance (ft)	2452		725		687
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		50		100	
Storage Blk Time (%)	4	0		0	
Queuing Penalty (veh)	1	0		0	

Intersection: 2: Oak Grove Rd & Mitchell Dr/Peachwillow Ln

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	224	318	214	161	85	180	289	308	129	304	305
Average Queue (ft)	145	171	58	58	38	36	131	156	63	160	160
95th Queue (ft)	215	259	135	123	83	101	240	273	132	278	279
Link Distance (ft)		2452		570			1000	1000		1087	1087
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	200		215		60	200			105		
Storage Blk Time (%)	1	3	0	10	1	0	2		2	19	
Queuing Penalty (veh)	2	11	0	5	0	0	1		7	12	

Intersection: 3: N Wiget Ln & Shadelands Dr

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	LT	R	LT	R
Maximum Queue (ft)	156	83	209	85	144	124	221	113
Average Queue (ft)	66	24	80	22	62	42	96	20
95th Queue (ft)	120	60	157	70	116	90	176	70
Link Distance (ft)	774		1457		436		725	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		60		60		100		100
Storage Blk Time (%)	11	0	18	0	1	0	12	0
Queuing Penalty (veh)	4	0	4	0	1	0	2	0

Intersection: 4: N Via Monte & Shadelands Dr

Movement	EB	WB	NB	NB
Directions Served	LTR	LTR	LT	R
Maximum Queue (ft)	44	98	64	98
Average Queue (ft)	2	21	23	39
95th Queue (ft)	19	63	55	79
Link Distance (ft)	1457	957	706	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				100
Storage Blk Time (%)			0	0
Queuing Penalty (veh)			0	0

Intersection: 5: Oak Grove Rd & Shadelands Dr

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LR	L	T	T	T	TR
Maximum Queue (ft)	422	225	155	159	168	214	231
Average Queue (ft)	149	161	74	22	29	66	70
95th Queue (ft)	291	234	137	88	98	167	177
Link Distance (ft)	957			346	346	1000	1000
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		200	150				
Storage Blk Time (%)	1	6	3	0			
Queuing Penalty (veh)	6	9	9	0			

Intersection: 6: Oak Grove Rd & Citrus Ave

Movement	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	TR	L	T	T
Maximum Queue (ft)	130	146	77	246	264	138	201	150
Average Queue (ft)	65	76	31	97	114	64	66	56
95th Queue (ft)	112	126	61	219	237	121	149	124
Link Distance (ft)		1151		603	603		346	346
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	190		870			120		
Storage Blk Time (%)		0				3	2	
Queuing Penalty (veh)		0				13	1	

Intersection: 7: Wiget Lane/N Wiget Lane & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	T	R	L	T
Maximum Queue (ft)	134	257	518	514	516	148	219	269	308	171	112	122
Average Queue (ft)	59	75	220	229	247	48	84	111	130	19	43	46
95th Queue (ft)	111	185	459	474	496	109	196	235	274	97	91	98
Link Distance (ft)			831	831	831		1517	1517	1517			479
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	465	465				165				200	145	
Storage Blk Time (%)			1			0	1		4	0	0	1
Queuing Penalty (veh)			1			0	1		1	0	0	1

Intersection: 7: Wiget Lane/N Wiget Lane & Ygnacio Valley Rd.

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	102	149	167	170
Average Queue (ft)	36	79	65	109
95th Queue (ft)	74	138	136	176
Link Distance (ft)			160	160
Upstream Blk Time (%)		0	1	3
Queuing Penalty (veh)		0	3	8
Storage Bay Dist (ft)	100	150		
Storage Blk Time (%)	0	0	1	
Queuing Penalty (veh)	0	0	1	

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	L	T	T	TR	L	T	T	TR	LT	R	L
Maximum Queue (ft)	153	272	494	590	526	131	320	424	278	91	44	151
Average Queue (ft)	67	86	158	179	199	42	75	96	99	34	15	58
95th Queue (ft)	123	178	376	434	435	96	220	271	226	79	42	124
Link Distance (ft)			1517	1517	1517		1114	1114	1114	752		193
Upstream Blk Time (%)							0	0				0
Queuing Penalty (veh)							0	0				0
Storage Bay Dist (ft)	430	430				165					90	
Storage Blk Time (%)			0			0	1			1		0
Queuing Penalty (veh)			1			0	1			0		0

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	158
Average Queue (ft)	67
95th Queue (ft)	129
Link Distance (ft)	
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	230
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	R	L	T	T
Maximum Queue (ft)	199	355	676	674	681	180	428	401	69	180	390	363
Average Queue (ft)	90	177	363	387	403	161	257	219	15	158	223	199
95th Queue (ft)	164	377	609	627	645	210	444	360	49	212	360	324
Link Distance (ft)			1114	1114	1114		5469	5469			1188	1188
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	330	330				155			1000	155		
Storage Blk Time (%)		0	12			39	7			24	12	33
Queuing Penalty (veh)		0	36			120	12			43	24	62

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd.

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R
Maximum Queue (ft)	125	199	223	261	260	133
Average Queue (ft)	92	115	130	148	161	4
95th Queue (ft)	176	183	200	228	231	61
Link Distance (ft)				603	603	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100	300	300			245
Storage Blk Time (%)	4			0	1	0
Queuing Penalty (veh)	7			0	1	0

Intersection: 90: N Via Monte /N Via Monte & Dwy

Movement	WB	NB	NB	SB
Directions Served	LR	T	R	T
Maximum Queue (ft)	65	72	91	6
Average Queue (ft)	25	5	10	0
95th Queue (ft)	47	38	52	5
Link Distance (ft)	134	193	193	706
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 91: N Wiget Lane/N Wiget Ln

Movement	NB	NB	SB	SB
Directions Served	T	T	T	T
Maximum Queue (ft)	70	55	52	103
Average Queue (ft)	7	4	3	10
95th Queue (ft)	36	25	28	61
Link Distance (ft)	160	160	436	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				410
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 418

Intersection: 1: N Wiget Ln & Mitchell Dr

Movement	WB	WB	NB	NB	SB
Directions Served	L	R	T	R	LT
Maximum Queue (ft)	132	74	54	68	60
Average Queue (ft)	57	51	30	38	28
95th Queue (ft)	99	84	49	58	52
Link Distance (ft)	2452		725		687
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		50		100	
Storage Blk Time (%)	7	2			
Queuing Penalty (veh)	12	7			

Intersection: 2: Oak Grove Rd & Mitchell Dr/Peachwillow Ln

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	118	134	67	310	85	224	315	264	129	741	819
Average Queue (ft)	54	79	31	151	49	146	104	116	42	331	449
95th Queue (ft)	103	123	58	267	103	234	245	219	103	655	757
Link Distance (ft)		2452		570			1000	1000		1087	1087
Upstream Blk Time (%)										0	0
Queuing Penalty (veh)										0	0
Storage Bay Dist (ft)	200		215		60	200			105		
Storage Blk Time (%)				40	1	8	1		1	23	
Queuing Penalty (veh)				32	1	16	1		1	9	

Intersection: 3: N Wiget Ln & Shadelands Dr

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	LT	R	LT	R
Maximum Queue (ft)	81	44	212	85	268	125	108	69
Average Queue (ft)	45	12	90	44	114	64	55	18
95th Queue (ft)	71	35	165	97	221	136	93	47
Link Distance (ft)	774		1458		434		725	
Upstream Blk Time (%)					0			
Queuing Penalty (veh)					0			
Storage Bay Dist (ft)		60		60		100		100
Storage Blk Time (%)	2	0	21	0	10	0	1	
Queuing Penalty (veh)	0	0	16	1	12	0	0	

Intersection: 4: N Via Monte & Shadelands Dr

Movement	EB	WB	NB	NB
Directions Served	LTR	LTR	LT	R
Maximum Queue (ft)	28	134	105	79
Average Queue (ft)	2	35	37	31
95th Queue (ft)	12	96	80	63
Link Distance (ft)	1458	958	706	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				100
Storage Blk Time (%)			1	0
Queuing Penalty (veh)			0	0

Intersection: 5: Oak Grove Rd & Shadelands Dr

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LR	L	T	T	T	TR
Maximum Queue (ft)	110	128	174	363	323	324	426
Average Queue (ft)	46	55	174	350	31	135	204
95th Queue (ft)	89	107	176	374	161	270	372
Link Distance (ft)	958			346	346	1000	1000
Upstream Blk Time (%)				28	0		
Queuing Penalty (veh)				184	3		
Storage Bay Dist (ft)		200	150				
Storage Blk Time (%)			45	0			
Queuing Penalty (veh)			163	0			

Intersection: 6: Oak Grove Rd & Citrus Ave

Movement	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	TR	L	T	T
Maximum Queue (ft)	214	346	114	654	695	128	131	166
Average Queue (ft)	129	180	40	571	577	63	36	54
95th Queue (ft)	225	279	87	731	864	116	100	129
Link Distance (ft)		1151		603	603		346	346
Upstream Blk Time (%)				18	15			
Queuing Penalty (veh)				134	115			
Storage Bay Dist (ft)	190		870			120		
Storage Blk Time (%)	0	7				4	1	
Queuing Penalty (veh)	1	17				9	1	

Intersection: 7: Wiget Ln/N Wiget Ln & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	T	R	L	T
Maximum Queue (ft)	215	222	207	208	227	189	403	424	442	204	153	215
Average Queue (ft)	117	124	79	68	82	64	172	192	207	25	73	90
95th Queue (ft)	187	195	171	166	191	149	354	384	411	120	136	169
Link Distance (ft)			830	830	830		1524	1524	1524			477
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	465	465				165				200	145	
Storage Blk Time (%)						0	9		10	0	1	8
Queuing Penalty (veh)						2	6		3	0	3	14

Intersection: 7: Wiget Ln/N Wiget Ln & Ygnacio Valley Rd.

