



# Street Maintenance Division

Council Transportation Committee

February 28, 2012

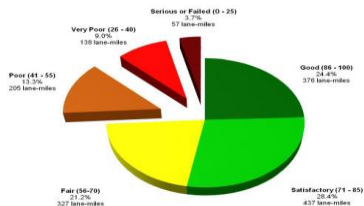


# SDOT Organization

- Capital Projects, Street Use, Policy & Planning, Resource Management and Human Resources
- Operations Groups:
  - Urban Forestry (35 FTE)
  - Roadway Structures (60 FTE)
  - Traffic Management (160 FTE)
  - Street Maintenance (147 FTE)
    - Upkeep of street pavements (\$6.3B), sidewalks (\$2.8B), and related facilities -- 70% of SDOT's total asset inventory (\$13.0B) on a replacement cost basis.*



# Street Maintenance Division



## Pavement Management (8 FTE)

- Inventory and condition assessments on City streets and sidewalks, prioritizing paving for the SDOT crew & CIP programs, construction support and project management.



## Paving (76 FTE)

- Pavement and sidewalk construction. Also builds curb bulbs, traffic islands, speed humps and similar structures for the SDOT Traffic Division and restores street openings for City utilities.



## 24/7/365 Operations & Emergency Response (14 FTE)

- Provides 24/7/365 response to snow & ice and other weather events, as well as to roadway hazards, landslides, and traffic accidents.



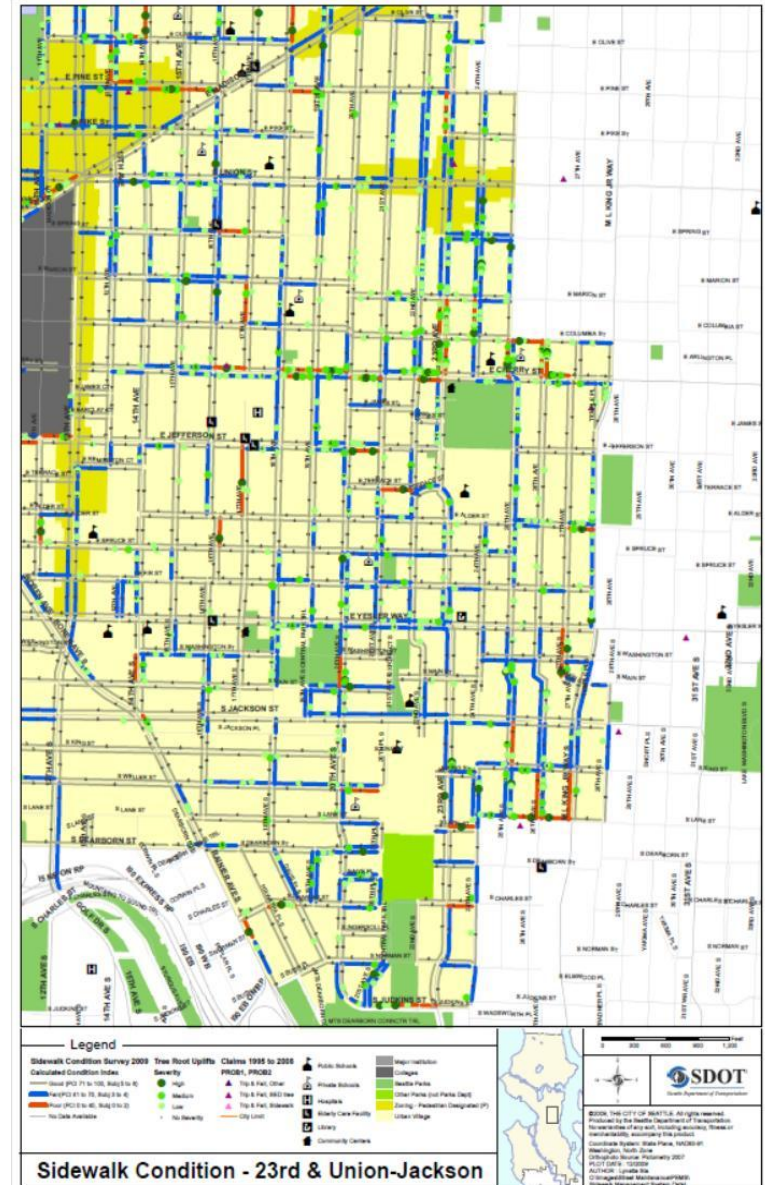
## Maintenance Operations (49 FTE)

- Day-to-day tasks that keep the street system in good working order – filling potholes and shimming sidewalks, trimming vegetation and picking up leaves, street sweeping and alley flushing.



