



Infrastructure Services Division

Street & Alley Condition Report

Pavement Management Objectives

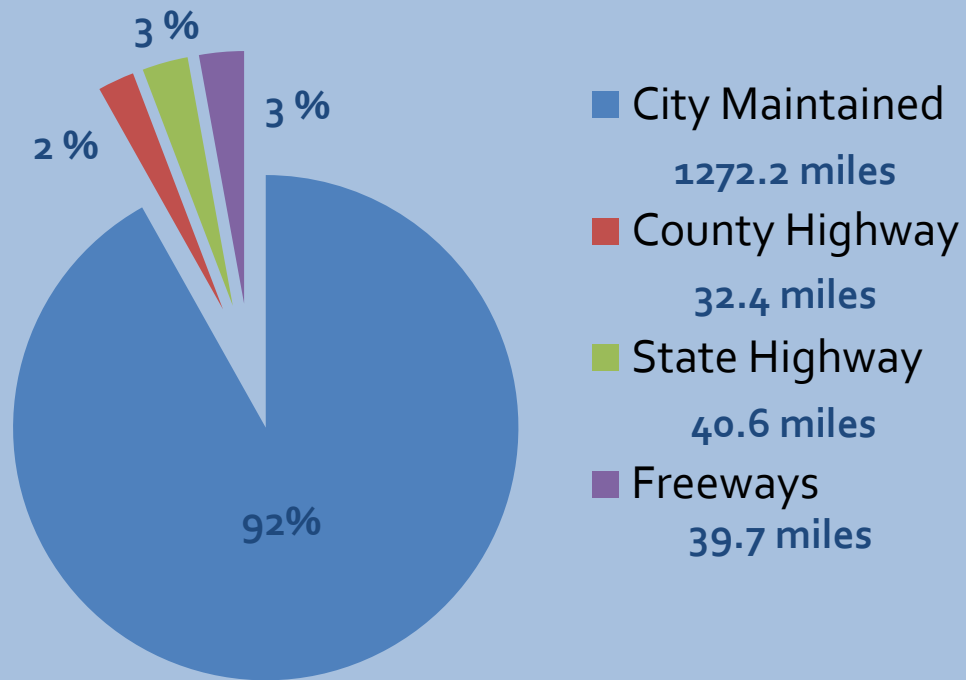
- Preserve and/or improve quality of streets and alleys
- Consider immediate and long term needs
- Systematic process to rank projects
- Publish 2-year program

Pavement Management Plan

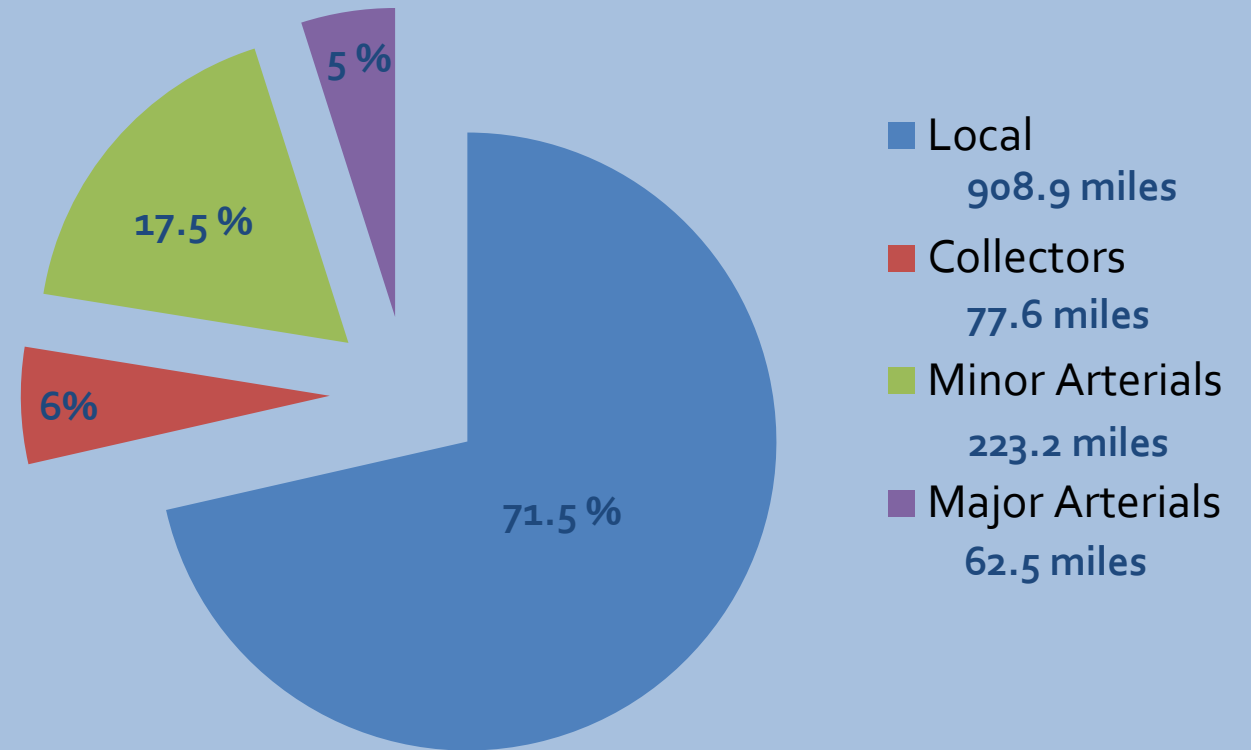
- Evaluate condition
- Apply appropriate treatment
 - Preventative maintenance
 - Resurface or reconstruct
- Get the most out of every dollar

