

LOCAL AGENCY PAVEMENT MANAGEMENT PROFILE: HILLSBORO

Profile Highlights: Hillsboro, OR

- Fifth largest city in Oregon
- Population of over 92,350
- Over 220 Centerline Miles
- Overall Network PCI of 81

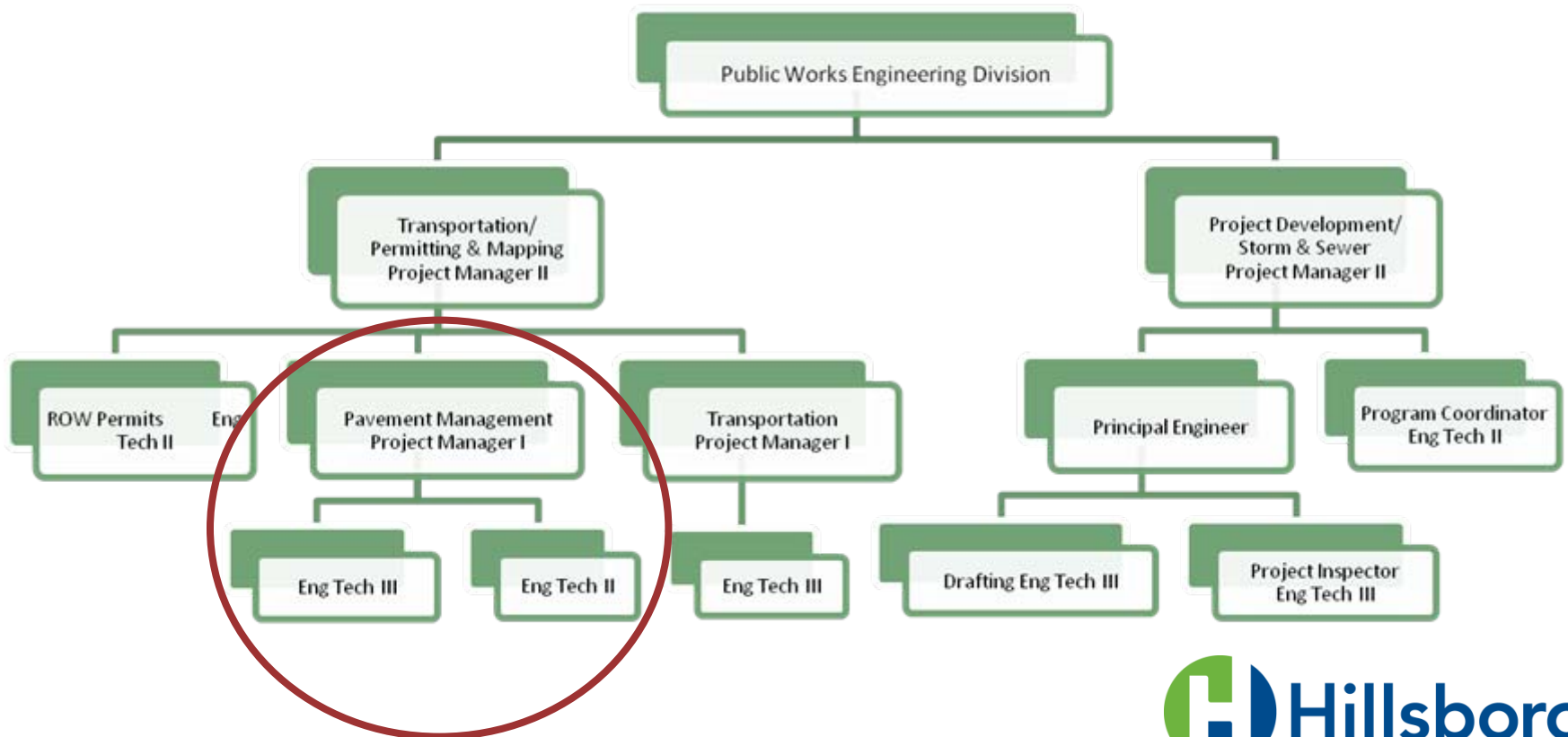


Profile Highlights: Hillsboro, OR

- Program Goal: Maintain roads in a good or better condition for the least amount of money.
- Funding: \$3.1 M indexed yearly (as of June 2012) for construction contracts
- Use Street Saver since 1998
- Use with GIS since 2000

