

Attachment A Transportation System
Improvements

JACKSON

Name: I-5: SISKIYOU REST AREA (ASHLAND)

Key: 09436

Highway: PACIFIC HIGHWAY **ACT:** ROGUE VALLEY ACT
Route: I-5 **MPO:** Rogue Valley
Milepoints: 12.00 to 13.00 **Applicant:** ODOT
Mile Length: 1.00 **Status:** Construction Scheduled to Begin
Description: RELOCATE REST AREA AT NEW LOCATION **Work Type:** Modernization

	Planning	Preliminary Engineering		Right of Way		Utility Relocation		Construction		Other	Project Total:
Year:		2002		1997		2015		2015		2014	
Phase Total:		\$2,861,000		\$520,000		\$20,000		\$6,733,842		\$250,000	\$10,384,842
First Fund:		S010	\$641,279	S010	\$520,000	S010	\$20,000	M240	\$3,545,659	S010	\$250,000
Match:			\$817,831						\$730,341		
Second Fund:		L05E	\$414,945					M001	\$1,193,627		
Match:			\$529,185						\$245,865		
Third Fund:		L00E	\$176,037					OTH0	\$844,416		
Match:			\$224,503						\$173,934		
Fourth Fund:		Q050	\$25,148								
Match:			\$32,072								

Amendment No: 12-15-125A **Approval Date:** 08/19/2014

Requested Action: Advance OTH Phase from 2015 to 2014. Funds were obligated in 2014

AMENDED

Name: OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)

Key: 13994

Highway: CRATER LAKE **ACT:** ROGUE VALLEY ACT
Route: OR 62 **MPO:** Rogue Valley
Milepoints: 0.86 to 3.65 **Applicant:** ODOT
Mile Length: 2.76 **Status:** Construction Scheduled to Begin
Description: JTA -EXPRESSWAY TO RELIEVE CONGESTION **Work Type:** Modernization

	Planning	Preliminary Engineering		Right of Way		Utility Relocation		Construction		Other	Project Total:
Year:		2011		2014		2012		2015		2014	
Phase Total:		\$4,647,000		\$23,850,000		\$2,100,000		\$36,646,500		\$550,000	\$67,793,500
First Fund:		TSP0	\$3,424,190	B3A2	\$12,163,500	B4A0	\$2,100,000	B4A0	\$36,280,035	B4A0	\$451,000
Match:											
Second Fund:		B3A2	\$711,520	B4A0	\$10,017,000			S010	\$366,465	B3A2	\$99,000
Match:											
Third Fund:		B4A0	\$511,290	TSP0	\$1,669,500						
Match:											

Amendment No: Tech **Approval Date:** 11/20/2014

Requested Action: Move \$300,000 from the CN Phase (\$100,000- OTH Phase) & (\$200,000 PE Phase)

AMENDED

Footnote: TOTAL ESTIMATED PROJECT COST IS \$60,045,000

JACKSON

Name: OR62: CORRIDOR SOLUTIONS UNIT 2 PHASE 2 (MEDFORD)

Key: 17188

Highway: CRATER LAKE **ACT:** ROGUE VALLEY ACT
Route: OR 62 **MPO:** Rogue Valley
Milepoints **Applicant:** ODOT
Mile Length **Status:** Construction Scheduled to Begin
Description: JTA -EXPRESSWAY TO RELIEVE CONGESTION **Work Type:** Modernization

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2011	2014	2015	2015		
Phase Total:		\$3,422,000	\$10,685,999	\$500,000	\$36,567,000		\$51,174,999
First Fund:		B3A2 \$3,422,000	ACP0 \$9,049,973	B4A0 \$500,000	B4A0 \$35,652,000		
Match:			\$1,634,958				
Second Fund:					S010 \$915,000		
Match:							

Amendment No: 12-15-171A **Approval Date:** 10/20/2014

Requested Action: Move \$686,000 in JTA Funds from CN Phase to RW Phase

AMENDED

Footnote: TOTAL ESTIMATED PROJECT COST IS \$51,800,000

Name: FFO-LOZIER LANE IMPROVEMENTS (MEDFORD)

Key: 17388

Highway: **ACT:** ROGUE VALLEY ACT
Route: VAR **MPO:** Rogue Valley
Milepoints **Applicant:** CITY OF MEDFORD
Mile Length **Status:** Construction Scheduled to Begin
Description: DESIGN, ACQUIRE ROW AND CONSTRUCT ROADWAY IMPROVEMENTS TO ADD CENTER LANE, BIKE LANES, SIDEWALKS **Work Type:** Congestion Mitigation, Modernization

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2013	2014		2015		
Phase Total:		\$902,000	\$5,722,000		\$4,546,000		\$11,170,000
First Fund:		M400 \$809,365	L40E \$4,158,361		M400 \$2,109,811		
Match:		\$92,635	\$475,533		\$241,477		
Second Fund:			L200 \$848,987		M240 \$844,398		
Match:			\$97,087		\$96,645		
Third Fund:			L20E \$106,144		L220 \$705,990		
Match:			\$12,149		\$80,804		
Fourth Fund:			Q200 \$12,542		OTH0		
Match:			\$1,435		\$466,875		
Fifth Fund:			H200 \$7,759				
Match:			\$888				

Amendment No: 12-15-040a **Approval Date:** 12/27/2013

Requested Action: Add local funds and funds split from 16853 per MTIP.

AMENDED

JACKSON

Name: I-5: BEAR CREEK BRIDGES NB & SB, SCOUR REPAIR

Key: 17529

Highway: PACIFIC HIGHWAY **ACT:** ROGUE VALLEY ACT
Route: I-5 **MPO:** Rogue Valley
Milepoints: 30.65 to 30.73 **Applicant:** ODOT
Mile Length: 0.08 **Status:** Construction Scheduled to Begin
Description: SCOUR REPAIR, BRIDGES 08771N & 08771S **Work Type:** Bridge

	Planning	Preliminary Engineering		Right of Way		Utility Relocation	Construction		Other	Project Total:
Year:		2013		2015			2015			
Phase Total:		\$225,000		\$10,000			\$1,759,000			\$1,994,000
First Fund:		L24E	\$201,893	L24E	\$8,973		L24E	\$1,578,351		
Match:			\$23,108		\$1,027			\$180,649		

Amendment No: 12-15-116A

Approval Date: 08/01/2014

Requested Action: Slip RW phase from 2014 to 2015

AMENDED

Name: TILLER-TRAIL HWY REALIGNMENT

Key: 17586

Highway: TILLER-TRAIL **ACT:** ROGUE VALLEY ACT
Route: **MPO:** Non-MPO
Milepoints: 40.20 to 40.41 **Applicant:** WFLHD
Mile Length: 0.21 **Status:** Construction Scheduled to Begin
Description: PAVEMENT REHAB, SUBGRADE STABILIZATION, CULVERT REPLACEMENT **Work Type:** Enhancement

	Planning	Preliminary Engineering		Right of Way		Utility Relocation	Construction		Other	Project Total:
Year:		2014					2015			
Phase Total:		\$390,000					\$2,860,000			\$3,250,000
First Fund:		F150	\$390,000				F150	\$2,860,000		
Match:										

JACKSON

Name: OR62:ROGUE RIVER DR-CLEVELAND ST STREETSCAPE **Key:** 17887

Highway: CRATER LAKE **ACT:** ROGUE VALLEY ACT
Route: OR 62 **MPO:** Non-MPO
Milepoints **Applicant:** CITY OF SHADY COVE/ODOT
Mile Length **Status:** Construction Scheduled to Begin
Description: CONSTRUCTION OF BICYCLE LANES, SIDEWALKS, CURB/GUTTER AND STORM DRAINAGE **Work Type:** Bicycle/Pedestrian, Enhancement, Modernization

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2011	2014	2016	2017		
Phase Total:		\$550,000	\$397,993	\$40,000	\$1,899,000		\$2,886,993
First Fund:		L22E \$201,893	L22E \$357,119	L220 \$35,892	L240 \$866,442		
Match:		\$23,108		\$4,108	\$99,072		
Second Fund:		L25E \$168,616	S080 \$40,874		L220 \$837,531		
Match:		\$19,299			\$95,859		
Third Fund:		L220 \$103,190					
Match:		\$11,811					
Fourth Fund:		Q250 \$8,353					
Match:		\$956					
Fifth Fund:		H250 \$7,200					
Match:		\$824					
Sixth Fund:		L250 \$4,264					
Match:		\$488					

Amendment No: 12-15-144A **Approval Date:** 08/29/2014
Requested Action: Remove FFO (Full Federal Oversight) from the project name. The project has been removed from the FFO project list. **AMENDED**

Name: STP (MPO SHARE) TRANSFER 2015 **Key:** 17978

Highway: **ACT:** ROGUE VALLEY ACT
Route: **MPO:** Rogue Valley
Milepoints **Applicant:** ROGUE VALLEY TRANSIT DISTRICT
Mile Length **Status:** Non-Construction Project
Description: CAPITALIZATION OF MAINTENANCE **Work Type:** Transit Capital

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:						2015	
Phase Total:						\$1,048,000	\$1,048,000
First Fund:						L240 \$940,370	
Match:						\$107,630	

Amendment No: 12-15-020a **Approval Date:** 12/27/2013
Requested Action: Add additional MPO funds per MTIP. **AMENDED**

JACKSON

Name: RVTD URBAN OPERATIONS 2014

Key: 17998

Highway: ACT: ROGUE VALLEY ACT
Route: MPO: Rogue Valley
Milepoints: Applicant: ROGUE VALLEY TRANSIT DISTRICT
Mile Length: Status: Non-Construction Project
Description: Work Type: Transit Operations

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:						2015	
Phase Total:						\$3,900,000	\$3,900,000
First Fund:						FF90 \$1,950,000	
Match:						\$1,950,000	

Name: HERSEY STREET SIDEWALK: N MAIN ST TO OAK ST

Key: 18250

Highway: ACT: ROGUE VALLEY ACT
Route: MPO: Rogue Valley
Milepoints: Applicant: CITY OF ASHLAND
Mile Length: Status: Construction Scheduled to Begin
Description: CONSTRUCT SIDEWALKS Work Type: Congestion Mitigation

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2013	2015		2015		
Phase Total:		\$134,000	\$21,000		\$438,000		\$593,000
First Fund:		L400 \$120,238	L400 \$18,843		L400 \$393,017		
Match:		\$13,762	\$2,157		\$44,983		

Amendment No: 12-15-018a **Approval Date:** 12/27/2013

Requested Action: Add project funded from Medford CMAQ financial plan per MTIP.

AMENDED

Name: CMAQ - RVMPO (2015)

Key: 18297

Highway: ACT: ROGUE VALLEY ACT
Route: MPO: Rogue Valley
Milepoints: Applicant: ODOT
Mile Length: Status: Funding Pooled
Description: CMAQ ALLOCATION FOR FY15 Work Type: Congestion Mitigation

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:						2015	
Phase Total:						\$2,732,000	\$2,732,000
First Fund:						M400 \$2,451,424	
Match:						\$280,576	

Amendment No: 12-15-021 **Approval Date:** 12/27/2013

Requested Action: Add CMAQ bucket for 2013 per MTIP.

AMENDED

JACKSON

Name: OR99 @ OAK ST: SIDEWALK AND PED CROSSING (PHOENIX)

Key: 18336

Highway:	ACT:	ROGUE VALLEY ACT
Route:	MPO:	Rogue Valley
Milepoints	Applicant:	CITY OF PHOENIX
Mile Length	Status:	Non-Construction Project
Description: SIDEWALKS & PEDESTRIAN CROSSING W/PED ACTIVATED CROSSING SIGNALS	Work Type:	Bicycle/Pedestrian

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:						2015	
Phase Total:						\$618,000	\$618,000
First Fund:						OTH0	
Match:						\$321,360	
Second Fund:						S080 \$296,640	
Match:							

Amendment No: 12-15-086A

Approval Date: 04/25/2014

Requested Action: MOVE CN PHASE TO OTH PHASE

AMENDED

Name: 1-5:CALIFORNIA STATE LINE - ASHLAND PAVING

Key: 18873

Highway:	PACIFIC HIGHWAY	ACT:	ROGUE VALLEY ACT
Route:	I-5	MPO:	Rogue Valley
Milepoints	0.00 to 11.45	Applicant:	ODOT
Mile Length	11.45	Status:	Construction Scheduled to Begin
Description: GRIND/INLAY		Work Type:	Preservation - Interstate Maintenance

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2015	2016	2016	2018		
Phase Total:		\$696,000	\$5,000	\$5,000	\$12,925,000		\$13,631,000
First Fund:		M001 \$624,521	S010 \$5,000	S010 \$5,000	M001 \$11,597,603		
Match:		\$71,479			\$1,327,398		

Name: I-5: S. MEDFORD - N. ASHLAND PAVING

Key: 18874

Highway:	PACIFIC HIGHWAY	ACT:	ROGUE VALLEY ACT
Route:	I-5	MPO:	Rogue Valley
Milepoints	19.09 to 26.73	Applicant:	ODOT
Mile Length	7.64	Status:	Construction Scheduled to Begin
Description: GRIND/INLAY		Work Type:	Preservation - Interstate Maintenance

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2014	2015	2015	2016		
Phase Total:		\$376,000	\$5,000	\$5,000	\$6,972,000		\$7,358,000
First Fund:		L010 \$346,747	S010 \$5,000	S010 \$5,000	M001 \$6,255,976		
Match:		\$29,253			\$716,024		

Amendment No: 12-15-053

Approval Date: 04/25/2014

Requested Action: ADD NEW PROJECT

AMENDED

JACKSON

Name: OR 99: ASHLAND - TALENT LANE REALIGNMENT

Key: 18888

Highway: ROGUE VALLEY **ACT:** ROGUE VALLEY ACT
Route: OR 99 **MPO:** Rogue Valley
Milepoints: 17.00 to 24.00 **Applicant:** ODOT
Mile Length: 7.00 **Status:** Construction Scheduled to Begin
Description: CONTINUE LANE RECONFIGURATION ASHLAND-TALENT **Work Type:** Safety

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2016			2016		
Phase Total:		\$25,000			\$225,000		\$250,000
First Fund:		MS30 \$23,055			MS30 \$207,495		
Match:		\$1,945			\$17,505		

Name: OR99: LAUREL STREET SIGNAL UPGRADE

Key: 18897

Highway: ROGUE VALLEY **ACT:** ROGUE VALLEY ACT
Route: OR 99 **MPO:** Rogue Valley
Milepoints: 18.70 to 18.10 **Applicant:** ODOT
Mile Length: 0.04 **Status:** Construction Scheduled to Begin
Description: UPGRADE TRAFFIC SIGNAL **Work Type:** Operations

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2016	2017	2017	2018		
Phase Total:		\$79,000	\$7,000	\$6,000	\$528,000		\$620,000
First Fund:		M240 \$70,887	S010 \$7,000	S010 \$6,000	M240 \$473,774		
Match:		\$8,113			\$54,226		

Name: OR273: PREACHER LANDSLIDE(MP 5.90-6.00)

Key: 18899

Highway: SISKIYOU **ACT:** ROGUE VALLEY ACT
Route: OR 273 **MPO:** Non-MPO
Milepoints: 5.90 to 6.00 **Applicant:** ODOT
Mile Length: 1.00 **Status:** Final Plans Scheduled to Begin
Description: BUTTRESS LANDSLIDE AT UPPER ROAD SECTION **Work Type:** Operations

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2014	2016	2016			
Phase Total:		\$248,000	\$25,000	\$5,000			\$278,000
First Fund:		M030 \$222,530	S010 \$25,000	S010 \$5,000			
Match:		\$25,470					

Amendment No: 12-15-058

Approval Date: 06/06/2014

Requested Action: Advance PE in to the 12-15 STIP

AMENDED

Footnote: 20% PROJECT

JACKSON

Name: ROGUE VALLEY VMS REPLACEMENT PROJECT

Key: 18905

Highway:		ACT:	VARIOUS
Route:	VAR	MPO:	Rogue Valley
Milepoints		Applicant:	ODOT
Mile Length		Status:	Construction Scheduled to Begin
Description:	REPLACE BOARDS: 1-5/MTN AVE., I-5/TABLE ROCK,HWY 199	Work Type:	Operations

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2016			2016		
Phase Total:		\$100,000			\$600,000		\$700,000
First Fund:		M240 \$89,730			M240 \$538,380		
Match:		\$10,270			\$61,620		

Name: OR66: HARLEY LANDSLIDE (MP 11.80-12.00)

Key: 18906

Highway:	GREEN SPRINGS	ACT:	ROGUE VALLEY ACT
Route:	OR 66	MPO:	Non-MPO
Milepoints	11.00 to 12.00	Applicant:	ODOT
Mile Length	0.20	Status:	Construction Scheduled to Begin
Description:	SHEAR KEY BUTTRESS SWITCH CATCH AT CENTERLINE OF ROAD, REBUILD ROAD SECTION	Work Type:	Operations

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2016	2017	2017	2018		
Phase Total:		\$66,000	\$10,000	\$5,000	\$637,000		\$718,000
First Fund:		M240 \$59,222	S010 \$10,000	S010 \$5,000	M240 \$571,580		
Match:		\$6,778			\$65,420		