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 Condition Ratings

Every seven 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

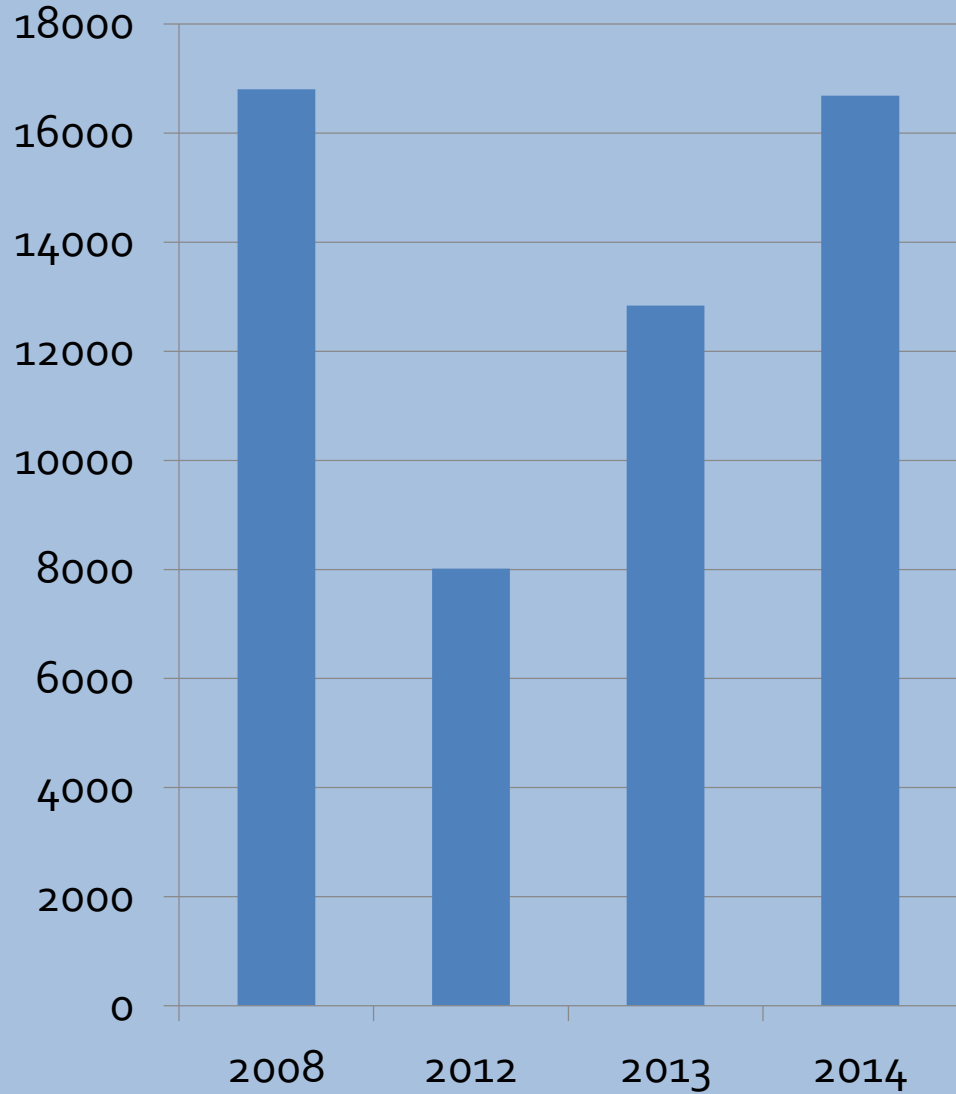
45-70 is Fair

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: Pothole Report



■ Pothole Repair Requests

2014 – 16,804

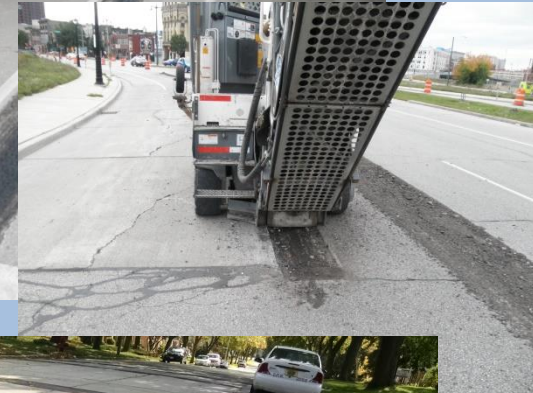
2013 – 12,836

2012 – 8,017

2008 – 16,778



Street Maintenance: Repair Strategies



Street Maintenance: Supercrews



Street Improvements: Local Street Program

2013

Local Program - \$13 m (17.4 miles)

HIP - \$1 m (3.6 miles)

2014

Local Program - \$13.5 m (15.6 miles)

HIP - \$3.0 m (9 miles)

2015

Local Program - \$8.0 m (8.0 miles)

HIP - \$7 m (21.0 miles)

- » Based on a 36 foot street
- » Minus \$2m for Capital Maintenance & Engineering/Administration Costs



Street Improvements: 2-3 yr. Extreme Makeover Paving Strategy

2016

Local Program - \$5 (5 miles)

HIP - \$10.5 m (30.5 miles)

2017

Local Program - \$5 m (5 miles)

HIP - \$10 m (30 miles)



Increase in Miles Paved

- » Based on a 36 foot street
- » Minus \$2m for Capital Maintenance & Engineering/Administration Costs

