



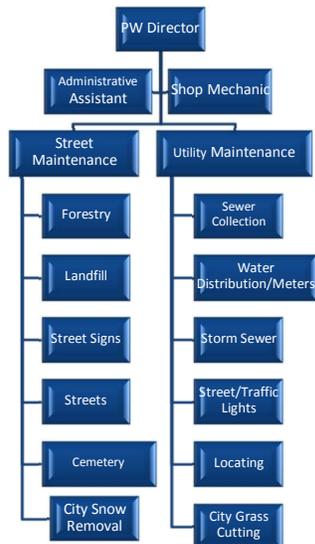
**GREAT THINGS**  
FOR BUSINESSES, RESIDENTS & VISITORS

COMMUNITY • OPPORTUNITY • ADVENTURE  
**MADE IN MANDAN**  
ACHIEVEMENT



**LOCAL GOVERNMENT SERVICES**  
**Public Works – Street Maintenance & More**  
*April 8, 2013*

## PUBLIC WORKS SERVICES



“ Forum focus areas:

- . Street maintenance
- . Snow removal
- . Street sweeping
- . Landfill & related services
- . Forestry
- . Utility maintenance

# 2012 State of the Streets Report

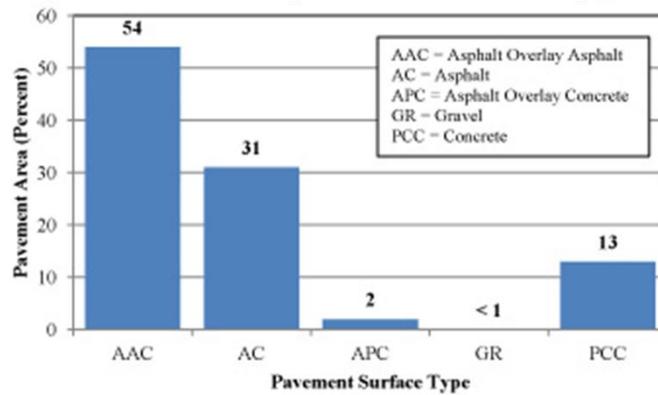


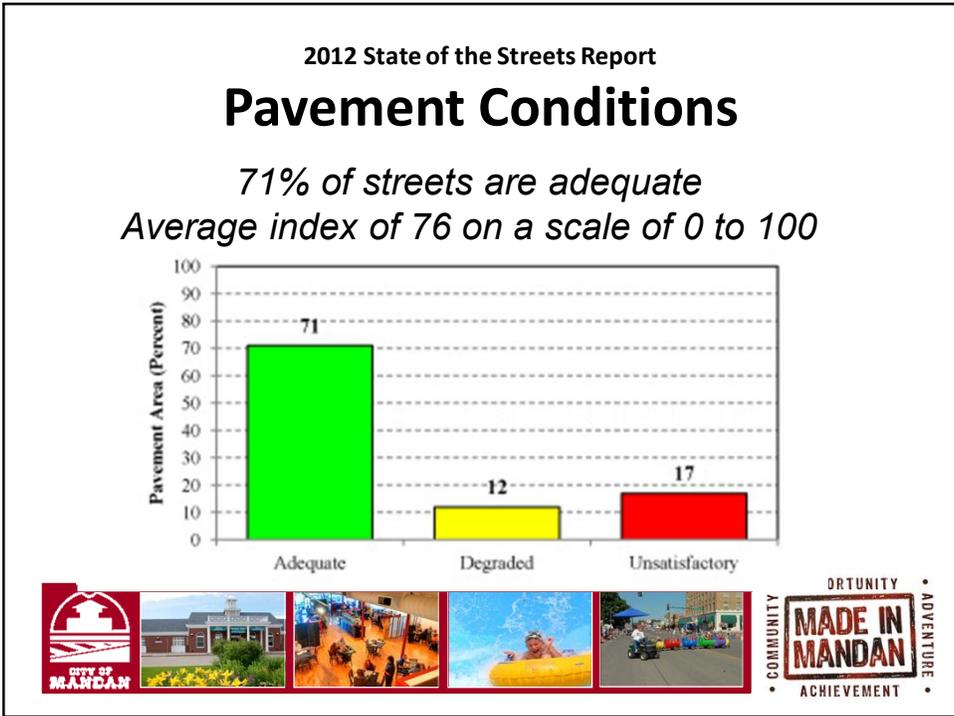
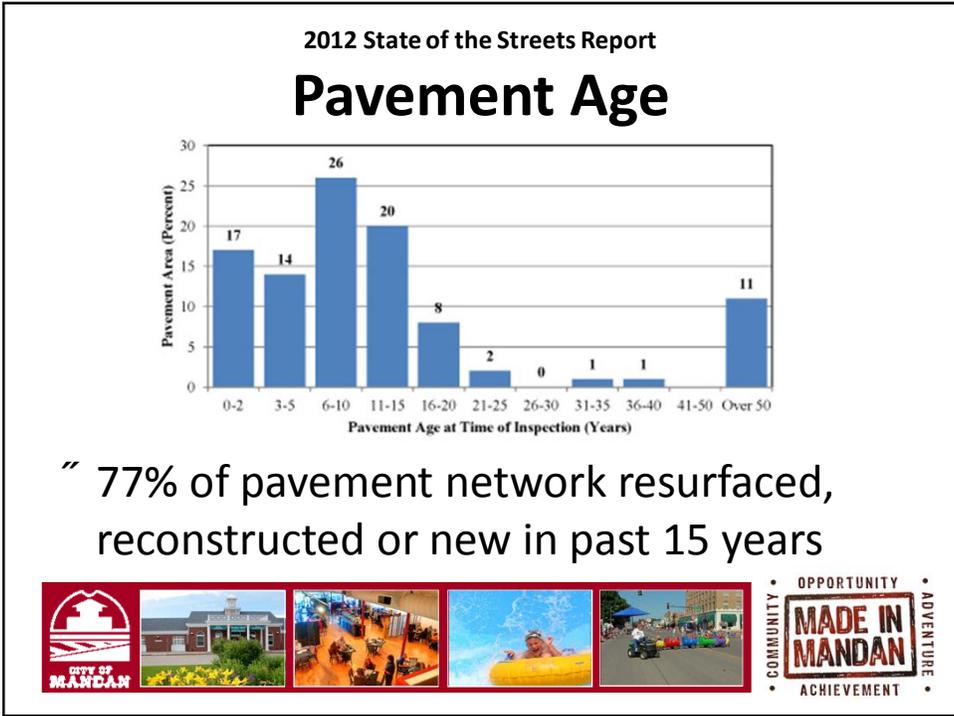
“ Surveyed 104 miles of paved roadways  
 . Including 26 miles of arterial streets



