

2016-2018 STIP Operations Allocation \$ 15,759,450
Proposed Operations Project Amount \$ 15,775,000
% List 100.1%

Project ID	Project Type	Project	Problem Description	Goals & Objectives	Scoping Estimate	Matched w/ Other Fix-it Projects	Matched w/ Enhance Projects	
OPERATIONS 100% LIST								
F-OP2	Full Signal Upgrade	OR213: Burnside	Signal is old and difficult/costly to maintain.	Upgrade signal to meet current standards to improve safety of the traveling public.	\$5,675,000			
F-OP4	Full Signal Upgrade	OR213: NE Wasco St. (Portland)	Signal is old and difficult/costly to maintain. The span is supported by a wood utility pole that can result in possible clearance issues.	Upgrade signal to meet current standards to improve safety of the traveling public.				
F-OP5	Full Signal Upgrade	OR213: SE Flavel (Portland)	Signal is old and difficult/costly to maintain.	Upgrade signal to meet current standards to improve safety of the traveling public.				
F-OP6	Full Signal Upgrade	OR213: SE Foster	Signal is old and difficult/costly to maintain.	Upgrade signal to meet current standards to improve safety of the traveling public.				
F-OP7	Full Signal Upgrade	OR213: SE Mill (Portland)	Signal is old and difficult/costly to maintain.	Upgrade signal to meet current standards to improve safety of the traveling public.				
F-OP8	Full Signal Upgrade	OR213: SE Raymond	Signal is old and difficult/costly to maintain.	Upgrade signal to meet current standards to improve safety of the traveling public.				
F-OP9	Full Signal Upgrade	OR213: SE Woodstock Blvd (Portland)	Signal is old and difficult/costly to maintain.	Upgrade signal to meet current standards to improve safety of the traveling public.				
F-OP10	Full Signal Upgrade	OR213: SE Yamhill (Portland)	Signal is old and difficult/costly to maintain. The poles are leaning causing clearance issues. There are also possible ADA issues.	Upgrade signal to meet current standards to improve safety of the traveling public.				
F-OP12	Full Signal Upgrade	TV Highway @ Cedar Hills Boulevard	Signal is old and difficult/costly to maintain.	Upgrade signal to meet current standards to improve safety of the traveling public.		\$965,000		E86
F-OP29	Misc. Signal/ Beacon Upgrades	OR8: SW Hall Blvd (Beaverton)	Signal heads are no longer standard and difficult and costly to maintain	Improve signal visibility and driver recognition of signal indications.				F-SP7; F-SP12
F-OP30	Misc. Signal/ Beacon Upgrades	OR8: SW Hocken	Signal heads are no longer standard and difficult and costly to maintain	Improve signal visibility and driver recognition of signal indications.			F-SP11; F-SP12	E86
F-OP31	Misc. Signal/ Beacon Upgrades	OR8: SW Watson	Signal heads are no longer standard and difficult and costly to maintain	Improve signal visibility and driver recognition of signal indications.			F-SP7; F-SP12	E86
F-OP32	Illumination	99E: Railroad Pedestrian Tunnel in Ore City	The pedestrian tunnel suffers from obsolete fixtures and poor electrical conditions creating poor visibility.	Install approximately 50 luminaries to reduce maintenance costs and increase electrical safety for maintenance personnel. Project will increase visibility in the tunnel, improving safety for public.	\$2,478,000		E75	
F-OP33	Illumination	I-5: Denver, NB Tunnel	Existing luminaries are non-functional, creating dark conditions in the tunnel. This is creating poor visibility into the tunnel from the outside.	Install 88 luminaries to bring tunnel lighting closer to current standards similar to the tunnels that have been re-done at the I-205/I-84 interchange. Improve visibility and safety.				
F-OP37	Illumination	OR217: Allen and Denny Interchanges	The electrical system is old and showing signs of corrosion, creating potential unsafe conditions for maintenance personnel. Corrosion on poles could hasten pole failure, a danger to the public.	Install 44 poles and fixtures to bring existing lighting system up to current standards, improving visibility and safety to the public. Improve safety to maintenance personnel working on electrical system.			E94	
F-OP39	Other Operations	I-84: Farley Slide (PE Only)	Columbia River is eroding a long standing slide on I-84	Stabilize slide to reduce damage to I-84	\$500,000			
F-OP40	Other Operations	LED Replacement Bucket	Existing LED are at the end of their useful life	Funding will be used to purchase LED's	\$200,000			
F-OP41	Other Operations	OR212 @ N. Fork Deep Creek Culvert	Existing culverts are in poor shape and there have been several occasions when the water has flooded the highway causing it to close. This is a major oversized route for Motor Carrier too.	Replace existing culvert	\$1,000,000	F-PR2		
F-OP42	Other Operations	Loop Replacement Bucket	Existing loops are old and not functioning correctly	Funding will be used to update loops	\$300,000			
F-OP43	Other Operations	Misc. Hardware/Software Bucket	Software and Hardware needed for operating the various electronic devices and improving system management effectiveness	Funding will be provided to update hardware and software used by the region for TMOc operations and other systematic needs	\$500,000			
F-OP44	Other Operations	Operations Quick Hit Reserve	Frequently, unanticipated needs are identified between STIP cycle updates	Funding will be used to fund unanticipated operational needs for the region during the 2016-2018 timeframe	\$350,000			
F-OP45	Other Operations	Region 1 Striping Bucket	Highway striping replacement and upgrades	Funding will be provided to various projects though out the region to update or address striping needs	\$200,000	All Pres		
F-OP46	Other Operations	Rockfall Scaling Project	Various locations region wide continue to have rockfalls onto the highway system, which disrupt or close highway traffic.	Project will provide scaling and rockfall mitigation at various sites region wide.	\$3,607,000			
REGION 1 100% OPERATIONS TOTAL					\$15,775,000			