Name: TWIN CREEKS RAIL CROSSING (CENTRAL POINT)

Key: 18972

Highway:		ACT:	ROGUE VALLEY ACT
Route:	VAR	MPO:	Rogue Valley
Milepoints		Applicant:	CITY OF CENTRAL POINT
Mile Length		Status:	Construction Scheduled to Begin
Description:	NEW ACCESS ROUTE INTO THE TWIN CREEKS DEVELOPMENT FOR OR99	Work Type:	Congestion Mitigation, Modernization

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2015	2015	2016	2016		
Phase Total:		\$148,000	\$15,000	\$10,000	\$3,797,000		\$3,970,000
First Fund:		M240 \$132,786	M240 \$13,460	M240 \$8,973	M240 \$2,514,767		
Match:		\$15,200	\$1,539	\$1,027	\$287,826		
Second Fund:					OTH0		
Match:					\$994,407		

JACKSON

Name: LINN ROAD: OR 62 TO BUCHANNAN (EAGLE POINT) **Key:** 18973

Highway: ACT: ROGUE VALLEY ACT
Route: VAR **MPO:** Rogue Valley
Milepoints **Applicant:** CITY OF EAGLE POINT
Mile Length **Status:** Construction Scheduled to Begin
Description: WIDEN ROAD, ADD BIKE AND PED FACILITIES WITH ILLUMINATION **Work Type:** Modernization

	Planning	Preliminary Engineering		Right of Way		Utility Relocation		Construction	Other	Project Total:
Year:		2016		2017		2017		2018		
Phase Total:		\$140,000		\$16,000		\$11,000		\$1,931,000		\$2,098,000
First Fund:		M240	\$125,622	M240	\$14,357	M240	\$9,870	M240 \$1,732,152		
Match:			\$14,378		\$1,643		\$1,130	\$198,059		
Second Fund:								OTH0		
Match:								\$596		

Name: TABLE ROCK ROAD: I-5 TO BIDDLE **Key:** 18974

Highway: ACT: ROGUE VALLEY ACT
Route: VAR **MPO:** Rogue Valley
Milepoints **Applicant:** ODOT
Mile Length **Status:** Construction Scheduled to Begin
Description: WIDEN THE ROADWAY, ADD BIKE LANES, SIDEWALKS AND STORM WATER SYSTEM **Work Type:** Congestion Mitigation, Modernization

	Planning	Preliminary Engineering		Right of Way		Utility Relocation		Construction	Other	Project Total:
Year:		2015		2016		2017		2018		
Phase Total:		\$449,000		\$1,298,000		\$10,000		\$6,126,540		\$7,883,540
First Fund:		M240	\$305,082	M240	\$672,975	M240	\$6,281	L400 \$2,906,682		
Match:			\$34,918		\$77,025		\$719	\$332,683		
Second Fund:		L400	\$97,806	L400	\$491,720	L400	\$2,692	M240 \$2,590,662		
Match:			\$11,194		\$56,280		\$308	\$296,513		

Name: OR 140: EXIT 35 BLACKWELL ROAD **Key:** 18975

Highway: ACT: ROGUE VALLEY ACT
Route: VAR **MPO:** Non-MPO
Milepoints **Applicant:** JACKSON COUNTY
Mile Length **Status:** Construction Scheduled to Begin
Description: ADD CENTER TURN LANE, WIDE SHOULDERS, ADD BIKE PATH **Work Type:** Modernization

	Planning	Preliminary Engineering		Right of Way		Utility Relocation		Construction	Other	Project Total:
Year:		2014		2016		2017		2018		
Phase Total:		\$410,000		\$276,000		\$109,000		\$4,980,000		\$5,775,000
First Fund:		M232	\$192,937	M240	\$247,655	M240	\$97,806	M240 \$4,468,554		
Match:			\$22,083		\$28,345		\$11,194	\$511,446		
Second Fund:		L24E	\$168,923							
Match:			\$19,334							
Third Fund:		H240	\$6,033							
Match:			\$691							

Amendment No: 12-15-071

Approval Date: 09/04/2014

Requested Action: Advance PE Phase into the 12-15 STIP

AMENDED

JACKSON

Name: I-5: MEDFORD VIADUCT ENVIRONMENTAL STUDY **Key:** 19063

Highway: PACIFIC HIGHWAY **ACT:** ROGUE VALLEY ACT
Route: I-5 **MPO:** Rogue Valley
Milepoints: **Applicant:** ODOT
Mile Length: **Status:** Final Plans Scheduled to Begin
Description: ENVIRONMENTAL ASSESSMENT STUDY **Work Type:** Planning

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2016					
Phase Total:		\$4,000,000					\$4,000,000
First Fund:		M240 \$3,589,200					
Match:		\$410,800					

Footnote: AWARDED DISCRETIONARY ENHANCE FUNDS OF \$4M

Name: I-5: SISKIYOU REST AREA (ASHLAND) PHASE 2 **Key:** 19140

Highway: PACIFIC HIGHWAY **ACT:** ROGUE VALLEY ACT
Route: I-5 **MPO:** Rogue Valley
Milepoints: 12.00 to 13.00 **Applicant:** ODOT
Mile Length: 1.00 **Status:** Construction Scheduled to Begin
Description: Facility Construction **Work Type:** Modernization

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2015			2016		
Phase Total:		\$511,000			\$3,820,158		\$4,331,158
First Fund:		M030 \$471,244			M001 \$3,427,828		
Match:		\$39,245			\$392,330		

Amendment No: 12-15-094A

Approval Date: 06/25/2014

Requested Action: Split project into two separate phases. I-5: Siskiyou Rest Area (Ashland) Phase1 "Site Construction" and I-5: Siskiyou Rest Area (Ashland) Phase 2 "Facility Construction"

AMENDED

Name: STEVENS ROAD-EAST MAIN STREET TO PALIMA DRIVE **Key:** 19230

Highway: **ACT:** ROGUE VALLEY ACT
Route: **MPO:** Rogue Valley
Milepoints: **Applicant:** CITY OF EAGLE POINT
Mile Length: **Status:** Construction Scheduled to Begin
Description: ADD BIKE LANES AND SIDEWALKS **Work Type:** Congestion Mitigation

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2016	2017		2018		
Phase Total:		\$309,914	\$11,145		\$2,394,355		\$2,715,414
First Fund:		L400 \$148,129	L400 \$10,000		L400 \$1,174,368		
Match:		\$16,954	\$1,145		\$134,412		
Second Fund:		L200 \$129,957			L200 \$973,978		
Match:		\$14,874			\$111,489		

JACKSON

Name: Foothill Rd: Hillcrest to McAndrews

Key: 19231

Highway: ACT: ROGUE VALLEY ACT
Route: MPO: Rogue Valley
Milepoints: Applicant: CITY OF MEDFORD
Mile Length: Status: Construction Scheduled to Begin
Description: WIDEN TO 5 LANES, CURB GUTTER, SIDEWALK AND BIKE LANES
Work Type: Congestion Mitigation

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2015	2016	2017	2017		
Phase Total:		\$800,000	\$600,000	\$40,000	\$11,662,600		\$13,102,600
First Fund:		OTH0	OTH0	OTH0	OTH0		
Match:		\$616,000	\$384,000	\$25,600	\$8,733,637		
Second Fund:		L400 \$165,103	L400 \$193,817	L400 \$12,921	L400 \$2,628,159		
Match:		\$18,897	\$22,183	\$1,479	\$300,805		

Name: REGIONAL ACTIVE TRANSPORTATION PLAN

Key: 19232

Highway: ACT: ROGUE VALLEY ACT
Route: MPO: Rogue Valley
Milepoints: Applicant: JACKSON COUNTY
Mile Length: Status: Planning
Description: ACTIVE TRANSPORTATION PLAN FOR RVMPO AREA
Work Type: Planning

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:	2016						
Phase Total:	\$200,000						\$200,000
First Fund:	L200 \$179,460						
Match:	\$20,540						

Name: WASHINGTON STREET EXTENSION

Key: 19365

Highway: ACT: ROGUE VALLEY ACT
Route: MPO: Rogue Valley
Milepoints: Applicant: CITY OF ASHLAND
Mile Length: Status: Construction Scheduled to Begin
Description: EXTEND WASHINGTON STREET TO TOLMAN CREEK ROAD CONSISTENT WITH THE IAMP EXIT 14 ACCESS
Work Type: Modernization

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:		2017			2018		
Phase Total:		\$105,000			\$950,000		\$1,055,000
First Fund:		OTH0			OTH0		
Match:		\$105,000			\$950,000		

JACKSON

Name: VALLEY FEEDER PILOT PROJECT

Key: 19378

Highway: ACT: ROGUE VALLEY ACT
Route: MPO: Rogue Valley
Milepoints: Applicant: RVTD
Mile Length: Status: Non-Construction Project
Description: OPERATING ASSISTANCE TO TRANSIT AGENCIES **Work Type:** Congestion Mitigation

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:						2016	
Phase Total:						\$111,445	\$111,445
First Fund:						L400 \$100,000	
Match:						\$11,445	

Name: 2016 URBAN OPERATIONS SUPPORT

Key: 19382

Highway: ACT: ROGUE VALLEY ACT
Route: MPO: Rogue Valley
Milepoints: Applicant: RVTD
Mile Length: Status: Non-Construction Project
Description: OPERATION SUPPORT **Work Type:** Transit Operations

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:						2016	
Phase Total:						\$5,000,000	\$5,000,000
First Fund:						FF90 \$2,500,000	
Match:						\$2,500,000	

Name: 2017 URBAN OPERATIONS SUPPORT

Key: 19384

Highway: ACT: NORTH WEST OREGON ACT
Route: MPO: Rogue Valley
Milepoints: Applicant: RVTD
Mile Length: Status: Non-Construction Project
Description: OPERATION SUPPORT **Work Type:** Transit Operations

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:						2017	
Phase Total:						\$5,100,000	\$5,100,000
First Fund:						FF90 \$2,550,000	
Match:						\$2,550,000	

JACKSON

Name: 2018 URBAN OPERATION SUPPORT **Key:** 19385

Highway: ACT: ROGUE VALLEY ACT
Route: MPO: Rogue Valley
Milepoints: Applicant: RVTD
Mile Length: Status: Non-Construction Project
Description: OPERATION SUPPORT **Work Type:** Transit Operations

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:						2018	
Phase Total:						\$5,200,000	\$5,200,000
First Fund:						FF90 \$2,600,000	
Match:						\$2,600,000	

Name: 2016 CAPITALIZATION OF MAINTENANCE (MPO STP TRANSFER) **Key:** 19386

Highway: ACT: ROGUE VALLEY ACT
Route: MPO: Rogue Valley
Milepoints: Applicant: ROGUE VALLEY TRANSIT DISTRICT
Mile Length: Status: Non-Construction Project
Description: CAPITALIZATION OF MAINTENANCE **Work Type:** Transit Capital

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:						2016	
Phase Total:						\$1,034,726	\$1,034,726
First Fund:						M240 \$928,460	
Match:						\$106,163	

Name: 2017 CAPITALIZATION OF MAINTENANCE (MPO STP TRANSFER) **Key:** 19387

Highway: ACT: ROGUE VALLEY ACT
Route: MPO: Non-MPO
Milepoints: Applicant: RVTD
Mile Length: Status: Non-Construction Project
Description: CAPITALIZATION OF MAINTENANCE **Work Type:** Transit Capital

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:						2017	
Phase Total:						\$1,049,214	\$1,049,214
First Fund:						M240 \$941,460	
Match:						\$107,649	

Name: 2018 CAPITALIZATION OF MAINTENANCE (MPO STP TRANSFER) **Key:** 19388

Highway: ACT: ROGUE VALLEY ACT
Route: MPO: Rogue Valley
Milepoints: Applicant: RVTD
Mile Length: Status: Non-Construction Project
Description: CAPITALIZATION OF MAINTENANCE **Work Type:** Transit Capital

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:						2018	
Phase Total:						\$1,063,903	\$1,063,903
First Fund:						M240 \$954,534	
Match:						\$109,263	

JACKSON

Name: LOZIER EXTENSION TO CUNNINGHAM

Key: 19396

Highway:	ACT:	ROGUE VALLEY ACT
Route:	MPO:	Rogue Valley
Milepoints	Applicant:	CITY OF MEDFORD
Mile Length	Status:	Under Construction
Description: NEW ROAD SECTION URBAN COLLECTOR, 3 LANS WITH BIKE LANES AND SIDEWALKS	Work Type:	Modernization

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:					2017		
Phase Total:					\$500,000		\$500,000
First Fund:					OTH0		
Match:					\$500,000		

Name: COLUMBUS AVENUE EXTENSION

Key: 19397

Highway:	ACT:	ROGUE VALLEY ACT
Route:	MPO:	Rogue Valley
Milepoints	Applicant:	
Mile Length	Status:	Under Construction
Description: NEW ROAD SECTION AND URBAN UPGRADER, 5 LANE MAJOR ARTERIAL	Work Type:	Modernization

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:					2018		
Phase Total:					\$4,000,000		\$4,000,000
First Fund:					OTH0		
Match:					\$4,000,000		

Name: MRA RTP IMPROVEMENTS

Key: 19403

Highway:	ACT:	ROGUE VALLEY ACT
Route:	MPO:	Non-MPO
Milepoints	Applicant:	MOTOR RIDERS ASSOC., INC.
Mile Length	Status:	Non-Construction Project
Description: Trail head improvements including a additional parking and day use area at Lily Prairie	Work Type:	Special Programs

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:						2015	
Phase Total:						\$193,518	\$193,518
First Fund:						M940 \$145,197	
Match:						\$48,302	

Footnote: ADD PROJECT SPLIT FROM KEY #17672

JACKSON

Name: PRESCOTT PARK TRAILS & TRAILHEAD DEVELOPMENT **Key:** 19415

Highway: ACT: ROGUE VALLEY ACT
Route: MPO: Non-MPO
Milepoints Applicant: CITY OF MEDFORD
Mile Length Status: Non-Construction Project
Description: The scope of this application covers phase one which includes restoration of 5,769 linear feet of existing trails, construction of 33,258 linear feet of new trails and implementation of Roxy Ann Trailhead facilities
Work Type: Special Programs

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:						2015	
Phase Total:						\$225,065	\$225,065
First Fund:						M940 \$74,992	
Match:						\$150,051	

Footnote: ADD PROJECT SPLIT FROM KEY #17672

Name: MOUNTAIN OF THE ROGUE TRAIL SYSTEM **Key:** 19418

Highway: ACT: ROGUE VALLEY ACT
Route: MPO: Non-MPO
Milepoints Applicant: BUREAU OF LAND MANAGEMENT
Mile Length Status: Non-Construction Project
Description: Construct a trailhead and the first 4.5 miles of a looped system of mountain biking and hiking trails: 2.6 miles will be mountain bike-specific downhill/flow trails, and 1.9 miles will be multi-use trails
Work Type: Special Programs

	Planning	Preliminary Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total:
Year:						2015	
Phase Total:						\$144,567	\$144,567
First Fund:						M940 \$89,473	
Match:						\$55,080	

Footnote: ADD PROJECT SPLIT FROM KEY #17672

Project Name	Project Description	RTP Project Number	Air Quality Status	Key #	Federal Fiscal Year	Phase	Federal		Federal Required Match		Total Fed+Req Match	Other		Total All Sources		
							\$	Source	\$	Source		\$	Source			
Ashland																
Walker Avenue: Ashland St. to East Main	Sidewalk Construction, west side Walker Ave. between Ashland and I-5; includes improvements at railroad crossing.	122	Exempt (Table 2) Safety, pavement resurfacing			Planning					\$ -					
				17249	FFY2011	Design	\$ 133,000	CMAQ (L400)			\$ 133,000					
				17249	FFY2012	Design	\$ 18,843	CMAQ (L400)	\$ 2,157	Ashland	\$ 21,000					
						Utility Relocate										
						Land Purchase	\$ 17,946	CMAQ (L400)	\$ 2,054	Ashland	\$ 20,000	\$ 50,000	Ashland	\$ 70,000		
				17249	FFY 2013	Construction	\$ 308,671	CMAQ (L400)	\$ 35,329	Ashland	\$ 344,000					
						Other	\$ 188,233		\$ 41,767	Ashland	\$ 230,000					
		Total FFY12-15			\$ 533,693		\$ 81,307		\$ 748,000				\$ 748,000			
N. Main Street Intersection Re-Alignment	Re-align intersection of Hersey and Wimer streets at N. Main Street		Exempt (Tables 2 and 3) Safety, Intersection Reconfiguration			Planning					\$ -					
				17473	FFY 2012	Design	\$ 30,000	STP-L (L200)	\$ 3,081	Ashland	\$ 33,081	\$ 4,419	Ashland	\$ 37,500		
						Land Purchase	\$ 50,000	STP-L (L200)	\$ 5,135	Ashland	\$ 55,135	\$ 50,000	Ashland	\$ 105,135		
						Utility Relocate	\$ 200,000	STP-L (L200)	\$ 20,540	Ashland	\$ 220,540	\$ 100,000	Ashland	\$ 320,540		
				17473	FFY 2012	Construction	\$ 446,272	STP-L (L200)	\$ 45,832	Ashland	\$ 492,104	\$ 235,412	Ashland	\$ 727,516		
						Other					\$ -					
		Total FFY10-13			\$ 726,272		\$ 74,588		\$ 800,860	\$ 389,831			\$ 1,190,691			
Laurel St. RR Crossing	R/R X-ing improvements, surface improvements	120	Exempt (Table 2) Safety, railroad crossing			Planning					\$ -					
				17251	FFY2012	Design	\$ 20,000	STP-L (L200)	\$ 2,289	Ashland	\$ 22,289					
						Land Purchase					\$ -					
						Utility Relocate					\$ -					
				17251	FFY2012	Construction	\$ 710,000	STP-L (L200)	\$ 81,263	Ashland	\$ 791,263					
						Other					\$ -					
		Total FFY10-13			\$ 730,000		\$ 83,552		\$ 813,552				\$ 813,552			
Hersey St: N. Main to Oak St Sidewalk	Sidewalk Construction	159	Exempt (Table 2) Safety, pavement resurfacing			Planning					\$ -					
				18250	FFY2012	Design	\$ 120,000	CMAQ (L400)	\$ 13,735	Ashland	\$ 133,735					
						Land Purchase	\$ 18,000		\$ 2,060	Ashland	\$ 20,060					
						Utility Relocate					\$ -					
				18250	FFY 2012	Construction	\$ 393,000	CMAQ (L400)	\$ 44,981	Ashland	\$ 437,981					
						Other			\$ -		\$ -					
		Total FFY12-15			\$ 531,000		\$ 60,776		\$ 591,776				\$ 591,776			
Subtotal Ashland Projects							\$ 2,520,965	\$ 218,916	\$ 2,739,881	\$ 389,831			\$ 3,344,019			