# Pavement Management Section

- Monitor street and sidewalk condition
- Develop cost effective maintenance strategies and prioritize paving
- Crew project management
- Report on paving needs and accomplishments
- Landslides
- Citizen correspondence and customer service







# Pavement Condition Ratings



## Good/Satisfactory

Asset is serviceable and requires only routine or preventive maintenance.



## Fair/Poor

Asset may benefit from major maintenance or rehabilitation to keep it functioning at an optimal service level.



## Very Poor / Serious

Asset is no longer serviceable and should be replaced. May require stopgap repairs to prevent complete failure.



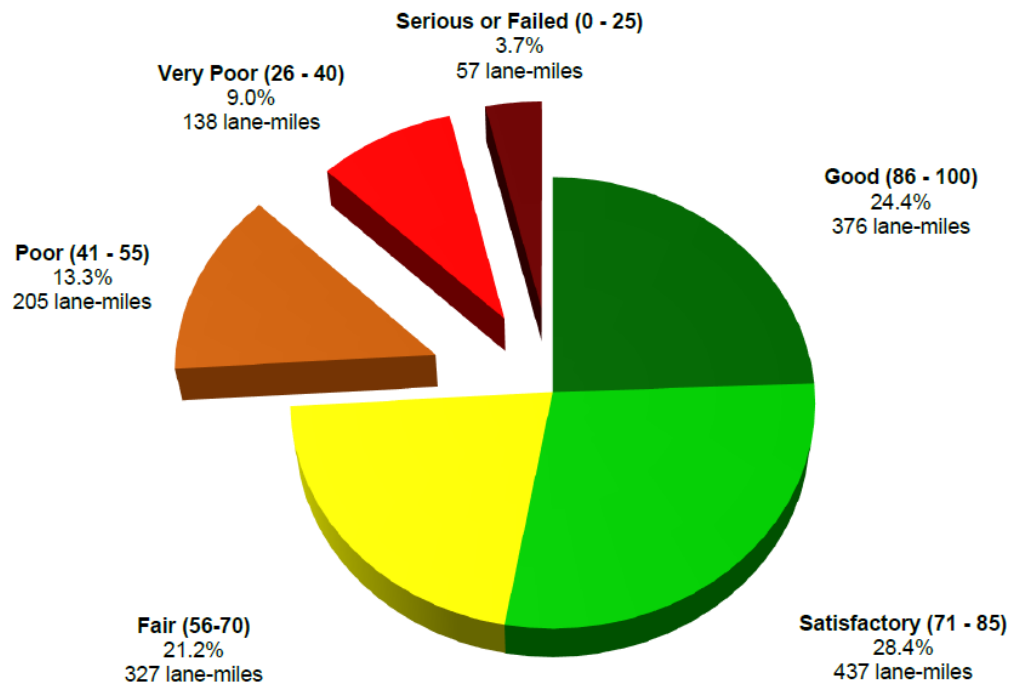


# Roadway Pavement Condition

## Arterial Streets

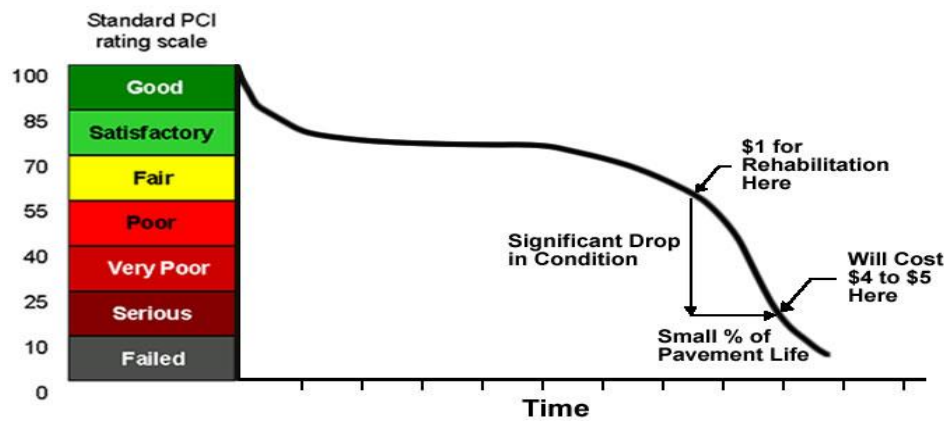
- 1,540 lane-miles, last condition rating in 2010 (at right)
- 400 lane-miles currently in need of major rehabilitation (Poor and below)
- 327 lane-miles with an impending major rehabilitation need (Fair)
- 20 to 25 lane-miles paved per year on Bridging the Gap CIP contract
- 3 to 15 lane-miles spot paving per year by SDOT crews