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	124	81	159	184
Average Queue (ft)	46	22	74	86
95th Queue (ft)	107	59	141	157
Link Distance (ft)			164	164
Upstream Blk Time (%)		0	0	1
Queuing Penalty (veh)		0	1	2
Storage Bay Dist (ft)	100	150		
Storage Blk Time (%)	0	0	1	
Queuing Penalty (veh)	0	0	0	

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	L	T	T	TR	L	T	T	TR	LT	R	L
Maximum Queue (ft)	106	115	197	179	217	170	463	599	453	144	104	193
Average Queue (ft)	48	52	71	68	91	48	172	198	200	60	32	40
95th Queue (ft)	90	98	157	157	187	128	378	435	399	117	73	125
Link Distance (ft)			1524	1524	1524		1114	1114	1114	751		195
Upstream Blk Time (%)								0				0
Queuing Penalty (veh)								0				1
Storage Bay Dist (ft)	430	430				165					90	
Storage Blk Time (%)						0	10			4	0	0
Queuing Penalty (veh)						0	4			2	0	1

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	178
Average Queue (ft)	87
95th Queue (ft)	156
Link Distance (ft)	
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	230
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	R	L	T	T
Maximum Queue (ft)	301	309	306	213	216	180	4616	4665	1025	180	701	618
Average Queue (ft)	127	92	87	96	112	138	2638	2775	935	143	267	195
95th Queue (ft)	254	234	239	176	197	225	5773	5769	1302	216	598	527
Link Distance (ft)			1114	1114	1114		5461	5461			1064	1064
Upstream Blk Time (%)							12	16			0	0
Queuing Penalty (veh)							0	0			0	0
Storage Bay Dist (ft)	330	330				155			1000	155		
Storage Blk Time (%)	3	3	0			4	32	1	60	17	23	18
Queuing Penalty (veh)	4	4	0			20	80	14	337	29	38	41

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd.

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R
Maximum Queue (ft)	125	92	152	260	263	186
Average Queue (ft)	44	31	57	143	150	10
95th Queue (ft)	141	73	109	229	230	92
Link Distance (ft)				603	603	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100	300	300			245
Storage Blk Time (%)	0			0	1	0
Queuing Penalty (veh)	1			0	2	0

Intersection: 90: N Via Monte & Dwy

Movement	WB	NB	NB	SB
Directions Served	LR	T	R	T
Maximum Queue (ft)	29	11	17	30
Average Queue (ft)	10	0	1	1
95th Queue (ft)	29	8	10	15
Link Distance (ft)	134	195	195	706
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 91: N Wiget Ln

Movement	NB	NB	SB
Directions Served	T	T	T
Maximum Queue (ft)	154	140	3
Average Queue (ft)	49	41	0
95th Queue (ft)	118	106	3
Link Distance (ft)	164	164	
Upstream Blk Time (%)	0	0	
Queuing Penalty (veh)	0	0	
Storage Bay Dist (ft)			410
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 1345

Intersection: 1: N Wiget Ln & Mitchell Dr

Movement	WB	WB	NB	NB	SB
Directions Served	L	R	T	R	LT
Maximum Queue (ft)	125	73	40	93	96
Average Queue (ft)	50	20	20	50	54
95th Queue (ft)	90	54	46	79	84
Link Distance (ft)	2452		725		687
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		50		100	
Storage Blk Time (%)	5	0		0	
Queuing Penalty (veh)	2	0		0	

Intersection: 2: Oak Grove Rd & Mitchell Dr/Peachwillow Ln

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	224	375	239	166	84	173	290	313	129	325	350
Average Queue (ft)	148	178	70	61	38	48	136	160	67	185	185
95th Queue (ft)	217	277	164	123	82	114	249	282	136	314	319
Link Distance (ft)		2452		570			1000	1000		1087	1087
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	200		215		60	200			105		
Storage Blk Time (%)	1	4	0	11	1		3		3	24	
Queuing Penalty (veh)	3	16	0	6	1		2		10	15	

Intersection: 3: N Wiget Ln & Shadelands Dr

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	LT	R	LT	R
Maximum Queue (ft)	165	85	210	85	201	124	258	114
Average Queue (ft)	68	27	85	20	77	50	115	20
95th Queue (ft)	123	67	166	64	147	107	213	77
Link Distance (ft)	774		1457		436		725	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		60		60		100		100
Storage Blk Time (%)	12	0	21	0	3	0	19	0
Queuing Penalty (veh)	5	1	5	0	3	0	4	0

Intersection: 4: N Via Monte & Shadelands Dr

Movement	EB	WB	NB	NB
Directions Served	LTR	LTR	LT	R
Maximum Queue (ft)	32	85	71	100
Average Queue (ft)	2	20	25	39
95th Queue (ft)	14	60	59	79
Link Distance (ft)	1457	957	706	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				100
Storage Blk Time (%)			0	0
Queuing Penalty (veh)			0	0

Intersection: 5: Oak Grove Rd & Shadelands Dr

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LR	L	T	T	T	TR
Maximum Queue (ft)	393	225	152	171	151	204	202
Average Queue (ft)	147	163	76	19	26	71	69
95th Queue (ft)	291	237	135	85	86	160	158
Link Distance (ft)	957			346	346	1000	1000
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		200	150				
Storage Blk Time (%)	1	6	1	0			
Queuing Penalty (veh)	5	9	4	0			

Intersection: 6: Oak Grove Rd & Citrus Ave

Movement	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	TR	L	T	T
Maximum Queue (ft)	172	183	66	262	283	140	238	177
Average Queue (ft)	83	88	30	104	127	76	83	68
95th Queue (ft)	147	147	56	228	252	135	177	144
Link Distance (ft)		1151		603	603		346	346
Upstream Blk Time (%)							0	
Queuing Penalty (veh)							0	
Storage Bay Dist (ft)	190		870			120		
Storage Blk Time (%)	0	0				6	3	
Queuing Penalty (veh)	0	0				26	3	

Intersection: 7: Wiget Lane/N Wiget Lane & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	T	R	L	T
Maximum Queue (ft)	146	290	503	524	518	174	236	277	305	166	134	166
Average Queue (ft)	75	88	221	225	241	50	95	126	143	19	47	51
95th Queue (ft)	131	179	462	477	494	113	208	251	281	97	105	115
Link Distance (ft)			831	831	831		1517	1517	1517			479
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	465	465				165				200	145	
Storage Blk Time (%)		0	0			0	2		5	0	0	2
Queuing Penalty (veh)		0	1			0	1		2	0	0	3

Intersection: 7: Wiget Lane/N Wiget Lane & Ygnacio Valley Rd.