2015 ≈ 32%

2016 ≈ 82%

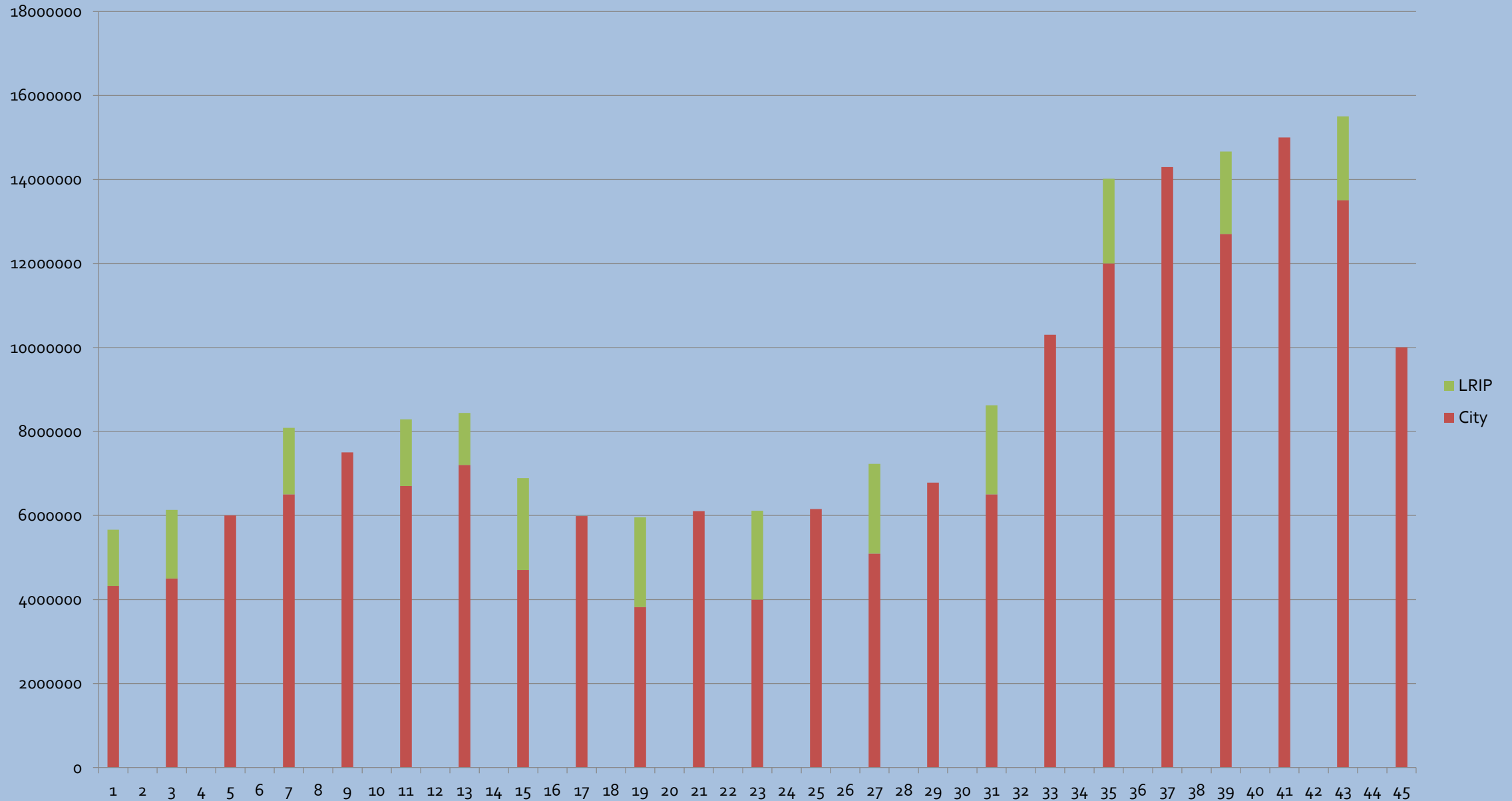
2017 ≈ 84%

High Impact Paving

- Good candidates
 - Major arterial for traffic movement
 - Located in a business district
 - Good sub base
 - No curb and gutter or sidewalk work
 - No major utility work
- Construction Work:
 - Mill 2 inches existing pavement
 - Place 2 inches new asphaltic pavement
 - Construction time 1-5 days (road closure, weather)
 - Cost \$1 mil = 3.6 miles vs \$1 mil = 1 mile resurface/reconstruct



1993-2015 Local Street Budget and LRIP funding



Local Street Miles Constructed

| <u>Year</u> | <u>Mile</u> |
|-------------|---------------|
| 2007 | 4.2 |
| 2008 | 9.7 |
| 2009 | 9.5 |
| 2010 | 19.5 |
| 2011 | 15.9 |
| 2012 | 19.3 |
| 2013 | 15.2 |
| 2014 | 12.7 |
| 2015 | 8 (estimated) |

