

SIX-YEAR TRANSPORTATION PROGRAM

Project Descriptions

(2015-2020)

Residential Street Preservation Program

Historically, this program has consisted of annual hot mix asphalt (HMA) overlays on an average of 1.5 miles of residential streets. 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 update from 2013 is an integral part of determining the locations and schedule of future residential street asphalt overlays and chip seal work for 2015 and beyond. When PCI falls below a score of 70, staff begins to consider a roadway for some form of resurfacing. For roadways that are approaching a resurfacing need but also have pending utility work (storm drainage, new watermain, etc.), these roadways are 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 will be added to these major areas to utilize the full amount of annual residential street funding.

- In 2015, roads to be resurfaced include portions of 66th Ave/70th Ave/71st Ave on First Hill and SE 28th Street in the 8300 block. These portions of roadway have seen stormwater improvements constructed in recent years and their PCI ratings range from "fair" to "poor". The neighborhood of SE 48th/86th Ave/88th Place/88th Ave lying west of Island Crest Way is planned for repaving as well, following watermain construction in 2014. SE 53rd/90th Ave lying east of Island Crest Way is also planned for repaving (PCI ratings of "very poor" and "failed").
- In 2016, 83rd and 85th Avenues lying west and east of Island Crest Way in the 4000 to 4200 blocks are scheduled to be repaved in conjunction with the Island Crest Way Phase 2 resurfacing work (PCI's of "fair" and "poor"). Also 83rd Ave, 89th Ave, and 90th Ave (PCI's of "failed"), all lying south of SE 40th are planned for repaving following watermain construction in 2015.
- In 2017, the neighborhood streets between SE 45th and SE 48th Streets, east of 88th Avenue, are planned for repaving, as are SE 61st/90th Ave/92nd Ave/93rd Ave/94th Ave east of Island Crest Way. PCI's of these roads range from "fair" to "poor" to "failed".
- For 2018, the Madrona Crest neighborhood (SE 36th, SE 37th, SE 39th, 86th Ave) is planned for repaving following new watermains in 2017. In addition, SE 33rd Place and SE 34th Place will be repaved.
- No streets have been identified yet for 2019 or 2020 resurfacing work.

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. Additionally, the City’s traffic signal installations in 2011 have impacted SE 27th Street with some electrical trenching. 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 2017 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 \$467,715. Staff has deferred this project to 2017 due to strong PCI values and continued redevelopment projects. The overlay work may be combined with the residential street project to create one larger paving contract.

- **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 have not been resurfaced since the mid 1980’s. Staff has split this work over two years: 2015 and 2017. Streets planned for resurfacing in 2015 are 80th Avenue (from SE 30th to SE 32nd Streets) and SE 32nd Street (from 80th to 78th Avenues), at a cost of \$170,415. In 2017, SE 29th Street (from 76th to 77th Avenues) and 80th Avenue (from SE 28th to SE 30th Streets) are planned for resurfacing at a cost of \$223,310. The condition of these streets has remained relatively unchanged over the past decade and have therefore continued to be deferred for several years.

The resurfacing work for these streets will be a slurry seal treatment rather than a hot mix overlay. A slurry seal will extend the life of these roadway pavements by 7 to 10 years, for approximately one-third of the cost of a hot mix overlay. Additional project scope includes repair of existing sidewalks where needed, and upgrade of sidewalk ramps to meet current ADA requirements.

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 of failing pavement areas (approximately \$35,000 per year) and crack sealing (approximately \$35,000 per year). Crack sealing extends the life of existing pavements by sealing out water intrusion.
- **SE 40th Street from 76th Avenue to Island Crest Way [C2]** is the repair and HMA resurfacing of the two-lane roadway at its current width, and striping of a paved shoulder in the uphill direction. In addition, existing asphalt walkways will be widened where possible and resurfaced. The total budget for this project is \$691,550 for design and construction in 2015, including approximately \$109,000 in PBF reinvestment. The current PCI rating for this roadway is “poor”.

