

SIX-YEAR TRANSPORTATION PROGRAM

Project Descriptions

(2018-2023)

A. Residential Street Preservation Program

Historically, this program has consisted of hot mix asphalt (HMA) overlays on an average of 1.5 miles of residential streets annually. Recently, the city has added chip sealing as another tool for street pavement preservation. To date, two chip seal projects have been performed, covering 2.2 miles of streets. The Residential Street Preservation Program also improves about one substandard street per year, as the need arises.

The City's pavement condition data is an integral part of determining the locations and schedule of future residential street asphalt overlays and chip seal work. Pavement Condition Index (PCI) data was last collected in 2013 and again in 2016. When PCI falls below a score of 70, staff begins to consider a roadway for some form of resurfacing. For roadways with a resurfacing need that also have pending utility work (storm drainage, new water main, etc.), these roadways are typically scheduled for paving in the year following that major utility work. The timing and limits of residential street resurfacing work in future TIP's may change, as determined by updated pavement condition information.

Some of the residential roadways planned for future repaving are listed below. Other roadways may be added or the timing of these streets below may change based on when and where water main, storm drainage construction, franchise utility work, and major housing projects occur.

- In 2018, several roadways east of Island Crest Way in the 4500 block (87th, 89th, and 90th Avenues, SE 45th Street) are planned for resurfacing. On the south end of the Island, SE 78th Street from Island Crest to 84th Avenue will receive a HMA overlay, SE 70th Street from WMW to 84th Avenue will get a chip seal, and 82nd and 83rd Avenues south of SE 70th Street will be repaved. These roadways have PCI's in the Fair to Poor ranges.
- For 2019, the Madrona Crest West neighborhood (SE 36th, SE 37th, and SE 39th Streets, 86th Avenue) and nearby SE 33rd Place and SE 34th Place are planned for repaving. These roadways have PCI ratings of Fair and Poor. In addition, SE 41st Street in Mercerwood will be repaved. Farther south, SE 47th Street, 85th Avenue, and 86th Avenue lying west of Island Crest Way are planned for repaving. PCI's in this area are Fair, Poor, and Very Poor.
- In 2020, the neighborhood plat of Parkwest bounded by 82nd Avenue, 83rd Place, SE 62nd Street and SE 70th Street is planned for repaving along with 93rd Avenue and SE 68th Street near East Mercer Way. All of these roadways have PCI's in the Fair to Poor ranges.
- In 2021, the neighborhood streets comprised of SE 61st Street and 90th, 92nd, 93rd, and 94th Avenues (east of Island Crest Way) and the roadways in Island Point (84th Avenue, SE 80th and SE 82nd Streets) are planned for repaving. Current PCI's of these roads range from Fair to Poor, with a few areas of Very Poor. This work may be a combination of HMA overlays and chip seals.
- No streets have been identified yet for 2022 and 2023 resurfacing work.

B. Town Center Street Improvements

- **Town Center Streets – North [B1]** installs hot mix overlays on several existing streets impacted by commercial development projects. Since 2004, multiple large scale development projects have required significant underground utility work within these roadways. Town Center streets will be resurfaced with HMA through a “grind and overlay” process at their current widths. No widening or revision to lane configurations is planned.

Streets are planned to be resurfaced in 2020 and include 76th Avenue (from SE 24th to SE 27th Streets), SE 27th Street (from 76th to 80th Avenues), and 78th Avenue (from SE 27th to SE 28th Streets) at an estimated cost of \$531,174. Staff has previously deferred this project due to stable PCI values, continued redevelopment projects, and the recent Town Center visioning process.

- **Town Center Streets – South [B2]** involves the repair and resurfacing of several roadways that were not part of the repaving work done during the 1994 and 1996 Town Center Street Improvement projects. These “south” streets, which have not been resurfaced since the mid 1980’s, include 80th Avenue (from SE 28th to SE 32nd Streets), SE 32nd Street (from 78th to 80th Avenues), and SE 29th Street (from 76th to 77th Avenues). The condition of these streets has remained relatively stable over the past decade. Resurfacing work for these streets may be a slurry seal treatment rather than a hot mix overlay. Additional project scope includes repair of existing sidewalks where needed, and upgrade of sidewalk ramps to meet current ADA requirements. This work is also proposed for 2020, at an estimated cost of \$493,132.