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	112	138	167	171
Average Queue (ft)	35	72	67	125
95th Queue (ft)	79	126	137	193
Link Distance (ft)			160	160
Upstream Blk Time (%)		1	1	5
Queuing Penalty (veh)		0	3	16
Storage Bay Dist (ft)	100	150		
Storage Blk Time (%)	0	1	1	
Queuing Penalty (veh)	1	1	1	

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	L	T	T	TR	L	T	T	TR	LT	R	L
Maximum Queue (ft)	136	235	550	580	484	124	222	412	444	110	71	172
Average Queue (ft)	67	82	158	173	192	44	78	100	120	37	16	57
95th Queue (ft)	120	161	409	433	424	100	186	275	301	82	48	124
Link Distance (ft)			1517	1517	1517		1114	1114	1114	752		193
Upstream Blk Time (%)			0									0
Queuing Penalty (veh)			0									0
Storage Bay Dist (ft)	430	430				165					90	
Storage Blk Time (%)			1			0	2			1	0	0
Queuing Penalty (veh)			1			0	1			0	0	0

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	166
Average Queue (ft)	71
95th Queue (ft)	139
Link Distance (ft)	
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	230
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd./Ygnacio Valley Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	R	L	T	T
Maximum Queue (ft)	179	355	684	712	687	180	474	399	84	180	422	401
Average Queue (ft)	95	185	381	403	414	164	269	225	19	159	228	208
95th Queue (ft)	160	386	641	653	647	209	476	358	59	210	376	345
Link Distance (ft)			1114	1114	1114		5469	5469			1188	1188
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	330	330				155			1000	155		
Storage Blk Time (%)		0	15			41	8			27	12	34
Queuing Penalty (veh)		0	45			127	14			50	24	63

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd./Ygnacio Valley Road

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R
Maximum Queue (ft)	125	217	257	298	318	215
Average Queue (ft)	88	124	141	165	179	20
95th Queue (ft)	176	197	220	252	266	138
Link Distance (ft)				603	603	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100	300	300			245
Storage Blk Time (%)	4			0	2	0
Queuing Penalty (veh)	8			1	4	0

Intersection: 90: N Via Monte /N Via Monte & Dwy

Movement	WB	NB	NB	SB
Directions Served	LR	T	R	T
Maximum Queue (ft)	56	57	95	12
Average Queue (ft)	26	4	9	0
95th Queue (ft)	46	30	48	6
Link Distance (ft)	134	193	193	706
Upstream Blk Time (%)			0	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 91: N Wiget Lane/N Wiget Ln

Movement	NB	NB	SB	SB
Directions Served	T	T	T	T
Maximum Queue (ft)	86	74	59	137
Average Queue (ft)	11	9	3	21
95th Queue (ft)	49	43	30	89
Link Distance (ft)	160	160	436	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				410
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 486

Intersection: 1: N Wiget Ln & Mitchell Dr

Movement	WB	WB	NB	NB	SB
Directions Served	L	R	T	R	LT
Maximum Queue (ft)	134	75	54	75	59
Average Queue (ft)	64	54	30	39	29
95th Queue (ft)	108	87	48	60	50
Link Distance (ft)	2452		730		687
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		50		100	
Storage Blk Time (%)	8	2		0	
Queuing Penalty (veh)	15	7		0	

Intersection: 2: Oak Grove Rd & Mitchell Dr/Peachwillow Ln

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	128	144	74	304	85	224	320	276	129	872	962
Average Queue (ft)	60	85	33	162	52	151	108	111	50	469	595
95th Queue (ft)	117	132	64	274	106	242	255	219	117	949	1046
Link Distance (ft)		2452		570			1000	1000		1087	1087
Upstream Blk Time (%)										1	4
Queuing Penalty (veh)										0	0
Storage Bay Dist (ft)	200		215		60	200			105		
Storage Blk Time (%)				43	1	10	1		1	27	
Queuing Penalty (veh)				35	1	21	2		2	11	

Intersection: 3: N Wiget Ln & Shadelands Dr

Movement	EB	EB	WB	NB	SB	SB
Directions Served	LT	R	LTR	LTR	LT	R
Maximum Queue (ft)	101	32	232	296	106	66
Average Queue (ft)	49	13	109	163	56	19
95th Queue (ft)	83	35	193	264	90	49
Link Distance (ft)	774		1468	636	730	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		60				100
Storage Blk Time (%)	3				0	0
Queuing Penalty (veh)	1				0	0

Intersection: 4: N Via Monte & Shadelands Dr

Movement	EB	WB	NB	NB
Directions Served	LTR	LTR	LT	R
Maximum Queue (ft)	28	124	105	72
Average Queue (ft)	1	36	36	27
95th Queue (ft)	12	96	82	60
Link Distance (ft)	1468	958	706	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				100
Storage Blk Time (%)			1	0
Queuing Penalty (veh)			0	0

Intersection: 5: Oak Grove Rd & Shadelands Dr

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LR	L	T	T	T	TR
Maximum Queue (ft)	114	130	174	365	323	357	460
Average Queue (ft)	43	53	174	348	49	149	219
95th Queue (ft)	86	103	179	379	230	300	408
Link Distance (ft)	958			346	346	1000	1000
Upstream Blk Time (%)				26	1		
Queuing Penalty (veh)				179	5		
Storage Bay Dist (ft)		200	150				
Storage Blk Time (%)		0	44	0			
Queuing Penalty (veh)		0	164	0			

Intersection: 6: Oak Grove Rd & Citrus Ave

Movement	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	TR	L	T	T
Maximum Queue (ft)	214	357	103	648	692	138	169	173
Average Queue (ft)	143	195	40	558	543	66	41	60
95th Queue (ft)	238	300	85	724	867	122	120	140
Link Distance (ft)		1151		603	603		346	346
Upstream Blk Time (%)				15	14			
Queuing Penalty (veh)				116	107			
Storage Bay Dist (ft)	190		870			120		
Storage Blk Time (%)	0	9				4	2	
Queuing Penalty (veh)	1	23				10	1	

Intersection: 7: Wiget Ln/N Wiget Ln & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	TR	L	T	T	T	R	L	T	R
Maximum Queue (ft)	411	307	255	258	189	508	620	635	184	163	233	124
Average Queue (ft)	240	102	81	94	67	211	237	257	25	83	97	53
95th Queue (ft)	382	231	189	208	163	445	502	529	133	150	189	119
Link Distance (ft)		812	812	812		1523	1523	1523			477	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	465				165				200	145		100
Storage Blk Time (%)	0				0	16		19	0	2	9	0
Queuing Penalty (veh)	1				2	11		6	0	3	17	0

Intersection: 7: Wiget Ln/N Wiget Ln & Ygnacio Valley Rd.

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	112	172	208
Average Queue (ft)	29	85	101
95th Queue (ft)	74	152	176
Link Distance (ft)		636	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	150		510
Storage Blk Time (%)	0	1	
Queuing Penalty (veh)	0	4	

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB
Directions Served	L	L	T	T	TR	L	T	T	TR	LT	L	TR
Maximum Queue (ft)	104	115	252	238	232	188	451	415	423	750	155	161
Average Queue (ft)	51	55	89	85	105	48	191	204	216	735	34	84
95th Queue (ft)	94	102	194	192	210	126	375	374	381	775	102	145
Link Distance (ft)			1523	1523	1523		1114	1114	1114	751	195	
Upstream Blk Time (%)							0			56	0	0
Queuing Penalty (veh)							0			0	0	0
Storage Bay Dist (ft)	430	430				165						230
Storage Blk Time (%)			0				10			100	0	0
Queuing Penalty (veh)			0				4			62	0	0

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd./Ygnacio Valley Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	R	L	T	T
Maximum Queue (ft)	330	335	635	565	214	180	5281	5307	1025	180	1064	1056
Average Queue (ft)	247	230	254	144	103	126	3520	3626	996	176	792	724
95th Queue (ft)	383	416	760	434	199	212	6397	6350	1211	197	1261	1252
Link Distance (ft)			1114	1114	1114		5461	5461			1064	1064
Upstream Blk Time (%)			1				12	17			25	8
Queuing Penalty (veh)			2				0	0			0	0
Storage Bay Dist (ft)	330	330				155			1000	155		
Storage Blk Time (%)	20	25	0			5	12	1	64	76	20	28
Queuing Penalty (veh)	30	38	0			27	32	15	375	136	36	67

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd./Ygnacio Valley Road

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R
Maximum Queue (ft)	125	103	178	288	325	269
Average Queue (ft)	60	36	62	168	178	29
95th Queue (ft)	161	85	125	258	276	167
Link Distance (ft)				603	603	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100	300	300			245
Storage Blk Time (%)	1			0	2	0
Queuing Penalty (veh)	1			0	7	0

Intersection: 90: N Via Monte & Dwy

Movement	WB	NB	NB	SB
Directions Served	LR	T	R	T
Maximum Queue (ft)	26	27	29	3
Average Queue (ft)	10	1	1	0
95th Queue (ft)	29	14	12	3
Link Distance (ft)	134	195	195	706
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 1579

Intersection: 1: N Wiget Ln & Mitchell Dr

Movement	WB	WB	NB	NB	SB
Directions Served	L	R	T	R	LT
Maximum Queue (ft)	112	73	76	108	127
Average Queue (ft)	51	22	21	52	57
95th Queue (ft)	87	59	55	84	98
Link Distance (ft)	2452		730		687
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		50		100	
Storage Blk Time (%)	6	0		0	
Queuing Penalty (veh)	2	0		0	