## 2012 State of the Streets Report

# Roadway Surface Type





**2012 State of the Streets Report**

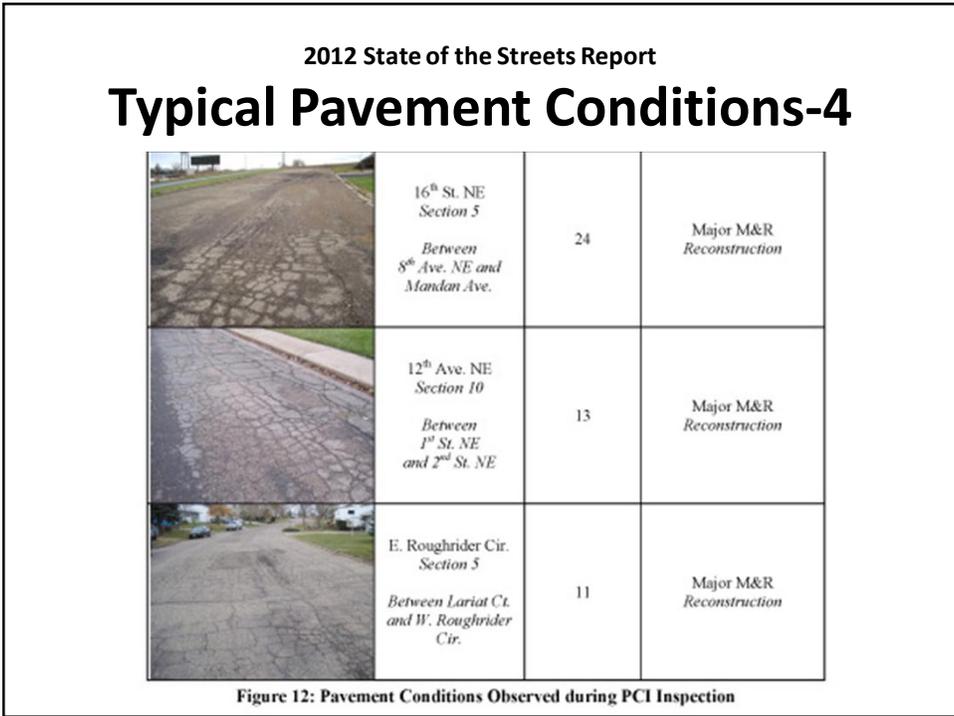
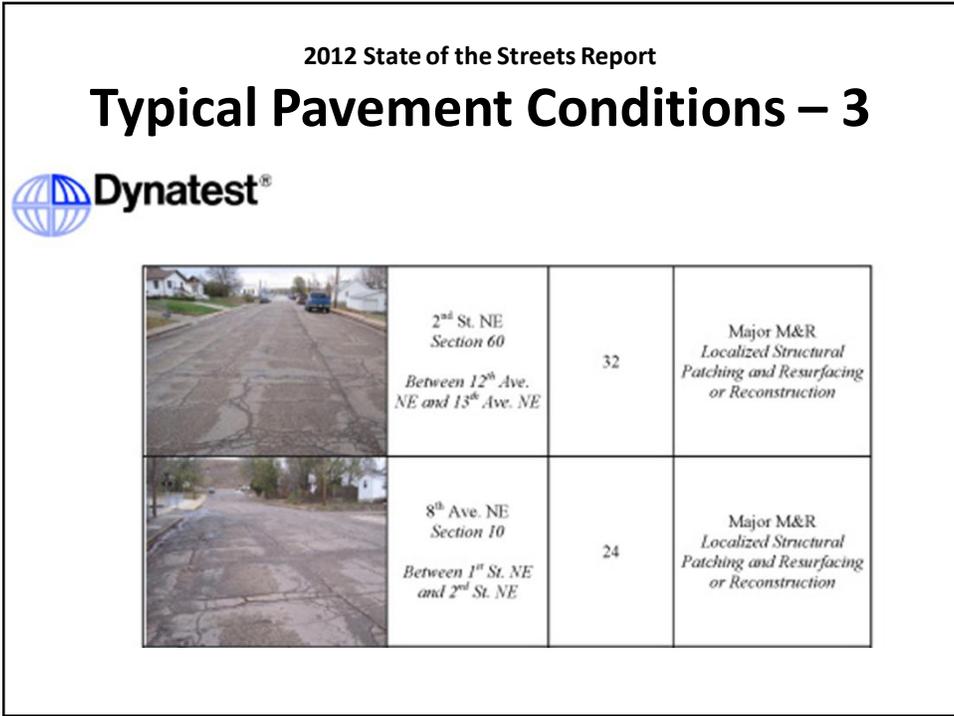
## Typical Pavement Conditions - 1

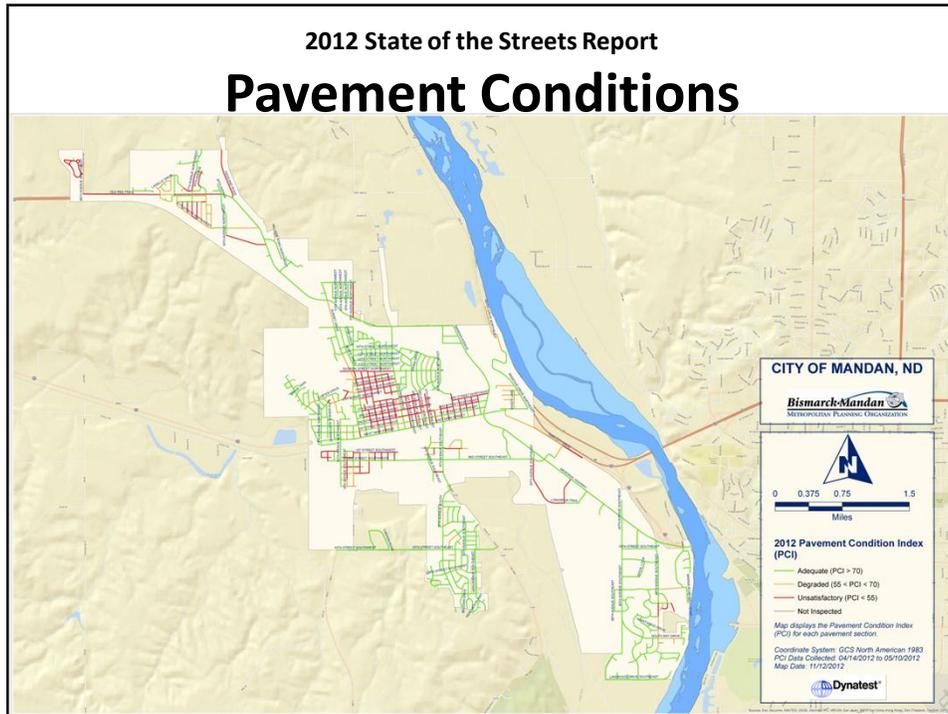
	Location	PCI	Recommended M&R Activity (Typical)
	2 <sup>nd</sup> St. NE Section 65 <i>Between 13<sup>th</sup> Ave. NE and Mandan Ave.</i>	100	Do Nothing
	1 <sup>st</sup> St. NE Section 35 <i>Between 6<sup>th</sup> Ave. NE and 8<sup>th</sup> Ave. NE</i>	89	Do Nothing or Preventive Maintenance <i>Joint Sealant</i>
	46 <sup>th</sup> Ave. SE Section 50 <i>Between 21<sup>st</sup> St. SE and 19<sup>th</sup> St. SE</i>	89	Do Nothing or Preventive Maintenance <i>Crack Seal, Surface Treatment</i>