Street Improvements: Major Street Program

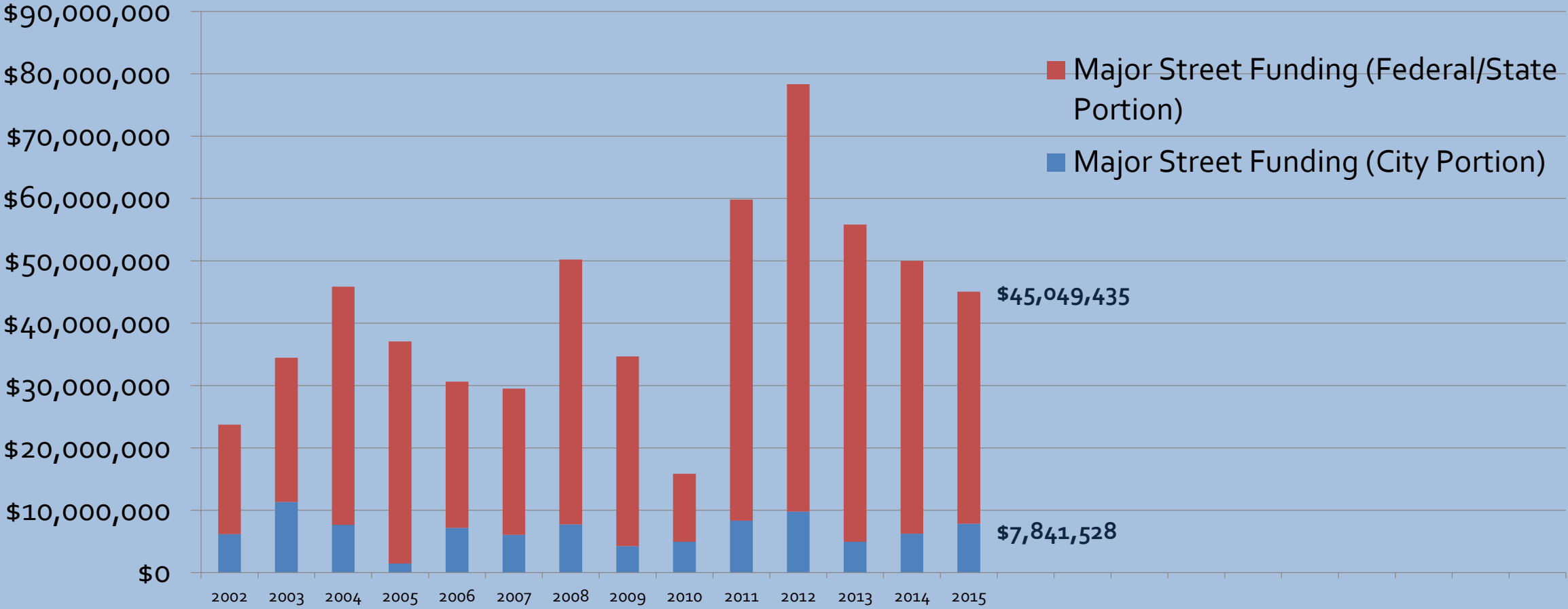
- Provide design and construction funding for major and minor arterial streets
- Design and construction funding for projects thru Milwaukee Urbanized Surface Transportation Program (STP-M), Connecting Highway Program, Highway Safety Improvement Program (HSIP), Safe Routes to School (SRTS), Transportation 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

2015 Major Street Program (\$45,049,435)

- State Trunk Highways \$11,000,000
- Connecting Highways \$ 5,075,000
- County Trunk Highways \$ 80,000
- State Transportation Program \$ 9,981,000
- Other (CH,TE, CMAQ, LRIP, SRTS, etc.) \$18,913,435