Project Name	Project Description	RTP Project Number	Air Quality Status	Key #	Federal Fiscal Year	Phase	Federal		Federal Required Match		Total Fed+Req Match	Other		Total All Sources	
							\$	Source	\$	Source		\$	Source		
Central Point															
Hybrid Vehicle Purchase	Purchase hybrid vehicle to replace existing service vehicle		Exempt (Table 2) Safety, vehicle replacement/rehabilitation			Planning					\$ -				
						Design					\$ -				
						Land Purchase						\$ -			
						Utility Relocate						\$ -			
						Construction						\$ -			
				17666	FFY2012	Other	\$ 83,140	CMAQ (L400)				\$ 83,140	\$ 39,000	Central Pt	
		Total FFY12-15	\$ 83,140		\$ 83,140		\$ 83,140	\$ 39,000			\$ 122,140				
Freeman Road Improvements	Urban Upgrade, adding center turn lane, bicycle lanes, sidewalks, curb, gutter and storm drain between Hopkins Road and Oak Street.	231	Exempt (Table 2) Safety, pavement resurfacing			Planning					\$ -			\$ -	
				17401	FFY2013	Design	\$ 161,514	CMAQ (L400)	\$ 18,486	Central Point	\$ 180,000				
				17401	FFY2014	Land Purchase	\$ 132,594	CMAQ (L400)	\$ 15,406	Central Point	\$ 148,000				
				17401	FFY2015	Construction	\$ 1,046,892	CMAQ (L400)	\$ 1,200,108	Central Point	\$ 2,247,000				
						Other					\$ -				
						Total FFY12-15	\$ 1,341,000		\$ 1,234,000		\$ 2,575,000	\$ -		\$ 2,575,000	
Central Point & Talent Parking Lot Improvements	Pave and improve alleys and parking facilities, both cities	230	Exempt (Table 2) Safety, pavement resurfacing			Planning					\$ -				
					FFY2012	Design	\$ 168,692	CMAQ (L400)	\$ 19,308		\$ 188,000				
					FFY2012	Land Purchase	\$ 50,000	CMAQ (L400)			\$ 50,000				
						Utility Relocate					\$ -				
				15695	FFY2013	Construction	\$ 825,403	CMAQ (L400)			\$ 825,403	\$ 127,598	OTHO		
						Other					\$ -				
		Total FFY12-15	\$ 1,044,095		\$ 19,308		\$ 1,063,403	\$ 127,598		\$ 1,191,001					
Subtotal Central Point Projects							\$ 2,468,235	\$ 1,336,448	\$ 3,721,543	\$ 127,598	\$ 3,888,141				
Eagle Point															
Pavement Rehabilitation	Maintain and rehabilitate paving on various sections of arterials and collectors within Eagle Point	331	Exempt (Table 2) Safety, pavement resurfacing			Planning					\$ -				
				18722	FFY2014	Design	\$ 19,339	STP	\$ 1,986	Eagle Point	\$ 21,325	\$ 3,247	Eagle Point		
						Design			\$ -	Eagle Point	\$ -				
						Land Purchase					\$ -				
						Utility Relocate					\$ -				
				18722	FFY2014	Construction	\$ 256,931	STP	\$ 26,387	Eagle Point	\$ 283,318				
		Other					\$ -								
		Total FFY12-15	\$ 276,270		\$ 28,373		\$ 304,643	\$ 3,247		\$ 307,890					
Mattie Brown Park Parking, Sidewalks	Pave parking area, construct sidewalks at park	324	Exempt (Table 2) Bicycle & Pedestrian facilities			Planning					\$ -				
				17734	FFY2011	Design	\$ 35,000	CMAQ (L400)	\$ 3,595	Eagle Point	\$ 38,595				
				17734	FFY2013	Design	\$ 31,406	CMAQ (L400)	\$ 3,225	Eagle Point	\$ 34,631				
						Land Purchase					\$ -				
						Utility Relocate					\$ -				
				17734	FFY2013	Construction	\$ 109,217	CMAQ (L400)	\$ 11,217	Eagle Point	\$ 125,709				
		Other					\$ -								
		Total FFY12-15	\$ 175,623		\$ 18,036		\$ 198,935			\$ 198,935					
Subtotal Eagle Point Projects							\$ 175,623	\$ 18,036	\$ 198,935		\$ 198,935				
Jacksonville															
First St. & Main St. Sidewalk & Streetscape	Install lighting, sidewalks, bike parking and pedestrian improvements	404	Exempt (Table 2) Bicycle & Pedestrian facilities			Planning					\$ -				
				16808	FFY2012	Design	\$ 213,557	TE (H220)	\$ 24,443	Jacksonville	\$ 238,000				
				16808	FFY2012	Land Purchase	\$ 897	TE (H220)	\$ 103	Jacksonville	\$ 1,000				
						Utility Relocate					\$ -				
				16808	FFY2013	Construction	\$ 702,000	TE (H220)	\$ 80,347	Jacksonville	\$ 782,347	\$ 40,000	otho		
						Other					\$ -				
		Total FFY12-15	\$ 916,454		\$ 104,892		\$ 1,021,346	\$ 40,000		\$ 1,061,346					
Subtotal Jacksonville Projects							\$ 916,454	\$ 104,892	\$ 1,021,346	\$ 40,000	\$ 1,061,346				

Project Name	Project Description	RTP Project Number	Air Quality Status	Key #	Federal Fiscal Year	Phase	Federal		Federal Required Match		Total Fed+Req Match	Other		Total All Sources
							\$	Source	\$	Source		\$	Source	
Medford														
Garfield Ave., Columbus to Lillian	Reconstruct roadway, add curbs, gutters, sidewalk and bike lanes	5002	Exempt (Table 2) Safety, pavement resurfacing, pedestrian facilities		FFY2010	Design					\$ -			
				17240	FFY2011	Design	\$ 150,000	CMAQ (L400)			\$ 150,000			
					FFY2011	Land Purchase	\$ 300,000	CMAQ (L400)			\$ 300,000			
						Utility Relocate					\$ -			
					FFY2012	Construction	\$ 874,581	CMAQ (L400)			\$ 874,581			
					FFY2013	Construction	\$ 325,419	CMAQ (L400)			\$ 325,419			
				17240	FFY2012	Construction	\$ 225,711	STP-L			\$ 225,711			
					FFY2013	Construction					\$ -	\$ 247,914	Medford	
		Total FFY12-15			\$ 1,425,711		\$ -	\$ 1,425,711	\$ 247,914	Medford	\$ 1,673,625			
S. Holly St. Extension - Garfield Ave. to Holmes Way	Construct street with center-turn lane, bike lanes and sidewalks	506	Non-Exempt			Planning				\$ -				
				11379	FFY2011	Design				\$ -	\$ 555,000	Other		
				11379	FFY2012	Land Purchase				\$ -	\$ 555,000	Other		
						Utility Relocate				\$ -				
				11379	FFY2013	Construction				\$ -	\$ 2,590,000	Other		
						Other				\$ -				
		Total FFY12-15			\$ -	\$ -	\$ -	\$ 3,700,000		\$ 3,700,000				
Columbus Ave., McAndrews Rd. to Sage Rd.	Extend Columbus to Sage, four lanes w/ center turn lane, bike lanes, sidewalks	507	Non-Exempt			Planning				\$ -				
				13350	FY2011	Design				\$ -	\$ 450,000	Other		
				13350	FY2012	Land Purchase				\$ -	\$ 450,000	Other		
						Utility Relocate				\$ -				
				13350	FY2013	Construction				\$ -	\$ 2,100,000	Other		
						Other				\$ -				
		Total FFY12-15			\$ -	\$ -	\$ -	\$ 2,550,000		\$ 2,550,000				
Crater Lake Av & Jackson St.: Alley Paving	Pave and improve alleys	598	Exempt (Table 2) pavement resurfacing			Planning				\$ -				
				15692	FFY2009	Design	\$ 161,514	CMAQ (L400)	\$18,486	Medford	\$ 180,000			
					FFY2013	Land Purchase	\$ 94,217	CMAQ (L400)	\$ 10,783	Medford	\$ 105,000			
						Utility Relocate				\$ -				
				15692	FFY2014	Construction	\$ 927,808	CMAQ (L400)	\$106,192	Medford	\$ 1,034,000	\$ 106,001.00	Medford	
						Other								
		Total FFY12-15			\$ 1,183,539	\$ 135,461	\$ 1,319,000	\$ 106,001.00		\$ 1,425,001				
Springbrook-Delta Waters Realignment	Realign intersection; add center-turn lane, bicycle lanes, sidewalks	5007	Exempt (Table 2, Table 3: Pedestrian improvements, intersection reconfiguration)			Planning				\$ -				
						Design				\$ 165,000				
						Land Purchase				\$ 60,000				
						Utility Relocate				\$ -				
				16091	FFY2012	Construction	\$ 100,000	CMAQ (L400)			\$ 100,000			
				16091	FFY2012	Construction	\$ 75,000	STP-L (L200)	\$ 8,587		\$ 83,587			
				16091	FFY2013	Construction	\$ 448,650	CMAQ (L400)	\$ 51,350		\$ 500,000			
				16091	FFY2013	Construction	\$ 75,000	STP-L (L200)	\$ 8,584		\$ 83,584	582862		
						Other					\$ -			
		Total FFY12-15			\$ 698,650	\$ 68,521	\$ 767,171	\$ 807,862		\$ 1,575,033				

Project Name	Project Description	RTP Project Number	Air Quality Status	Key #	Federal Fiscal Year	Phase	Federal		Federal Required Match		Total Fed+Req Match	Other		Total All Sources	
							\$	Source	\$	Source		\$	Source		
Medford. Continued															
Larson Creek Trail	Build trail connecting Bear Creek Greenway Trail to Ellendale Drive	5008	Exempt (Table 2) bicycle and pedestrian facilities			Planning					\$ -				
				16903	FY2012	Design	\$ 85,000	56CO			\$ 85,000				
				16903	FY2013	Land Purchase	\$ 180,000	56CO			\$ 180,000				
						Utility Relocate					\$ -				
					FY2014	Construction	\$ 275,000	56CO			\$ 275,000	\$ 45,000	OTHO		
		Total FFY10-13			\$ 540,000		\$ -		\$ 540,000	\$ 45,000		\$ 585,000			
Adaptive Signal Timing	Install adaptive signal timing equipment along Highway 62 Corridor	5005	Exempt (Table 2) TCD's			Planning					\$ -			\$ -	
						Design				\$ -			\$ -		
						Land Purchase			\$ -			\$ -		\$ -	
						Utility Relocate			\$ -			\$ -		\$ -	
				17241	FFY2012	Other	\$ 278,870	CMAQ (L400)	\$ 84,027	Medford	\$ 362,897			\$ 362,897	
		Total FFY12-15			\$ 278,870		\$ 84,027		\$ 362,897	\$ -	\$ 362,897				
Lozier Lane Improvements	Urban Upgrade Design and Land Acquisition: Design and acquire right-of-way necessary for future addition of center turn lane, bicycle lanes, sidewalks, curb, gutter and storm drain between W. Main and Stewart Ave. In partnership with Jackson County	5009	Exempt (Table 2) bicycle and pedestrian facilities; Safety Improvements			Planning									
				17388	FFY2012	Design	\$ 368,733	CMAQ(2011)	\$ 42,203		\$ 410,936		\$ 410,936		
				17388	FFY2012	Design	\$ 157,575	CMAQ(2010)	\$ 18,035		\$ 175,610		\$ 175,610		
				17388	FFY2014	Design	\$ 282,538	CMAQ(2014)	\$ 32,338	JaCo/Medford	\$ 314,876		\$ 314,876		
				17388	FFY2014	Land Purchase	\$ 1,628,154	CMAQ(2014)	\$ 186,350	JaCo/Medford	\$ 1,814,504		\$ 1,814,504		
				17388	FFY2015	Land Purchase	\$ 2,564,912	CMAQ(2015)	\$ 293,566	JaCo/Medford	\$ 2,858,478		\$ 2,858,478		
				17388	FFY2013	Land Purchase	\$ 102,298	STP-L	\$ 11,708	JaCo/Medford	\$ 114,006		\$ 114,006		
				17388	FFY2014	Land Purchase	\$ 117,514	STP-L	\$ 13,450	JaCo/Medford	\$ 130,964		\$ 130,964		
				17388	FFY2015	Land Purchase	\$ 721,231	STP-L	\$ 82,548	JaCo/Medford	\$ 803,779		\$ 803,779		
						Utility Relocate									
						Construction								\$ -	
		Other								\$ -					
		Total FFY12-15			\$ 5,942,955		\$ 680,197		\$ 6,623,152		\$ 6,623,152				
Rail Safety Improvements	Downtown Medford rail crossing improvements: Install new gate, signals at Third Street; Close street crossing at 11th Street.	5010	Exempt (Table 2) RR			Planning					\$ -			\$ -	
				17753	FFY2013	Design	\$ 90,000	LS40			\$ 90,000		\$ 90,000		
						Land Purchase					\$ -		\$ -		
						Utility Relocate					\$ -		\$ -		
					FFY2014	Construction	\$ 200,000	MS50			\$ 200,000		\$ 200,000		
		Other	\$ 380,000	MS50			\$ 380,000		\$ 380,000						
		Total FFY12-15			\$ 670,000		\$ -		\$ 670,000	\$ -	\$ 670,000				
Subtotal Medford Projects							\$ 10,739,725	\$ 968,206	\$ 11,707,931	\$ 6,542,914	\$ 19,164,708				

Project Name	Project Description	RTP Project Number	Air Quality Status	Key #	Federal Fiscal Year	Phase	Federal		Federal Required Match		Total Fed+Req Match	Other		Total All Sources	
							\$	Source	\$	Source		\$	Source		
Phoenix															
OR99 @ Oak St: Sidewalk & Ped Crossing (Phoenix)	Sidewalks & Ped crossing w/ped activated crossing signals	616	Exempt (Table 2) Safety			Planning					\$ -				
						Design					\$ -				
						Land Purchase						\$ -			
						Utility Relocate						\$ -			
				18336	FFY2015	Construction	\$ 173,000	S080	\$324,000	Phoenix	\$ 497,000				
				18336	FFY2014	Other	\$ 121,000	S080			\$ 121,000				
		Total FFY12-15	\$ 294,000		\$ 324,000		\$ 618,000			\$ 618,000					
Subtotal Phoenix Projects														\$ 618,000	
Talent															
Chuck Roberts Parking Lot Improvements	Pave and improve (Project combined with Central Point #15695 for delivery.)	727	Exempt (Table 2) Safety, pavement resurfacing			Planning					\$ -				
				15695		Design	\$ 56,539	CMAQ (L400)	\$6,471	Talent	\$ 63,010				
						Land Purchase					\$ -				
						Utility Relocate					\$ -				
				15695	FY2011	Construction	\$284,500	CMAQ (L400)	\$32,562	Talent	\$ 317,062				
						Other					\$ -				
		Total FFY10-13	\$ 341,039		\$ 39,033		\$ 380,072			\$ 380,072					
Subtotal Talent Projects														\$ 380,072	
														<i>Amounts shown for information only; Track project through Central Point #15695</i>	