**2012 State of the Streets Report**

## Typical Pavement Conditions - 2

	Mandan Ave. Section 15 <i>Between 2<sup>nd</sup> St. NE and 3<sup>rd</sup> St. NE</i>	79	Preventive Maintenance <i>Joint Sealant</i>
	1 <sup>st</sup> St. NW Section 70 <i>Between 1<sup>st</sup> Ave. NW and Collins Ave.</i>	68	Preventive Maintenance <i>Crack Seal, Localized Patching</i>





**2012 State of the Streets Report**

## Effect of Budget on Roadways

- “ Street maintenance budget – mainly patching - mill/overlay/chip sealing
- “ Annual funding would need to increase from current \$2 million average to:
  - \$4.2 million to maintain ratings in next 5 years
  - \$7.2 million to eliminate backlog of repair projects in next 5 years

**CITY OF MANDAN**

• OPPORTUNITY •

**MADE IN MANDAN**

• COMMUNITY •

• ADVENTURE •

• ACHIEVEMENT •

## Street Maintenance

- “ Paid for via State Aid - N.D. Highway Fund
  - . Gas tax
  - . Based on % of state population
- “ City budgets about \$350,000/yr for replacement of water & sewer lines
  - . Try to do before a major street project



Did you know?

- “ Mandan has about 115 miles of public & private streets
- “ About 14 miles of alleys



## Why Special Assessments for Street Improvement Projects?

- “ Property taxes for the general fund don't quite cover police & fire
- “ Property taxes would need to be higher to cover more or larger share of street projects
- “ Major projects - mill, overlay, reconstruction
  - . Largely funded via special assessments for defined districts (benefitting properties)



## Funding for Urban/Arterial Roadway Improvements

- “ Federal/state funding
  - . 80% to 90%, but above ground only
  - . Does not cover water, sewer
- “ Local share
  - . Special assessment district
  - . Dedicated mill levy
  - . Sales tax fund contribution



## Current Street Improvement Projects

- “ 2012-13
  - . NW Mandan - Diane’s Addition, et al
- “ 2013
  - . Sunset Drive (7<sup>th</sup> St to 15<sup>th</sup> St NW)



## Future Street Improvement Projects

- “ SE – 46<sup>th</sup> & 40<sup>th</sup> Avenues SE – impacted by flood
- “ NW - Developers West & Roughriders subdivisions



## Downtown Street Improvement Project

- “ 2<sup>nd</sup> to 5<sup>th</sup> Streets NW (from 6<sup>th</sup> Ave NW to Mandan Ave) need to be reconstructed or repaired, but ...
  - . 2<sup>nd</sup> St recently added to urban roads/arterial list
    - “ Makes street portion of project eligible for federal funds
  - . Complicating aspect - old water & sewer lines need to be replaced & storm water drainage needs to be addressed
  - . Concern is ability of residents/property owners to pay as part of a special assessment district



## Other Remaining Street Improvement Projects

- “ North Central – north of 5<sup>th</sup> Street & south of Division Street (from 6<sup>th</sup> Ave NW to Collins Ave)
- “ South of Main Street to Heart River
  - . Needs storm sewer