Intersection: 2: Oak Grove Rd & Mitchell Dr/Peachwillow Ln

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	224	367	239	166	84	176	274	299	129	319	329
Average Queue (ft)	148	181	71	59	39	49	138	161	66	180	181
95th Queue (ft)	220	290	159	121	84	116	242	270	139	297	307
Link Distance (ft)		2452		570			1000	1000		1087	1087
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	200		215		60	200			105		
Storage Blk Time (%)	1	4	0	11	1		2		3	24	
Queuing Penalty (veh)	4	15	0	6	1		1		11	16	

Intersection: 3: N Wiget Ln & Shadelands Dr

Movement	EB	EB	WB	NB	SB	SB
Directions Served	LT	R	LTR	LTR	LT	R
Maximum Queue (ft)	176	85	244	250	266	125
Average Queue (ft)	75	33	106	121	117	27
95th Queue (ft)	137	74	204	217	215	89
Link Distance (ft)	774		1468	636	730	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		60				100
Storage Blk Time (%)	14	0			20	0
Queuing Penalty (veh)	6	1			4	0

Intersection: 4: N Via Monte & Shadelands Dr

Movement	EB	WB	NB	NB
Directions Served	LTR	LTR	LT	R
Maximum Queue (ft)	40	95	81	112
Average Queue (ft)	2	21	26	38
95th Queue (ft)	19	60	64	85
Link Distance (ft)	1468	957	706	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				100
Storage Blk Time (%)			0	0
Queuing Penalty (veh)			0	0

Intersection: 5: Oak Grove Rd & Shadelands Dr

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LR	L	T	T	T	TR
Maximum Queue (ft)	416	225	160	182	167	225	207
Average Queue (ft)	153	165	80	21	28	73	68
95th Queue (ft)	305	236	141	91	97	172	156
Link Distance (ft)	957			346	346	1000	1000
Upstream Blk Time (%)					0		
Queuing Penalty (veh)					0		
Storage Bay Dist (ft)		200	150				
Storage Blk Time (%)	1	8	3	0			
Queuing Penalty (veh)	4	12	9	0			

Intersection: 6: Oak Grove Rd & Citrus Ave

Movement	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	TR	L	T	T
Maximum Queue (ft)	173	183	82	263	285	143	251	184
Average Queue (ft)	90	93	34	115	131	80	84	70
95th Queue (ft)	151	158	66	238	257	139	187	147
Link Distance (ft)		1151		603	603		346	346
Upstream Blk Time (%)							0	0
Queuing Penalty (veh)							0	0
Storage Bay Dist (ft)	190		870			120		
Storage Blk Time (%)	0	0				6	2	
Queuing Penalty (veh)	0	0				29	2	

Intersection: 7: Wiget Lane/N Wiget Lane & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	TR	L	T	T	T	R	L	T	R
Maximum Queue (ft)	411	563	570	589	172	315	344	387	204	125	149	109
Average Queue (ft)	162	258	271	291	46	119	146	166	26	48	55	39
95th Queue (ft)	321	517	540	554	118	275	313	349	129	99	113	84
Link Distance (ft)		812	812	812		1524	1524	1524			479	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	465				165				200	145		100
Storage Blk Time (%)	0	2			0	6		9	0	0	2	0
Queuing Penalty (veh)	0	3			0	3		3	0	0	2	1

Intersection: 7: Wiget Lane/N Wiget Lane & Ygnacio Valley Rd.

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	171	186	303
Average Queue (ft)	101	72	156
95th Queue (ft)	165	140	263
Link Distance (ft)		636	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	150		510
Storage Blk Time (%)	3	1	
Queuing Penalty (veh)	16	3	

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB
Directions Served	L	L	T	T	TR	L	T	T	TR	LT	L	TR
Maximum Queue (ft)	157	407	624	636	644	165	238	337	354	755	145	152
Average Queue (ft)	78	112	283	300	323	47	121	146	160	638	60	60
95th Queue (ft)	137	266	564	580	594	115	228	285	304	914	117	122
Link Distance (ft)			1524	1524	1524		1114	1114	1114	752	193	
Upstream Blk Time (%)										41	0	0
Queuing Penalty (veh)										0	0	0
Storage Bay Dist (ft)	430	430				165						230
Storage Blk Time (%)		0	3			0	5			100	0	0
Queuing Penalty (veh)		0	6			1	2			19	0	0

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd./Ygnacio Valley Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	R	L	T	T
Maximum Queue (ft)	183	355	656	710	676	180	571	487	99	180	450	398
Average Queue (ft)	93	172	353	377	394	167	336	259	20	161	251	226
95th Queue (ft)	164	371	632	662	670	211	590	458	63	208	430	383
Link Distance (ft)			1114	1114	1114		5469	5469			1188	1188
Upstream Blk Time (%)				0								
Queuing Penalty (veh)				0								
Storage Bay Dist (ft)	330	330				155			1000	155		
Storage Blk Time (%)		0	13			55	7			29	13	39
Queuing Penalty (veh)		0	41			173	13			56	26	74

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd./Ygnacio Valley Road

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R
Maximum Queue (ft)	125	229	247	291	297	242
Average Queue (ft)	93	136	152	163	176	20
95th Queue (ft)	177	208	231	246	258	134
Link Distance (ft)				603	603	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100	300	300			245
Storage Blk Time (%)	4	0	0	0	2	0
Queuing Penalty (veh)	8	0	0	0	4	0

Intersection: 90: N Via Monte /N Via Monte & Dwy

Movement	WB	NB	NB
Directions Served	LR	T	R
Maximum Queue (ft)	58	74	118
Average Queue (ft)	26	4	8
95th Queue (ft)	46	32	55
Link Distance (ft)	134	193	193
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 580

Intersection: 1: N Wiget Ln & Mitchell Dr

Movement	WB	WB	NB	NB	SB
Directions Served	L	R	T	R	LT
Maximum Queue (ft)	168	75	47	65	52
Average Queue (ft)	69	53	29	35	26
95th Queue (ft)	125	87	46	53	49
Link Distance (ft)	2452		725		687
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		50		100	
Storage Blk Time (%)	10	2			
Queuing Penalty (veh)	17	8			

Intersection: 2: Oak Grove Rd & Mitchell Dr/Peachwillow Ln

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	123	141	64	271	85	218	255	262	129	422	517
Average Queue (ft)	51	77	27	130	56	104	91	118	39	191	293
95th Queue (ft)	104	124	55	243	104	192	191	218	98	368	478
Link Distance (ft)		2452		570			1000	1000		1087	1087
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	200		215		60	200			105		
Storage Blk Time (%)				32	1	2	1		0	14	
Queuing Penalty (veh)				26	1	4	1		1	5	

Intersection: 3: N Wiget Ln & Shadelands Dr

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	LT	R	LT	R
Maximum Queue (ft)	98	44	272	85	216	125	135	75
Average Queue (ft)	49	13	119	51	103	49	62	18
95th Queue (ft)	82	37	233	107	185	117	106	50
Link Distance (ft)	774		1458		434		725	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		60		60		100		100
Storage Blk Time (%)	3	0	31	0	8	0	2	0
Queuing Penalty (veh)	1	0	24	2	6	0	0	0

Intersection: 4: N Via Monte & Shadelands Dr

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	26	172	98	73	73
Average Queue (ft)	1	39	38	23	32
95th Queue (ft)	13	111	80	55	63
Link Distance (ft)	1458	958	706		267
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				100	
Storage Blk Time (%)			1	0	
Queuing Penalty (veh)			0	0	

Intersection: 5: Oak Grove Rd & Shadelands Dr

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LR	L	T	T	T	TR
Maximum Queue (ft)	117	125	174	361	330	296	384
Average Queue (ft)	50	53	171	312	43	131	190
95th Queue (ft)	96	102	190	466	200	250	336
Link Distance (ft)	958			346	346	1000	1000
Upstream Blk Time (%)				20	0		
Queuing Penalty (veh)				114	0		
Storage Bay Dist (ft)		200	150				
Storage Blk Time (%)			40	0			
Queuing Penalty (veh)			124	0			

Intersection: 6: Oak Grove Rd & Citrus Ave

Movement	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	TR	L	T	T
Maximum Queue (ft)	214	312	85	614	664	130	164	174
Average Queue (ft)	130	175	26	393	332	52	39	60
95th Queue (ft)	226	263	65	658	677	106	112	145
Link Distance (ft)		1151		603	603		346	346
Upstream Blk Time (%)				4	4			
Queuing Penalty (veh)				27	27			
Storage Bay Dist (ft)	190		870			120		
Storage Blk Time (%)	0	6				2	1	
Queuing Penalty (veh)	1	14				5	1	

Intersection: 7: Wiget Ln/N Wiget Ln & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	T	R	L	T
Maximum Queue (ft)	181	180	205	185	202	184	431	447	461	225	152	168
Average Queue (ft)	98	106	75	65	80	67	180	200	213	25	71	72
95th Queue (ft)	161	167	161	153	179	143	369	393	415	122	129	134
Link Distance (ft)			830	830	830		1524	1524	1524			477
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	465	465				165				200	145	
Storage Blk Time (%)						0	10		11	0	1	4
Queuing Penalty (veh)						0	6		3	0	1	7

Intersection: 7: Wiget Ln/N Wiget Ln & Ygnacio Valley Rd.

