



# Infrastructure Services Division

## Street & Alley Condition Report

# Pavement Management Objectives

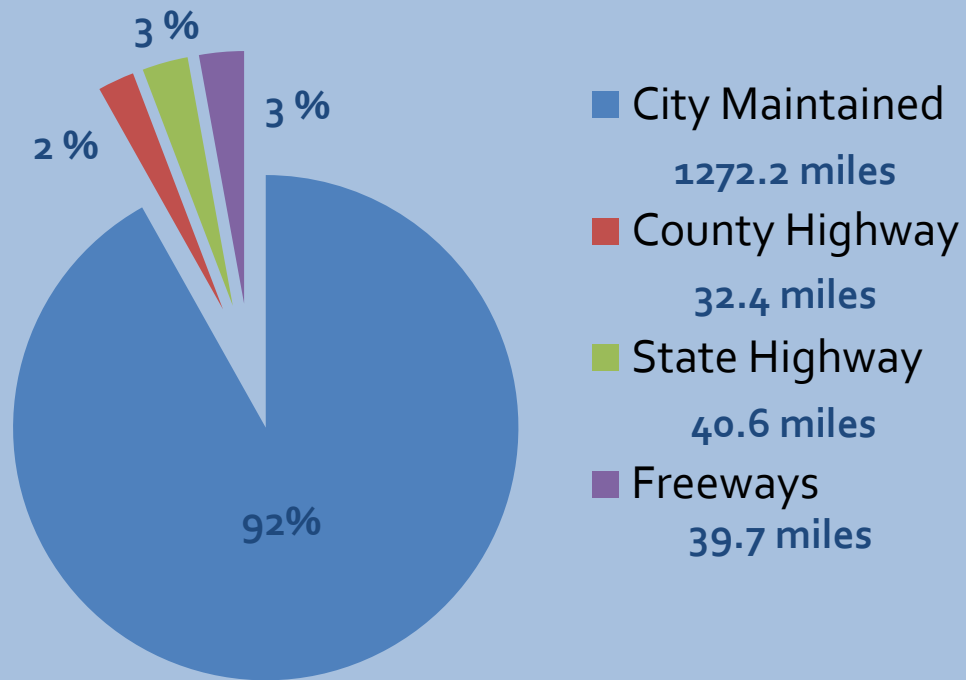
- Preserve and/or improve quality of streets and alleys
- Consider immediate and long term needs
- Systematic process to rank projects
- Publish 2-year program

# Pavement Management Plan

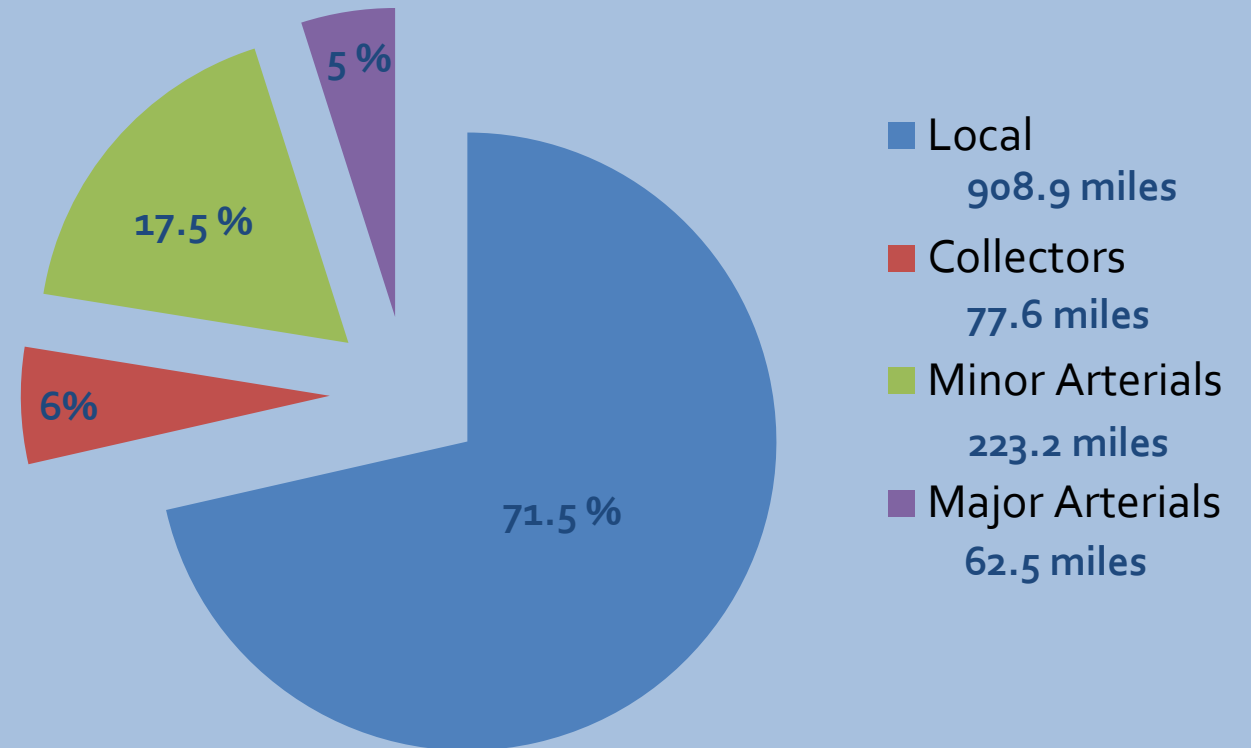
- Evaluate Condition
- Apply appropriate treatment
  - Preventative maintenance
  - Resurface or reconstruct
- Maintain and get the most out of every dollar

