

**Table C-1 High-Speed Rail Construction Equipment List – Land Clearing**

Construction Equipment	Actual Equipment Rated HP hp/hr	Type of Fuel	Number of Units	Construction Activity	
				Months of Activity	Days of Activity
<b><i>Land Clearing - Along route ahead of earth moving</i></b>					
Tractors/Loaders/Backhoes-0120	97	Diesel	1	66	1389
Crawler Tractors-0500	410	Diesel	2	66	1389
Excavators-0500	450	Diesel	1	66	1389
Off-Highway Trucks -0500	300	Diesel	2	66	1389
Scrapers-0500	335	Diesel	2	66	1389
<b><i>Construction Equipment Total</i></b>			<b>8</b>		
<b><i>Construct Haul Roads</i></b>					
Tractors/Loaders/Backhoes-0120	97	Diesel	1	63	1326
Crawler Tractors-0500	410	Diesel	1	63	1326
Excavators-0500	450	Diesel	1	63	1326
Scrapers-0500	335	Diesel	1	63	1326
<b><i>Construction Equipment Total</i></b>			<b>4</b>		

**Table C-2 High-Speed Rail Construction Equipment List – Earth Moving**

Construction Equipment	Actual Equipment Rated HP hp/hr	Type of Fuel	Number of Units	Construction Activity	
				Months of Activity	Days of Activity
<b><i>Earth Moving - 3108+00 to 3321+00 (2,380,000 CY CUT + 630,000 CY FILL)</i></b>					
Crawler Tractors-0500	410	Diesel	8	54	1129
Excavators-0500	450	Diesel	6	54	1129
Rubber Tired Loaders-0500	349	Diesel	6	54	1129
Graders-0250	458	Diesel	4	54	1129
Rollers-0175	174	Diesel	4	54	1129
On-Highway Trucks-0500	300	Diesel	6	54	1129
Off-Highway Trucks-0500	300	Diesel	24	54	1129
On-Highway Trucks-0250	210	Diesel	6	54	1129
Off-Highway Trucks-0250	210	Diesel	6	54	1129
<b><i>Construction Equipment Total</i></b>			<b>70</b>		

**Table C-3 High-Speed Rail Construction Equipment List – Roadway Construction**

Construction Equipment	Actual Equipment Rated HP hp/hr	Type of Fuel	Number of Units	Construction Activity	
				Months of Activity	Days of Activity
<b>Roadway Construction</b>					
Other General Industrial Equipment-0050	50	Diesel	20	66	1379
Other General Industrial Equipment-0250	250	Diesel	10	66	1379
Aerial Lifts-0120	60	Diesel	7	66	1379
Bore/Drill Rigs-0500	291	Diesel	7	66	1379
Pavers-0250	180	Diesel	7	66	1379
Sweepers/Scrubbers-0050	25	Diesel	7	66	1379
Off-Highway Trucks-0250	250	Diesel	7	66	1379
Tractors/Loaders/Backhoes-0120	87	Diesel	15	66	1379
Cranes-0500	470	Diesel	7	66	1379
Excavators-0500	450	Diesel	7	66	1379
Rubber Tired Loaders-0250	197	Diesel	7	66	1379
Graders-0175	158	Diesel	7	66	1379
Rollers-0175	174	Diesel	7	66	1379
<b>Construction Equipment Total</b>			<b>115</b>		

**Table C-4 High-Speed Rail Construction Equipment List – Structures Demolition**

Construction Equipment	Actual Equipment Rated HP hp/hr	Type of Fuel	Number of Units	Construction Activity	
				Months of Activity	Days of Activity
<b>Bridge Demolition</b>					
Excavators-0500	450	Diesel	1-2	2	43
Rubber Tired Loaders-0500	349	Diesel	1	2	43
Other General Industrial Equipment-0050	15	Diesel	1-2	2	43
Off-Highway Trucks-0500	300	Diesel	1	2	43
<b>Construction Equipment Total</b>			<b>4-6</b>		