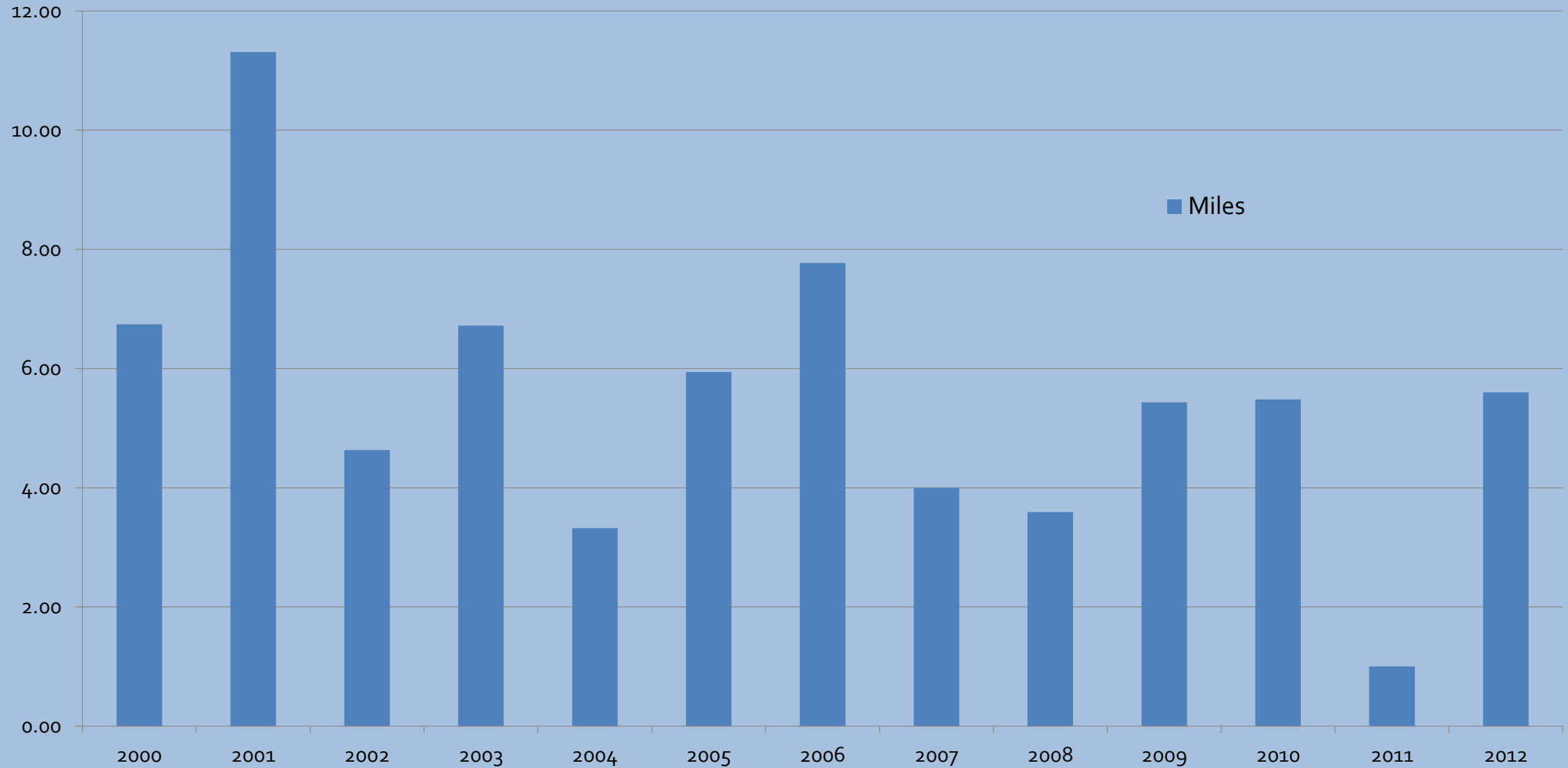
2002- 2014 Major Street Funding



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 |

Miles of Major Streets Constructed