ODOT REGION 1: Fix-it Project Listing (2016-2018)

2016-2018 STIP Preservation Allocation \$ 26,100,000
 Proposed Preservation Project Amount \$ 26,100,000
 % List 100.0%

Project ID	Project Type	Project	Problem Description	Goals & Objectives	Scoping Estimate	Matched w/ Other Fix-it Projects	Matched w/ Enhance Projects
PRESERVATION - 100% LIST							
F-PR1	Pavement Preservation	OR-211: HWY 213 to Meadowbrook (PE Only)	Road condition is fair to poor. This section of hwy is a very good candidate for 1R treatment to keep it from falling into the 3R category and increasing costs.	Add useful life to the pavement and prevent significant pavement degradation.	\$ 255,000		E18
F-PR2	Pavement Preservation	OR-212: Richey Rd to OR-26	Pavement condition is poor and starting to rapidly deteriorate. This section has cracking, delaminating and pot holes. Maintenance patch has held this section together but will need a 3R treatment. This is a main connector to hwy 26 from I205.	Repair pavement to fair or better condition and improve ADA access, if necessary	\$ 2,666,000	F-SP2	E72
F-PR3	Pavement Preservation	OR-213: Mulino to Blackman's Corner	Pavement condition has started to erode. Showing cracking and pot holes. This pavement is in fair to poor condition. Maintenance patching is needed to keep in the 1R category. This is a good project to assure cost do not significantly increase due to pavement failure.	Bring pavement to fair or better condition,	\$ 2,627,000	F-OP23	E54
F-PR5	Pavement Preservation	OR-99E: SW Berg Parkway to Pudding River	Pavement condition is fair to poor. Bringing this section of roadway to fair or better would ensure that the section does not rapidly deteriorate increasing repair costs. It currently needs maintenance patching as F mix had deteriorated. This is crucial to keep it in the 1R category out to 2018.	Bring pavement to fair or better condition,	\$ 1,866,000		
F-PR6	Pavement Preservation	OR99E: Pine St - SW Berg Pkwy (Canby) Sec. (PE Only)	Road condition is poor. This section is 3R or 4R. Potholes and rough sections. Cracking of pavement sections delaminating.	Bring pavement to fair or better condition.	\$ 300,000		E75
F-PR7	Pavement Preservation	OR-99E: SE Harold St to SE Harrison St	Road condition is fair to poor. Pavement shows cracking and delaminating. This is a 3R section with high traffic. Maintenance paving is currently holding section together and will continue to need further attention.	Bring pavement to fair or better condition.	\$ 7,206,000	F-OP11	E75
F-PR8	Pavement Preservation	US-26: NW Mountindale Rd to NW Glencoe Rd	Road condition shows evidence of rutting. This section of Hwy is in fair condition as of 2010 and is expected to fall to poor out to 2018. It will be very important to pave this section before it drops further down in the ratings. Cost to repair will be significantly higher and fall out of the 1R category to 3R.	Add useful life to the pavement and prevent significant pavement degradation.	\$ 1,566,000		
F-PR9	Pavement Preservation	US-30: NW Bridge Ave to McNamee Rd **	Pavement condition is poor and starting to rapidly deteriorate. This section of hwy has pot hole, cracking and delaminating. Maintenance patching will be needed to hold its current condition. This section will drop rapidly in condition if not paved out to 2018.	Bring pavement condition to fair or better and prevent significant pavement degradation.	\$ 4,691,000		
F-PR10	Pavement Preservation	OR213: Lindy to King	Road condition is fair to poor.	Bring pavement to fair or better condition.	\$ 2,500,000		
F-PR11	Pavement Preservation	Region 1 Pavement Reserve			\$ 2,423,000		
REGION 1 100% PRESERVATION TOTAL					\$26,100,000		

** Cost is actually \$6,491,000 - Agency priority program is providing \$1.8M towards this project

ODOT REGION 1: Fix-it Project Listing (2016)