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	117	100	164	205
Average Queue (ft)	38	25	76	107
95th Queue (ft)	90	66	139	185
Link Distance (ft)			164	164
Upstream Blk Time (%)		0	0	3
Queuing Penalty (veh)		0	1	6
Storage Bay Dist (ft)	100	150		
Storage Blk Time (%)	0	0	1	
Queuing Penalty (veh)	0	0	0	

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	L	T	T	TR	L	T	T	TR	LT	R	L
Maximum Queue (ft)	100	112	182	196	221	167	334	352	343	160	115	191
Average Queue (ft)	45	52	66	68	83	48	121	138	144	54	29	46
95th Queue (ft)	87	97	145	158	182	114	286	309	309	115	69	139
Link Distance (ft)			1524	1524	1524		1114	1114	1114	751		195
Upstream Blk Time (%)												1
Queuing Penalty (veh)												2
Storage Bay Dist (ft)	430	430				165					90	
Storage Blk Time (%)						0	6			4	0	1
Queuing Penalty (veh)						0	2			2	0	2

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	188
Average Queue (ft)	105
95th Queue (ft)	175
Link Distance (ft)	
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	230
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	R	L	T	T
Maximum Queue (ft)	179	136	190	189	220	180	713	808	698	180	362	304
Average Queue (ft)	78	46	75	96	111	142	397	418	278	132	157	97
95th Queue (ft)	141	100	150	174	199	224	824	911	729	201	297	228
Link Distance (ft)			1114	1114	1114		5461	5461			1064	1064
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	330	330				155			1000	155		
Storage Blk Time (%)						4	31	0	3	10	8	7
Queuing Penalty (veh)						20	76	1	18	16	14	16

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd.

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R
Maximum Queue (ft)	125	82	157	268	303	215
Average Queue (ft)	29	23	51	138	144	10
95th Queue (ft)	112	60	106	227	234	93
Link Distance (ft)				603	603	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100	300	300			245
Storage Blk Time (%)	0			0	1	0
Queuing Penalty (veh)	0			0	2	0

Intersection: 90: N Via Monte & Dwy

Movement	WB	NB	NB	SB
Directions Served	LR	T	R	T
Maximum Queue (ft)	26	22	37	34
Average Queue (ft)	9	1	2	2
95th Queue (ft)	28	13	18	18
Link Distance (ft)	134	195	195	706
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 91: N Wiget Ln

Movement	NB	NB	SB
Directions Served	T	T	T
Maximum Queue (ft)	104	93	20
Average Queue (ft)	25	24	1
95th Queue (ft)	80	73	10
Link Distance (ft)	164	164	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			410
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 606

Intersection: 1: N Wiget Ln & Mitchell Dr

Movement	WB	WB	NB	NB	SB
Directions Served	L	R	T	R	LT
Maximum Queue (ft)	85	65	58	107	111
Average Queue (ft)	41	14	19	53	54
95th Queue (ft)	70	42	49	86	86
Link Distance (ft)	2452		725		687
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		50		100	
Storage Blk Time (%)	3	0		0	
Queuing Penalty (veh)	1	0		0	

Intersection: 2: Oak Grove Rd & Mitchell Dr/Peachwillow Ln

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	221	291	172	158	85	127	260	286	129	308	317
Average Queue (ft)	140	164	46	58	36	31	112	133	57	147	156
95th Queue (ft)	211	241	115	119	80	84	210	240	122	264	275
Link Distance (ft)		2452		570			1000	1000		1087	1087
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	200		215		60	200			105		
Storage Blk Time (%)	1	3	0	11	1		1		1	17	
Queuing Penalty (veh)	2	8	0	5	1		0		4	10	

Intersection: 3: N Wiget Ln & Shadelands Dr

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	LT	R	LT	R
Maximum Queue (ft)	146	84	181	85	189	125	210	86
Average Queue (ft)	65	27	74	18	80	52	87	17
95th Queue (ft)	119	66	145	59	153	115	163	60
Link Distance (ft)	774		1457		436		725	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		60		60		100		100
Storage Blk Time (%)	10	0	14	0	4	0	8	0
Queuing Penalty (veh)	4	0	3	0	4	0	2	0

Intersection: 4: N Via Monte & Shadelands Dr

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	29	66	96	104	50
Average Queue (ft)	2	11	42	38	24
95th Queue (ft)	16	40	82	80	49
Link Distance (ft)	1457	957	706		306
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				100	
Storage Blk Time (%)			0	0	
Queuing Penalty (veh)			0	0	

Intersection: 5: Oak Grove Rd & Shadelands Dr

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LR	L	T	T	T	TR
Maximum Queue (ft)	296	223	162	159	138	159	164
Average Queue (ft)	115	139	75	17	25	40	44
95th Queue (ft)	227	222	141	81	87	109	113
Link Distance (ft)	957			346	346	1000	1000
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		200	150				
Storage Blk Time (%)	0	4	2	0			
Queuing Penalty (veh)	1	4	7	0			

Intersection: 6: Oak Grove Rd & Citrus Ave

Movement	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	TR	L	T	T
Maximum Queue (ft)	142	158	73	260	274	124	186	175
Average Queue (ft)	62	80	29	89	108	52	59	55
95th Queue (ft)	112	131	57	208	226	104	134	124
Link Distance (ft)		1151		603	603		346	346
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	190		870			120		
Storage Blk Time (%)	0	0				2	1	
Queuing Penalty (veh)	0	0				7	1	

Intersection: 7: Wiget Lane/N Wiget Lane & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	T	R	L	T
Maximum Queue (ft)	157	344	552	571	581	148	243	399	316	153	114	124
Average Queue (ft)	76	97	226	234	251	48	87	117	134	20	44	52
95th Queue (ft)	133	219	470	492	510	107	204	304	280	103	96	106
Link Distance (ft)			831	831	831		1517	1517	1517			479
Upstream Blk Time (%)								0				
Queuing Penalty (veh)								0				
Storage Bay Dist (ft)	465	465				165				200	145	
Storage Blk Time (%)			1			0	2		4	0	0	1
Queuing Penalty (veh)			2			0	1		2	0	0	2

Intersection: 7: Wiget Lane/N Wiget Lane & Ygnacio Valley Rd.

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	112	150	163	172
Average Queue (ft)	38	80	55	102
95th Queue (ft)	83	134	123	173
Link Distance (ft)			160	160
Upstream Blk Time (%)		0	0	2
Queuing Penalty (veh)		0	1	6
Storage Bay Dist (ft)	100	150		
Storage Blk Time (%)	0	1	1	
Queuing Penalty (veh)	1	1	1	

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	L	T	T	TR	L	T	T	TR	LT	R	L
Maximum Queue (ft)	168	233	458	471	589	107	201	227	251	98	70	163
Average Queue (ft)	82	95	159	175	200	38	70	83	97	40	17	45
95th Queue (ft)	145	173	356	390	450	86	163	183	211	85	49	111
Link Distance (ft)			1517	1517	1517		1114	1114	1114	752		193
Upstream Blk Time (%)												0
Queuing Penalty (veh)												0
Storage Bay Dist (ft)	430	430				165					90	
Storage Blk Time (%)			0				1			1	0	0
Queuing Penalty (veh)			1				0			0	0	0

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	152
Average Queue (ft)	61
95th Queue (ft)	121
Link Distance (ft)	
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	230
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd./Ygnacio Valley Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	R	L	T	T
Maximum Queue (ft)	188	355	648	673	689	180	560	488	74	180	409	386
Average Queue (ft)	91	166	351	374	394	167	343	257	13	158	218	198
95th Queue (ft)	162	358	599	620	643	207	687	512	45	209	373	340
Link Distance (ft)			1114	1114	1114		5469	5469			1188	1188
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	330	330				155			1000	155		
Storage Blk Time (%)		0	12			50	6			25	9	30
Queuing Penalty (veh)		0	34			152	10			45	18	56