Project Name	Project Description	RTP Project Number	Air Quality Status	Key #	Federal Fiscal Year	Phase	Federal		Federal Required Match		Total Fed+Req Match	Other		Total All Sources
							\$	Source	\$	Source		\$	Source	
Jackson County														
W. Jackson Road Realignment	Realignment of W. Jackson Road at Hw 99	872	Exempt (Table 3)			Planning					\$ -			
					FFY2012	Design	\$ 132,000	OTIBL			\$ 132,000			
				19073	FFY2013	Land Purchase	\$ 111,000	OTIBL			\$ 111,000			
						Utility Relocate					\$ -			
					FFY2013	Construction	\$ 530,000	OTIBL			\$ 530,000			
						Other								
		Total FFY12-15			\$ 773,000			\$ -		\$ 530,000			\$ 530,000	
Blackwell Rd: Re-Alignment MP 2 & 3	Safety project to straightn curves on Blackwell Rd. between Mileposts 2 & 3	856	Exempt (Table 2) Safety, pavement resurfacing			Planning					\$ -			
					FFY2009	Design	\$ 184,440	HSIP	\$ 15,560		\$ 200,000			
				15780	FFY2011	Land Purchase	\$ 114,353	HSIP	\$9,647	Jackson Co.	\$ 124,000			
						Utility Relocate					\$ -			
					FFY2012	Construction	\$ 1,043,008	HSIP	\$87,992	Jackson Co.	\$ 1,131,000			
						Other								
		Total FFY12-15			\$ 1,043,008			\$ 87,992		\$ 1,131,000			\$ 1,131,000	
Peachey Rd.: Walker to Hillview	Pave and improve	854	Exempt (Table 2) Safety, pavement resurfacing			Planning					\$ -	Project Name		
				15702	FFY2011	Design	\$ 202,000	CMAQ (L400)			\$ 202,000			
				15702	FFY2012	Land Purchase	\$ 38,000	CMAQ (L400)			\$ 38,000			
						Utility Relocate					\$ -			
				15702	FFY2013	Construction	\$ 660,000	CMAQ (L400)			\$ 660,000			
						Construction					\$ -			
		Other					\$ -							
		Total FFY12-15			\$ 698,000			\$ -		\$ 698,000			\$ 698,000	
Bear Creek Greenway	Multi-use trail construction: Pine Street to Upton Road	857	Exempt (Table 2) bicycle and pedestrian facilities			Planning					\$ -			
					FFY2012	Design	\$ 264,704		\$ 30,296	Jackson Co.	\$ 295,000			
						Land Purchase					\$ -			
						Utility Relocate	\$ 8,973		\$ 1,027		\$ 10,000			
				17883	FFY2013	Construction	\$ 1,206,869	TE (H220)	\$ 138,131	Jackson Co.	\$ 1,345,000			
				17883	FFY2013	Construction	\$ 44,865	STP-L (L-200)	\$ 5,135	Jackson Co.	\$ 50,000			
		Other					\$ -							
		Total FFY12-15			\$ 1,525,411			\$ 174,589		\$ 1,700,000			\$ 1,700,000	
Bear Creek Greenway: Repair Test	Multi-use trail -- Test Root-Damage Repair Program		Exempt (Table 2) bicycle and pedestrian facilities			Planning					\$ -			
						Design					\$ -			
						Land Purchase					\$ -			
						Utility Relocate					\$ -			
				17243	FFY2012	Construction	\$ 50,176	L94E	\$12,544	Jackson Co.	\$ 62,720			
						Other					\$ -			
		Total FFY12-15			\$ 50,176			\$ 12,544		\$ 62,720			\$ 62,720	
Kirtland Rd./Avenue G, Table Rock to 700' E of Pacific Ave.	Straighten 90 degree curves, build to rural major collector stds.	805	Exempt (Table 2) Safety, pavement resurfacing			Planning								
						Design								
						Land Purchase								
						Utility Relocate								
				17253	FFY2012	Construction					\$ 1,400,000	Jackson Co.		
						Other								
		Total FFY12-15			\$ -			\$ -		\$ 1,400,000			\$ 1,400,000	
Table Rock Rd., Wilson St. to Elmhurst St.	Widen to add center-turn lane, with bike lanes, sidewalks; align Gregory Road intersection.	812	Exempt (Tables 2 and 3) Safety, Intersectoin Reconfiguration			Planning								
						Design								
						Land Purchase								
						Utility Relocate								
				13344	FFY2014	Construction					\$ 2,000,000	Jackson Co.		
						Other								
		Total FFY12-15			\$ -			\$ -		\$ 2,000,000			\$ 2,000,000	
Bear Creek Greenway: Hwy62 Connection (Medford)	Bike/ped connections from Bear Creek Greenway to Hwy62 and N. Medford Interchange	871	Exempt (Table 2) Safety			Planning					\$ -			
				18335	FFY2014	Design	\$ 70,000	S080	\$ -		\$ 70,000			
						Land Purchase					\$ -			
						Utility Relocate					\$ -			
				18335	FFY2015	Construction	\$ 379,500	S080	\$51,500	Jackson Co.	\$ 431,000			
						Other								
		Total FFY12-15			\$ 449,500			\$ 51,500		\$ 501,000			\$ 501,000	

Subtotal Jackson County Projects						\$ 3,766,095	\$ 326,625	\$ 4,092,720	\$ 3,400,000	\$ 7,492,720
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Project Name	Project Description	RTP Project Number	Air Quality Status	Key #	Federal Fiscal Year	Phase	Federal		Federal Required Match		Total Fed+Req Match	Other		Total All Sources		
							\$	Source	\$	Source		\$	Source			
Oregon Department of Transportation (ODOT)																
OR 62: Linn Rd - JCT Hwy 271 (Sams Valley); Rolling Hills Drive at Barton Road	Grind/Inlay and Overlay Pavement Linn Rd to Hwy. 234; Build two way center left turn lane between Barton and Rolling Hills	941 & 942	Exempt (Table 2) Safety, pavement resurfacing			Planning					\$ -					
				16206	FFY2011	Design	\$ 352,258	NHS	\$38,142		\$ 390,400					
				16206	FFY2011	Design	\$ 88,064	HSIP	\$9,536		\$ 97,600					
				16206	FFY2012	Land Purchase						\$ 74,000	S010			
				16206	FFY2012	Utility Relocate										
				16206	FFY2013	Construction	\$ 2,827,837	NHS	\$26,603		\$ 2,854,440					
				16206	FFY2013	Construction	\$ 1,589,221	HSIP	\$163,339		\$ 1,752,560					
						Other	\$ 4,534	NHS	\$ 466		\$ 5,000					
						Total FFY12-15			\$ 4,421,592		\$ 190,408		\$ 5,100,000	\$ 74,000		\$ 5,174,000
I-5: Siskiyou Rest Area, Phase 1 (Ashland)	Relocate rest area at new location	913	Exempt (Table 3) Safety, roadside rest area			Planning										
				09436	FFY2002	Design	\$ 1,257,917	Q050, L00E	\$ 1,603,083	S010, L05E	\$ 2,861,000					
						Design										
				09436	FFY1997	Land Purchase			\$ 520,000	S010	\$ 520,000					
				09436	FFY2015	Land Purchase										
				09436	FFY2015	Utility Relocate			\$ 20,000	S010	\$ 20,000					
				09436	FFY2015	Construction	\$ 1,291,584	M001	\$147,908		\$ 1,439,492					
				09436	FFY2015	Construction	\$ 3,836,641	M240	\$439,359		\$ 4,276,000					
				09436	FFY2015	Construction	\$ 1,018,350	Oth0			\$ 1,018,350					
		FFY2014	Other	\$ 224,313	M240	\$25,688		\$ 250,000								
		Total FFY12-15			\$ 7,628,805		\$ 1,152,954		\$ 10,384,842	\$ -		\$ 10,384,842				
I-5: Siskiyou Rest Area, Phase II (Ashland)	Relocate rest area at new location	913	Exempt (Table 3) Safety, roadside rest area			Planning										
				09436	FFY2013	Design			\$ 511,000	S010	\$ 511,000					
						Design										
						Land Purchase										
						Land Purchase										
						Utility Relocate					\$ -					
				09436	FFY2015	Construction	\$ 3,427,828	M001	\$392,330		\$ 3,820,158					
						Construction										
						Construction										
		Other						\$ -								
		Total FFY12-15			\$ 3,427,828		\$ 903,330		\$ 4,331,158	\$ -		\$ 4,331,158				
I-5: Fern Valley Interchange, Unit 2	Reconstruct interchange with new bridge over I-5; realign and widen Fern Valley Road from two to five lanes west to new intersection with extended S. Phoenix Road. Realign N. Phoenix Road. Replace Bear Creek Bridge and build two-lane couplets on east end	902	Non-Exempt			Planning					\$ -					
				12723	FFY2012	Design	\$ 200,080	L240	\$ 22,900	state	\$ 222,980					
				12723	FFY2012	Design					\$ 3,000,000	ACP1				
				12723	FFY2012	Design	\$ 2,058,460	LY10	\$ 235,600	state	\$ 2,294,060					
				12723	FFY2012	Design					\$ 118,002	B4A0				
				12723	FFY2012	Design					\$ 1,000,000	OTHO				
				12723	FFY2012	Design					\$ 428,000	S010				
				12723	FFY2013	Land Purchase	\$ 1,277,890	LY10	\$ 146,260	state	\$ 1,424,150					
				12723	FFY2013	Land Purchase	\$ 147,444	L240	\$ 16,876	state	\$ 164,320					
						FFY2013	Land Purchase				\$ 12,500,000	ACP1				
						FFY2013	Land Purchase				\$ 11,530	B4A0				
						FFY2012	Utility Relocate				\$ -	\$ 1,500,000	B4A0			
				12723	FFY2013	Construction	\$ 11,445,727	STP	\$1,310,015	state	\$ 12,755,742	\$ 24,361,998	B4A0			
				12723	FFY2013	Construction	\$ 3,383,055	L10	\$387,205	state	\$ 3,770,260	\$ 2,852,000	L24E			
				12723	FFY2013	Construction	\$ 475,037	LY40	\$54,370	state	\$ 529,407	\$ 4,300,000	OTHO			
				12723		Other					\$ -	\$ 520,000	B3A2			
		Total FFY12-15			\$ 18,987,693		\$ 2,173,226		\$ 21,160,919	\$ 50,591,530		\$ 71,752,449				
Hwy 62: Corridor Solutions Unit 2 (Medford)	JTA Expressway to Relieve Congestion.	903	Non-Exempt			Planning					\$ -					
				13994	FFY2011	Design					\$ 4,447,000	B3A2				
				13994	FFY2012	Land Purchase					\$ 23,850,000	B3A2				
					FFY2012	Land Purchase					\$ -					
					FFY2011	Utility Relocate					\$ -	\$ 2,100,000	B4A0			
13994	FFY2013	Construction	\$ 8,973	L240	\$ 1,027		\$ 10,000	\$ 37,038,000	S010							

							\$ -	\$ 100,000	B3A2		
							\$ 10,000	\$ 67,535,000			\$ 67,545,000

Project Name	Project Description	RTP Project Number	Air Quality Status	Key #	Federal Fiscal Year	Phase	Federal		Federal Required Match		Total Fed+Req Match	Other		Total All Sources			
							\$	Source	\$	Source		\$	Source				
Oregon Department of Transportation (ODOT), continued																	
OR62 Corridor Solutions Environmental Impact Statement	Environmental Impact Study to Identify Solutions Associated with Congestion on Hwy 62	903	Non-Exempt (right-of-way constrained in 2038 RVMP0 RTP)	13226	FFY2012	Planning	\$ 2,232,123	Q050	\$ 255,477		\$ 2,487,600	\$ 62,190	OTIAIII				
				13226	FFY2012	Planning				\$ -		\$3,171,690	OTIAIII				
				13226	FFY2012	Planning						\$ -	\$497,520	JTABond			
						Design											
						Land Purchase											
						Utility Relocate						\$ -					
						Construction						\$ -					
		Other						\$ -									
						Total FFY12-15	\$ 2,232,123		\$ 255,477		\$ 2,487,600	\$ 3,731,400		\$ 6,219,000			
OR62: Corridor Solutions Unit 2, Phase 2	JTA Expressway to Relieve Congestion.	903	Non-Exempt			Planning					\$ -						
						FFY2011	Design				\$ 3,077,000	JTABond					
				17188	FFY2012	Land Purchase			\$ -		\$ 10,000,000	JTABond					
				17188	FFY2013	Utility Relocate			\$ -		\$ 500,000	JTABond					
				17188	FFY2013	Construction					\$ 36,683,000	JTABond					
				17188	FFY2013	Construction	821030	L240		\$93,970		\$ 915,000					
						Other						\$ -					
						Total FFY12-15	\$ 821,030		\$ 93,970		\$ 915,000	\$ 50,260,000		\$ 51,175,000			
Interstate 5 Bear Creek Bridges	Scour repair on Interstate 5 bridges north- and south-bound	946	Exempt (Table 2- Bridge Repair)			Planning					\$ -						
				17529	FFY2013	Design	\$ 201,893	STP	\$ 23,107		\$ 225,000						
				17529	FFY2014	Land Purchase	\$ 2,692	STP	\$ 308		\$ 3,000						
						Utility Relocate					\$ -						
				17529	FFY2015	Construction	\$ 1,584,632	STP	\$ 181,368		\$ 1,766,000						
						Other					\$ -						
						Total FFY12-15	\$ 1,789,217		\$ 204,783		\$ 1,994,000	\$ -		\$ 1,994,000			
OR 238 @ N. Ross	Install New Traffic Signal	911	Exempt (Table 2) Safety			Planning					\$ -						
						FFY2008	Design	\$ 8,973	STP	\$ 1,027		\$ 10,000					
						FFY2012	Land Purchase				\$ -	\$ 25,000	OTHER				
						Utility Relocate	\$ -										
				14985	FFY2012	Construction					\$ 150,000	OTHER					
						Other											
						Total FFY12-15	\$ -		\$ 1,027		\$ -	\$ 175,000		\$ 175,000			
OR99: Rapp Rd to Talent City Limits	Build left turn lane, sidewalks at intersection	945	Exempt (Table 2) Safety			Planning					\$ -						
				17478	FFY2013	Design	\$ 86,687	HSIP	\$ 7,313		\$ 94,000						
				17478	FFY2013	Land Purchase	\$ 6,455	HSIP	\$ 545		\$ 7,000						
						Utility Relocate					\$ -						
				17478	FFY2015	Construction	\$ 829,058	HSIP	\$ 69,942		\$ 899,000						
						Other					\$ -						
						Total FFY12-15	\$ 922,200		\$ 77,800		\$ 1,000,000	\$ -		\$ 1,000,000			
Hwy. 62 & 140 Intersection Improvements	Relocate signal, modify lane configuration	952	Exempt (Table 2) Safety			Planning					\$ -						
				17471	FFY2012	PrelimEngineer	\$ 143,568	HSIP	\$16,432		\$ 160,000						
				17471	FFY2013	Land Purchase					\$ 4,000	S010					
						Utility Relocate					\$ -						
				17471	FFY2015	Construction	\$ 1,109,407	HSIP	\$93,593		\$ 1,203,000						
						Other					\$ -						
						Total FFY12-15	\$ 1,252,975		\$ 110,025		\$ 1,363,000	\$ 4,000		\$ 1,367,000			
I-5 Medford to Ashland Paving	Grid/Inlay	906	Exempt (Table 2) Safety			Planning					\$ -						
				18874	FFY2014	PrelimEngineer	\$ 337,385	M001	\$38,615		\$ 376,000						
						Land Purchase											
						Utility Relocate					\$ -						
						Construction					\$ -						
						Other					\$ -						
						Total FFY12-15	\$ 337,385		\$ 38,615		\$ 376,000	\$ -		\$ 376,000			
OR 140: Exit 35 to Blackwell Road	Add center turn lane, widen shoulders, add bike lane	907	Exempt (Table 2) Safety			Planning					\$ -						
				18975	FFY2014	PrelimEngineer	\$ 367,893	STP	\$42,107		\$ 410,000						
						Land Purchase											
						Utility Relocate					\$ -						
						Construction					\$ -						
						Other					\$ -						
						Total FFY12-15	\$ 367,893		\$ 42,107		\$ 410,000	\$ -		\$ 410,000			