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

Alley in need of repair



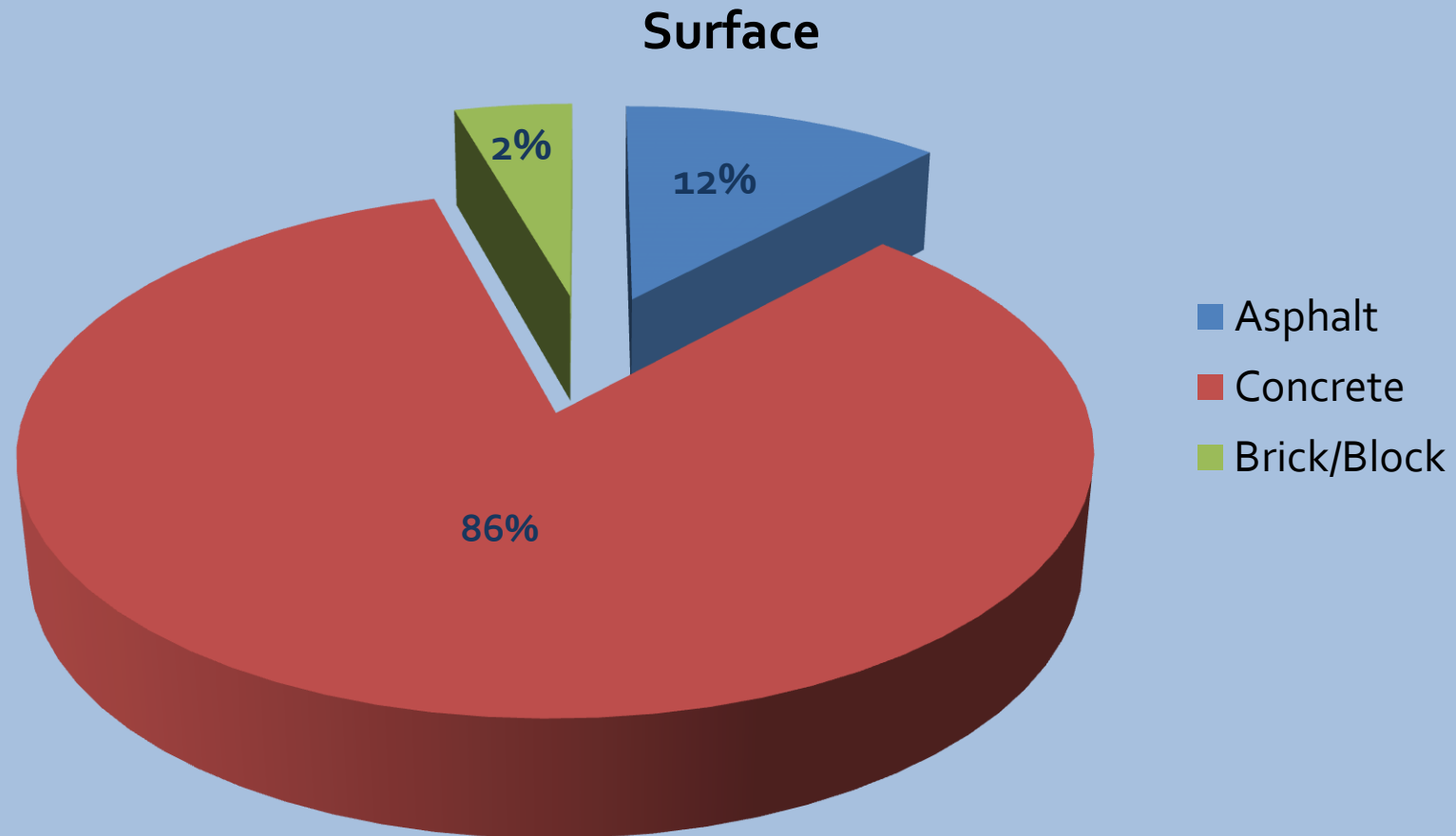
New alley



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 |