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd./Ygnacio Valley Road

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R
Maximum Queue (ft)	125	195	206	259	277	240
Average Queue (ft)	86	99	115	152	165	11
95th Queue (ft)	176	169	182	230	243	100
Link Distance (ft)				603	603	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100	300	300			245
Storage Blk Time (%)	4		0	0	1	0
Queuing Penalty (veh)	8		0	0	1	0

Intersection: 90: N Via Monte /N Via Monte & Dwy

Movement	WB	NB	NB	SB
Directions Served	LR	T	R	T
Maximum Queue (ft)	57	53	91	6
Average Queue (ft)	25	4	9	0
95th Queue (ft)	46	28	51	4
Link Distance (ft)	134	193	193	706
Upstream Blk Time (%)			0	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 91: N Wiget Lane/N Wiget Ln

Movement	NB	NB	SB	SB
Directions Served	T	T	T	T
Maximum Queue (ft)	98	74	11	92
Average Queue (ft)	16	8	0	8
95th Queue (ft)	64	40	7	49
Link Distance (ft)	160	160	436	
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)				410
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 408

Intersection: 1: N Wiget Ln & Mitchell Dr

Movement	WB	WB	NB	NB	SB
Directions Served	L	R	T	R	LT
Maximum Queue (ft)	158	75	57	78	58
Average Queue (ft)	75	57	30	38	27
95th Queue (ft)	127	91	50	59	52
Link Distance (ft)	2452		725		687
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		50		100	
Storage Blk Time (%)	12	2		0	
Queuing Penalty (veh)	22	9		0	

Intersection: 2: Oak Grove Rd & Mitchell Dr/Peachwillow Ln

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	130	136	74	273	85	222	257	265	124	500	600
Average Queue (ft)	59	84	33	122	51	119	105	130	44	220	330
95th Queue (ft)	111	127	62	225	103	211	210	233	106	423	538
Link Distance (ft)		2452		570			1000	1000		1087	1087
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	200		215		60	200			105		
Storage Blk Time (%)				32	1	4	1		1	18	
Queuing Penalty (veh)				26	1	8	1		2	7	

Intersection: 3: N Wiget Ln & Shadelands Dr

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	LT	R	LT	R
Maximum Queue (ft)	96	48	319	85	240	125	146	93
Average Queue (ft)	48	12	131	55	107	48	70	19
95th Queue (ft)	79	36	263	110	195	116	119	58
Link Distance (ft)	774		1458		434		725	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		60		60		100		100
Storage Blk Time (%)	3	0	37	0	9	0	3	0
Queuing Penalty (veh)	1	0	28	1	7	0	1	0

Intersection: 4: N Via Monte & Shadelands Dr

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	27	157	102	87	71
Average Queue (ft)	1	34	36	24	33
95th Queue (ft)	13	106	78	60	59
Link Distance (ft)	1458	958	706		267
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				100	
Storage Blk Time (%)			1	0	
Queuing Penalty (veh)			0	0	

Intersection: 5: Oak Grove Rd & Shadelands Dr

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LR	L	T	T	T	TR
Maximum Queue (ft)	122	131	174	363	355	297	386
Average Queue (ft)	50	55	172	321	54	135	188
95th Queue (ft)	99	105	188	466	232	256	334
Link Distance (ft)	958			346	346	1000	1000
Upstream Blk Time (%)				22	1		
Queuing Penalty (veh)				131	3		
Storage Bay Dist (ft)		200	150				
Storage Blk Time (%)			41	0			
Queuing Penalty (veh)			132	0			

Intersection: 6: Oak Grove Rd & Citrus Ave

Movement	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	TR	L	T	T
Maximum Queue (ft)	214	320	81	639	690	137	160	184
Average Queue (ft)	132	182	28	452	412	63	37	58
95th Queue (ft)	229	277	64	716	768	118	110	141
Link Distance (ft)		1151		603	603		346	346
Upstream Blk Time (%)				5	5			
Queuing Penalty (veh)				37	35			
Storage Bay Dist (ft)	190		870			120		
Storage Blk Time (%)	0	6				3	1	
Queuing Penalty (veh)	1	15				8	1	

Intersection: 7: Wiget Ln/N Wiget Ln & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	T	R	L	T
Maximum Queue (ft)	185	200	209	190	229	186	505	525	544	205	158	240
Average Queue (ft)	101	110	84	72	93	75	204	225	244	25	75	86
95th Queue (ft)	168	177	173	160	200	162	411	440	467	120	143	192
Link Distance (ft)			830	830	830		1524	1524	1524			477
Upstream Blk Time (%)												0
Queuing Penalty (veh)												0
Storage Bay Dist (ft)	465	465				165				200	145	
Storage Blk Time (%)						0	13		15	0	3	5
Queuing Penalty (veh)						3	8		5	0	6	10

Intersection: 7: Wiget Ln/N Wiget Ln & Ygnacio Valley Rd.

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	120	78	187	218
Average Queue (ft)	42	21	82	124
95th Queue (ft)	96	56	153	212
Link Distance (ft)			164	164
Upstream Blk Time (%)		0	1	5
Queuing Penalty (veh)		0	2	12
Storage Bay Dist (ft)	100	150		
Storage Blk Time (%)	0	0	2	
Queuing Penalty (veh)	0	0	0	

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	L	T	T	TR	L	T	T	TR	LT	R	L
Maximum Queue (ft)	95	103	187	198	224	152	344	415	365	140	102	201
Average Queue (ft)	42	50	68	68	85	46	135	156	162	54	31	54
95th Queue (ft)	81	91	154	160	188	109	319	358	343	111	73	158
Link Distance (ft)			1524	1524	1524		1114	1114	1114	751		195
Upstream Blk Time (%)												1
Queuing Penalty (veh)												3
Storage Bay Dist (ft)	430	430				165					90	
Storage Blk Time (%)						0	7			4	0	1
Queuing Penalty (veh)						0	3			2	0	3

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	186
Average Queue (ft)	111
95th Queue (ft)	181
Link Distance (ft)	
Upstream Blk Time (%)	1
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	230
Storage Blk Time (%)	1
Queuing Penalty (veh)	0

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	R	L	T	T
Maximum Queue (ft)	178	144	174	197	228	180	945	997	821	179	343	296
Average Queue (ft)	78	54	82	105	120	148	442	482	375	138	154	99
95th Queue (ft)	146	115	157	183	206	222	878	1011	880	207	284	227
Link Distance (ft)			1114	1114	1114		5461	5461			1064	1064
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	330	330				155			1000	155		
Storage Blk Time (%)						5	34	0	5	13	7	7
Queuing Penalty (veh)						29	85	1	30	21	12	17

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd.

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R
Maximum Queue (ft)	125	82	141	292	313	241
Average Queue (ft)	33	30	57	141	148	16
95th Queue (ft)	120	70	108	243	252	121
Link Distance (ft)				603	603	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100	300	300			245
Storage Blk Time (%)	0		0	0	1	0
Queuing Penalty (veh)	0		0	0	4	0

Intersection: 90: N Via Monte & Dwy

Movement	WB	NB	NB	SB
Directions Served	LR	T	R	T
Maximum Queue (ft)	32	10	10	62
Average Queue (ft)	11	0	0	3
95th Queue (ft)	31	7	8	29
Link Distance (ft)	134	195	195	706
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 91: N Wiget Ln

Movement	NB	NB	SB	SB
Directions Served	T	T	T	T
Maximum Queue (ft)	117	114	5	46
Average Queue (ft)	32	30	0	4
95th Queue (ft)	92	88	5	33
Link Distance (ft)	164	164	434	
Upstream Blk Time (%)	0	0		
Queuing Penalty (veh)	0	0		
Storage Bay Dist (ft)				410
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 732

Intersection: 1: N Wiget Ln & Mitchell Dr

Movement	WB	WB	NB	NB	SB
Directions Served	L	R	T	R	LT
Maximum Queue (ft)	108	69	54	111	104
Average Queue (ft)	50	20	20	56	55
95th Queue (ft)	87	55	49	91	88
Link Distance (ft)	2452		725		687
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		50		100	
Storage Blk Time (%)	5	0		1	
Queuing Penalty (veh)	2	0		0	

Intersection: 2: Oak Grove Rd & Mitchell Dr/Peachwillow Ln

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	224	289	195	155	85	150	259	285	129	308	346
Average Queue (ft)	141	166	52	61	39	43	120	141	61	165	181
95th Queue (ft)	210	242	127	123	85	101	226	255	128	285	310
Link Distance (ft)		2452		570			1000	1000		1087	1087
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	200		215		60	200			105		
Storage Blk Time (%)	0	3	0	12	1		2		1	21	
Queuing Penalty (veh)	1	8	0	6	1		1		4	13	