Subtotal ODOT Projects							\$ 38,064,608	\$ 4,260,697	\$ 44,415,361	\$ 172,370,930	\$ 216,786,291			
Project Name	Project Description	RTP Project Number	Air Quality Status	Key #	Federal Fiscal Year	Phase	Federal		Federal Required Match		Total Fed+Req Match	Other		Total All Sources
							\$	Source	\$	Source		\$	Source	
Rogue Valley Transportation District (RVTD)														
Urban Operations Support		1037	Exempt (Table 2) - Operating assistance to transit agencies	17256	FFY2012	Other	\$ 1,850,000	FTA 5307	\$ 1,850,000	RVTD	\$ 3,700,000			\$ 3,700,000
Urban Operations Support		1038	Exempt (Table 2) - Operating assistance to transit agencies	17257	FFY2012	Other	\$ 1,900,000	FTA 5307	\$ 1,900,000	RVTD	\$ 3,800,000			\$ 3,800,000
Urban Operations Support		1039	Exempt (Table 2) - Operating assistance to transit agencies	17258	FFY2013	Other	\$ 2,410,885	FTA 5307	\$ 2,410,885	RVTD	\$ 4,821,770			\$ 4,821,770
Urban Operations Support		1056	Exempt (Table 2) - Operating assistance to transit agencies	17997	FFY2014	Other	\$ 2,464,119	FTA 5307	\$ 2,464,119	RVTD	\$ 4,928,238			\$ 4,928,238
Urban Operations Support		1057	Exempt (Table 2) - Operating assistance to transit agencies	17998	FFY2015	Other	\$ 1,950,000	FTA 5307	\$ 1,950,000	RVTD	\$ 3,900,000			\$ 3,900,000
Job Access/Reverse Commute, transit operations			Exempt (Table 2) - Operating assistance to transit agencies	17899	FFY2012	Other	\$ 103,051	FTA 5316	\$ 103,051	RVTD	\$ 206,102			\$ 206,102
RVTD Transit Capital -- STP Transfer: Purchase Services, Vehicle Maintenance		1046	Exempt (Table 2) - Rehabilitation of transit vehicles	17853	FFY2012	Other	\$ 723,865	STP	\$ 82,850	RVTD	\$ 806,715			\$ 806,715
RVTD Transit Capital -- STP Transfer: Purchase Services, Vehicle Maintenance		1047	Exempt (Table 2) - Rehabilitation of transit vehicles	17860	FFY2012	Other	\$ 710,662	STP	\$ 81,338	RVTD	\$ 792,000			\$ 792,000
Ashland Park-Ride		1025	Exempt (Table 2) bicycle and pedesrian facilitties	17259	FFY2012	Other	\$ 115,950	STP	\$ 11,290	RVTD	\$ 127,240			\$ 127,240
Ashland Park-Ride		1025	Exempt (Table 2) bicycle and pedesrian facilitties	14664	FFY2012	Other	\$ 248,000	STP	\$ 62,000	RVTD	\$ 310,000			\$ 310,000
Expanded Transit Servie: Estending transit service to week nights and Saturdays		1061	Exempt (Table 2) - Operating assistance to transit agencies	17168	FFY2012	Other	\$ 1,081,756	CMAQ (L400)	\$ 867,347	RVTD	\$ 1,949,103			\$ 1,949,103
Radio Communications System Replacement and Upgrad		1062	Exempt (Table 2) - Operating assistance to transit agencies	18163	FFY2012	Other	\$ 600,000	State Flex Funds	\$ 142,868	RVTD	\$ 742,868			\$ 742,868

Project Name	Project Description	RTP Project Number	Air Quality Status	Key #	Federal Fiscal Year	Phase	Federal		Federal Required Match		Total Fed+Req Match	Other		Total All Sources
							\$	Source	\$	Source		\$	Source	
RVTD, continued														
Capitalization of Maintenance (MPO STP Transfer)		1040	Exempt (Table 2) - Rehabilitation of transit vehicles	17860	FFY 2012	Other	\$ 710,662	MPO STP	\$ 81,338	RVTD	\$ 792,000			\$ 792,000
Capitalization of Maintenance (MPO STP Transfer)		1041	Exempt (Table 2) - Rehabilitation of transit vehicles	17262	FFY 2013	Other	\$ 838,505	MPO STP	\$ 95,971	RVTD	\$ 934,476			\$ 934,476
Capitalization of Maintenance (MPO STP Transfer)		1063	Exempt (Table 2) - Rehabilitation of transit vehicles	17975	FFY2014	Other	\$ 887,953	MPO STP	\$ 101,630	RVTD	\$ 989,583			\$ 989,583
Capitalization of Maintenance (MPO STP Transfer)		1064	Exempt (Table 2) - Rehabilitation of transit vehicles	17978	FFY2015	Other	\$ 940,163	MPO STP	\$ 107,606	RVTD	\$ 1,047,769			\$ 1,047,769
TDM Rideshare Projects: Transportation Demand Management program operated by Rogue Valley Transportation District		1017	Exempt (Table 2) - Operating assistance to transit agencies	16214	FFY 2012	Other	\$ 134,595	STP (L240)	\$ 15,405	RVTD	\$ 150,000			\$ 150,000
TDM Rideshare Projects: Transportation Demand Management program operated by Rogue Valley Transportation District		1019	Exempt (Table 2) - Operating assistance to transit agencies	16215	FFY2013	Other	\$ 134,595	STP (L240)	\$ 15,405	RVTD	\$ 150,000			\$ 150,000
TDM Rideshare Projects: Transportation Demand Management program operated by Rogue Valley Transportation District		1055	Exempt (Table 2) - Operating assistance to transit agencies	17639	FFY 2014	Other	\$ 134,595	STP (L240)	\$ 15,405	RVTD	\$ 150,000			\$ 150,000
TDM Rideshare Projects: Drive Less Connect Outreach, TDM program operated by Rogue Valley Transportation District		1055	Exempt (Table 2) - Operating assistance to transit agencies	19151	FFY 2014	Other	\$ 49,000	STP FLEX	\$ 5,608	RVTD	\$ 54,608			\$ 54,608
TDM Rideshare Projects: Transportation Demand Management program operated by Rogue Valley Transportation District		1054	Exempt (Table 2) - Operating assistance to transit agencies	17640	FFY2015	Other	\$ 134,595	STP (L240)	\$ 15,405	RVTD	\$ 150,000			\$ 150,000
Passenger Information Systems Completion		1035	Exempt (Table 2) - Rehabilitation of transit vehicles	17263	FFY2012	Other	\$ 923,322	CMAQ (L400)	\$ 105,678	RVTD	\$ 1,029,000			\$ 1,029,000
Capitalization of Maintenance (MPO STP Transfer)		1032	Exempt (Table 2) - Rehabilitation of transit vehicles	15661	FFY2012	Other	\$ 660,049	MPO STP	\$ 75,546	RVTD	\$ 735,595			\$ 735,595
Veterans Transportation Call Center		1053	Exempt (Table 2) - Operating assistance to transit agencies	18248	FFY2013	Other	\$ 1,082,400	FTA 5309	\$ 270,600	RVTD	\$ 1,353,000			\$ 1,353,000
Purchase New Transit Buses		1073	Exempt (Table 2) - Operating assistance to transit agencies	18144	FFY2012	Other	\$ 1,093,600	FTA State of Good Repair	\$ 273,400	RVTD	\$ 1,367,000			\$ 1,367,000
5310 E & D STP XFER		1068	Exempt (Table 2) - Operating assistance to transit agencies	18374	FFY2013	Other	\$ 592,364	STP (L240)	\$ 67,799	RVTD	\$ 660,163			\$ 660,163
5310 E & D STP XFER		1069	Exempt (Table 2) - Operating assistance to transit agencies	18375	FFY2014	Other	\$ 527,453	STP (L240)	\$ 60,369	RVTD	\$ 587,822			\$ 587,822

5310 Enhanced Mobility E & D	1070	Exempt (Table 2) - Operating assistance to transit agencies	18376	FFY2013	Other	\$ 259,926	F160	\$ 64,982	RVTD	\$ 324,908		\$ 324,908				
5310 Enhanced Mobility E & D	1071	Exempt (Table 2) - Operating assistance to transit agencies	18377	FFY2014	Other	\$ 169,463	F160	\$ 42,366	RVTD	\$ 211,829		\$ 211,829				
Mass Transit Vehicle Replacement	1072	Exempt (Table 2)	19074	FFY2014	Other	\$ 637,084	FTA 5307	\$ 72,917	RVTD	\$ 710,001		\$ 710,001				
Subtotal RVTD Projects						\$ 23,431,528		\$ 11,490,261		\$ 36,771,789		\$ 36,771,789				
Project Name	Project Description	RTP Project Number	Air Quality Status	Key #	Federal Fiscal Year	Phase	Federal		Federal Required Match		Total Fed+Req Match	Other		Total All Sources		
							\$	Source	\$	Source		\$	Source			
Rogue Valley Council of Governments																
Cascade Sierra Solutions Emissions Reduction Center	Implement Diesel Retrofit Outreach Center	1002	Exempt (Table 2) Planning and Technical Studies			Planning					\$ -					
						Design					\$ -					
						Land Purchase							\$ -			
						Utility Relocate							\$ -			
						Construction							\$ -			
				16290	FFY2012	Other	\$ 314,055	CMAQ (L400)	\$35,945	RVMPO	\$ 350,000					
Total FFY10-13						\$ 314,055		\$ 35,945		\$ 350,000		\$ 350,000				
RVMPO Clean Air Campaign	Develop and implement clean air campaign for RVMPO Area	1007	Exempt (Table 2) Planning and Technical Studies			Planning					\$ -					
						Design					\$ -					
						Land Purchase						\$ -				
						Utility Relocate							\$ -			
						Construction							\$ -			
				17254	FFY2013	Other	\$ 55,000	CMAQ (L400)	\$6,295	RVMPO	\$ 61,295					
Total FFY10-13						\$ 55,000		\$ 6,295		\$ 61,295		\$ 61,295				
RVMPO Plan Update	Complete work necessary to update the RVMPO Long-Range Plan	1003	Exempt (Table 2) Planning and Technical Studies			Planning					\$ -					
						Design					\$ -					
						Land Purchase						\$ -				
						Utility Relocate						\$ -				
						Construction						\$ -				
				15475	FFY2012	Other	\$ 55,000	STP-L (L200)	\$6,295	RVMPO	\$ 61,295					
Total FFY10-13						\$ 55,000		\$ 6,295		\$ 61,295		\$ 61,295				
CMAQ - RVMPO 2013	Allocation of FFY 2013 Congestion Mitigation and Air Quality funds for allocation within Medford-Ashland Air Quality Maintenance Area	1004	Exempt (Table 2) Air Quality			Planning					\$ -					
						Design					\$ -					
						Land Purchase						\$ -				
						Utility Relocate						\$ -				
						Construction						\$ -				
				16853	FFY2013	Other	\$ 2,317,498	CMAQ (L400)	\$265,248	local	\$2,582,746					
Total FFY10-13						\$ 2,317,498		\$ 265,248		\$ 2,582,746		\$ 2,582,746				
CMAQ - RVMPO 2014	Allocation of FFY2014 Congestion Mitigation and Air Quality funds for allocation within Medford-Ashland Air Quality Maintenance Area	1005	Exempt (Table 2) Air Quality			Planning					\$ -					
						Design					\$ -					
						Land Purchase						\$ -				
						Utility Relocate						\$ -				
						Construction						\$ -				
				18296	FFY2014	Other	\$ 2,188,000	CMAQ (L400)	\$250,426	local	\$2,438,426					
Total FFY10-13						\$ 2,188,000		\$ 250,426		\$ 2,438,426		\$ 2,438,426				
CMAQ - RVMPO 2015	Allocation of FFY2014 Congestion Mitigation and Air Quality funds for allocation within Medford-Ashland Air Quality Maintenance Area	1006	Exempt (Table 2) Air Quality			Planning					\$ -					
						Design					\$ -					
						Land Purchase						\$ -				
						Utility Relocate						\$ -				
						Construction						\$ -				
				18297	FFY2015	Other	\$ 2,451,000	CMAQ (L400)	\$280,528	local	\$2,731,528					
Total FFY10-13						\$ 2,451,000		\$ 280,528		\$ 2,731,528		\$ 2,731,528				

<i>Subtotal RVC0G Projects</i>					\$ 424,055	\$48,535	\$472,590		\$8,225,290
<i>Total RVMP0 2012-2015 RVMP0 MTIP Projects</i>									<i>\$ 297,551,239</i>

Exhibit A
Jackson County Roads Capital Plan
 February 27, 2015

PRIORITY	BUDGET YEAR	CONSTR. YEAR	ROAD	SECTION	IMPROVEMENT TYPE	ESTIMATED					Comments	
						COST	STP	SDC	Road Fund	Other		
A	15/16	2018	Table Rock Road - Preliminary Engineering	I-5 to Biddle	3 and 5 Lane, curb, gutter, Sidewalk and bike lanes	\$460,000	\$47,242				\$412,758	Enhance Federal Funding
A	14/15	2016/17	Lozier Lane - Right of Way	W Main to Stewart	3-Lane, curb, gutter, sidewalk and bike lanes	\$2,250,000			\$231,075		\$2,018,925	Federal Funds (CMAQ)
A	14/15	2015	BCGW Connection @ Highway 62		Greenway trail connection at I-5/62 Interchange	\$610,000					\$610,000	State Bike/Ped + ODOT Match
A	14/15	Unknown	RRGW - Preliminary Eng. & R/W	Del Rio to Twin Bridges Road	Roadside Greenway trail connection readiness project	\$450,000					\$450,000	RRGW Foundation + State Bike/Ped
A	15/16	2015	Overlay Program (Table Rock Rd)	Biddle to Wilson		\$697,758	\$497,758		\$200,000			
A	15/16	2015/16	Misc. Safety Improvements			\$25,000	\$25,000					
A	14/15		Budget Reserve for Foothill/Atlantic									\$290,000 SDC Reserve
		2015	Totals			\$4,492,758	\$570,000	\$0	\$431,075	\$3,491,683		
A	15/16	2016/17	Lozier Lane - Construction	W Main to Stewart	3-Lane, curb, gutter, sidewalk and bike lanes	\$4,500,000			\$462,150	\$4,037,850		Federal Funds (CMAQ+Enhance)
A	15/16	2016	Bridge #360	Wheeler Rd/Snider Cr.	Replace Glue Lam Bridge	\$200,000			\$200,000	\$0		Maintenance Project
A	16/17	2016	Overlay Program			\$0	\$0					
A	16/17	2016/17	Misc. Safety Improvements			\$25,000	\$25,000					
A	15/16		Budget Reserve for Foothill/Atlantic									\$290,000 SDC + \$545,000 STP Reserve
		2016	Totals			\$4,725,000	\$25,000	\$0	\$662,150	\$4,037,850		
A	16/17	2018	Table Rock Road - Right-of-Way	I-5 to Biddle	3 and 5 Lane, curb, gutter, Sidewalk and bike lanes	\$1,300,000	\$133,510				\$1,166,490	Enhance Federal Funding
A	16/17	2017	Bridge #651	Ramsey Rd/Sams Cr.	Replace Timber Bridge	\$250,000			\$250,000	\$0		Maintenance Project
A	17/18	2017	Overlay Program			\$411,490	\$411,490					
A	17/18	2017/18	Misc. Safety Improvements			\$25,000	\$25,000					
		2017	Totals			\$1,986,490	\$570,000	\$0	\$250,000	\$1,166,490		
A	17/18	2018	Foothill/Atlantic Connection	Corey to Atlantic	Rural Collector + Signal	\$2,500,000	\$1,117,057	\$1,160,000	\$222,944			
A	17/18	2018	Table Rock Road - Construction	I-5 to Biddle	3 and 5 Lane, curb, gutter, Sidewalk and bike lanes	\$6,235,000	\$92,944				\$6,142,057	Enhance + CMAQ + Cities Match
A	18/19	2018	Overlay Program			\$0	\$0					
A	18/19	2018/19	Misc. Safety Improvements			\$25,000	\$25,000					
		2018	Totals			\$8,760,000	\$1,235,000	\$1,160,000	\$222,944	\$6,142,057		
A	18/19	2019	Bridge #640	Elder Mill Rd/Trail Creek	Replace Glue Lam Bridge	\$250,000			\$250,000	\$0		Maintenance Project
A	19/20	2019	Overlay Program			\$545,000	\$545,000					
A	19/20	2019/20	Misc. Safety Improvements			\$25,000	\$25,000					
A	18/19		Budget Reserve for Foothill, Delta Waters to Coker Butte									\$290,000 SDC
		2019	Totals			\$820,000	\$570,000	\$0	\$250,000	\$0		
			S=Supplemental Budget Required		Assumptions:	1. STP (Federal transportation funds) Road Fund balance at 7/1/15 is \$120,000. 2. STP (Federal transportation funds) assumed at \$550,000/year (after fund exchange). 3. SDC balance at 7/1/15 is \$290,000 4. SDC revenue assumed \$290,000/year.						

Attachment B Year 2038 Traffic Conditions
Worksheets

Year 2038 Traffic Conditions
1: Hamrick Road & E Pine Street/Biddle Road

Weekday PM Peak Hour
6/23/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕			↕	↖		↕	↖
Volume (vph)	515	660	60	31	1016	88	79	33	33	88	22	627
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	5.0		4.0	5.0			4.5	4.5		4.5	4.5
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.99		1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	0.99		1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97	1.00		0.96	1.00
Satd. Flow (prot)	1614	3190		1525	3191			1482	1468		1683	1473
Flt Permitted	0.11	1.00		0.35	1.00			0.69	1.00		0.64	1.00
Satd. Flow (perm)	184	3190		556	3191			1063	1468		1128	1473
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	579	742	67	35	1142	99	89	37	37	99	25	704
RTOR Reduction (vph)	0	5	0	0	5	0	0	0	28	0	0	7
Lane Group Flow (vph)	579	804	0	35	1236	0	0	126	9	0	124	697
Confl. Peds. (#/hr)	2		1	1		2						
Confl. Bikes (#/hr)			1						1			
Heavy Vehicles (%)	3%	2%	11%	9%	3%	0%	17%	7%	0%	0%	0%	1%
Turn Type	D.P+P	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	pt+ov
Protected Phases	5	2		1	6			8			4	4 5
Permitted Phases	6			6			8		8	4		
Actuated Green, G (s)	77.2	73.5		40.6	36.9			30.2	30.2		30.2	75.0
Effective Green, g (s)	77.2	73.5		40.6	36.9			30.2	30.2		30.2	75.0
Actuated g/C Ratio	0.64	0.61		0.34	0.31			0.25	0.25		0.25	0.62
Clearance Time (s)	4.0	5.0		4.0	5.0			4.5	4.5		4.5	
Vehicle Extension (s)	2.5	4.3		2.5	4.0			2.5	2.5		2.5	
Lane Grp Cap (vph)	594	1939		216	973			265	366		281	913
v/s Ratio Prot	c0.32	0.25		0.00	c0.39							c0.47
v/s Ratio Perm	0.30			0.05				0.12	0.01		0.11	
v/c Ratio	0.97	0.41		0.16	1.27			0.48	0.03		0.44	0.76
Uniform Delay, d1	33.4	12.4		28.5	42.0			38.6	34.2		38.2	16.6
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	30.3	0.2		0.3	129.8			1.0	0.0		0.8	3.7
Delay (s)	63.7	12.7		28.7	171.8			39.6	34.3		39.0	20.2
Level of Service	E	B		C	F			D	C		D	C
Approach Delay (s)		34.0			167.9			38.4			23.0	
Approach LOS		C			F			D			C	

Intersection Summary

HCM 2000 Control Delay	78.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	120.9	Sum of lost time (s)	13.5
Intersection Capacity Utilization	94.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Two Way Analysis cannot be performed on Signalized Intersection.