## 2010 Seattle Arterial Street Condition, by PCR



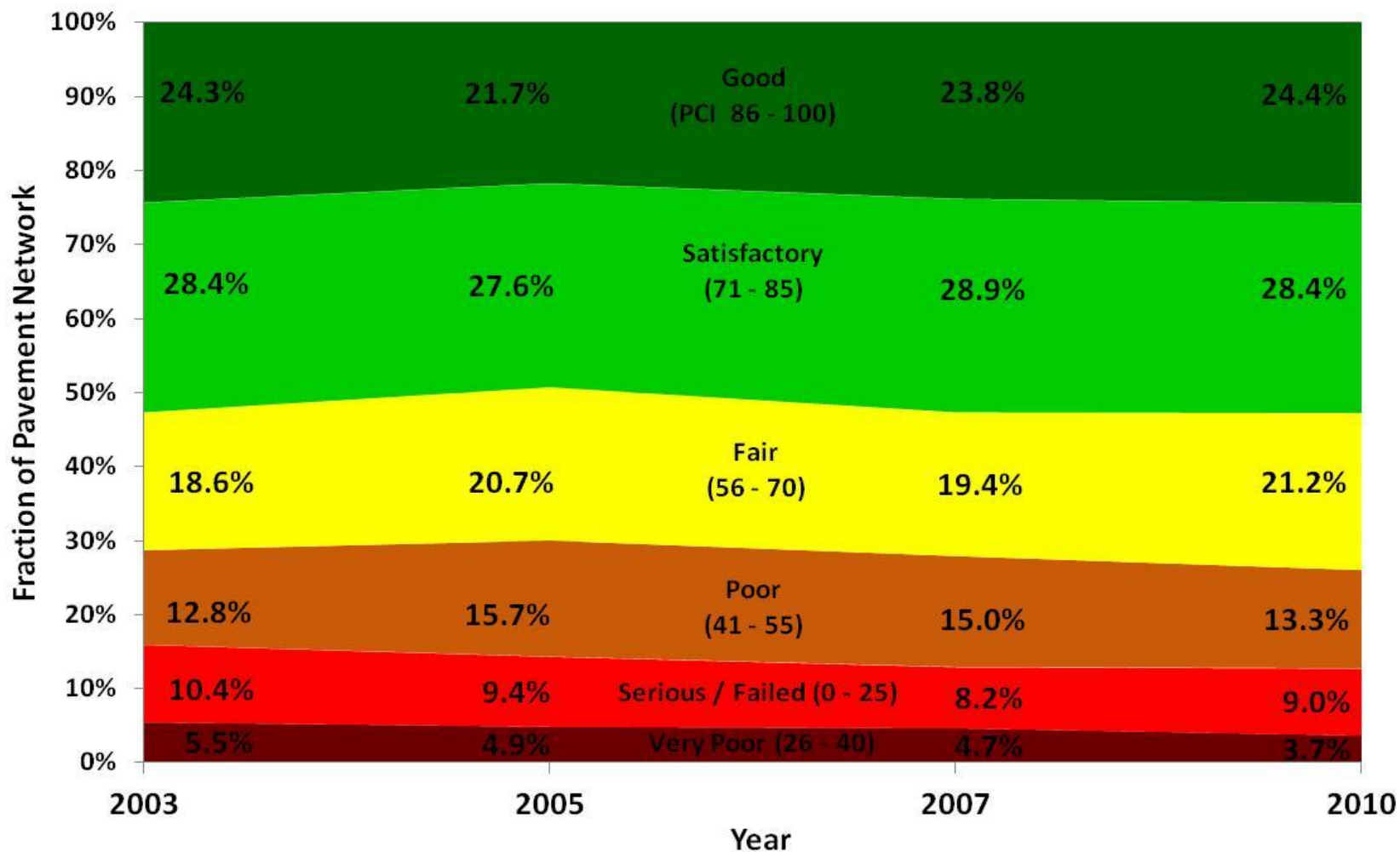
## Non-arterial Streets

- 2,412 lane-miles
- No Condition Data
- 0.2 to 0.5 lane-miles of spot paving per year by SDOT crews