# Street Inventory

## All Streets



## City Maintained



# How are streets and treatments chosen?

- Pavement Quality Index (PQI) rates street segments to narrow the list
- Visual inspection
- Street Maintenance experience
- Pavement core samples
- Traffic volume (including transit, freight, pedestrian and bicycle)
- Coordinate needed pavement work with needed utility work
- Citizen complaints
- Allocate appropriate funding levels to maintenance, resurfacing and reconstruction
- Leverage grants and other funding opportunities
- Developments and TID's



# Pavement Condition Rating

- **Transportation Aids Distributions:** Per State Statute, since 2001 each municipality and county shall assess the physical condition of highways under its jurisdiction, using a pavement rating system approved by the WISDOT. In 2015, \$2,202 per mile in mileage aid payment shall be available for each mile of road or street under the jurisdiction of a municipality.
- **Stantec Consultant** – WISDOT approved pavement rating system
  - 2013 – 2014 last survey
  - Data was delivered in Dec, 2014 – will be analyzed to assist with ranking paving projects
  - Pavement management system updated with 2014 & 2015 improvements

# Pavement Condition Ratings

Every several years DPW obtains a condition rating for every street segment in the City under the PMS (Pavement Management System) and rates them on various pavement distresses such as:

- Severity of cracking
- Potholes
- Joint failure
- Rutting

# Pavement Ratings

A PQI (Pavement Quality Index) is identified from the distresses on a scale of 20 to 100 for the new Road Matrix system

100 is the best, brand new street

70-90 is Good

45-70 is Fair

20-45 is Poor



# Preventative Maintenance Program Benefits

- Most cost effective – address issues when they first appear
- More predictable funding needs
- Fewer premature pavement failures
- Safer road conditions
- Reduces disruption to traffic
- Require proper pavement restoration when issuing DPW permits