**Table C-5 High-Speed Rail Construction Equipment List – Buildings Demolition**

Construction Equipment	Actual Equipment Rated HP hp/hr	Type of Fuel	Number of Units	Construction Activity	
				Months of Activity	Days of Activity
<b>Building Demolition</b>					
Crawler Tractors-0500	410	Diesel	2	4	83
Excavators-0500	450	Diesel	3	4	83
Rubber Tired Loaders-0500	349	Diesel	3	4	83
On-Highway Trucks-0500	300	Diesel	7	4	83
On-Highway Trucks-0250	210	Diesel	7	4	83
<b>Construction Equipment Total</b>			<b>22</b>		

**Table C-6 High-Speed Rail Construction Equipment List – Elevated Structures**

Construction Equipment	Actual Equipment Rated HP hp/hr	Type of Fuel	Number of Units	Construction Activity	
				Months of Activity	Days of Activity
<b>Elevated Structures - HSR Alignment (Assuming 2 substructure crews and 2 superstructure crews to construct 4 structures)</b>					
Aerial Lifts-0120	60	Diesel	1	66	1379
Bore/Drill Rigs-0500	291	Diesel	1	66	1379
Excavators-0500	300	Diesel	1	66	1379
Cranes-0500	420	Diesel	1	66	1379
Off-Highway Trucks-0250	210	Diesel	1	66	1379
Other General Industrial Equipment-0050	10	Diesel	2	66	1379
Rubber Tired Loaders-0500	262	Diesel	1	66	1379
Forklift	110	Diesel	2	66	1379
Concrete Pump	200	Diesel	1	66	1379
<b>Construction Equipment Total</b>			<b>11</b>		
<b>Elevated Structures - HSR Alignment (Assuming 2 substructure crews and 2 superstructure crews to construct 16 structures)</b>					
Aerial Lifts-0120	60	Diesel	1	66	1379
Other Construction Equipment-0120	106	Diesel	1	66	1379
Bore/Drill Rigs-0500	291	Diesel	2	66	1379
Excavators-0500	300	Diesel	1	66	1379
Cranes-0500	420	Diesel	1	66	1379
Off-Highway Trucks-0250	210	Diesel	2	66	1379
Cranes-0500	420	Diesel	2	66	1379
Other General Industrial Equipment-0050	10	Diesel	3	66	1379
Crawler Tractors-0500	310	Diesel	1	66	1379

Construction Equipment	Actual Equipment Rated HP hp/hr	Type of Fuel	Number of Units	Construction Activity	
				Months of Activity	Days of Activity
Rubber Tired Loaders-0500	262	Diesel	1	66	1379
Graders-0175	158	Diesel	1	66	1379
Off-Highway Trucks-0250	210	Diesel	1	66	1379
Cranes-0500	420	Diesel	1	66	1379
Forklift	110	Diesel	1	66	1379
Concrete Pump	200	Diesel	1	66	1379
<b>Construction Equipment Total</b>			<b>20</b>		

**Table C-7 High-Speed Rail Construction Equipment List – Tracks at Grade**

Construction Equipment	Actual Equipment Rated HP hp/hr	Type of Fuel	Number of Units	Construction Activity	
				Months of Activity	Days of Activity
<b>Lay Track at Grade</b>					
Rail Car Locomotive	4,000	Diesel	1	0	2
Crawler Tractor	125	Diesel	2	66	1388
Other Construction Equipment-0250	300	Diesel	3	66	1388
Off-Highway Trucks-0500	479	Diesel	5	66	1388
Other General Industrial Equipment-0050	45	Diesel	1	66	1388
<b>Construction Equipment Total</b>			<b>12</b>		

**Table C-8 High-Speed Rail Construction Equipment List – Materials Handling**

Construction Equipment	Actual Equipment Rated HP hp/hr	Type of Fuel	Number of Units	Construction Activity	
				Months of Activity	Days of Activity
<b>North, Central, South</b>					
Tractors/Loaders/Backhoes-0120	97	Diesel	1	78	1639
Crawler Tractors-0500	410	Diesel	1	78	1639
Rubber Tired Loaders-0500	349	Diesel	2	78	1639
Other Construction Equipment-0250	350	Diesel	4	78	1639
Other General Industrial Equipment-0050	15	Diesel	1	78	1639
<b>Construction Equipment Total</b>			<b>9</b>		