Year 2038 Traffic Conditions
2: Table Rock Road & Biddle Road

Weekday PM Peak Hour
6/23/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	308	401	96	68	716	310	162	466	5	208	555	318
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1599	3292	1488	1662	3325	1444	1646	1696		1646	1716	1328
Flt Permitted	0.13	1.00	1.00	0.43	1.00	1.00	0.10	1.00		0.11	1.00	1.00
Satd. Flow (perm)	215	3292	1488	758	3325	1444	181	1696		197	1716	1328
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	346	451	108	76	804	348	182	524	6	234	624	357
RTOR Reduction (vph)	0	0	66	0	0	203	0	0	0	0	0	66
Lane Group Flow (vph)	346	451	42	76	804	145	182	530	0	234	624	291
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	4%	1%	0%	0%	0%	3%	1%	3%	0%	1%	2%	12%
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	D.P+P	NA		D.P+P	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases	6		2	2		6	4			8		4
Actuated Green, G (s)	55.0	48.8	48.8	55.0	35.0	35.0	51.5	35.1		51.5	38.2	58.2
Effective Green, g (s)	55.0	48.8	48.8	55.0	35.0	35.0	51.5	35.1		51.5	38.2	58.2
Actuated g/C Ratio	0.43	0.39	0.39	0.43	0.28	0.28	0.41	0.28		0.41	0.30	0.46
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	4.0
Vehicle Extension (s)	1.5	4.6	4.6	1.5	4.6	4.6	1.5	3.5		1.5	3.5	1.5
Lane Grp Cap (vph)	312	1269	574	373	919	399	227	470		268	518	610
v/s Ratio Prot	c0.18	0.14		0.01	0.24		0.08	0.31		c0.11	c0.36	0.08
v/s Ratio Perm	c0.31		0.03	0.08		0.10	0.24			0.24		0.14
v/c Ratio	1.11	0.36	0.07	0.20	0.87	0.36	0.80	1.13		0.87	1.20	0.48
Uniform Delay, d1	36.4	27.7	24.6	21.3	43.7	36.8	30.2	45.7		34.1	44.1	23.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	83.5	0.3	0.1	0.1	9.9	1.0	17.2	81.3		24.7	109.3	0.2
Delay (s)	119.9	28.0	24.6	21.4	53.5	37.8	47.4	127.0		58.8	153.5	23.8
Level of Service	F	C	C	C	D	D	D	F		E	F	C
Approach Delay (s)		62.7			47.1			106.7			97.2	
Approach LOS		E			D			F			F	

Intersection Summary

HCM 2000 Control Delay	76.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	126.5	Sum of lost time (s)	20.0
Intersection Capacity Utilization	98.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Two Way Analysis cannot be performed on Signalized Intersection.

Year 2038 Traffic Conditions
3: Table Rock Road & Vilas Road

Weekday PM Peak Hour
6/23/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	154	245	44	459	610	174	110	694	449	136	496	259
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	5.4		4.0	5.4		4.0	5.4	5.4	4.0	5.4	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.97		1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1599	1668		1599	1640		1646	3228	1473	1662	3018	
Flt Permitted	0.11	1.00		0.26	1.00		0.15	1.00	1.00	0.17	1.00	
Satd. Flow (perm)	190	1668		444	1640		257	3228	1473	299	3018	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	171	272	49	510	678	193	122	771	499	151	551	288
RTOR Reduction (vph)	0	5	0	0	7	0	0	0	319	0	50	0
Lane Group Flow (vph)	171	316	0	510	864	0	122	771	180	151	789	0
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)						1						1
Heavy Vehicles (%)	4%	3%	0%	4%	2%	6%	1%	3%	1%	0%	5%	1%
Turn Type	D.P+P	NA		D.P+P	NA		D.P+P	NA	Perm	D.P+P	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4			8			2		6	6		
Actuated Green, G (s)	47.2	24.3		47.2	35.4		43.0	32.3	32.3	43.0	34.0	
Effective Green, g (s)	47.2	24.3		47.2	35.4		43.0	32.3	32.3	43.0	34.0	
Actuated g/C Ratio	0.43	0.22		0.43	0.32		0.39	0.30	0.30	0.39	0.31	
Clearance Time (s)	4.0	5.4		4.0	5.4		4.0	5.4	5.4	4.0	5.4	
Vehicle Extension (s)	1.5	1.5		1.5	5.1		1.5	4.5	4.5	1.5	4.5	
Lane Grp Cap (vph)	234	371		434	532		216	956	436	251	941	
v/s Ratio Prot	0.08	0.19		0.25	c0.53		0.05	0.24		c0.06	c0.26	
v/s Ratio Perm	0.24			c0.26			0.18		0.12	0.18		
v/c Ratio	0.73	0.85		1.18	1.62		0.56	0.81	0.41	0.60	0.84	
Uniform Delay, d1	24.7	40.6		36.0	36.8		39.3	35.5	30.8	38.0	34.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.7	16.2		100.6	289.0		2.0	5.6	1.1	2.8	7.2	
Delay (s)	34.3	56.8		136.6	325.8		41.4	41.1	31.9	40.8	42.2	
Level of Service	C	E		F	F		D	D	C	D	D	
Approach Delay (s)		49.0			255.9			37.8			42.0	
Approach LOS		D			F			D			D	

Intersection Summary

HCM 2000 Control Delay	110.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	109.0	Sum of lost time (s)	18.8
Intersection Capacity Utilization	101.8%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Two Way Analysis cannot be performed on Signalized Intersection.

Year 2038 Traffic Conditions
4: Table Rock Road & W Antelope Road

Weekday PM Peak Hour
6/23/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	19	8	271	62	154	24	174	412	176	189	1
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		5.4	5.4	4.0	5.4	5.4	4.0	5.4		4.0	5.4	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	0.89		1.00	1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1636	1444	1583	1620	1403	1498	1515		1539	1732	
Flt Permitted		1.00	1.00	0.74	1.00	1.00	0.60	1.00		0.09	1.00	
Satd. Flow (perm)		1636	1444	1237	1620	1403	940	1515		153	1732	
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	0	23	10	330	76	188	29	212	502	215	230	1
RTOR Reduction (vph)	0	0	7	0	0	174	0	44	0	0	0	0
Lane Group Flow (vph)	0	23	3	330	76	14	29	670	0	215	231	0
Heavy Vehicles (%)	0%	7%	3%	5%	8%	6%	11%	4%	3%	8%	1%	0%
Turn Type	D.P+P	NA	custom	D.P+P	NA	custom	D.P+P	NA		D.P+P	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		7.4	30.1	26.1	30.1	7.4	57.7	42.4		57.7	54.7	
Effective Green, g (s)		7.4	30.1	26.1	30.1	7.4	57.7	42.4		57.7	54.7	
Actuated g/C Ratio		0.07	0.29	0.25	0.29	0.07	0.56	0.41		0.56	0.53	
Clearance Time (s)		5.4	5.4	4.0	5.4	5.4	4.0	5.4		4.0	5.4	
Vehicle Extension (s)		2.5	2.5	1.5	2.5	2.5	1.5	4.8		1.5	4.8	
Lane Grp Cap (vph)		117	423	377	475	101	544	626		292	923	
v/s Ratio Prot		0.01		c0.16	0.05		0.00	c0.44		c0.11	0.13	
v/s Ratio Perm			0.00	c0.06		0.01	0.03			0.30		
v/c Ratio		0.20	0.01	0.88	0.16	0.13	0.05	1.07		0.74	0.25	
Uniform Delay, d1		44.8	25.7	35.4	26.9	44.6	10.0	30.1		25.3	12.9	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.6	0.0	19.1	0.1	0.4	0.0	56.2		8.1	0.3	
Delay (s)		45.4	25.7	54.5	27.0	45.0	10.0	86.3		33.4	13.2	
Level of Service		D	C	D	C	D	B	F		C	B	
Approach Delay (s)		39.4			48.0			83.4			22.9	
Approach LOS		D			D			F			C	

Intersection Summary

HCM 2000 Control Delay	56.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	102.6	Sum of lost time (s)	18.8
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Two Way Analysis cannot be performed on Signalized Intersection.

Intersection

Int Delay, s/veh 3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	56	93	192	939	628	77
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	3	3	0
Mvmt Flow	62	103	213	1043	698	86

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1689	392	783
Stage 1	741	-	-
Stage 2	948	-	-
Critical Hdwy	6.8	6.9	4.1
Critical Hdwy Stg 1	5.8	-	-
Critical Hdwy Stg 2	5.8	-	-
Follow-up Hdwy	3.5	3.3	2.2
Pot Cap-1 Maneuver	86	613	844
Stage 1	437	-	-
Stage 2	342	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	64	613	844
Mov Cap-2 Maneuver	174	-	-
Stage 1	437	-	-
Stage 2	256	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.4	1.8	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	844	-	315	-	-
HCM Lane V/C Ratio	0.253	-	0.526	-	-
HCM Control Delay (s)	10.7	-	28.4	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	1	-	2.9	-	-

Intersection

Int Delay, s/veh 77.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	4	5	29	150	9	3	26	664	189
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	3	0	0	5	6	0
Mvmt Flow	5	6	34	176	11	4	31	781	222

Major/Minor

	Minor2			Minor1			Major1		
Conflicting Flow All	1528	1632	565	1541	1523	892	567	0	0
Stage 1	567	567	-	954	954	-	-	-	-
Stage 2	961	1065	-	587	569	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.13	6.5	6.2	4.15	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.13	5.5	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.13	5.5	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.527	4	3.3	2.245	-	-
Pot Cap-1 Maneuver	97	102	528	~ 93	119	344	990	-	-
Stage 1	512	510	-	310	340	-	-	-	-
Stage 2	311	302	-	494	509	-	-	-	-
Platoon blocked, %									
Mov Cap-1 Maneuver	84	94	528	~ 78	110	344	990	-	-
Mov Cap-2 Maneuver	84	94	-	~ 78	110	-	-	-	-
Stage 1	474	509	-	287	315	-	-	-	-
Stage 2	275	279	-	456	508	-	-	-	-

Approach

	EB	WB	NB
HCM Control Delay, s	23	\$ 741.8	0.3
HCM LOS	C	F	

Minor Lane/Major Mvmt

	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	990	-	-	244	80	698	-	-
HCM Lane V/C Ratio	0.031	-	-	0.183	2.382	0.002	-	-
HCM Control Delay (s)	8.8	0	-	23	\$ 741.8	10.2	0	-
HCM Lane LOS	A	A	-	C	F	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	17.8	0	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	1	478	4
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	85	85	85
Heavy Vehicles, %	0	3	0
Mvmt Flow	1	562	5

Major/Minor Major2

Conflicting Flow All	1004	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	698	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	698	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach SB

HCM Control Delay, s	0
HCM LOS	

Minor Lane/Major Mvmt

Intersection

Int Delay, s/veh 11.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	158	548	4	1	265	1	89	1	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	450	-	375	470	-	380	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0
Mvmt Flow	170	589	4	1	285	1	96	1	6

Major/Minor

	Major1	Major2	Minor1
Conflicting Flow All	285	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	1289	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1289	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach

	EB	WB	NB
HCM Control Delay, s	1.8	0	115.8
HCM LOS			F

Minor Lane/Major Mvmt

	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	120	1289	-	-	996	-	-	429
HCM Lane V/C Ratio	0.86	0.132	-	-	0.001	-	-	0.246
HCM Control Delay (s)	115.8	8.2	-	-	8.6	-	-	16.1
HCM Lane LOS	F	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	5.3	0.5	-	-	0	-	-	1

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	11	7	80
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	93	93	93
Heavy Vehicles, %	0	0	0
Mvmt Flow	12	8	86

Major/Minor **Minor2**

Conflicting Flow All	1220	1216	285
Stage 1	287	287	-
Stage 2	933	929	-
Critical Hdwy	7.1	6.5	6.2
Critical Hdwy Stg 1	6.1	5.5	-
Critical Hdwy Stg 2	6.1	5.5	-
Follow-up Hdwy	3.5	4	3.3
Pot Cap-1 Maneuver	158	183	759
Stage 1	725	678	-
Stage 2	322	349	-
Platoon blocked, %			
Mov Cap-1 Maneuver	139	159	759
Mov Cap-2 Maneuver	139	159	-
Stage 1	629	677	-
Stage 2	275	303	-

Approach **SB**

HCM Control Delay, s	16.1
HCM LOS	C

Minor Lane/Major Mvmt

Year 2038 Traffic Conditions
8: OR62 & OR140

Weekday PM Peak Hour
6/23/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↕	↗	↗	↕↗	
Volume (vph)	99	155	178	261	142	145	272	1516	288	108	1202	75
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frbp, ped/bikes		1.00	1.00		1.00	0.99	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.98	1.00		0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1646	1473		1577	1424	1630	3292	1385	1614	3260	
Flt Permitted		0.32	1.00		0.50	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		535	1473		812	1424	1630	3292	1385	1614	3260	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	109	170	196	287	156	159	299	1666	316	119	1321	82
RTOR Reduction (vph)	0	0	133	0	0	108	0	0	49	0	4	0
Lane Group Flow (vph)	0	279	63	0	443	51	299	1666	267	119	1399	0
Confl. Peds. (#/hr)	2					2	2					2
Confl. Bikes (#/hr)									3			2
Heavy Vehicles (%)	0%	7%	1%	5%	12%	3%	2%	1%	5%	3%	1%	0%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4			6			
Actuated Green, G (s)		37.0	37.0		37.0	37.0	14.0	48.9	48.9	12.1	47.0	
Effective Green, g (s)		37.0	37.0		37.0	37.0	14.0	48.9	48.9	12.1	47.0	
Actuated g/C Ratio		0.32	0.32		0.32	0.32	0.12	0.42	0.42	0.10	0.41	
Clearance Time (s)		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)		2.5	2.5		3.0	3.0	5.0	4.7	4.7	2.5	4.7	
Lane Grp Cap (vph)		170	469		259	454	196	1387	583	168	1320	
v/s Ratio Prot							c0.18	c0.51		0.07	0.43	
v/s Ratio Perm		0.52	0.04		c0.55	0.04			0.19			
v/c Ratio		1.64	0.13		1.71	0.11	1.53	1.20	0.46	0.71	1.06	
Uniform Delay, d1		39.5	28.1		39.5	27.9	51.0	33.5	24.0	50.2	34.5	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		313.5	0.1		335.6	0.1	260.7	97.7	2.6	11.9	42.3	
Delay (s)		353.0	28.2		375.1	28.0	311.7	131.2	26.6	62.2	76.8	
Level of Service		F	C		F	C	F	F	C	E	E	
Approach Delay (s)		219.0			283.4			140.4			75.6	
Approach LOS		F			F			F			E	

Intersection Summary

HCM 2000 Control Delay	145.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.46		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	113.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Two Way Analysis cannot be performed on Signalized Intersection.