# Street Maintenance: Repair Strategies



Crack Filling



Joint Repair



Patching



Frost Heave Repair

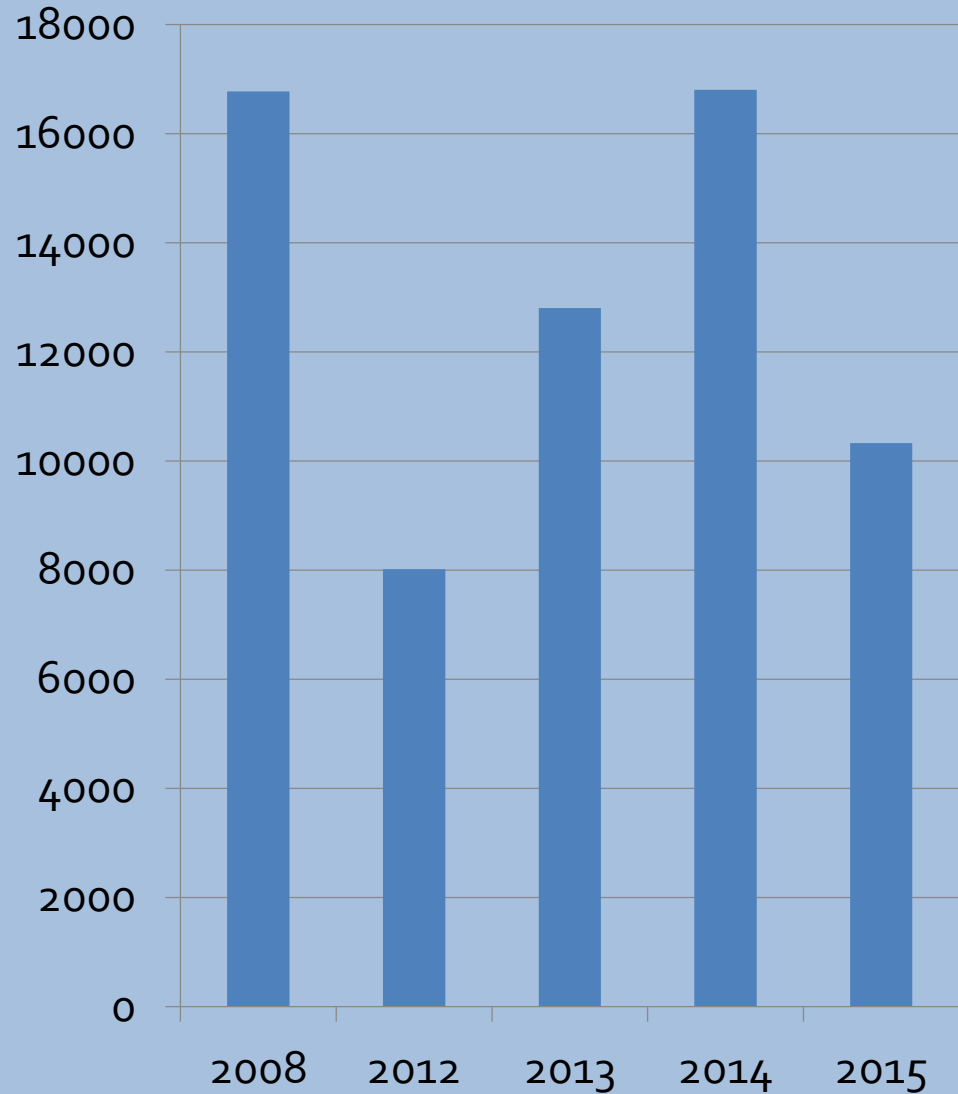


# Street Maintenance: Supercrews





# Street Maintenance: Pothole Report



## ■ Pothole Repair Requests

(Thru Feb. 29<sup>th</sup>)