Profile Highlights: Staffing

- All “In-House” – 4.25 FTEs (over 7 staff)
 - ✓ Annual Personnel Budget: \$178,000 (5.7% of construction)



Program Task Breakdown

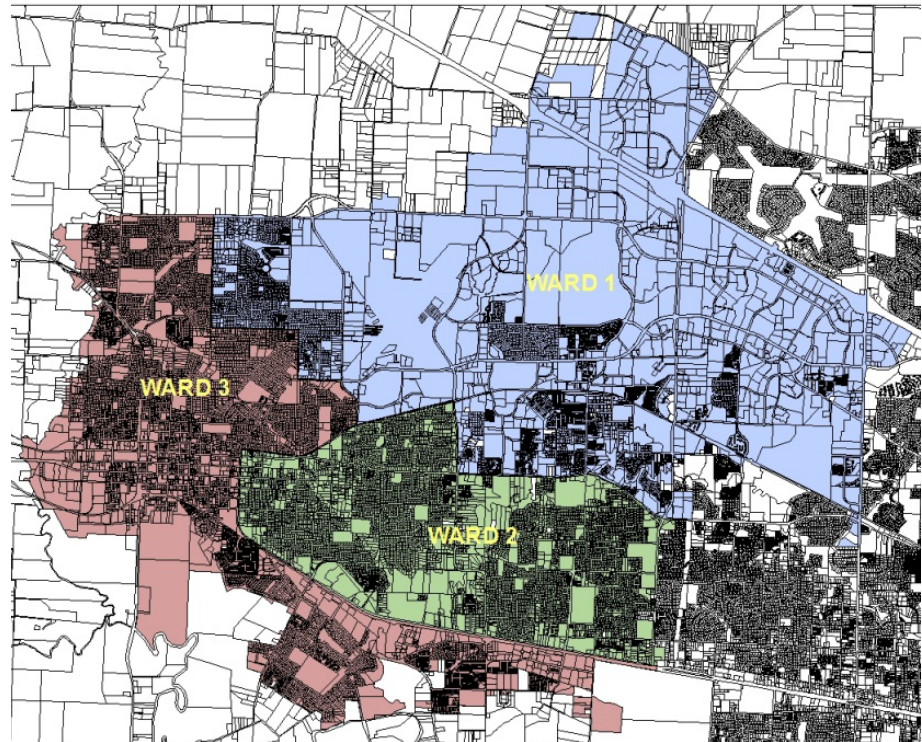
- Condition Assessment: Feb-May
- Project Selection: Oct-Jan
 - ✓ Database Updates
 - ✓ Annual Report
 - ✓ Needs Analysis
 - ✓ Coordination
- Bid Preparation: Dec-April
- Construction Management: May-Oct