2016 STIP Safety Allocation \$ 11,740,000
 Proposed Safety Project Amount \$ 11,375,000
 % List 96.9%

Project ID	Project Type	Project	Problem Description	Goals & Objectives	Scoping Estimate	Matched w/ Other Fix-it Projects	Matched w/ Enhance Projects
SAFETY 100% LIST							
F-SP2	Safety	OR212, at location exit and entrance ramp with WB Mt Hood Highway (US26).	Stop control. The access across exit on south side creates conflicts.	Improve intersection signing for OR212 and US26. Striping changes, close westerly access to business on south side.	\$ 260,000	F-PR2	
F-SP6	Safety	OR213: Includes leg from S. Union Mills Rd. S. Union Mills Rd, leg to S. Union Mills Rd.	High percentage turning crashes at all legs of intersection.	Install advance warning beacons, intersection geometric improvements.	\$ 520,000		E54
F-SP7	Safety	OR8: TV Highway and Hall and Watson (signal)	Congested urban 5 lane signalized intersection with heavy bus traffic, business access problems.	Upgrade signal, sign improvements, other intersection improvements	\$ 390,000	F-OP29; F-OP31	E86
F-SP8	Safety	OR8: TV Highway and SE 44th, SE 45th Ave (both unlit)	5 lane unsignalized ped crossing between 44th & 45th, business access issues.	Upgrade ped crossing to modern RRFB; improve visibility and delineation of crossing.	\$ 195,000		E86
F-SP10	Safety	OR8: TV Highway and SW 209th Ave (signal)	5-6 lane urban signalized intersection with a high volume of traffic, and business access problems.	Upgrade signal and intersection improvements	\$ 1,300,000	F-SP12	E86
F-SP12	Safety	OR8: Tualatin Valley Highway (MP1.5-16.67)	Deficient signing, signals and striping at the following 40 potential locations: *Canyon Drive; SW 110th; OR217 Interchange; 115th *117th; Tri-Met Park & Ride/Lombard; Hall Blvd; Watson Ave *Cedar Hills Blvd; Hocken; Murray Blvd; 153rd *160th/Milikan; 170th; 178th; 185th; 198th *209th; Cornelius Pass Rd; 229th Ave/SE 67th Ave *234th/Century Blvd; Brookwood/Witch Hazel *Shopping Ctr Entr/24th; SE21st/Minter Br; SE13th/River Rd *Shopping Ctr Entr./SE11th; Maple; Walnut; 10th/Oak *10th/Baseline; SE5th @ Baseline; SE3rd @ Oak *SE3rd @ Baseline; SE2nd @ Oak; S1st/OR219 @Baseline *S1st/OR219 @Oak; SW Main @ Baseline; N14th Ave @ Baseline *N 10th @ Adair; N 10th @ Baseline	Systematic intersection improvements which could include signing, signals, and striping improvements	\$ 2,600,000	F-OP29; F-OP30; F-OP31	