C. Arterial Street Improvements

- **Arterial Preservation Program [C1]** work continues annually. The purpose of this program is to extend the life of arterial streets proactively, through the repair and patching of isolated pavement failure areas and crack sealing. Crack sealing extends the life of existing pavements by sealing out water intrusion.
- **SE 40th Street Corridor (Island Crest Way to 88th Avenue) [C2].** This project was originally proposed during the 2014 TIP to improve circulation and safety at the SE 40th Street and 86th Avenue traffic signal. In last year’s TIP, roadway improvements for this area were shown as two separate projects. For this year, Staff has combined the work into one project for economies of scale. The project adds a bike lane from Island Crest Way to 86th Ave SE on the south side of SE 40th. Concrete curbs will be installed and the existing HMA sidewalk will be widened and resurfaced. The project also improves the sidewalk on the north side of SE 40th from 85th Ave SE to 88th Ave SE by adding concrete curbs and widening and resurfacing the sidewalk. Lastly the roadway will be repaved between 86th Ave SE and 88th Ave SE. Design work is planned to begin in 2017 and construction is planned for 2018. The total project cost is \$780,162.
- **Island Crest Way (SE 27th Street to 3100 Block) [C3]** emerged during the 2013 PCI rating project as a resurfacing need. This roadway was constructed by WSDOT between 1988 and 1991 as part of the I-90 Island Crest Way freeway interchange improvement. The asphalt paving is now over 20 years old, is showing fatigue and age cracking, and has a PCI rating of Fair. It was crack sealed in 2011 and 2014 and now needs a HMA overlay. Originally scheduled for 2017, Staff has moved the project to 2018, at a cost of \$390,000.

- **78th Avenue (SE 34th Street to SE 39th Street) [C4].** This roadway received a HMA overlay in 2001; however, the pavement is not performing as well as expected. It has extensive cracking, has been patched and sealed several times, and is at the bottom of the Satisfactory bracket. Staff proposes placing a chip seal on this roadway to extend its pavement life. This new project has been added to 2018 in order to combine it with two other arterial chip seal projects already planned for 2018. The project is estimated to cost \$67,060.
- **SE 53rd Place (Island Crest Way to East Mercer Way) [C5]** is proposed for a chip seal in 2018 at an estimated cost of \$106,375. This roadway, last resurfaced in 1989, is showing pavement distresses and some patching has been performed. Its PCI rating is Fair. This project was previously scoped as a HMA overlay, but staff recommended changing to chip seal in an effort to reduce costs within the TIP. Additionally, PBF improvements previously scoped in conjunction of the overlay project were deleted during the 2014 TIP update.
- **East Mercer Way Resurfacing (4400 block to West Mercer Way) [C6 and C7]** is proposed for 2018, 2019, and 2021. Last repaved in 1992, East Mercer Way is showing pavement fatigue and advanced wear. Patching and crack sealing has been done in recent years and additional patching is planned for 2017. Pavement segments within these limits range from Satisfactory to Fair. The scope of this project includes a chip seal from SE 70th Place to West Mercer Way in 2018 at a cost of \$297,565, a HMA overlay from the 4400 block to SE 53rd Place in 2019 at a cost of \$695,474, and a HMA overlay from SE 53rd Place to SE 70th Place in 2021 at a cost of \$752,200. These projects will also resurface the adjacent paved shoulder areas. Staff changed the southern portion of this area to chip seal to reduce costs within the TIP.
- **SE 40th Street (76th Avenue to 78th Avenue) [C8].** This portion of SE 40th Street would have been rebuilt in 2015 with the other SE 40th Street improvements from 78th Avenue to Island Crest Way; however, staff learned of three new home projects set for construction in 2015 and 2016, so work on this section of SE 40th Street was postponed. This project will rebuild the failing asphalt pavement structure (PCI rating of Poor) as well as replace concrete curbs on one side. The work is planned for 2019 at a budget of \$327,928.
- **North Mercer Way (7450 to 76th Avenue) [C9].** This new project is a “grind and overlay” to restore aging asphalt pavement. This roadway was last paved in 1994 with an overlay by WSDOT. Its PCI rating has dropped between 2013 and 2016, and is currently rated as Fair. This project will also repair existing sidewalks and is planned for 2019 at a cost of \$155,000.
- **SE 68th Street and SE 70th Place (Island Crest Way to East Mercer Way) [C10]** was added to the TIP in 2013 as a HMA resurfacing project. The pavement on SE 68th Street is older than 1985 and SE 70th Place was last resurfaced in 2001. Pavement cracking on SE 70th Place was crack sealed in 2011 and again in 2016. This project has been scheduled for 2020 at a cost of \$525,000. The timing of this project may be changed in future TIP's, depending upon changes in pavement condition. It is currently rated as Satisfactory; however, staff believes its rating will decline in the next several years.
- **North Mercer Way (7450 to Roanoke Way) [C11].** This new project proposes to restore the aging pavement on this portion of North Mercer Way with a chip seal in 2021. The roadway was last repaved in 1994 and although its current PCI rating is Satisfactory, Staff predicts that it will be in Fair condition by 2021. This project's estimated cost is \$133,000.