2014 – 2,378

2016 – 1,303

98% Completed



# Street Improvements: Paving Program

**2013**

**Local Program - \$13 m (14 miles)**

**HIP - \$1 m (3.6 miles)**

**2014**

**Local Program - \$15.5 m (15.6 miles)**

**HIP - \$3.0 m (9 miles)**

**2015**

**Local Program - \$9 m (9.5 miles)**

**HIP - \$7 m (22 miles)**

**2016**

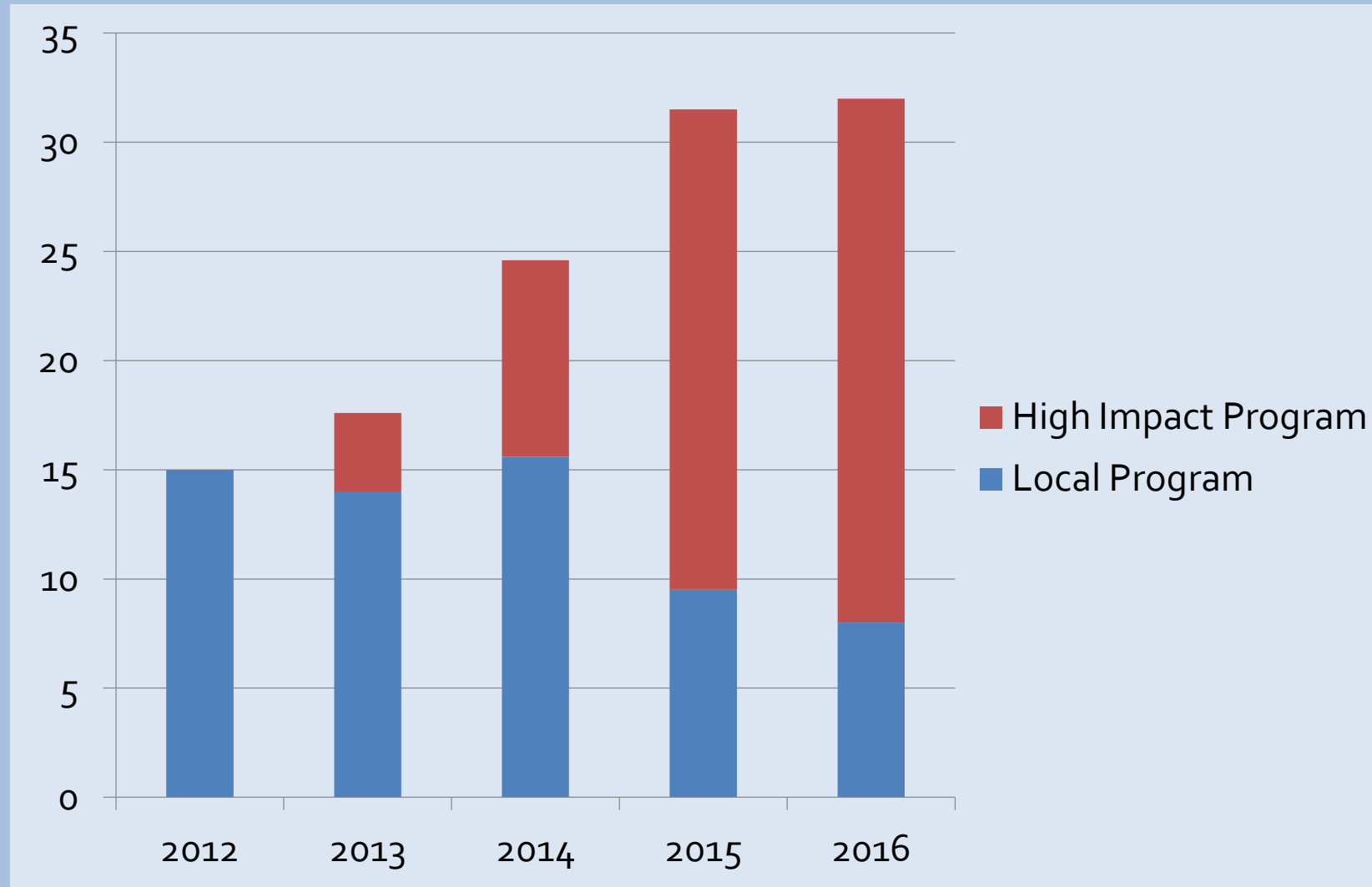
**Local Program - \$7.7 m (8 miles)**

**HIP - \$8.0 m (24 miles)**

- » Based on a 36 foot wide street
- » Minus \$2m from local program for Capital Maintenance & Engineering/Administration Costs
- » Includes \$2 m LRIP in even years for local program



# Street Improvements: Paving Program



# Street Improvements: Major Street Program

- Provide design and construction funding for major and minor arterial streets
- Design and construction funding for projects thru Milwaukee Urbanized Surface Transportation Program (STP-M), Connecting Highway Program, Highway Safety Improvement Program (HSIP), Safe Routes to School (SRTS), Transportation Enhancement (TE), American Recovery and Reinvestment Act (ARRA), Municipal Streets Improvement Program (MSIP) or Congestion Mitigation Air Quality (CMAQ) program.
- Coordinate with adjacent outlying communities on arterial paving projects crossing municipal boundaries funded by State and Federal Aid
- Coordinate with the WisDOT on State Trunk Highway Projects within the City Limits
- Represent City Interests on Milwaukee County Highway Paving and Bridge projects
- Coordinate with WisDOT on Mega Projects