F-SP13	Safety	OR99E: SE McLoughlin Blvd includes Maple St, SE McLoughlin Way, Oak Grove Blvd (signalized)	High percentage turning and rear end crashes concentrated near Maple St and Oak Grove Blvd. Possible issue with SB far side bus pull out. Issue with NB far side bus pull out creating sight distance issues for vehicles.	Enforcement assisted lights, red extension, Ped/Bike/Transit improvements (2 bus pull outs)	\$ 260,000		E75
F-SP14	Safety	US26: Powell Boulevard includes SE 20th Ave, SE 21st Ave (signalized), SE 23rd Ave	High percentage turning and rear end crashes. 4 ped crashes at SE 21st Ave. Very poor visibility of pedestrians, intersection sight distance restricted, permissive left turns on mainline and side street @ SE 21st Ave, no delineation on side street	Signal upgrade w/left turn phasing @ SE 21st Ave, improve intersection sight distance and pedestrian visibility (tree removal), improve signing on mainline, improved illumination.	\$ 1,300,000	F-SP16	E87
F-SP15	Safety	US26: Powell Boulevard includes SE 38th Ave, SE Cesar Chavez (signalized), SE 40th Ave and SE 42nd Ave/SE 43rd Ave (off set signalized).	High percentage turning, rear end and ped crashes within this segment. Ped crashes concentrated @ SE Cesar Chavez to SE 40th Ave. High ped exposure - busy retail area, several bus stops, etc.	Signal upgrade @ SE Cesar Chavez, improve intersection sight distance and pedestrian visibility (tree removal). Safeway building restricting intersection sight distance on SE corner. Improve signing on mainline, Evaluate safety impacts of drop lane. Improve access related crashes	\$ 1,300,000	F-SP16	E87
F-SP17	Safety	US26: Powell Boulevard includes SE 24th Ave, SE 25th Ave, SE 26th Ave (signalized), SE 28th Ave, SE 28th Pl, SE 29th Ave, SE 31st Ave, SE 32nd Ave, SE 33rd Ave	High percentage rear end and ped crashes. High ped exposure, high school, park, Catholic charities, several bus stops, etc. Very poor visibility of pedestrians, intersection sight distance restricted, permissive left turns on side streets.	Signal upgrade w/left turn phasing @ SE 26th and 33rd Ave's, improve intersection sight distance and pedestrian visibility (tree removal), improve signing on mainline, improved illumination, RRFB installation.	\$ 2,600,000	F-SP16	E87
F-SP19	Safety	US30B: Sandy Blvd includes NE 103rd Ave, NE 104th Ave, NE 105th Ave(signalized), NE 106th Ave, NE 107th Ave.	High percentage turning and rear end crashes concentrated at NE 105 St. EB permissive left turning, WB left turns prohibited, median island with trees obstructs sight distance.	Provide protected lefts and remove median island trees. Evaluate left turn prohibition.	\$ 650,000		
REGION 1 100% SAFETY TOTAL					\$11,375,000		