Intersection

Int Delay, s/veh 33

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	103	0	85	0	1	0	115	540	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	4	0	2	0	0	0	1	1	0
Mvmt Flow	124	0	102	0	1	0	139	651	0

Major/Minor

	Minor2		Minor1		Major1				
Conflicting Flow All	1352	1352	422	1403	1352	651	422	0	0
Stage 1	424	424	-	928	928	-	-	-	-
Stage 2	928	928	-	475	424	-	-	-	-
Critical Hdwy	7.14	6.5	6.22	7.1	6.5	6.2	4.11	-	-
Critical Hdwy Stg 1	6.14	5.5	-	6.1	5.5	-	-	-	-
Critical Hdwy Stg 2	6.14	5.5	-	6.1	5.5	-	-	-	-
Follow-up Hdwy	3.536	4	3.318	3.5	4	3.3	2.209	-	-
Pot Cap-1 Maneuver	126	151	632	118	151	472	1143	-	-
Stage 1	604	590	-	324	349	-	-	-	-
Stage 2	319	349	-	574	590	-	-	-	-
Platoon blocked, %									
Mov Cap-1 Maneuver	~ 113	133	632	90	133	472	1143	-	-
Mov Cap-2 Maneuver	~ 113	133	-	90	133	-	-	-	-
Stage 1	531	589	-	285	307	-	-	-	-
Stage 2	279	307	-	481	589	-	-	-	-

Approach

	EB	WB	NB
HCM Control Delay, s	204.4	32.3	1.5
HCM LOS	F	D	

Minor Lane/Major Mvmt

	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	1143	-	-	180	133	945	-
HCM Lane V/C Ratio	0.121	-	-	1.258	0.009	0.001	-
HCM Control Delay (s)	8.6	-	-	204.4	32.3	8.8	0
HCM Lane LOS	A	-	-	F	D	A	A
HCM 95th %tile Q(veh)	0.4	-	-	12.6	0	0	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	1	350	91
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	Free
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	83	83	83
Heavy Vehicles, %	0	2	5
Mvmt Flow	1	422	110

Major/Minor Major2

Conflicting Flow All	651	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	945	-	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %		-	
Mov Cap-1 Maneuver	945	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach SB

HCM Control Delay, s 0
 HCM LOS

Minor Lane/Major Mvmt

Intersection

Int Delay, s/veh 3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	48	9	53	25	1	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	150	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	8	0	0	14
Mvmt Flow	56	10	62	29	1	47
























Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	111	62	0
Stage 1	62	-	-
Stage 2	49	-	-
Critical Hdwy	6.4	6.2	4.1
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	2.2
Pot Cap-1 Maneuver	891	1009	1554
Stage 1	966	-	-
Stage 2	979	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	890	1009	1554
Mov Cap-2 Maneuver	890	-	-
Stage 1	966	-	-
Stage 2	978	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	890	1009	1554	-
HCM Lane V/C Ratio	-	-	0.063	0.01	0.001	-
HCM Control Delay (s)	-	-	9.3	8.6	7.3	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	0	-

Year 2038 Traffic Conditions
11: OR62 & Vilas Road

Weekday PM Peak Hour
6/23/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	118	323	550	230	252	10	546	718	329	58	706	133
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.5	6.0	4.5	4.5	6.0		4.5	6.0	6.0	4.5	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1599	1733	1473	1662	1707		1662	3292	1400	1662	3292	1394
Flt Permitted	0.39	1.00	1.00	0.22	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	662	1733	1473	378	1707		1662	3292	1400	1662	3292	1394
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	124	340	579	242	265	11	575	756	346	61	743	140
RTOR Reduction (vph)	0	0	55	0	1	0	0	0	91	0	0	86
Lane Group Flow (vph)	124	340	524	242	275	0	575	756	255	61	743	54
Confl. Bikes (#/hr)									1			4
Heavy Vehicles (%)	4%	1%	1%	0%	2%	0%	0%	1%	4%	0%	1%	4%
Turn Type	D.P+P	NA	pm+ov	D.P+P	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases	8		4	4					2			6
Actuated Green, G (s)	46.8	29.5	55.9	46.8	35.1		26.4	56.5	56.5	8.4	38.5	38.5
Effective Green, g (s)	46.8	29.5	55.9	46.8	35.1		26.4	56.5	56.5	8.4	38.5	38.5
Actuated g/C Ratio	0.35	0.22	0.42	0.35	0.26		0.20	0.43	0.43	0.06	0.29	0.29
Clearance Time (s)	4.5	6.0	4.5	4.5	6.0		4.5	6.0	6.0	4.5	6.0	6.0
Vehicle Extension (s)	2.5	2.5	2.5	2.5	2.5		2.5	4.6	4.6	2.5	4.6	4.6
Lane Grp Cap (vph)	316	385	620	300	451		330	1401	596	105	955	404
v/s Ratio Prot	0.03	c0.20	0.17	c0.10	0.16		c0.35	0.23		0.04	c0.23	
v/s Ratio Perm	0.10		0.19	0.18					0.18			0.04
v/c Ratio	0.39	0.88	0.85	0.81	0.61		1.74	0.54	0.43	0.58	0.78	0.13
Uniform Delay, d1	30.7	49.9	34.5	34.2	42.8		53.1	28.4	26.8	60.4	43.2	34.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	20.5	10.1	14.2	2.1		346.4	0.6	0.9	6.6	4.6	0.3
Delay (s)	31.3	70.4	44.6	48.4	44.9		399.6	29.1	27.7	67.1	47.8	35.1
Level of Service	C	E	D	D	D		F	C	C	E	D	D
Approach Delay (s)		51.4			46.5			155.8			47.1	
Approach LOS		D			D			F			D	
Intersection Summary												
HCM 2000 Control Delay			91.7			HCM 2000 Level of Service			F			
HCM 2000 Volume to Capacity ratio			1.04									
Actuated Cycle Length (s)			132.7			Sum of lost time (s)			21.0			
Intersection Capacity Utilization			103.8%			ICU Level of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

Two Way Analysis cannot be performed on Signalized Intersection.

Intersection

Int Delay, s/veh 2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	4	3	3	21	18	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	4	3	3	23	20	34

Major/Minor

	Minor1		Minor2		Major2	
Conflicting Flow All	86	0	73	34	0	0
Stage 1	0	-	73	-	-	-
Stage 2	86	-	0	-	-	-
Critical Hdwy	6.4	-	6.5	6.2	-	-
Critical Hdwy Stg 1	-	-	5.5	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	-	4	3.3	-	-
Pot Cap-1 Maneuver	920	-	821	1045	-	-
Stage 1	-	-	838	-	-	-
Stage 2	942	-	-	-	-	-
Platoon blocked, %						-
Mov Cap-1 Maneuver	920	-	0	1045	-	-
Mov Cap-2 Maneuver	920	-	0	-	-	-
Stage 1	-	-	0	-	-	-
Stage 2	942	-	0	-	-	-

Approach

	WB		NB		SB
HCM Control Delay, s			8.5		0
HCM LOS	-		A		

Minor Lane/Major Mvmt

	NBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	1045	-	-	-
HCM Lane V/C Ratio	0.025	-	-	-
HCM Control Delay (s)	8.5	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection

Int Delay, s/veh 5.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	31	8	3	11	7	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	0	17	0	0	0	0
Mvmt Flow	46	12	4	16	10	6

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	21	0	116
Stage 1	-	-	13
Stage 2	-	-	103
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	1608	-	885
Stage 1	-	-	1015
Stage 2	-	-	926
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1608	-	859
Mov Cap-2 Maneuver	-	-	859
Stage 1	-	-	1015
Stage 2	-	-	899

Approach	EB	WB	SB
HCM Control Delay, s	5.8	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1608	-	-	-	926
HCM Lane V/C Ratio	0.028	-	-	-	0.017
HCM Control Delay (s)	7.3	0	-	-	9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection

Int Delay, s/veh 2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	67	233	253	26	25	37
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	None
Storage Length	60	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	82	284	309	32	30	45

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	309	0	757
Stage 1	-	-	309
Stage 2	-	-	448
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	1263	0	378
Stage 1	-	0	749
Stage 2	-	0	648
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1262	-	353
Mov Cap-2 Maneuver	-	-	353
Stage 1	-	-	749
Stage 2	-	-	606

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	13.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	SBLn1
Capacity (veh/h)	1262	-	-	511
HCM Lane V/C Ratio	0.065	-	-	0.148
HCM Control Delay (s)	8.1	-	-	13.3
HCM Lane LOS	A	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	0.5

Intersection									
Int Delay, s/veh	1.3								

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	3	0	22	3	3	2	81	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	8	0	0	0	6	0
Mvmt Flow	0	3	0	25	3	3	2	92	38

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	282	297	152	280	282	111	156	0	0
Stage 1	163	163	-	115	115	-	-	-	-
Stage 2	119	134	-	165	167	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.18	6.5	6.2	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.18	5.5	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.18	5.5	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.572	4	3.3	2.2	-	-
Pot Cap-1 Maneuver	674	618	900	660	630	948	1436	-	-
Stage 1	844	767	-	875	804	-	-	-	-
Stage 2	890	789	-	823	764	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	666	614	900	654	626	948	1436	-	-
Mov Cap-2 Maneuver	666	614	-	654	626	-	-	-	-
Stage 1	842	764	-	873	802	-	-	-	-
Stage 2	881	787	-	816	761	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	10.9	10.6	0.1
HCM LOS	B	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1436	-	-	614	673	1468	-	-
HCM Lane V/C Ratio	0.002	-	-	0.006	0.047	0.004	-	-
HCM Control Delay (s)	7.5	0	-	10.9	10.6	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	5	130	7
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	88	88	88
Heavy Vehicles, %	0	5	0
Mvmt Flow	6	148	8

Major/Minor Major2

Conflicting Flow All	130	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	1468	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1468	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach SB

HCM Control Delay, s	0.3
HCM LOS	

Minor Lane/Major Mvmt

Intersection

Int Delay, s/veh 1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	60	24	624	124	18	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	170	180	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	0	1	0	0	0
Mvmt Flow	68	27	709	141	20	0

Major/Minor

	Minor1		Major1		Major2	
Conflicting Flow All	750	709	0	0	709	0
Stage 1	709	-	-	-	-	-
Stage 2	41	-	-	-	-	-
Critical Hdwy	6.42	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	379	438	-	-	899	-
Stage 1	488	-	-	-	-	-
Stage 2	981	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	371	438	-	-	899	-
Mov Cap-2 Maneuver	428	-	-	-	-	-
Stage 1	488	-	-	-	-	-
Stage 2	959	-	-	-	-	-

Approach

	WB		NB		SB
HCM Control Delay, s	15.7		0		9.1
HCM LOS	C				

Minor Lane/Major Mvmt

	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	431	899	-
HCM Lane V/C Ratio	-	-	0.221	0.023	-
HCM Control Delay (s)	-	-	15.7	9.1	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.8	0.1	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	18	3	2	39	71	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	0	0	6	0	0	0
Mvmt Flow	23	4	3	50	91	62

Major/Minor	Minor2	Major1		Major2
Conflicting Flow All	177	122	153	0
Stage 1	122	-	-	-
Stage 2	55	-	-	-
Critical Hdwy	6.4	6.2	4.16	-
Critical Hdwy Stg 1	5.4	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-
Follow-up Hdwy	3.5	3.3	2.254	-
Pot Cap-1 Maneuver	817	935	1403	-
Stage 1	908	-	-	-
Stage 2	973	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	815	935	1403	-
Mov Cap-2 Maneuver	815	-	-	-
Stage 1	908	-	-	-
Stage 2	971	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1403	-	830	-	-
HCM Lane V/C Ratio	0.002	-	0.032	-	-
HCM Control Delay (s)	7.6	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection

Int Delay, s/veh 2.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	40	16	31	73	85	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	2	0	1
Mvmt Flow	43	17	33	78	90	59

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	264	120	149
Stage 1	120	-	-
Stage 2	144	-	-
Critical Hdwy	6.4	6.2	4.1
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	2.2
Pot Cap-1 Maneuver	729	937	1445
Stage 1	910	-	-
Stage 2	888	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	712	937	1445
Mov Cap-2 Maneuver	712	-	-
Stage 1	910	-	-
Stage 2	867	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	2.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1445	-	764	-	-
HCM Lane V/C Ratio	0.023	-	0.078	-	-
HCM Control Delay (s)	7.5	0	10.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Int Delay, s/veh	7.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	11	14	157	19	14	119
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	1	0	0	0
Mvmt Flow	12	15	169	20	15	128

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	12	370
Stage 1	-	-	12
Stage 2	-	-	358
Critical Hdwy	-	4.11	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.209	3.5
Pot Cap-1 Maneuver	-	1613	634
Stage 1	-	-	1016
Stage 2	-	-	712
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1613	568
Mov Cap-2 Maneuver	-	-	568
Stage 1	-	-	1016
Stage 2	-	-	637

Approach	EB	WB	NB
HCM Control Delay, s	0	6.7	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	982	-	1613	-
HCM Lane V/C Ratio	0.146	-	0.105	-
HCM Control Delay (s)	9.3	-	7.5	-
HCM Lane LOS	A	-	A	-
HCM 95th %tile Q(veh)	0.5	-	0.4	-

Year 2038 Traffic Conditions
20: N Phoenix Road/Foothill Road & Hillcrest Road

Weekday PM Peak Hour
6/23/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	217	245	228	61	122	37	268	812	16	47	607	114
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.96		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1646	1613		1662	1688		1646	3315		1662	3219	
Flt Permitted	0.47	1.00		0.18	1.00		0.13	1.00		0.25	1.00	
Satd. Flow (perm)	820	1613		311	1688		230	3315		442	3219	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	238	269	251	67	134	41	295	892	18	52	667	125
RTOR Reduction (vph)	0	29	0	0	11	0	0	1	0	0	14	0
Lane Group Flow (vph)	238	491	0	67	164	0	295	909	0	52	778	0
Confl. Bikes (#/hr)			2									
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	39.7	30.3		28.9	22.5		47.7	39.0		33.7	28.0	
Effective Green, g (s)	39.7	30.3		28.9	22.5		47.7	39.0		33.7	28.0	
Actuated g/C Ratio	0.42	0.32		0.30	0.24		0.50	0.41		0.35	0.29	
Clearance Time (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	464	512		184	398		362	1355		229	944	
v/s Ratio Prot	c0.08	c0.30		0.02	0.10		c0.14	0.27		0.01	0.24	
v/s Ratio Perm	0.14			0.09			c0.26			0.07		
v/c Ratio	0.51	0.96		0.36	0.41		0.81	0.67		0.23	0.82	
Uniform Delay, d1	19.3	31.9		25.4	30.9		22.3	23.0		20.8	31.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	29.1		1.2	0.7		13.2	1.3		0.5	5.9	
Delay (s)	20.3	61.1		26.6	31.6		35.5	24.3		21.3	37.3	
Level of Service	C	E		C	C		D	C		C	D	
Approach Delay (s)		48.3			30.2			27.0			36.3	
Approach LOS		D			C			C			D	

Intersection Summary

HCM 2000 Control Delay	35.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	95.4	Sum of lost time (s)	14.0
Intersection Capacity Utilization	85.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Two Way Analysis cannot be performed on Signalized Intersection.

Intersection	
Int Delay, s/veh	54.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	118	8	144	891	596	148
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Free
Storage Length	0	-	185	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	15	20	0	1	1	0
Mvmt Flow	128	9	157	968	648	161

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1930	648	0
Stage 1	648	-	-
Stage 2	1282	-	-
Critical Hdwy	6.55	6.4	4.1
Critical Hdwy Stg 1	5.55	-	-
Critical Hdwy Stg 2	5.55	-	-
Follow-up Hdwy	3.635	3.48	2.2
Pot Cap-1 Maneuver	~ 67	440	947
Stage 1	497	-	-
Stage 2	245	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	~ 56	440	947
Mov Cap-2 Maneuver	~ 56	-	-
Stage 1	497	-	-
Stage 2	204	-	-

Approach	EB	NB	SB
HCM Control Delay, s	\$ 753.3	1.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT
Capacity (veh/h)	947	-	59	-
HCM Lane V/C Ratio	0.165	-	2.321	-
HCM Control Delay (s)	9.6	-	\$ 753.3	-
HCM Lane LOS	A	-	F	-
HCM 95th %tile Q(veh)	0.6	-	13.5	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 53.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	81	324	38	958	471	141
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Free
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	1	1	1
Mvmt Flow	88	352	41	1041	512	153

Major/Minor	Minor2	Major1		Major2
Conflicting Flow All	1636	512	512	0
Stage 1	512	-	-	-
Stage 2	1124	-	-	-
Critical Hdwy	6.4	6.2	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-
Pot Cap-1 Maneuver	112	566	1064	-
Stage 1	606	-	-	-
Stage 2	313	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	108	566	1064	-
Mov Cap-2 Maneuver	108	-	-	-
Stage 1	606	-	-	-
Stage 2	301	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	247.2	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT
Capacity (veh/h)	1064	-	306	-
HCM Lane V/C Ratio	0.039	-	1.439	-
HCM Control Delay (s)	8.5	-	247.2	-
HCM Lane LOS	A	-	F	-
HCM 95th %tile Q(veh)	0.1	-	23.7	-

Intersection

Int Delay, s/veh 20.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	42	0	92	2	0	1	58	991	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0
Mvmt Flow	46	0	100	2	0	1	63	1077	4

Major/Minor

	Minor2			Minor1			Major1		
Conflicting Flow All	1966	1968	760	2015	1994	1079	789	0	0
Stage 1	760	760	-	1205	1205	-	-	-	-
Stage 2	1206	1208	-	810	789	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-
Pot Cap-1 Maneuver	48	63	409	44	61	268	840	-	-
Stage 1	401	417	-	227	259	-	-	-	-
Stage 2	226	258	-	377	405	-	-	-	-
Platoon blocked, %									
Mov Cap-1 Maneuver	~ 41	51	409	28	50	268	840	-	-
Mov Cap-2 Maneuver	~ 41	51	-	28	50	-	-	-	-
Stage 1	326	417	-	184	210	-	-	-	-
Stage 2	183	209	-	285	405	-	-	-	-