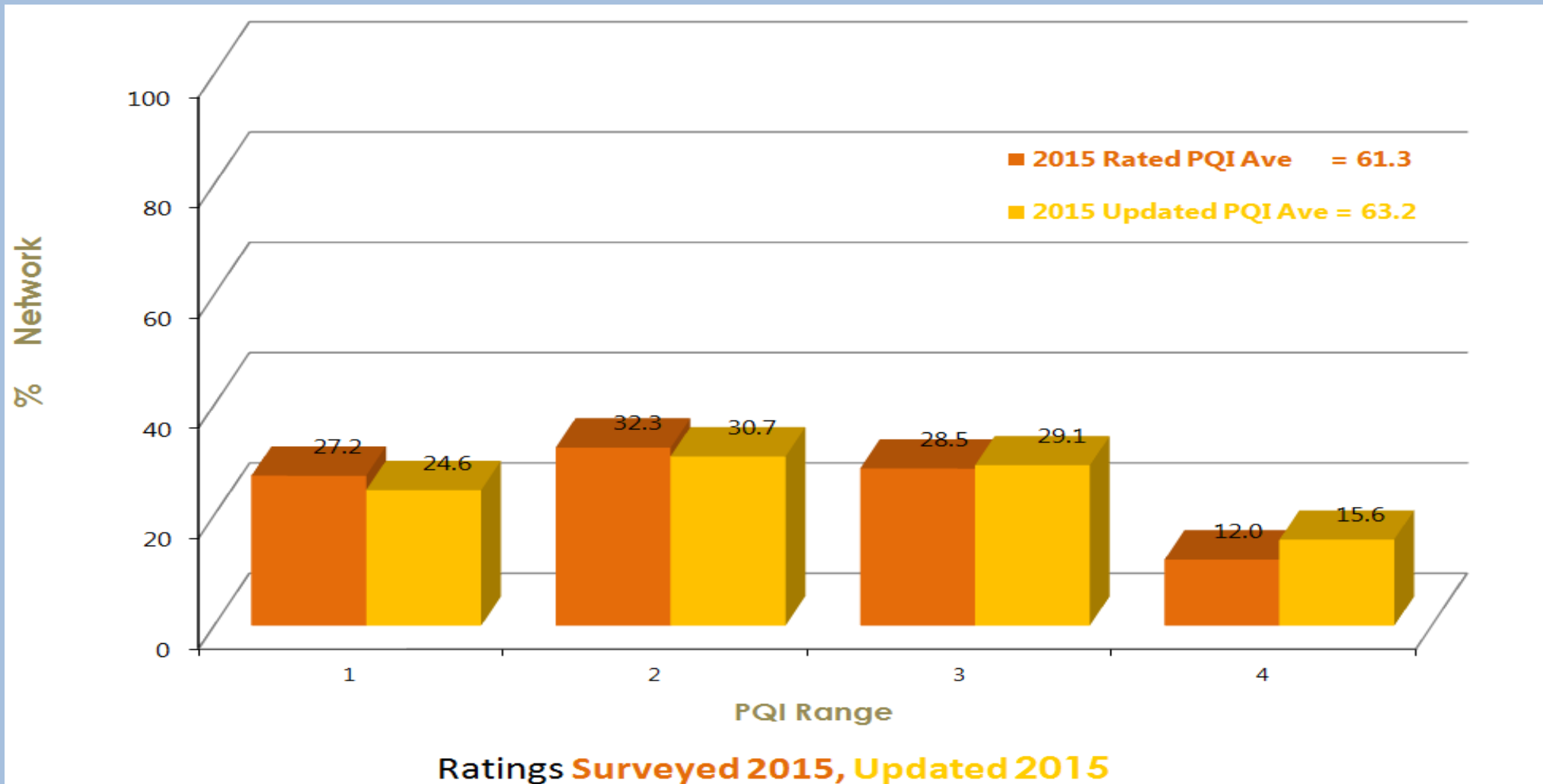


# STP (State Transportation Program) Funding to the City From WISDOT for Paving of Arterial Streets

<u>Funding Year</u>	<u>STP Funds</u>
2004-2005	\$12,042,850
2006-2007	\$11,687,730
2008-2009	\$10,965,750
2010-2012	\$12,309,509
2013-2014	\$11,796,858
2015-2018	\$41,830,098
2019-2020	\$17,902,000