- **West Mercer Way (SE 72nd St to East Mercer Way) [C12].** This roadway was last repaved in 1995 with a HMA overlay. Its current PCI condition is Satisfactory, but Staff believes that given its age, it will degrade to a condition of Fair in a few more years. A chip seal resurfacing is proposed for 2021 at a cost of \$283,000. At that time, the current pavement will be 26 years old.
- **Gallagher Hill Road [C13]** is proposed for resurfacing with a HMA overlay in 2022. Last repaved in 1988, Gallagher Hill Road's PCI rating is Fair, and staff believes that by 2021, its rating could fall to Poor. The estimated cost of this repaving project is \$532,400. The timing of this project may change based upon future PCI data.
- **SE 36th Street (Gallagher Hill Road to East Mercer Way) [C14].** This new project proposes to resurface SE 36th Street with a HMA overlay in 2023. This roadway was rebuilt in the late 1980's by WSDOT as part of the I-90 freeway improvements. Its current PCI rating is Fair, but is expected to drop in the coming years. This pavement has performed well, but will be 37 years old in 2023, and will be in need of resurfacing. Project elements may also include sidewalk repairs. This project's estimated cost is \$843,300.

D. Pedestrian and Bicycle Facilities – New Facilities

- **PBF Plan Implementation [D1]** is recommended to continue to be funded at \$45,000 per year. Specific projects for this program have not yet been identified or prioritized for construction in 2018-2023. Staff proposes to focus on implementation of signage and pavement markings to support sharing of the road by all users and completion of missing links in sidewalk or trails to fill gaps in the PBF system.
- **ADA Compliance Plan Implementation [D2]** allocates funding to identify, inventory, prioritize, design, and construct spot improvements to pedestrian facilities citywide to meet compliance standards established by the Americans with Disabilities Act (ADA). Staff recommend funding of \$75,000 per biennium starting in 2019.
- **Aubrey Davis Park Regional Multiuse Corridor Plan [D3]** is a joint effort with the Parks & Recreation Department to develop a guiding document for future priorities and site improvements along this regional park trail to meet the needs of the many user groups. The street contribution to this effort in 2018 is \$150,000 which is intended to be used to supplement the planning efforts or for implementation of plan elements.
- **Wayfinding Sign Program Implementation [D4]** allocates \$30,000 for wayfinding improvements. City staff has been working with community stakeholders, including members of the Mercer Island Chamber of Commerce and the Neighbor's in Motion to develop a wayfinding program. This funding will be used to implement wayfinding signage identified in the planning process.
- **East Mercer Way Roadside Shoulders [D5]** have been under construction in phases since 2004. A Roadside Shoulder Development Program was established in 2002 to construct new paved shoulders along the Mercer Ways for pedestrian and bicycle use (constructed independently from roadway improvement projects). Council has continued to approve and fund additional projects along East Mercer Way, which to date total 3.5 miles of paved roadside shoulder (74% of its 4.8 mile length). East Mercer Way Roadside Shoulders Phase 11 will

construct new paved shoulders from Clarke Beach to Avalon Drive in 2022 at a budget of \$465,400.

- **West Mercer Way Roadside Shoulders - Phase 2 [D6]** continues improvements from West Mercer Way Roadside Shoulders (7400-8000 Block), considered as Phase 1, which will be completed in 2017. Phase 2 will add a shoulder on the east side of West Mercer Way from the 7400 block north to SE 70th Street. The estimated cost of this new project is \$351,000 for construction in 2020.
- **Crosswalk Improvement (SE 36th Street and North Mercer Way) [D7]** is proposed for 2019 to construct a pedestrian crossing including a refuge island, channelization, ADA improvements and an RRFB at the intersection to establish a crossing between the residential and commercial on the south side of SE 36th Street and the I-90 trail system on the north side. The estimated cost of this project is \$65,000.
- **Gallagher Hill Road Sidewalk Improvement (SE 36th Street to 40th Street) [D8]** is proposed for 2022 to build concrete curb and gutter and sidewalk along the east side of the roadway. This project is budgeted at \$444,815 and will be constructed in conjunction with the resurfacing of Gallagher Hill Road [C13].