Condition Assessment: Feb-May

- Network contains 3611 Sections

- ✓ Intersections
- ✓ Width Changes
- ✓ Curb/Gutter Changes
- ✓ Pavement Changes

- Rating Mapbook – GIS



Condition Assessment: Feb-May

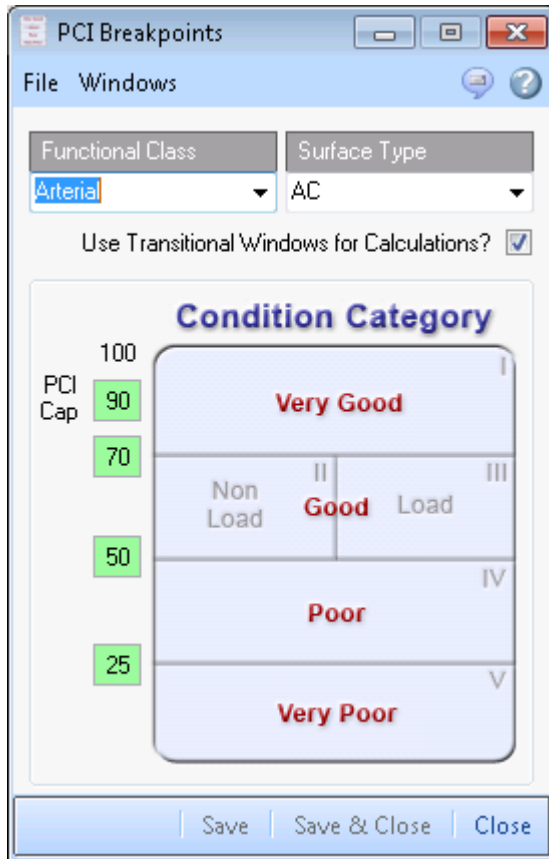
- Visually rate condition w/Mobile Rater
- Arterials/Collectors every Year
 - ✓ 60 centerline miles
- Local by Council Ward every 3 Years
 - ✓ 163 centerline miles
- Average 105 miles rated at approx. 350-400 hours
- Quality control of rating

Project Selection: Oct-Jan

- Begins in October after Construction Season
- Rating Completed
- Enter Maintenance Completed for the year
- Any other updates?
 - ✓ Capital Improvement Projects
 - ✓ Re-sectioning
 - ✓ New Streets
- Once everything entered Run Calculations

Project Selection: Oct-Jan

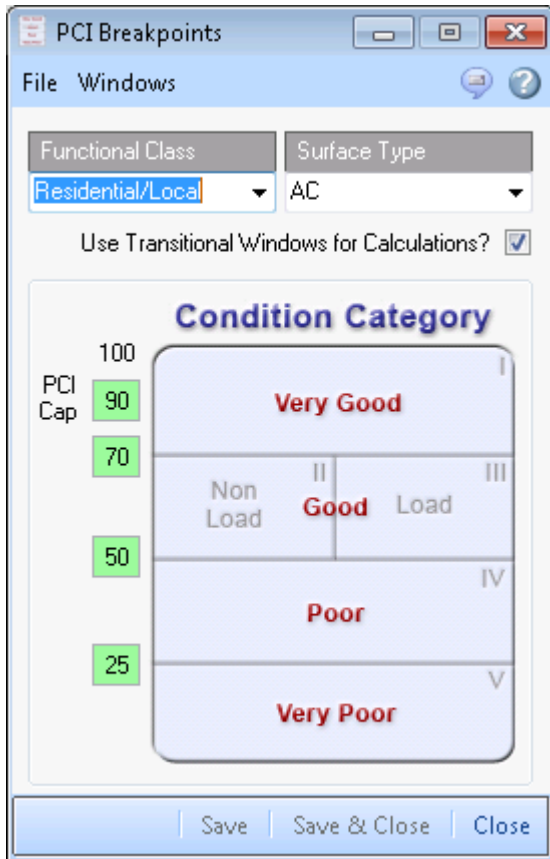
- Update Treatment Costs/Decision Trees in Street Saver



Arterials/Collectors

Surface Type	Condition Category	Treatment	Years Between Seals	# of Surface Seals before Overlay
Asphalt	I – Very Good	Seal Cracks	5	1
	II – Good, Non-Load	Micro-Surfacing	8	
	III – Good, Load Related	Mill & Thin Overlay		
	IV – Poor	Mill & Thick Overlay		
	V – Very Poor	Reconstruct Structure		
Concrete	I – Very Good	Seal Cracks	5	
	V – Very Poor	Reconstruct Structure		
ST	III – Good, Load Related	Chip Seal		
	IV – Poor	Double Chip Seal		
	V – Very Poor	Reconstruct Structure		