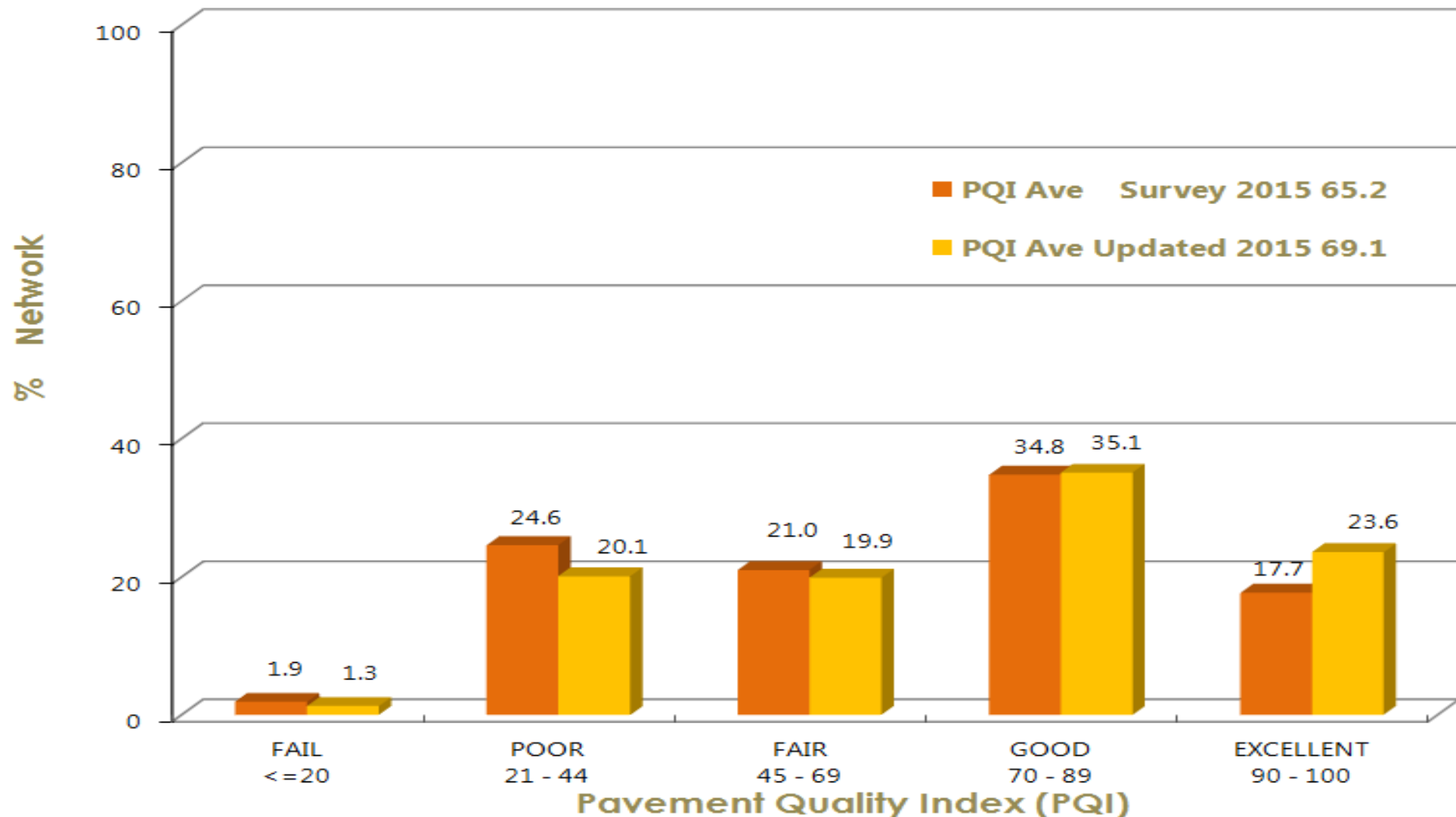
# PQI COMPARISON

## City Maintained Roads – 2015 Rehabs Rating