

## **SDOT STREET PRESERVATION OVERVIEW – 2011 JUNE 20**

### **1. Pothole Repairs – SDOT Maintenance Operations Crews**

Pothole repairs are the SDOT Street Maintenance Division’s first priority. By nature, they are safety repairs which typically correct severe, localized roadway defects. Pothole repairs keep streets reasonably safe for public travel, albeit at a condition level that is usually far below optimal. Frequent pothole repairs signal a pavement that has reached the end of its functional life and needs to be reconstructed or otherwise rehabilitated. Pothole repair examples are shown in Figure 1.

**Figure 1. Pothole Repair Examples.**



SDOT Pothole Ranger crew.



Accumulated pothole repairs along S Fidalgo St.

In 2010, SDOT filled citywide 10,124 potholes at a cost of \$3.833M. Preventive maintenance programs, chip sealing and crack sealing, were deferred to respond to pothole repair requests. In 2011, the pothole budget has increased to \$4.172M. However, that amount was 54% spent at the end of April as a result of the winter pothole outbreak. It is likely that the preventive maintenance programs will be deferred again in 2011 to meet demand for pothole repairs.

*Each additional \$1.0M funds approximately 2,500 additional pothole repairs.*

### **2. Spot or Localized Paving – SDOT Surface Restoration Crews**

SDOT crews annually do paving work that is larger in scale than a pothole repair, yet smaller than a contracted CIP paving project. These projects are typically one to three blocks in length. Spot and localized paving can extend the life of an existing pavement or address a location with recurring pothole problems. However, this work does not necessarily deliver a long lived pavement fix and it cannot address large, corridor scale paving needs. Spot paving examples are shown below in Figure 2.

**Figure 2. Spot Paving Examples**



14<sup>th</sup> Ave S at S Judkins St, before spot paving



After spot paving

## Figure 2. Spot Paving Examples (cont)



E Marginal Way S crossover at Duwamish Ave S, before spot paving.



After spot paving.

In 2010, SDOT crews delivered 3.4 lane-miles of spot paving at 23 locations. Budget for the work was approximately \$1.5M.

*Each additional \$1.0M funds an additional 8 to 15 spot paving projects. Paved area will vary depending on the mix of asphalt and concrete work, but total output should be in the range of 0.5 to 2.2 lane-miles.*

### 3. Major Paving – Transportation CIP Contracts

Ultimately, repaving streets before they reach critical condition is what solves Seattle’s pothole problem. Potholes most frequently occur on pavements that have reached the end of their functional life. As of 2010, SDOT estimates there are approximately 400 lane-miles and \$575M in unfunded paving needs on arterial streets alone. Seattle’s street system is deteriorating and many streets are at or approaching functional obsolescence. The solution to the pothole problem is to rehabilitate and modernize streets for transit and other modes. Figure 3 shows the result of a major CIP paving project.

### Figure 3. Arterial Asphalt and Concrete Paving Program (TCIP) Example



South Columbian Way 2010 AAC, before TCIP paving.



After TCIP paving.

Over the nine-year life of the Bridging the Gap transportation levy, SDOT expects to average 20 to 25 lane-miles of streets paved per year. This level of accomplishment will not come close to addressing all of the outstanding arterial needs and it is unlikely to prevent further system decline.

*Each additional \$1M in AAC Transportation CIP dollars funds an additional 0.4 to 1.6 lane-miles of paving, depending on the mix of rehabilitation and reconstruction.*