Project Selection: Oct-Jan

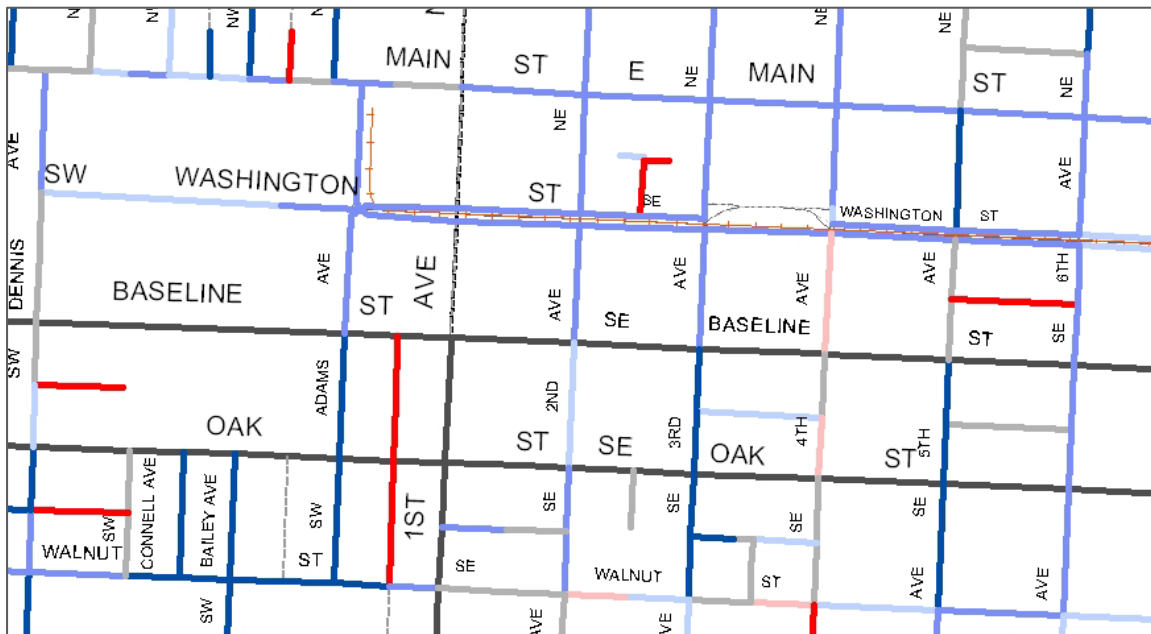


Neighborhood Routes/ Local Residential Streets

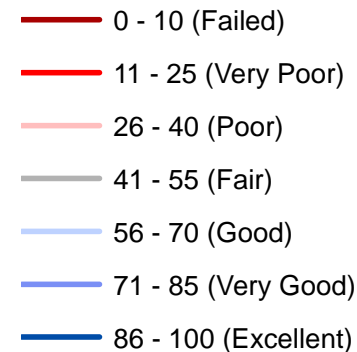
Surface Type	Condition Category	Treatment	Years Between Seals	# of Surface Seals before Overlay
Asphalt	I – Very Good	Seal Cracks Slurry Seal Mill & Thin Overlay	5 10	3
	II – Good, Non-Load	Slurry Seal	9	
	III – Good, Load Related	Mill & Thin Overlay		
	IV – Poor	Reconstruct Surface		
	V – Very Poor	Reconstruct Structure		
Concrete	I – Very Good	Seal Cracks	5	
	V – Very Poor	Reconstruct Structure		
ST	III – Good, Load Related	Chip Seal		
	IV – Poor	Double Chip Seal		
	V – Very Poor	Reconstruct Structure		

Project Selection: Oct-Jan

- Annual Report
- Update GIS Maps
- Update Transportation Committee



2011 Pavement Conditions PCI



Project Selection: Oct-Jan

- Needs Analysis in Street Saver
- Create Project Selection Map - GIS
- Selection Based on Following:
 - ✓ Needs Analysis
 - ✓ Funding (20-35% Preventative Maintenance)
 - ✓ Political/Citizen Complaints
 - ✓ Group for Construction/Contract Package
 - ✓ Delay/Move Forward due to other projects/utility work
 - ✓ Multi-year Projects
- Coordination of Projects
 - ✓ Capital Improvement Projects
 - ✓ Water Department
 - ✓ Planning Department (new developments)
 - ✓ Utility Companies
 - ✓ County/State/City Agencies



Bid Preparation: Dec-April

- Gather Quantities
- Final Project Selection
- Transportation Committee Authorization
- Specifications
- Coordination of Selected Projects
 - ✓ County/State/City Agencies
 - ✓ TriMet
 - ✓ Railroad
- Advertise & Award Bid