- **SE 40th Street Corridor, East of ICW [C3].** This newly proposed project will improve circulation and safety at the SE 40th and 86th Avenue traffic signal by installing dedicated left turn pockets, which will require some roadway widening on SE 40th Street. Although this project is scheduled for 2018, it is intended to be a placeholder for future discussion by the City Council. The estimated project cost is \$758,750.
- **Island Crest Way Resurfacing Phase 2 from SE 40th Street to 86th Avenue [C4]** was originally planned for 2014. Work will consist of repairs to existing curbs and sidewalks, pavement repairs and planing, followed by HMA overlay of the existing roadway. This road was last resurfaced in 1990 and its current PCI rating is “poor”. The estimated cost for this work is \$1,354,800. Pedestrian facility repairs and improvements will be made for approximately \$150,000 of this budget. Prior to this resurfacing work, a water main replacement project will be constructed between SE 40th and SE 42nd Streets. During the adoption of the 2013-2014 Budget, the timing of this project was changed to 2016 construction because the timing of the watermain work was changed to 2015. A budget of \$50,000 in 2014 was established to pay for potential repairs to the roadway until its repaving in 2016.
- **SE 53rd Place from Island Crest Way to East Mercer Way [C5]** is proposed for a chip seal in 2017 at an estimated cost of \$387,000. This roadway, last resurfaced in 1989, is beginning to show pavement distresses and some patching has been performed. Its PCI rating is “fair”. This project was previously scoped as an HMA overlay, but staff recommends changing to chip seal in an effort to reduce costs within the TIP. Additionally, PBF improvements previously scoped in conjunction of the overlay project have been deleted.
- **Island Crest Way from SE 27th to SE 30th Streets [C6]** recently emerged as a resurfacing need. This roadway was constructed by WSDOT between 1988 and 1991 as part of Interstate 90’s 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, but will need an HMA overlay in the future. Staff has scheduled it in 2017 at a cost of \$381,000. The timing of paving this high traffic principal arterial may be accelerated in future TIP’s, depending upon its pavement condition.
- **Preservation Overlay of West Mercer Way from I-90 to Roanoke Way [C7].** This newly proposed project is a result of the 2013 PCI data project. This road’s current PCI rating is “poor”, which is a substantial drop from its 2009 condition rating. Staff has placed this street in 2017 as a HMA overlay at a cost of \$155,000.
- **East Mercer Way Resurfacing from 4400 block to West Mercer Way [C8 and C9]** is proposed for 2018 and 2019. Last repaved in 1992, East Mercer Way is showing pavement fatigue and advanced wear. Patching and crack sealing has been done on some segments in recent years and additional sealing and patching will be needed over the next several years. Pavement segments within these limits range from “satisfactory” to “fair”. The scope of this project includes a chip seal from SE 70th Place to WMW in 2018 at a cost of \$388,000 and an HMA overlay from the 4400 block to SE 70th Place in 2019 at a cost of \$1,378,000. Both of these projects will resurface the adjacent paved shoulder areas. Staff changed the southern portion of this area to chip seal to reduce costs within the TIP.
- **SE 68th Street and SE 70th Place from Island Crest Way to East Mercer Way [C10]** is an emerging need that was added last year as a resurfacing project for 2019. 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 sealed in 2011. This project has been moved to 2020 at a cost of \$520,000. 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, the 2009 data rated it as "fair".

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 2017-2020; however the funding in 2015-2016 will be dedicated to the construction of the ICW Crosswalk Enhancement – SE 32nd St. [D4] and 84th Avenue Path (SE 39th to Upper Luther Burbank) [D5]. Staff proposes to focus on continuing the conversion of arterial street striping from raised pavement markers to painted fog lines (along areas of paved shoulder being used by bicyclists). Other projects for consideration include: implementation of signage and pavement markings to support sharing of the road by all users (particularly on the Mercer Ways and the I-90 Trail) and completion of sidewalk or trails to complete missing links or gaps in the PBF system
- **Safe Routes – Madrona Crest (86th Ave) Sidewalk [D2]** is a newly proposed project to install sidewalk along 86th Avenue SE to provide a 'safe walk route' to the new elementary school. Phase 1, from SE 39th to SE 40th Streets, is programmed for construction in 2015 at a budget of \$170,000, to be completed before the school opens its doors in September 2016. Phase 2, from SE 36th to SE 39th Streets is programmed in 2018 at a budget of \$340,000 which will give staff time to evaluate walking patterns through the neighborhood to determine if this future phase is necessary.
- **Safe Routes to School – New Elementary School [D3]** includes sidewalk landings and curb ramps proposed on SE 40th Street at the intersections of 88th Avenue, Gallagher Hill Road, and 92nd Avenue to improve safety and access for pedestrians. It will also enhance some existing trails south of the school district's megablock campus. This project is scheduled for construction in 2015, ahead of the new elementary school construction, at an estimated cost of \$454,000 and is a partner project to SE 40th Street Corridor (E. of ICW) [C3]. Safe Routes to School is an ongoing program typically funded at \$100,000 on a biennial basis in the odd year of each biennium; however for this 6-year TIP the funding of this program will be channeled to the Safe Routes – Madrona Crest project and New Elementary School. It will resume in 2021. The work in this program has focused on small improvements in the vicinity of the elementary schools in the past several years. Into the future this program will expand to include small improvements in the vicinity of all Mercer Island public schools to complete gaps in existing facilities to encourage and support alternative modes of transportation to school. The program may also include supporting school programs that encourage "healthy ways" of walking, biking, and riding the bus to school. The Safe Routes to School program was created during the 2009 TIP update to focus on improving or completing sidewalks, walking paths, bicycle areas, and other enhancements that support safe, non-motorized alternative ways to get to school. The first Safe Routes to School project in 2009 focused on improvements near Lakeridge Elementary. The second project in 2011 focused on improvements that benefitted West Mercer Elementary. In 2013, a trail route along SE 53rd Place from the Lansdowne Lane neighborhood to Island Crest Way and Island Park Elementary was constructed, completing a link between West Mercer Way and Island Crest Way. In 2015 this program will be used primarily to address