# Roadway Pavement Condition 2003 to 2010



Arterial Average Pavement Condition Index (PCI)

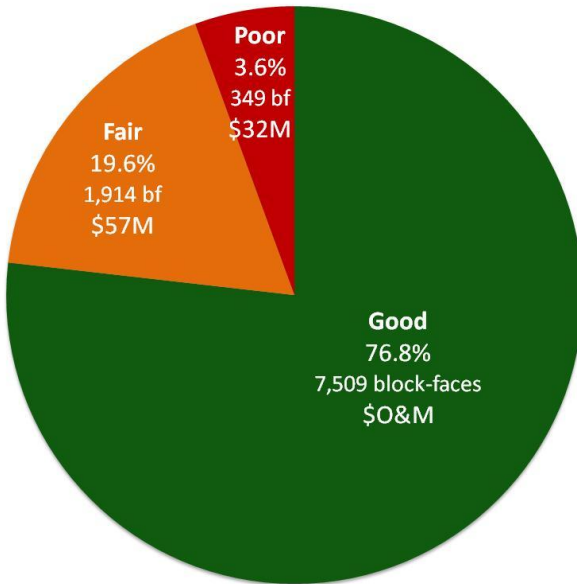
<u>2003</u>	<u>2005</u>	<u>2007</u>	<u>2010</u>
67.5	66.5	68.3	68.8