Intersection: 3: N Wiget Ln & Shadelands Dr

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	LT	R	LT	R
Maximum Queue (ft)	141	85	189	85	213	125	224	115
Average Queue (ft)	66	26	72	20	93	54	101	22
95th Queue (ft)	114	65	140	64	175	117	185	76
Link Distance (ft)	774		1457		436		725	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		60		60		100		100
Storage Blk Time (%)	11	0	16	0	6	0	13	0
Queuing Penalty (veh)	4	1	4	0	6	0	3	0

Intersection: 4: N Via Monte & Shadelands Dr

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	33	63	105	102	54
Average Queue (ft)	3	9	42	37	25
95th Queue (ft)	19	38	82	78	48
Link Distance (ft)	1457	957	706		306
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				100	
Storage Blk Time (%)			0	0	
Queuing Penalty (veh)			0	0	

Intersection: 5: Oak Grove Rd & Shadelands Dr

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LR	L	T	T	T	TR
Maximum Queue (ft)	351	225	166	193	169	179	195
Average Queue (ft)	126	149	82	19	25	49	52
95th Queue (ft)	251	226	143	98	98	128	132
Link Distance (ft)	957			346	346	1000	1000
Upstream Blk Time (%)				0	0		
Queuing Penalty (veh)				0	0		
Storage Bay Dist (ft)		200	150				
Storage Blk Time (%)	1	5	2	0			
Queuing Penalty (veh)	2	6	7	0			

Intersection: 6: Oak Grove Rd & Citrus Ave

Movement	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	TR	L	T	T
Maximum Queue (ft)	162	171	66	248	275	140	202	167
Average Queue (ft)	80	91	31	96	116	67	64	57
95th Queue (ft)	137	149	58	216	239	123	144	124
Link Distance (ft)		1151		603	603		346	346
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	190		870			120		
Storage Blk Time (%)	0	0				4	1	
Queuing Penalty (veh)	0	0				17	1	

Intersection: 7: Wiget Lane/N Wiget Lane & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	T	R	L	T
Maximum Queue (ft)	178	365	566	568	576	163	245	268	318	187	125	151
Average Queue (ft)	88	108	233	237	256	48	98	127	149	28	45	52
95th Queue (ft)	153	239	473	485	510	113	214	254	301	122	95	114
Link Distance (ft)			831	831	831		1517	1517	1517			479
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	465	465				165				200	145	
Storage Blk Time (%)			1			0	3		5	0	0	1
Queuing Penalty (veh)			2			0	1		2	0	0	2

Intersection: 7: Wiget Lane/N Wiget Lane & Ygnacio Valley Rd.

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	120	144	162	171
Average Queue (ft)	39	75	56	119
95th Queue (ft)	88	131	123	186
Link Distance (ft)			160	160
Upstream Blk Time (%)		0	1	4
Queuing Penalty (veh)		0	2	12
Storage Bay Dist (ft)	100	150		
Storage Blk Time (%)	1	1	1	
Queuing Penalty (veh)	1	0	1	

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	L	T	T	TR	L	T	T	TR	LT	R	L
Maximum Queue (ft)	157	278	445	471	486	114	218	231	283	106	54	126
Average Queue (ft)	80	97	147	159	180	37	73	90	105	39	17	44
95th Queue (ft)	143	206	364	389	420	87	171	196	230	87	45	95
Link Distance (ft)			1517	1517	1517		1114	1114	1114	752		193
Upstream Blk Time (%)												0
Queuing Penalty (veh)												0
Storage Bay Dist (ft)	430	430				165					90	
Storage Blk Time (%)			1				1			2	0	0
Queuing Penalty (veh)			1				0			0	0	0

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	131
Average Queue (ft)	52
95th Queue (ft)	103
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	230
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd./Ygnacio Valley Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	R	L	T	T
Maximum Queue (ft)	197	355	672	695	709	180	438	394	83	180	382	358
Average Queue (ft)	92	177	359	381	400	164	266	228	18	159	222	195
95th Queue (ft)	168	380	615	629	646	214	435	355	57	209	358	324
Link Distance (ft)			1114	1114	1114		5469	5469			1188	1188
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	330	330				155			1000	155		
Storage Blk Time (%)	0	0	13			43	8			25	11	33
Queuing Penalty (veh)	0	0	39			132	14			45	22	62

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd./Ygnacio Valley Road

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R
Maximum Queue (ft)	125	211	238	267	284	186
Average Queue (ft)	89	108	124	156	172	9
95th Queue (ft)	176	180	200	240	259	88
Link Distance (ft)				603	603	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100	300	300			245
Storage Blk Time (%)	4	0	0	0	1	0
Queuing Penalty (veh)	7	0	0	0	3	0

Intersection: 90: N Via Monte /N Via Monte & Dwy

Movement	WB	NB	NB	SB
Directions Served	LR	T	R	T
Maximum Queue (ft)	49	49	74	3
Average Queue (ft)	24	4	7	0
95th Queue (ft)	43	30	42	3
Link Distance (ft)	134	193	193	706
Upstream Blk Time (%)			0	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 91: N Wiget Lane/N Wiget Ln

Movement	NB	NB	SB	SB
Directions Served	T	T	T	T
Maximum Queue (ft)	106	85	47	130
Average Queue (ft)	20	15	2	15
95th Queue (ft)	71	59	24	75
Link Distance (ft)	160	160	436	
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)				410
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 438

Intersection: 1: N Wiget Ln & Mitchell Dr

Movement	WB	WB	NB	NB	SB
Directions Served	L	R	T	R	LT
Maximum Queue (ft)	168	75	53	71	67
Average Queue (ft)	74	58	30	38	29
95th Queue (ft)	129	90	50	58	54
Link Distance (ft)	2452		730		687
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		50		100	
Storage Blk Time (%)	12	2			
Queuing Penalty (veh)	23	9			

Intersection: 2: Oak Grove Rd & Mitchell Dr/Peachwillow Ln

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	134	149	67	294	85	218	283	278	129	453	576
Average Queue (ft)	60	85	34	138	53	117	107	131	50	219	328
95th Queue (ft)	114	132	61	248	103	203	224	240	116	400	510
Link Distance (ft)		2452		570			1000	1000		1087	1087
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	200		215		60	200			105		
Storage Blk Time (%)				34	1	3	1		1	18	
Queuing Penalty (veh)				28	1	6	2		3	8	

Intersection: 3: N Wiget Ln & Shadelands Dr

Movement	EB	EB	WB	NB	SB	SB
Directions Served	LT	R	LTR	LTR	LT	R
Maximum Queue (ft)	103	65	337	281	153	87
Average Queue (ft)	50	15	148	140	68	21
95th Queue (ft)	84	42	282	245	117	58
Link Distance (ft)	774		1468	636	730	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		60				100
Storage Blk Time (%)	4	0			3	0
Queuing Penalty (veh)	1	0			1	0

Intersection: 4: N Via Monte & Shadelands Dr

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	26	174	98	77	92
Average Queue (ft)	2	38	37	23	32
95th Queue (ft)	13	113	82	59	67
Link Distance (ft)	1468	958	706		267
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				100	
Storage Blk Time (%)			1	0	
Queuing Penalty (veh)			0	0	

Intersection: 5: Oak Grove Rd & Shadelands Dr

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LR	L	T	T	T	TR
Maximum Queue (ft)	125	124	174	365	309	292	350
Average Queue (ft)	52	53	173	339	28	134	184
95th Queue (ft)	100	101	179	430	153	253	325
Link Distance (ft)	958			346	346	1000	1000
Upstream Blk Time (%)				26	0		
Queuing Penalty (veh)				162	1		
Storage Bay Dist (ft)		200	150				
Storage Blk Time (%)			43	0			
Queuing Penalty (veh)			146	0			

Intersection: 6: Oak Grove Rd & Citrus Ave

Movement	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	TR	L	T	T
Maximum Queue (ft)	214	347	82	647	696	134	150	160
Average Queue (ft)	137	187	28	513	479	65	41	60
95th Queue (ft)	236	289	67	724	833	121	114	139
Link Distance (ft)		1151		603	603		346	346
Upstream Blk Time (%)				8	8			
Queuing Penalty (veh)				60	58			
Storage Bay Dist (ft)	190		870			120		
Storage Blk Time (%)	1	7				4	1	
Queuing Penalty (veh)	1	17				10	1	

Intersection: 7: Wiget Ln/N Wiget Ln & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	TR	L	T	T	T	R	L	T	R
Maximum Queue (ft)	388	255	232	245	189	738	797	805	225	163	258	123
Average Queue (ft)	210	106	96	115	70	301	330	346	32	89	87	42
95th Queue (ft)	349	227	201	229	166	649	695	712	155	156	184	101
Link Distance (ft)		812	812	812		1523	1523	1523			477	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	465				165				200	145		100
Storage Blk Time (%)	0				0	25		28	0	3	7	0
Queuing Penalty (veh)	1				0	16		9	0	6	12	0

Intersection: 7: Wiget Ln/N Wiget Ln & Ygnacio Valley Rd.