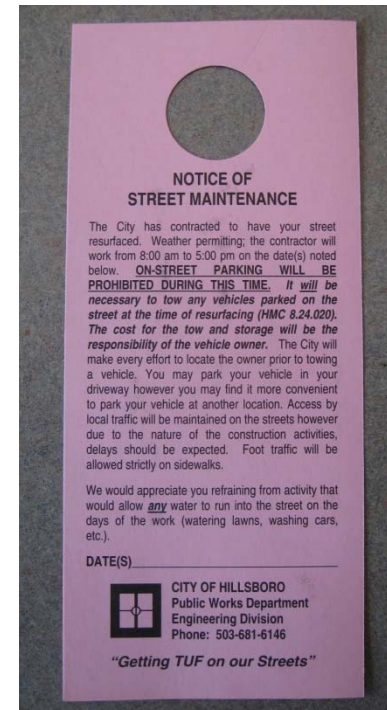
Construction Management: May-Oct



- Inspection
 - ✓ PMP Staff
 - ✓ CIP Group
- Manage 3-4 Contracts
 - ✓ Crack Seal
 - ✓ Slurry Seals
 - ✓ Micro-Surfacing
 - ✓ AC Replacements & Overlays
- Testing

Construction Projects

- Slurry/Micro Letter to Residents & Businesses
Once Contract Awarded
 - ✓ Notify of Work & Access Affected
 - ✓ Frequently Asked Q & A
- Door Hangers & No Parking Signs
 - ✓ Color Coded for Type of Work
 - ✓ Posted 36-72 Hours Before Work



Construction Projects

- Customer Service
- Micro-Surfacing Began in 2009 after Reno Visit
- 2007 Started Upgrading ADA Ramps with Overlays



SE Cypress Street – 2010 Micro



- Heavy weathering
- Depression at paving seam
- Cracks – sealed prior to placement
- Remove striping prior to placement



SE Cypress Street – 2010 Micro



- We were able to add bicycle lanes by restriping after the Micro

NW 206th Avenue (Notting Hill Ln to Brownstone Way) – 2011 Overlay

3" Grind/3" Overlay

- Street Saver Identified Need
- Weathering
- Alligator Cracking
- Many Utility Patches
- Depressions
- Potholes
- Number Citizen Complaints
- Will be Detour for
Cornelius Pass Closure 2012
- Coordinate w/TVWD



NW 206th Avenue (Notting Hill Ln to Brownstone Way) – 2011 Overlay



- Tied into previous year's overlay on north end.
- Added 4,330 linear feet of bicycle lanes by restriping.
- Upgraded ADA ramps.