E & F. Other Transportation Projects/Activities

- **Pavement Marking Replacement [E1].** Funding for this annual program was increased slightly beginning in 2015. The progressive shift to painted fog lines (white edge lines) along the Mercer Way shoulders and other Island streets, as well as increased amounts of thermoplastic markings, has increased the quantity of pavement markings needing to be replaced each year. This program's purpose is to maintain existing pavement markings by replacing them as they wear out or become damaged.
- **ROW Tree Maintenance [E2].** Mercer Island has 275 acres of public Right of Way (ROW) – an area comparable to the number of acres of open space on the Island. The ROW makes up about 19% of the Island's total land mass and provides 14% of its tree canopy. This program continues to support a variety of activities, including the evaluation and removal of hazard trees, oversight of PSE's line-clearing work, the removal of invasive plants such as ivy and noxious weeds, the removal and replacement of trees in conjunction with construction projects in the ROW, and the enforcement of elements of the Tree Ordinance such as view pruning requests that impact the ROW.
- **Metro Transit Shuttle Service [F3]** is an ongoing service to co-fund the Metro shuttle connecting the Mercer Island community with downtown Seattle via Seattle's First Hill. Council approved this service and authorized the funding enhancement on April 20, 2015 (AB 5058).
- **Mobile Asset Data Collection [F5]** projects will continue to update and improve the City's pavement condition index database. Staff plans to collect pavement condition data every three years. This pavement data will aid staff in determining which streets are deteriorating most rapidly, which streets are conducive to less expensive preservation techniques such as chip sealing, and which streets are trending towards more costly rehabilitation.

G. Unfunded Projects

- **East Link Mitigation Projects [G1].** The East Link light rail line is scheduled to open for service in 2023. The project is expected to degrade level of service (LOS) at some Mercer Island intersections and impact safety in several roadway corridors and intersections. The expected impacts are the result of traffic associated with East Link, closure of the I-90 center roadway, and restricted access to the Island Crest Way (ICW) westbound onramp to the new R8A high occupancy vehicle (HOV) lane.

The Federal Highway Administration recently informed the City that Mercer Island single occupant vehicles (SOVs) will not be allowed to access the new R8A HOV lanes nor the ICW westbound HOV on-ramp. This prohibition will force Mercer Island SOVs to take alternate routes to access the mainline on-ramps to I-90 at 76th Ave SE, West Mercer Way, and East Mercer Way. The temporary improvements are fully funded by Sound Transit and include:

- 77th Ave SE & NMW - Temporary traffic signal
- 76th Ave SE on-ramp & North Mercer Way intersection - Temporary traffic signal, modification of westbound striping at ramp to create a bus bypass, and modification of trail connection (at the request of the City)
- Island Crest Way between the I-90 on-and off-ramps - Restripe to improve travel times in the morning commute
- 80th Ave SE & Island Crest Way (at SE 27th St and North Mercer Way intersections) – Install four surveillance cameras to communicate information back to WSDOT Traffic Management Center

At the time of the preparation of the TIP, a comprehensive list of mitigation measures had not yet been identified. The City has retained three separate traffic engineering firms to evaluate the loss of the Island Crest Way westbound on-ramp to SOVs and that work is currently underway. A comprehensive list of mitigation measures will be identified in the next TIP.

- **SRTS – Madrona Crest Phase 2 (86th Avenue from SE 36th Street to SE 39th Street) [G2]** is penciled in for 2019 at an estimated cost of \$340,000. Phase 1 was completed in 2016, which included new concrete curb, gutter, and sidewalk on the east side of 86th Avenue between SE 40th Street and SE 39th Street as a ‘safe walk route’ to the new Northwood Elementary School. Phase 2 will continue sidewalk improvements along the east side 86th Avenue to SE 36th Street. Staff will evaluate walking patterns through the neighborhood to determine if this future phase is necessary. WSDOT will be soliciting applications for the Safe Routes to School Program grant funding in early 2018. Staff plans to submit this project for possible funding.
- **SRTS – 92nd Avenue (SE 40th Street to SE 41st Street) [G3]** is penciled in for 2019 at an estimated cost of \$200,000. This project proposes to install concrete curb, gutter, and sidewalk along the west side of 92nd Avenue to provide a ‘safe walk route’ for Northwood Elementary, the High School and a bus stop location for Islander Middle School. This project will complete a missing link on 92nd Avenue and connect with sidewalks the School District constructed in 2015 along the High School frontage from SE 41st to SE 42nd Streets.