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	109	188	266
Average Queue (ft)	29	92	132
95th Queue (ft)	74	164	226
Link Distance (ft)		636	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	150		510
Storage Blk Time (%)		2	
Queuing Penalty (veh)		7	

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB
Directions Served	L	L	T	T	TR	L	T	T	TR	LT	L	TR
Maximum Queue (ft)	108	109	238	241	262	172	448	558	436	752	206	186
Average Queue (ft)	48	52	93	94	114	55	199	220	221	736	48	101
95th Queue (ft)	91	99	203	205	225	134	408	443	410	797	140	173
Link Distance (ft)			1523	1523	1523		1114	1114	1114	751	195	
Upstream Blk Time (%)										85	1	0
Queuing Penalty (veh)										0	2	0
Storage Bay Dist (ft)	430	430				165						230
Storage Blk Time (%)							11			100	1	0
Queuing Penalty (veh)							5			57	2	0

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd./Ygnacio Valley Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	R	L	T	T
Maximum Queue (ft)	254	223	210	228	244	180	1937	2068	998	180	1029	1006
Average Queue (ft)	116	80	82	97	116	146	860	1028	724	178	778	706
95th Queue (ft)	223	191	180	190	218	218	2474	2663	1274	191	1209	1225
Link Distance (ft)			1114	1114	1114		5461	5461			1064	1064
Upstream Blk Time (%)											22	9
Queuing Penalty (veh)											0	0
Storage Bay Dist (ft)	330	330				155			1000	155		
Storage Blk Time (%)	1	1				6	15	1	25	84	10	22
Queuing Penalty (veh)	2	1				33	40	5	144	143	17	52

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd./Ygnacio Valley Road

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R
Maximum Queue (ft)	125	101	139	297	356	243
Average Queue (ft)	56	34	61	170	182	29
95th Queue (ft)	156	79	109	265	288	165
Link Distance (ft)				603	603	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100	300	300			245
Storage Blk Time (%)	1			0	2	0
Queuing Penalty (veh)	1			0	8	0

Intersection: 90: N Via Monte & Dwy

Movement	WB	NB	NB	SB
Directions Served	LR	T	R	T
Maximum Queue (ft)	26	15	25	45
Average Queue (ft)	10	1	1	2
95th Queue (ft)	28	10	13	21
Link Distance (ft)	134	195	195	706
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 1101

Intersection: 1: N Wiget Ln & Mitchell Dr

Movement	WB	WB	NB	NB	SB
Directions Served	L	R	T	R	LT
Maximum Queue (ft)	106	70	55	99	95
Average Queue (ft)	48	18	21	55	56
95th Queue (ft)	84	50	48	84	83
Link Distance (ft)	2452		730		687
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		50		100	
Storage Blk Time (%)	5	0		0	
Queuing Penalty (veh)	2	0		0	

Intersection: 2: Oak Grove Rd & Mitchell Dr/Peachwillow Ln

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	222	293	201	171	85	165	264	292	130	330	352
Average Queue (ft)	144	167	53	64	41	48	125	149	62	169	182
95th Queue (ft)	212	245	116	129	88	108	229	261	127	291	313
Link Distance (ft)		2452		570			1000	1000		1087	1087
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	200		215		60	200			105		
Storage Blk Time (%)	1	3	0	14	1	0	2		2	21	
Queuing Penalty (veh)	3	10	0	7	1	0	1		7	14	

Intersection: 3: N Wiget Ln & Shadelands Dr

Movement	EB	EB	WB	NB	SB	SB
Directions Served	LT	R	LTR	LTR	LT	R
Maximum Queue (ft)	145	85	179	255	254	125
Average Queue (ft)	66	28	77	130	104	25
95th Queue (ft)	113	67	140	227	200	86
Link Distance (ft)	774		1468	636	730	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		60				100
Storage Blk Time (%)	10	0			13	0
Queuing Penalty (veh)	4	0			3	0

Intersection: 4: N Via Monte & Shadelands Dr

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	27	66	114	115	55
Average Queue (ft)	2	11	41	38	23
95th Queue (ft)	14	43	88	82	49
Link Distance (ft)	1468	957	706		306
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				100	
Storage Blk Time (%)			1	0	
Queuing Penalty (veh)			0	0	

Intersection: 5: Oak Grove Rd & Shadelands Dr

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LR	L	T	T	T	TR
Maximum Queue (ft)	311	225	159	126	116	186	189
Average Queue (ft)	113	141	75	14	22	49	49
95th Queue (ft)	218	222	133	64	74	129	127
Link Distance (ft)	957			346	346	1000	1000
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		200	150				
Storage Blk Time (%)	1	4	2	0			
Queuing Penalty (veh)	2	4	5	0			

Intersection: 6: Oak Grove Rd & Citrus Ave

Movement	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	TR	L	T	T
Maximum Queue (ft)	162	177	79	262	278	140	226	167
Average Queue (ft)	82	98	32	102	123	73	68	58
95th Queue (ft)	141	158	63	221	246	130	157	128
Link Distance (ft)		1151		603	603		346	346
Upstream Blk Time (%)							0	
Queuing Penalty (veh)							0	
Storage Bay Dist (ft)	190		870			120		
Storage Blk Time (%)	0	0				5	2	
Queuing Penalty (veh)	0	0				22	1	

Intersection: 7: Wiget Lane/N Wiget Lane & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	TR	L	T	T	T	R	L	T	R
Maximum Queue (ft)	453	622	638	640	163	329	366	389	206	111	134	117
Average Queue (ft)	179	290	296	314	46	120	148	171	33	51	57	39
95th Queue (ft)	349	548	564	582	120	291	330	373	152	96	109	86
Link Distance (ft)		812	812	812		1524	1524	1524			479	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	465				165				200	145		100
Storage Blk Time (%)	0	2				7		10	0	0	2	0
Queuing Penalty (veh)	0	5				3		4	0	0	2	0

Intersection: 7: Wiget Lane/N Wiget Lane & Ygnacio Valley Rd.

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	166	178	288
Average Queue (ft)	91	62	145
95th Queue (ft)	157	133	244
Link Distance (ft)		636	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	150		510
Storage Blk Time (%)	2	0	
Queuing Penalty (veh)	12	2	

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	L	T	T	TR	L	T	T	TR	LT	R	L
Maximum Queue (ft)	161	397	602	612	635	138	257	366	380	755	3	105
Average Queue (ft)	84	116	255	273	296	41	122	148	165	632	0	43
95th Queue (ft)	143	264	516	537	559	100	232	293	325	927	3	90
Link Distance (ft)			1524	1524	1524		1114	1114	1114	752		193
Upstream Blk Time (%)										46		
Queuing Penalty (veh)										0		
Storage Bay Dist (ft)	430	430				165					90	
Storage Blk Time (%)		0	2				5			98		
Queuing Penalty (veh)		0	5				2			20		

Intersection: 8: S Via Monte/N Via Monte & Ygnacio Valley Rd.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	122
Average Queue (ft)	52
95th Queue (ft)	100
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	230
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd./Ygnacio Valley Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	TR	L	T	T	R	L	T	T
Maximum Queue (ft)	183	355	682	712	718	180	513	520	82	180	438	438
Average Queue (ft)	92	170	340	358	376	166	296	254	18	160	248	224
95th Queue (ft)	164	365	648	668	689	206	632	503	55	214	420	388
Link Distance (ft)			1114	1114	1114		5469	5469			1188	1188
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	330	330				155			1000	155		
Storage Blk Time (%)		0	12			40	8			30	12	35
Queuing Penalty (veh)		0	39			126	15			56	24	67

Intersection: 9: Oak Grove Rd & Ygnacio Valley Rd./Ygnacio Valley Road

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R
Maximum Queue (ft)	125	206	233	260	281	214
Average Queue (ft)	94	106	121	153	167	11
95th Queue (ft)	176	175	192	236	251	97
Link Distance (ft)				603	603	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100	300	300			245
Storage Blk Time (%)	5		0	0	1	0
Queuing Penalty (veh)	10		0	0	2	0

Intersection: 90: N Via Monte /N Via Monte & Dwy

Movement	WB	NB	NB
Directions Served	LR	T	R
Maximum Queue (ft)	53	55	68
Average Queue (ft)	26	3	7
95th Queue (ft)	44	26	39
Link Distance (ft)	134	193	193
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 482

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