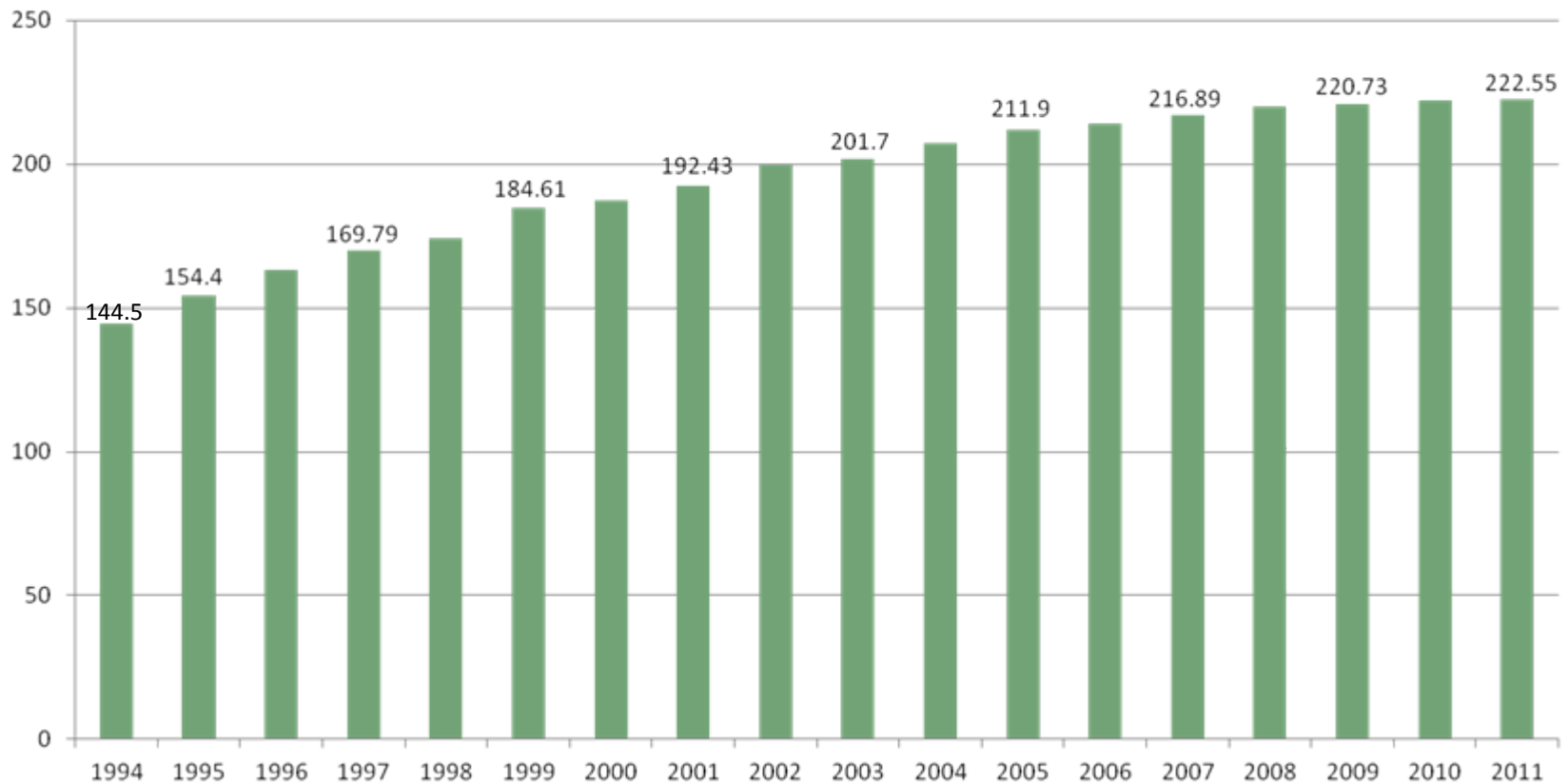
2012 Construction Projects

2012 CONSTRUCTION (Jan-June): FY11-12					
Maintenance Type	Centerline Miles	Area (Sq Yd)	Amount of Material	Project Cost*	Cost/LF or Sq Yd
Crack Seals & AC Replacements	22.0	449,456	189,542 Linear Feet 673 Tons Asphalt	\$219,207	\$ 0.62 \$39.57
2012 CONSTRUCTION (July-Oct): FY12-13					
Slurry Seals	7.1	124,143	124,143 Square Yards	\$259,807	\$ 2.09
Micro-Surfacing	4.9	115,249	115,249 Square Yards	\$530,530	\$ 4.60
AC Replacements & Overlays	7.1	87,026	15,284 Tons Asphalt	\$1,750,000	\$30.57 \$21.23
Totals	41.1	775,874		\$2,759,544	
<ul style="list-style-type: none"> • Replaced 87 ADA Ramps as part of Overlays <p>* Includes mobilization, traffic control, clean-up, etc. Does not include cost for testing.</p> <ul style="list-style-type: none"> • Added 11,110 linear feet of bicycle lanes by restriping. • Worked with Facilities Dept to crack seal several parking lots. 					