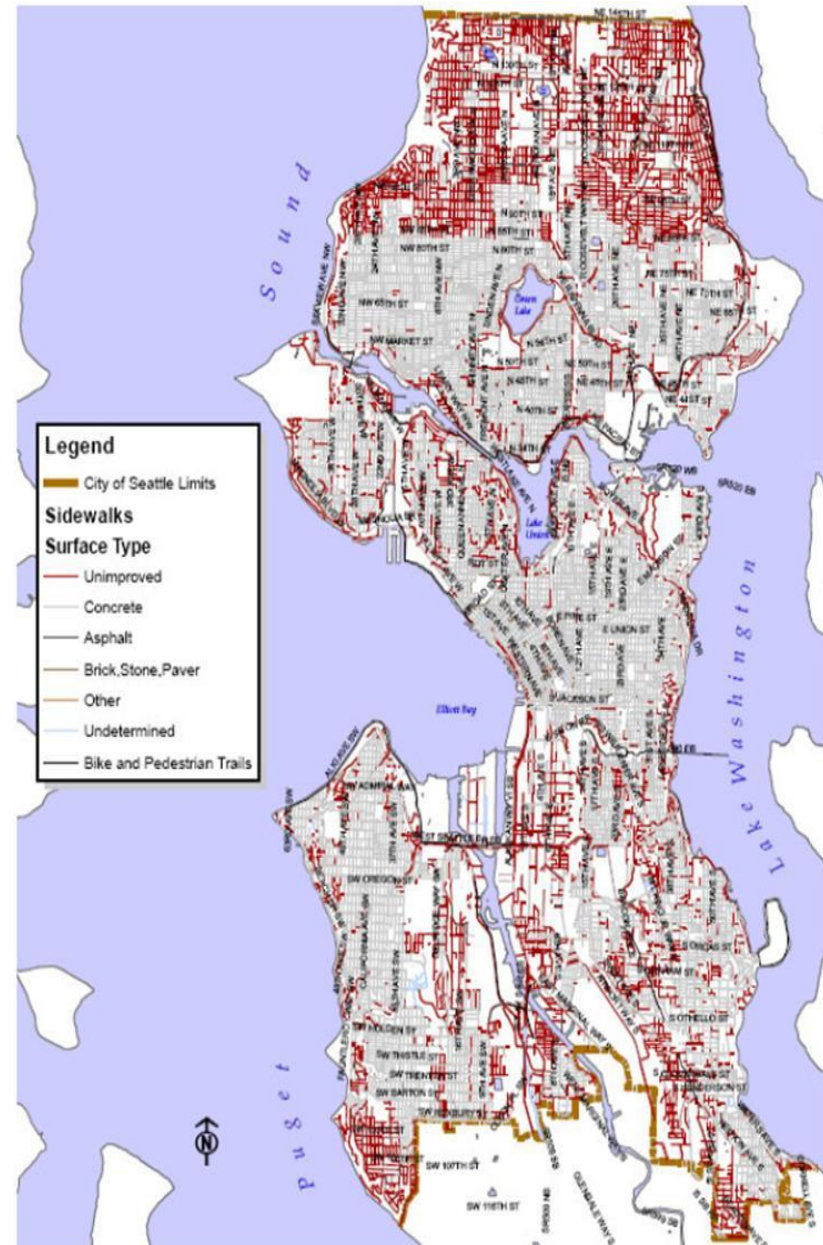


# Sidewalk Condition

Urban Village Sidewalk Condition in 2008



- 33,241 paved block faces citywide
- 9,772 paved block-faces in Urban Villages, last condition rating in 2008
- Simplified Rating System (Good / Fair / Poor)
- Differ from street pavements – 12,799 block-faces (28%, red) lack sidewalks. Responsibility shared between City & property owner per SMC 15.72







# Paving Section



- “Spot” street and sidewalk paving projects
- Reimbursable work for SDOT’s Traffic Division, the Neighborhood Project Fund (NPF) and others – sidewalk development, curb ramps, curb bulbs, traffic circles, traffic islands, etc.
- Utility cuts