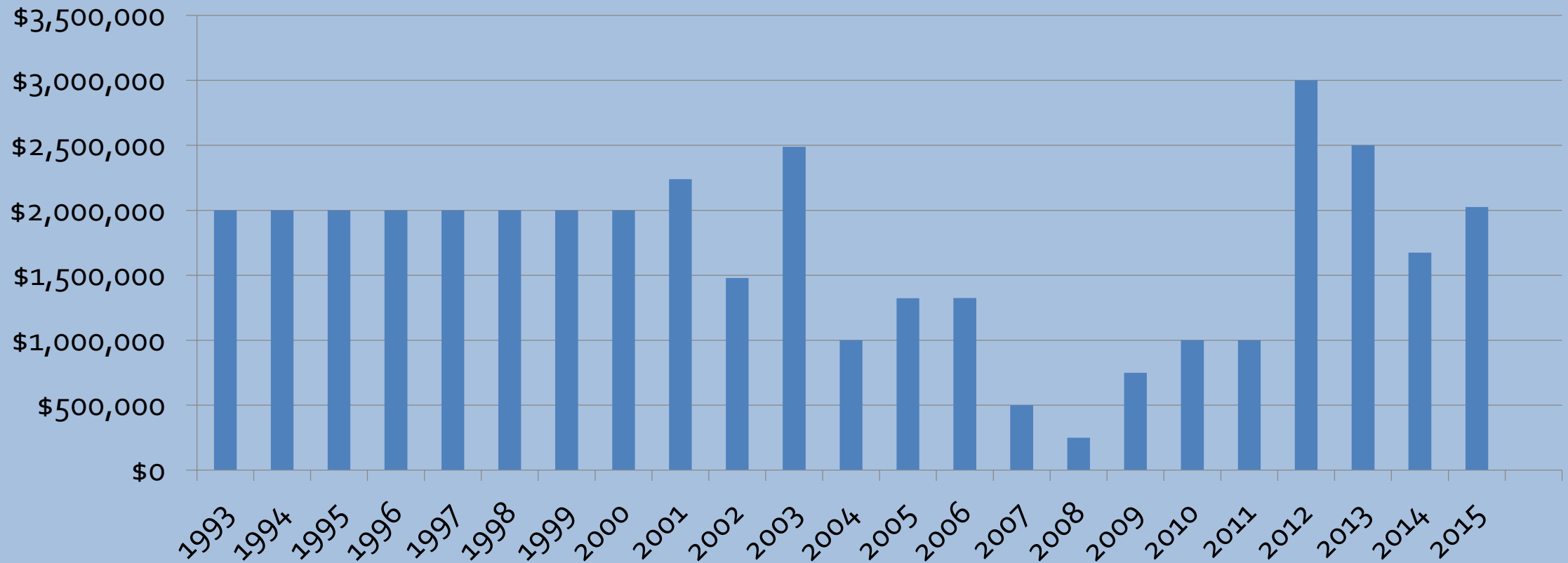
Alley pavement types



Funding for Alleys

1993- 2013

1993-2015 funding for alleys



Alleys constructed 1990-2014