Update



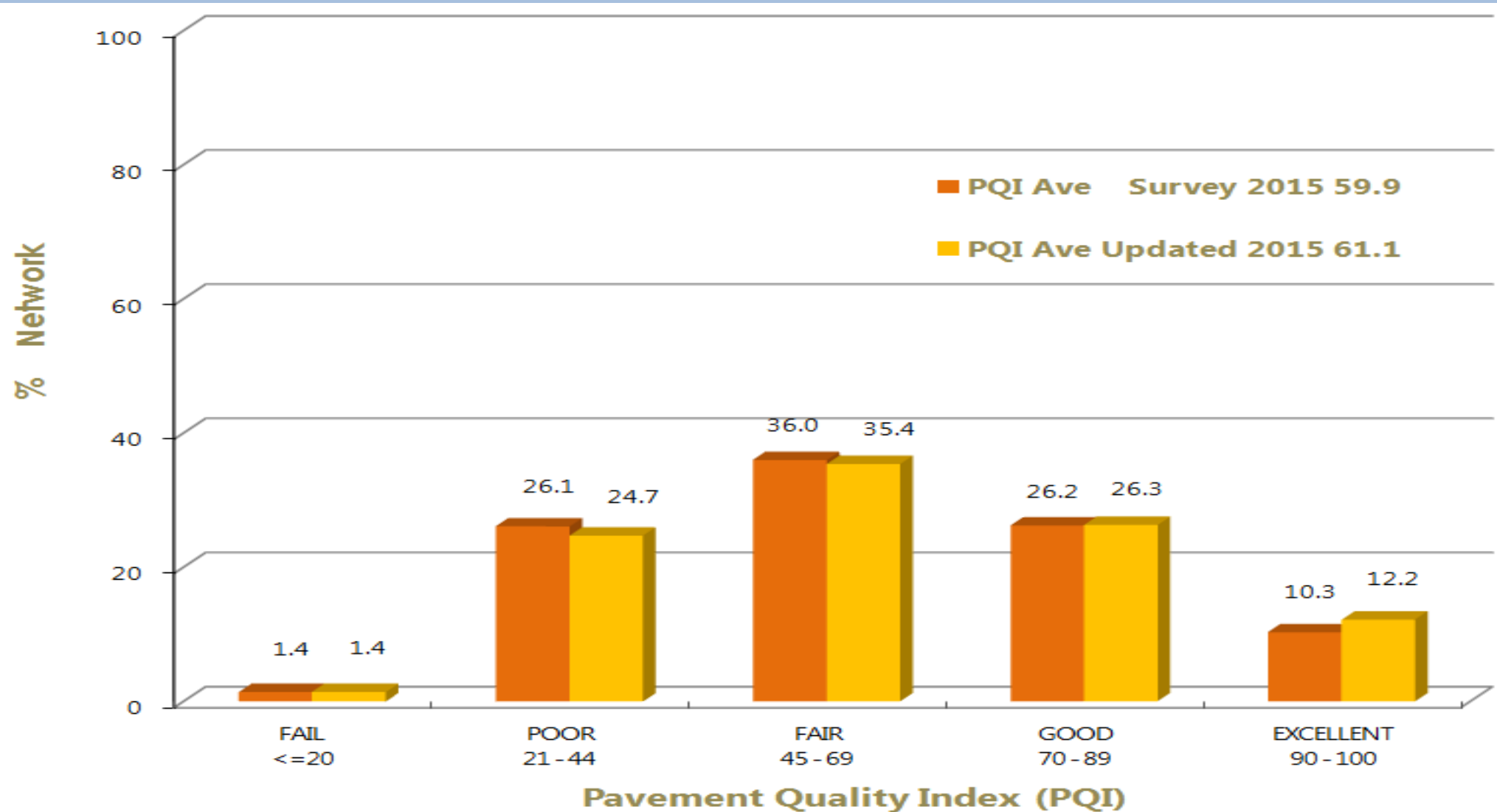
## Network Present Status Distribution PQI – 2015