Approach

	EB	WB	NB
HCM Control Delay, s	284.9	102.8	0.5
HCM LOS	F	F	

Minor Lane/Major Mvmt

	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	840	-	-	107	40	652	-	-
HCM Lane V/C Ratio	0.075	-	-	1.361	0.082	-	-	-
HCM Control Delay (s)	9.6	0	-	284.9	102.8	0	-	-
HCM Lane LOS	A	A	-	F	F	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	10.2	0.3	0	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	673	53
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	0	1	0
Mvmt Flow	0	732	58

Major/Minor Major2

Conflicting Flow All	1082	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	652	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	652	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach SB

HCM Control Delay, s 0
 HCM LOS

Minor Lane/Major Mvmt

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	26	95	62	541	419	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	9	3	0	1	0	0
Mvmt Flow	28	102	67	582	451	26

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1178	463	476
Stage 1	463	-	-
Stage 2	715	-	-
Critical Hdwy	6.49	6.23	4.1
Critical Hdwy Stg 1	5.49	-	-
Critical Hdwy Stg 2	5.49	-	-
Follow-up Hdwy	3.581	3.327	2.2
Pot Cap-1 Maneuver	204	597	1097
Stage 1	619	-	-
Stage 2	472	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	186	597	1097
Mov Cap-2 Maneuver	186	-	-
Stage 1	619	-	-
Stage 2	430	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18	0.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1097	-	405	-	-
HCM Lane V/C Ratio	0.061	-	0.321	-	-
HCM Control Delay (s)	8.5	0	18	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.2	-	1.4	-	-

Intersection												
Intersection Delay, s/veh	13.9											
Intersection LOS	B											
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	22	93	63	0	56	230	16	0	100	111	69
Peak Hour Factor	1.00	0.94	0.94	0.94	1.00	0.94	0.94	0.94	1.00	0.94	0.94	0.94
Heavy Vehicles, %	2	0	0	0	2	0	0	0	2	0	2	2
Mvmt Flow	0	23	99	67	0	60	245	17	0	106	118	73
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	11.9	15.4	14.3
HCM LOS	B	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	36%	12%	19%	8%
Vol Thru, %	40%	52%	76%	64%
Vol Right, %	25%	35%	5%	28%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	280	178	302	241
LT Vol	111	93	230	155
Through Vol	69	63	16	67
RT Vol	100	22	56	19
Lane Flow Rate	298	189	321	256
Geometry Grp	1	1	1	1
Degree of Util (X)	0.481	0.319	0.524	0.422
Departure Headway (Hd)	5.933	6.068	5.989	5.925
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	611	595	607	610
Service Time	3.933	4.083	3.989	3.937
HCM Lane V/C Ratio	0.488	0.318	0.529	0.42
HCM Control Delay	14.3	11.9	15.4	13.2
HCM Lane LOS	B	B	C	B
HCM 95th-tile Q	2.6	1.4	3	2.1

Intersection

Intersection Delay, s/veh
 Intersection LOS

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	19	155	67
Peak Hour Factor	1.00	0.94	0.94	0.94
Heavy Vehicles, %	2	0	3	0
Mvmt Flow	0	20	165	71
Number of Lanes	0	0	1	0

Approach

	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	13.2
HCM LOS	B

Lane

Two Way Analysis cannot be performed on an All Way Stop Intersection.

Intersection

Int Delay, s/veh 2.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	1	27	52	148	68	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	30	57	163	75	4

Major/Minor	Minor2	Major1		Major2
Conflicting Flow All	354	77	79	0
Stage 1	77	-	-	-
Stage 2	277	-	-	-
Critical Hdwy	6.4	6.2	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-
Pot Cap-1 Maneuver	648	990	1532	-
Stage 1	951	-	-	-
Stage 2	774	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	621	990	1532	-
Mov Cap-2 Maneuver	621	-	-	-
Stage 1	951	-	-	-
Stage 2	742	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	1.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1532	-	969	-	-
HCM Lane V/C Ratio	0.037	-	0.032	-	-
HCM Control Delay (s)	7.4	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection												
Intersection Delay, s/veh	14.9											
Intersection LOS	B											
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	5	165	1	0	178	92	85	0	7	4	44
Peak Hour Factor	1.00	0.70	0.70	0.70	1.00	0.70	0.70	0.70	1.00	0.70	0.70	0.70
Heavy Vehicles, %	2	0	0	0	2	0	0	0	2	0	0	0
Mvmt Flow	0	7	236	1	0	254	131	121	0	10	6	63
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	11.4	18.6	9.6
HCM LOS	B	C	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	3%	50%	64%
Vol Thru, %	7%	96%	26%	18%
Vol Right, %	80%	1%	24%	18%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	55	171	355	114
LT Vol	4	165	92	20
Through Vol	44	1	85	21
RT Vol	7	5	178	73
Lane Flow Rate	79	244	507	163
Geometry Grp	1	1	1	1
Degree of Util (X)	0.124	0.362	0.697	0.27
Departure Headway (Hd)	5.692	5.33	4.946	5.959
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	627	674	730	601
Service Time	3.752	3.374	2.981	4.01
HCM Lane V/C Ratio	0.126	0.362	0.695	0.271
HCM Control Delay	9.6	11.4	18.6	11.2
HCM Lane LOS	A	B	C	B
HCM 95th-tile Q	0.4	1.7	5.7	1.1

Intersection

Intersection Delay, s/veh
 Intersection LOS

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	73	20	21
Peak Hour Factor	1.00	0.70	0.70	0.70
Heavy Vehicles, %	2	0	0	0
Mvmt Flow	0	104	29	30
Number of Lanes	0	0	1	0

Approach

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	11.2
HCM LOS	B

Lane

Two Way Analysis cannot be performed on an All Way Stop Intersection.

Intersection

Int Delay, s/veh 5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	112	65	12	1	50	62	6	19	3
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	100	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	4	0	0	0	0
Mvmt Flow	124	72	13	1	56	69	7	21	3

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	124	0	0	86	0	0	445	455	80
Stage 1	-	-	-	-	-	-	328	328	-
Stage 2	-	-	-	-	-	-	117	127	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1475	-	-	1523	-	-	527	504	986
Stage 1	-	-	-	-	-	-	689	651	-
Stage 2	-	-	-	-	-	-	892	795	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1474	-	-	1522	-	-	464	461	985
Mov Cap-2 Maneuver	-	-	-	-	-	-	464	461	-
Stage 1	-	-	-	-	-	-	631	596	-
Stage 2	-	-	-	-	-	-	844	794	-

Approach	EB	WB	NB
HCM Control Delay, s	4.5	0.1	12.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	464	497	1474	-	-	1522	-	-	483	759
HCM Lane V/C Ratio	0.014	0.049	0.084	-	-	0.001	-	-	0.067	0.064
HCM Control Delay (s)	12.9	12.6	7.7	-	-	7.4	-	-	13	10.1
HCM Lane LOS	B	B	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	0	0.2	0.3	-	-	0	-	-	0.2	0.2

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	29	12	32
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	100	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	90	90	90
Heavy Vehicles, %	0	0	0
Mvmt Flow	32	13	36

Major/Minor **Minor2**

Conflicting Flow All	432	426	91
Stage 1	92	92	-
Stage 2	340	334	-
Critical Hdwy	7.1	6.5	6.2
Critical Hdwy Stg 1	6.1	5.5	-
Critical Hdwy Stg 2	6.1	5.5	-
Follow-up Hdwy	3.5	4	3.3
Pot Cap-1 Maneuver	537	524	972
Stage 1	920	823	-
Stage 2	679	647	-
Platoon blocked, %			
Mov Cap-1 Maneuver	483	480	971
Mov Cap-2 Maneuver	483	480	-
Stage 1	843	822	-
Stage 2	597	593	-

Approach **SB**

HCM Control Delay, s	11.3
HCM LOS	B

Minor Lane/Major Mvmt

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	3	38	29	0	0	3
Conflicting Peds, #/hr	6	0	0	6	2	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	44	33	0	0	3

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	35	0	86
Stage 1	-	-	35
Stage 2	-	-	51
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	1589	-	920
Stage 1	-	-	993
Stage 2	-	-	977
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1581	-	915
Mov Cap-2 Maneuver	-	-	915
Stage 1	-	-	991
Stage 2	-	-	973

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1581	-	-	-	1029
HCM Lane V/C Ratio	0.002	-	-	-	0.003
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection

Int Delay, s/veh 2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	287	52	2	312	85	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	165	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	338	61	2	367	100	4

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	338
Stage 1	-	-	338
Stage 2	-	-	372
Critical Hdwy	-	-	4.1
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	-	2.2
Pot Cap-1 Maneuver	-	-	1232
Stage 1	-	-	727
Stage 2	-	-	702
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1232
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	727
Stage 2	-	-	701

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	16.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	408	-	-	1232	-
HCM Lane V/C Ratio	0.254	-	-	0.002	-
HCM Control Delay (s)	16.8	-	-	7.9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1	-	-	0	-

Year 2038 Traffic Conditions
31: Foothill Road & OR140

Weekday PM Peak Hour
6/23/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	115	482	52	102	238	10	272	35	225	11	97	6
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Fr _t	1.00	0.99		1.00	0.99		1.00	0.87		1.00	0.99	
Fl _t Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1662	1724		1662	1739		1662	1523		1662	1735	
Fl _t Permitted	0.59	1.00		0.29	1.00		0.69	1.00		0.56	1.00	
Satd. Flow (perm)	1037	1724		504	1739		1203	1523		976	1735	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	121	507	55	107	251	11	286	37	237	12	102	6
RTOR Reduction (vph)	0	7	0	0	3	0	0	148	0	0	4	0
Lane Group Flow (vph)	121	555	0	107	259	0	286	126	0	12	104	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	19.4	19.4		19.4	19.4		16.4	16.4		16.4	16.4	
Effective Green, g (s)	19.4	19.4		19.4	19.4		16.4	16.4		16.4	16.4	
Actuated g/C Ratio	0.44	0.44		0.44	0.44		0.37	0.37		0.37	0.37	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	459	763		223	770		450	570		365	649	
v/s Ratio Prot		c0.32			0.15			0.08			0.06	
v/s Ratio Perm	0.12			0.21			c0.24			0.01		
v/c Ratio	0.26	0.73		0.48	0.34		0.64	0.22		0.03	0.16	
Uniform Delay, d ₁	7.7	10.0		8.6	8.0		11.2	9.3		8.7	9.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d ₂	0.3	3.5		1.6	0.3		2.9	0.2		0.0	0.1	
Delay (s)	8.0	13.5		10.3	8.2		14.2	9.5		8.7	9.2	
Level of Service	A	B		B	A		B	A		A	A	
Approach Delay (s)		12.5			8.8			11.9			9.2	
Approach LOS		B			A			B			A	

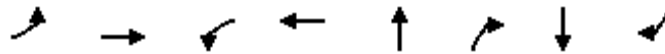
Intersection Summary

HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	43.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Two Way Analysis cannot be performed on Signalized Intersection.

Attachment C Year 2038 Queuing Worksheets



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	579	809	35	1241	126	37	124	704
v/c Ratio	0.96	0.41	0.14	1.31	0.47	0.08	0.44	0.76
Control Delay	60.4	12.9	15.6	183.3	46.0	0.4	44.5	21.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.4	12.9	15.6	183.3	46.0	0.4	44.5	21.8
Queue Length 50th (ft)	387	171	9	~694	87	0	85	350
Queue Length 95th (ft)	#599	217	20	#820	150	0	146	504
Internal Link Dist (ft)		1047		1982	637		835	
Turn Bay Length (ft)	380		305			150		
Base Capacity (vph)	662	1992	297	945	273	442	290	979
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.41	0.12	1.31	0.46	0.08	0.43	0.72

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	346	451	108	76	804	348	182	530	234	624	357
v/c Ratio	1.09	0.35	0.17	0.19	0.89	0.58	0.78	1.12	0.86	1.20	0.48
Control Delay	111.6	29.7	5.9	20.0	57.6	13.1	51.0	120.5	59.5	145.6	15.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	111.6	29.7	5.9	20.0	57.6	13.1	51.0	120.5	59.5	145.6	15.9
Queue Length 50th (ft)	~273	142	0	34	337	42	95	~514	138	~612	117
Queue Length 95th (ft)	#469	197	39	64	#448	138	173	#737	#249	#905	222
Internal Link Dist (ft)		1982			1561			971		1160	
Turn Bay Length (ft)	450		225	75		200	100		100		
Base Capacity (vph)	317	1278	643	507	928	606	315	473	318	521	738
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.35	0.17	0.15	0.87	0.57	0.58	1.12	0.74	1.20	0.48

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Year 2038 Traffic Conditions
 3: Table Rock Road & Vilas Road

Weekday PM Peak Hour
 6/23/2015



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	171	321	510	871	122	771	499	151	839
v/c Ratio	0.72	0.85	1.16	1.62	0.56	0.81	0.66	0.59	0.85
Control Delay	40.4	61.4	129.6	313.5	43.4	43.9	9.7	44.0	42.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.4	61.4	129.6	313.5	43.4	43.9	9.7	44.0	42.4
Queue Length 50th (ft)	68	211	~354	~879	49	250	22	62	260
Queue Length 95th (ft)	154	333	#644	#1324	98	#397	143	117	#453
Internal Link Dist (ft)		685		784		599			621
Turn Bay Length (ft)	85		115		90		215	90	
Base Capacity (vph)	350	544	440	539	388	1044	783	399	1026
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.59	1.16	1.62	0.31	0.74	0.64	0.38	0.82

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	23	10	330	76	188	29	714	215	231
v/c Ratio	0.19	0.02	0.83	0.16	0.68	0.05	1.09	0.72	0.25
Control Delay	50.5	0.1	52.0	26.9	20.2	10.2	92.0	38.2	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.5	0.1	52.0	26.9	20.2	10.2	92.0	38.2	15.7
Queue Length 50th (ft)	14	0	184	36	0	7	~496	86	81
Queue Length 95th (ft)	39	0	256	66	50	21	#757	169	147
Internal Link Dist (ft)	1242			1195			856		973
Turn Bay Length (ft)		150	275			100		270	
Base Capacity (vph)	492	552	823	535	553	683	653	368	937
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.02	0.40	0.14	0.34	0.04	1.09	0.58	0.25

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	279	196	443	159	299	1666	316	119	1403
v/c Ratio	1.64	0.33	1.71	0.28	1.53	1.20	0.50	0.71	1.06
Control Delay	342.4	5.6	363.7	5.8	296.1	129.1	21.2	72.7	76.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	342.4	5.6	363.7	5.8	296.1	129.1	21.2	72.7	76.1
Queue Length 50th (ft)	~301	0	~488	0	~312	~811	125	86	~606
Queue Length 95th (ft)	#473	52	#688	48	#487	#957	215	#152	#746
Internal Link Dist (ft)	812		1016			717			800
Turn Bay Length (ft)					130		60	200	
Base Capacity (vph)	170	603	259	562	196	1388	632	194	1324
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.64	0.33	1.71	0.28	1.53	1.20	0.50	0.61	1.06

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	124	340	579	242	276	575	756	346	61	743	140
v/c Ratio	0.38	0.88	0.78	0.79	0.61	1.73	0.54	0.50	0.50	0.80	0.29
Control Delay	30.2	74.4	34.4	48.0	50.3	372.3	31.9	19.0	76.0	51.3	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.2	74.4	34.4	48.0	50.3	372.3	31.9	19.0	76.0	51.3	10.3
Queue Length 50th (ft)	69	292	366	146	209	~783	277	125	54	328	13
Queue Length 95th (ft)	127	#488	604	#258	346	#1102	367	236	107	408	65
Internal Link Dist (ft)		716			680		616			610	
Turn Bay Length (ft)	150		200	50		250		90	200		90
Base Capacity (vph)	408	454	742	342	485	333	1476	715	204	1217	592
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.75	0.78	0.71	0.57	1.73	0.51	0.48	0.30	0.61	0.24

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

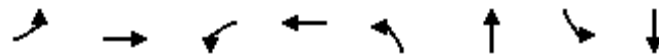


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	238	520	67	175	295	910	52	792
v/c Ratio	0.50	0.95	0.31	0.44	0.80	0.66	0.20	0.84
Control Delay	22.8	59.2	21.6	33.6	39.1	26.5	15.3	40.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.8	59.2	21.6	33.6	39.1	26.5	15.3	40.2
Queue Length 50th (ft)	99	~305	25	87	123	241	16	234
Queue Length 95th (ft)	157	#545	51	155	#273	335	37	318
Internal Link Dist (ft)		782		845		571		507
Turn Bay Length (ft)	175		100		175		150	
Base Capacity (vph)	500	549	375	554	375	1374	436	1051
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.95	0.18	0.32	0.79	0.66	0.12	0.75

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	121	562	107	262	286	274	12	108
v/c Ratio	0.27	0.74	0.49	0.35	0.65	0.39	0.03	0.17
Control Delay	11.1	18.3	19.6	10.5	20.6	4.6	10.7	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.1	18.3	19.6	10.5	20.6	4.6	10.7	10.8
Queue Length 50th (ft)	18	107	18	40	58	6	2	17
Queue Length 95th (ft)	57	261	70	103	146	46	11	48
Internal Link Dist (ft)		520		568		572		528
Turn Bay Length (ft)								
Base Capacity (vph)	687	1145	333	1153	743	1031	603	1075
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.49	0.32	0.23	0.38	0.27	0.02	0.10

Intersection Summary