Upcoming Challenges: Growth of Network

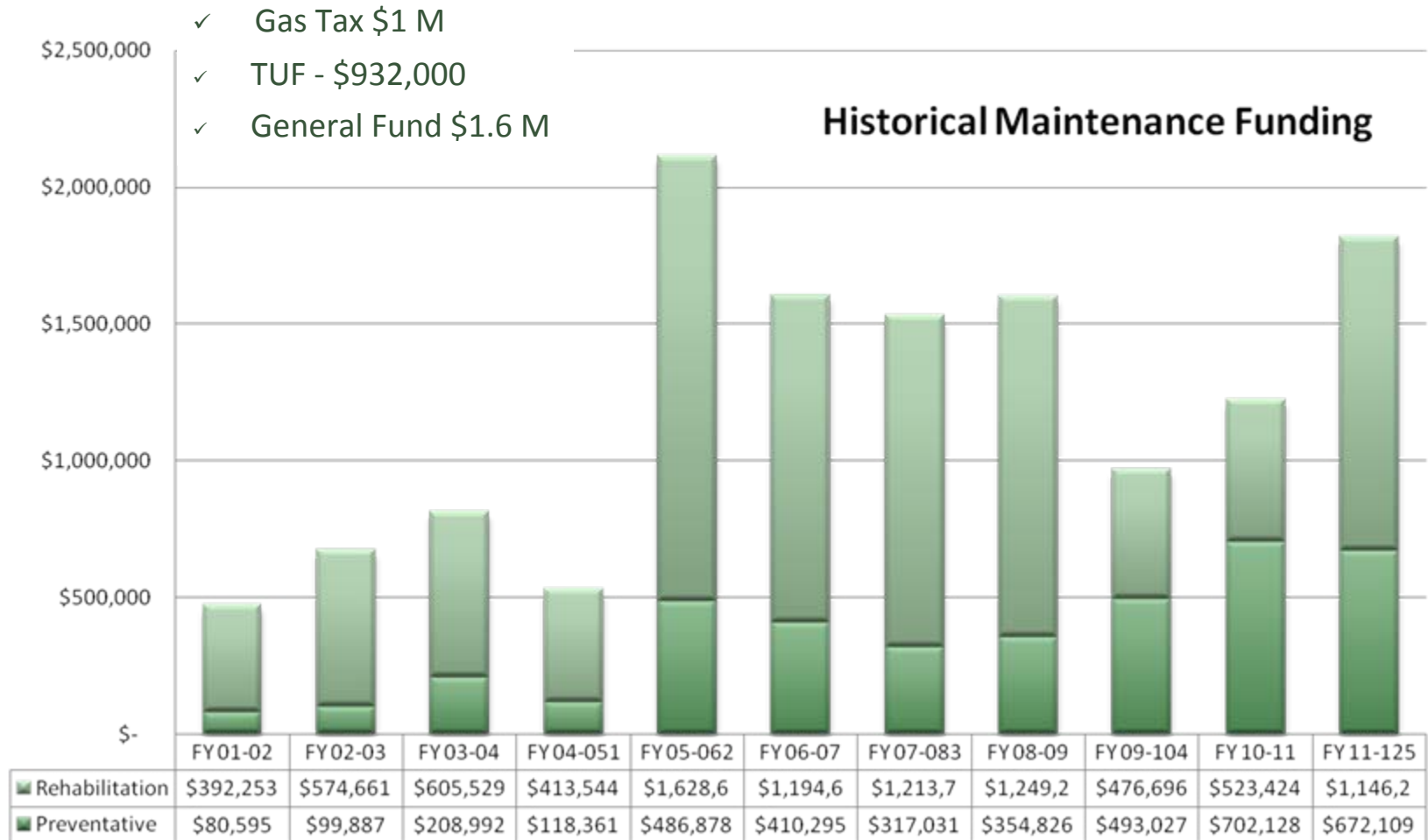
- Early 90's rapid growth reaching 20 year life 2020

Historical Centerline Miles



Upcoming Challenges: Sustainable Funding

- Funding: \$3.1 M indexed yearly (as of June 2012) for Construction Contracts



Upcoming Challenges: Private Streets

- Maintenance Coming Due
- TUF
- Developing Citywide Policy

Upcoming Challenges: New Technology

- Staying on top of new technology
 - ✓ WARM mix
 - ✓ Tire Rubber Modified products
 - ✓ Type II Fiberized Slurry Seal Demo

NE 41st/Lincoln St



Questions?

- Contact: Teresa Gibson, P.E.
503-681-6234
teresa.gibson@hillsboro-oregon.gov