### City Maintained Minor and Major Arterials



## Network Present Status Distribution PQI – 2015

### City Maintained Local and Collectors



**Alleys:** 4,028 paved alleys with a length of 414 miles

**Alley in need of repair**



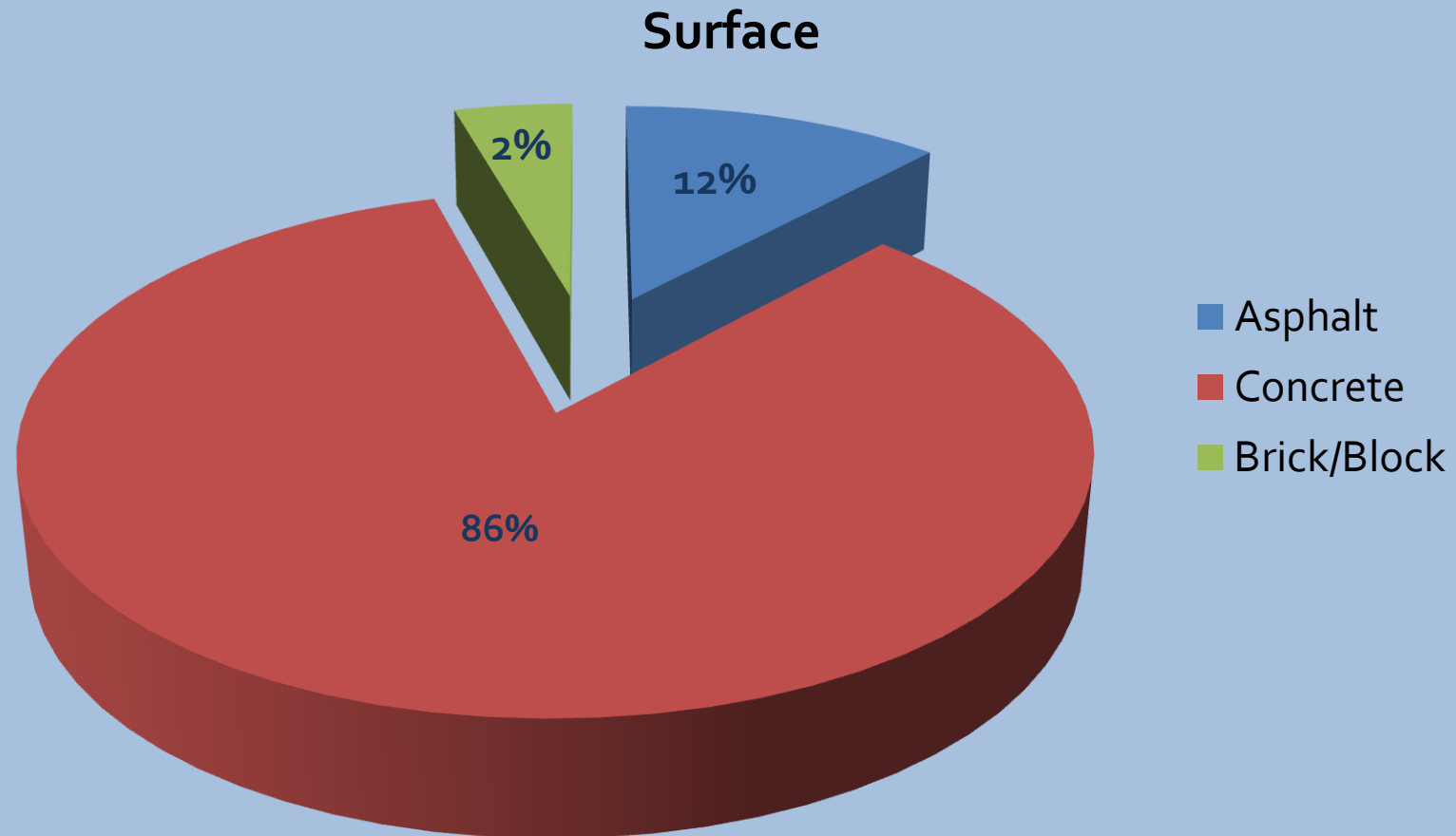
**New alley**



# 2015 Adopted Alley

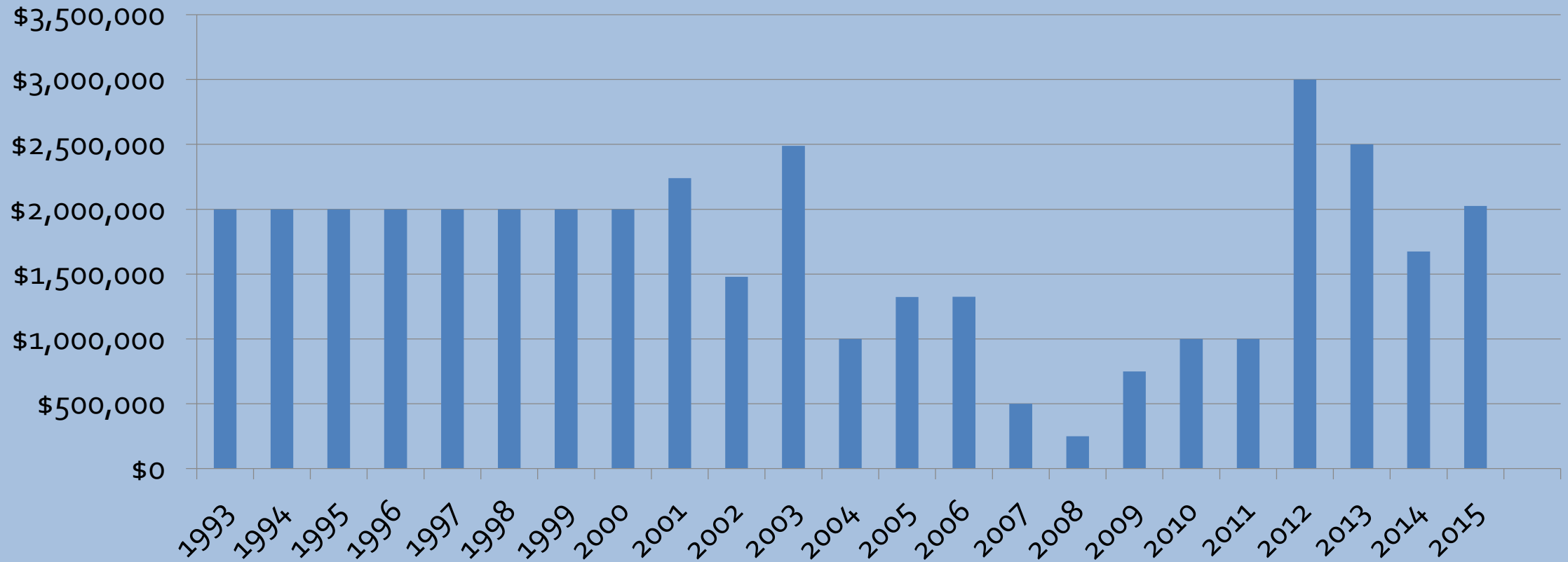
	Alley
Year	Millions
2015	\$2.025
2016	\$2.125
2017	\$2.125
2018	\$2.125
2019	\$2.125
2020	\$2.125
6 Yr Total	\$12.650

# Alley pavement types





## 1993-2015 funding for alleys



## Alleys constructed 1990-2014