walking route needs for the new elementary school, once the school boundaries and walk routes are confirmed.

- **Island Crest Way at SE 32nd Crosswalk Enhancement [D4]** will upgrade this existing crossing by adding Rectangular Rapid Flashing Beacons (RRFB) to the crossing, similar to those installed in 2013 at existing crosswalks at Island Park Elementary and Island Crest Park on Island Crest Way. This area of Island Crest Way is five lanes wide. In 2005 during the Island Crest Way paving project, the existing crosswalk was enhanced by adding a pedestrian island in the center of the roadway, creating a refuge area for pedestrians to be able to cross two-lanes and have a place to wait before crossing the remaining two-lanes. Prior to the installation of the pedestrian island, walkers needed to cross all five lanes. RRFB's are a lower cost alternative to pedestrian signals that are proving to be extremely effective at increasing driver yielding behavior. The estimated cost for the installation of RRFB's in 2015 is \$25,000.
- **84th Ave. Path from SE 39th to Upper Luther Burbank Park [D5]** is a new project to add a gravel shoulder pedestrian facility adjacent to 84th Avenue SE to provide a link between the SE 39th Street/Clise Park/Island Crest Way area and the south end of the Upper Luther Burbank Park trail. This project was requested by the neighbors adjacent to 84th Avenue. It has been scheduled for 2015 at a budget of \$70,000.
- **East Mercer Way Roadside Shoulders [D6]** 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 3.3 miles of paved roadside shoulder (70% of its 4.8 mile length). Each new phase of construction builds between 2000 and 2500 linear feet of new paved shoulder. Three more phases of work are planned along East Mercer Way that will extend asphalt shoulders from the 6600 block south:
 1. Phase 9 (2016) - from the 6600 block to the 7500 block at a budget of \$358,000.
 2. Phase 10 (2018) - from the end of Phase 9 to possibly reach the 7900 block, at a budget of \$303,255.
 3. Phase 11 (2020) - from the end of Phase 10 to approximately the south end of EMW.
- **West Mercer Way Roadside Shoulders from 7400 to 8000 blocks [D7]** is a newly proposed project to build a paved shoulder (consistent with those along East Mercer Way) through a hilly and curvy section of West Mercer Way where no shoulder area currently exists for pedestrians or bicyclists. The need for this project was identified by the participants of the Mercer Ways Multimodal Transportation Summit in 2013. The estimated cost for this work in 2016 is \$417,500.

Other Transportation Projects/Activities

- **Pavement Marking Replacement [E1].** Funding for this annual program has been increased slightly. 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. In 2011, the ROW Tree Maintenance program went through substantial changes because the half-time ROW Arborist position was eliminated with the biennium’s budget. 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.
- **Spot Improvements [E3]** is a newly proposed program to fund transportation related improvements that are too small to justify their own capital project or are not currently funded or fit within the scope of other programs. The types of projects that this annual program could include (but are not limited to): installation of guardrail in safety sensitive areas, traffic calming, new signing or pavement markings, or street lights that are requested by Mercer Island residents and recommended by staff. This program has been identified to begin in 2015 at a cost of \$10,000 annually.
- **Mobile Asset Data Collection [F4]** 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.