**Table C-9 High-Speed Rail Construction Equipment List – Tunnel Construction**

Construction Equipment	Actual Equipment Rated HP hp/hr	Type of Fuel	Number of Units	Construction Activity	
				Months of Activity	Days of Activity
<b><i>Tunneling</i></b>					
Tractors/Loaders/Backhoes-0120	97	Diesel	4	72	1504
Crawler Tractors-0500	410	Diesel	5	72	1504
Excavators-0500	450	Diesel	3	67	1400
Rubber Tired Loaders-0500	349	Diesel	6	67	1400
Graders-0250	458	Diesel	2	7	147
Rollers-0175	174	Diesel	2	7	147
Cranes-0500	399	Diesel	4	72	1504
Forklifts-0175	145	Diesel	4	72	1504
Aerial Lifts-0120	60	Diesel	8	72	1504
On-Highway Trucks-0500	300	Diesel	8	12	251
On-Highway Trucks-0250	210	Diesel	4	53	1107
Deidric D90 Drill Rig for Soldier Piles	225	Diesel	2	77	1608
Katolight 250kW Generator for pipe jacking	379	Diesel	3	77	1608
Misc Generators	10	Diesel	11	60	1254
Conveyor for Cut and Cover Excavation	50	Diesel	1	12	250
Other General Industrial Equipment-0050	10	Diesel	1	79	1650
Other Construction Equipment-0500	350	Diesel	2	79	1650
Other Construction Equipment-0175	125	Diesel	2	79	1650
Concrete Pump 100 CY / HR	131	Diesel	1	79	1650
Shotcrete Pump 50/ CY HR	70	Diesel	1	29	605
Low Haul Scooptram ST 1520 Atlas Copco	230	Diesel	1	24	502
Alpine Road Header for SEM Tunnel excavation	190	Diesel	1	41	856
Concrete Batch Plant. For shotcrete as well as Concrete	320	Diesel	1	41	856
Concrete Mixer Trucks, also for shotcrete Mix 8 CY Trucks	280	Diesel	5	36	752
Air Compressors 250 CFM for Shotcrete	80	Diesel	4	24	501
Air Compressor 1600	450	Diesel	12	24	501
Menzi Mucker Excavator to Trip SEM Tunnel Excavation as Required	104	Diesel	1	67	1400
Rough Terrain Fork Lift. Load Drill & Blast Holes & erect lattice girders in SEM Tunnel	80	Diesel	1	79	1650
CAT C18 ACERT off road Articulated Rear Dump Truck 45 Ton Capacity	496	Diesel	1	77	1607
CAT 988 Front End Loader	475	Diesel	1	36	752
<b><i>Construction Equipment Total</i></b>			<b>102</b>		

**Table C-10 High-Speed Rail Construction Equipment List – System Facilities**

Construction Equipment	Actual Equipment Rated HP hp/hr	Type of Fuel	Number of Units	Construction Activity	
				Months of Activity	Days of Activity
<b>Systems Facilities -</b>					
Tractors/Loaders/Backhoes-0120	97	Diesel	2	78	1629
Crawler Tractors-0500	410	Diesel	1	78	1629
Rubber Tired Loaders-0500	349	Diesel	1	78	1629
Graders-0250	458	Diesel	1	78	1629
Rollers-0175	174	Diesel	1	78	1629
Other General Industrial Equipment-0050	15	Diesel	2	78	1629
Off-Highway Trucks-0250	210	Diesel	2	78	1629
<b>Construction Equipment Total</b>			<b>10</b>		

**Table C-11 High-Speed Rail Construction Equipment List – Metrolink CMF Upgrades**

Construction Equipment	Actual Equipment Rated HP hp/hr	Type of Fuel	Number of Units	Construction Activity	
				Months of Activity	Days of Activity
<b>Metrolink CMF Upgrades -</b>					
Tractors/Loaders/Backhoes-0120	97	Diesel	2	42	876
Crawler Tractors-0500	410	Diesel	4	42	876
Excavators-0500	450	Diesel	2	42	876
Rubber Tired Loaders-0500	349	Diesel	2	42	876
Graders-0250	458	Diesel	2	42	876
Rollers-0175	156-174	Diesel	2	42	876
Other General Industrial Equipment-0050	15	Diesel	2	42	876
Off-Highway Trucks-0250	210	Diesel	8	42	876
<b>Construction Equipment Total</b>			<b>24</b>		