# Crew Paving Highlights & Challenges



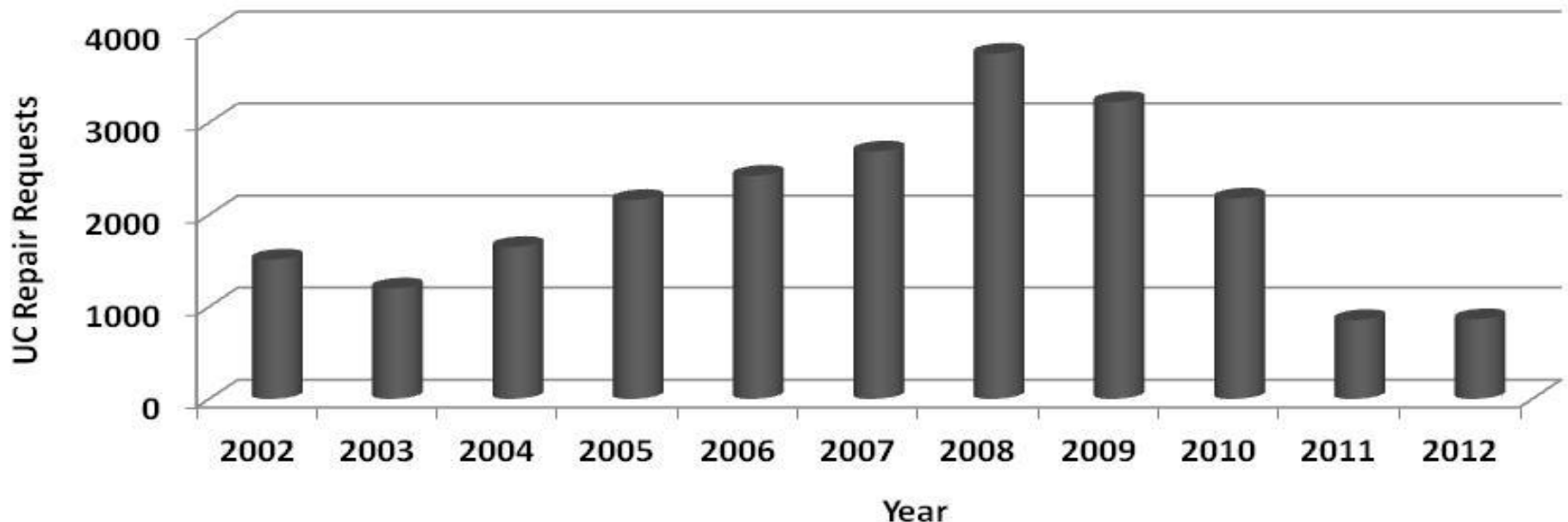
- SDOT crew arterial paving programs delivered 15.8 lane-miles (86 sites) in 2011 AMM paving.
  - More than 4x the historic level of 3.4lm / yr crew on program 2003 to 2010
  - Drop in potholes repaired December 2010 to 2011 of 2,584 to 975 (a 62% decrease) and January 2011 to 2012 of 4,138 to 1,762 (a 57% drop)
- Non-arterial crew paving 0.8 lane-miles serving transit, bike/ped and local businesses
- Chip seal - 2 yrs skipped because of funding level
- Sidewalk Safety Repair 26 block-face equivalents



# Utility Cut Restoration



- Pavement restoration for City utilities following repairs or new service connections
- Decline in requests since 2008 recession
- Staffing reductions in 2011 and 2012







# 24/7/365 Operations

- Similar to Police and Fire, the SMD is prepared to quickly respond 24/7 /365 to calls that pose a hazardous condition or access restriction in the ROW.
- The 24-hour Dispatch Center provides a “city wide” emergency response coordination and support service for SDOT, external agencies, and the greater Seattle community.
- Engineering Emergency Laborers provide a rapid response to emergency calls when regular SMD forces are off-duty during the night, weekends and holidays.
- The SMD equips for emergencies by establishing and maintaining strategic facilities, and by procuring equipment and materials required to respond to emergent conditions in Seattle's Right-of-Way.







# Emergency Response – Routine & Major

- Street Maintenance Division emergency response consist of two types of responses. These include routine calls, and major emergency events.
- The most common responses are the routine calls received daily such as potholes or debris removal. Routine calls are managed with regular staffing, scheduling and resources.
- In addition to routine responses, the division responds to major regional emergency events. Major events such as a significant winter weather storms trigger TOC and/or EOC activation, and require the need to augment regular emergency response staffing, scheduling, and resources.
- Employees are trained on a periodic basis to respond to a variety of emergency situations in the City of Seattle.





# Maintenance Operations Section



- Maintenance Operations crews perform the day-to-day work that keeps Seattle's streets in good working order
- Crews work out of three headquarters, West Seattle, Charles Street and Haller Lake. This gives the Street Maintenance Division good geographic coverage throughout the city.
- Maintenance Operations crews are first responders to daytime emergencies including spills, frost or ice and other road condition problems in addition to performing routine maintenance activities





# Maintenance Ops Highlights & Challenges



- Pothole patching and sidewalks shims – make safe repairs
- Alley cleaning and flushing
- Street sweeping – conventional and for water quality (SPU reimbursable / partnership)



- Vegetation control – mainly for sight safety distance (at intersections – funding challenge + leaf pick-up in fall months (helps drainage)
- Stairway & Pathway maintenance





QUESTIONS?

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