## Streets – Cold Season

- “ Sanding/salting
  - . Police Department assists with monitoring
- “ Snow removal
  - . 9 plows, 10 operators
  - . 4” snow or more
  - . Arterial routes take priority
  - . Goal is to have all streets open within 36 hours after a storm



## What About Snow Gates?

### “ Pros

- . Citizen convenience
- . Most effective under 6” snow
- . Work well cleaning up intersections



## What About Snow Gates?

### “ Cons - time & expense

- . 25% longer to clear streets
- . 31% more fuel
- . \$54,000-plus approximate cost
  - ~ \$6,000/gate X 9 plows
  - ~ PLUS cost of additional plows & operators since it takes longer to cover same distance
  - ~ PLUS installation & maintenance costs



## More on Snow Removal

- “ 3 stall garages leave fewer places to put snow on streets until it can be hauled
- “ We do our best to minimize ridge in driveway
- “ Homeowners responsible for mailboxes
  - . Again we do our best to keep clear



## Streets – Warm Season

- “ Crack sealing
  - . Best done in cooler weather when cracks are still open
- “ Pothole repair
- “ Street sweeping
  - . 3 sweepers
  - . 1-2 times through whole city in spring
  - . Again after July 4
  - . Fall leaf clean-up



## Other

- “ Adopt-A-Street program
  - . Litter clean-up
- “ Holiday banners, lights, streamers, etc.
  - . Assisted by Utility Department (bucket truck)



## Household Garbage Handling

- “ Contract for collection & hauling
  - . Totes available via Armstrong Sanitation
- “ Compacted at landfill transfer station
- “ Hauled to Wishek
  - . Mandan not certified as a municipal landfill



## More About Mandan's Landfill

- “ For inert waste
  - . Primarily commercial construction debris
  - . Furniture, etc.
- “ Other materials taken at landfill
  - . Appliances
  - . Concrete
  - . Wood
  - . Lawn & garden waste



## Recycling – Current Services

- “ At landfill - white metals (appliances), concrete, wood
- “ Composting - Grass, leaves
- “ Collection sites
  - . Newspapers, cardboard other paper – Braves Center
  - . Newspapers - Central Market



## Potential for Curbside Recycling

- “ Place for recyclables to go & transportation costs are key factors
- “ In preliminary discussions with Waste Management
  - . Totes available in different sizes depending upon household needs
  - . Bismarck offering opt-out provision



## Spring Clean-Up Week

- “ April 29 – May 4, 2013
  - . Bulky items at point of waste collection by 5 a.m. on normally scheduled day
  - . Keep items for discard separate from household garbage
  - . No tires, branches, leaves, grass, commercial or demolition rubbish, or hazardous materials (paints, batteries or insecticides)
  - . Landfill open free to Mandan residents



## Fall Clean-Up Week?

- “ Not currently offered due to
  - . approximate \$35,000 cost for operators, equipment and lost landfill fees,
  - . plus time not spent on other priorities such as pothole repair, etc.
- “ Alternatively, could possibly offer free landfill services again for a week



## Grass Collection Sites

- “ 6 collection sites
  - . 2 trucks
  - . About 20 containers
  - . 1 full-time operator in summer
- “ Commercial – to landfill



- “ *No bags or garbage please*
- “ *Crew member has to physically separate*
- “ *Public cooperation requested to keep sites clean*



# Forestry

- “ Tree City USA since 1976
  - . 1 of 8 cities in USA to have status 30+ years
  - . 5,009 boulevard trees
- “ Boulevard tree cost-sharing program
  - . Contact City Forester for verification of eligible trees
  - . Reimbursement for ½ cost of tree up to \$50 & \$300 per property



Arbor Day program



# Forestry Disease Prevention & Control

- “ Dutch Elm disease
  - . Losing stately trees
  - . 140 public & private trees diagnosed in 2012
  - . Quick removal of infected trees controls spreading
  - . Dispose of all elm firewood & deadwood
    - “ If bark is removed, bare wood is not harmful



## Forestry Disease Prevention & Control

- “ Ashe Borer
  - . Do not transport wood from outside of state into N.D., especially eastern states
- “ Tree inventory is changing
  - . Fewer American Elm (58% in 1976 vs. 13% in 2013)
  - . More Green Ash (8% in 1976 vs. 28% in 2013)



## Utility Maintenance Statistics

- “ Water mains – about 130 miles
- “ Fire hydrants – about 1,150
- “ Sewer mains – about 100 miles
- “ Lift stations – 26
- “ Storm sewer – about 35 miles
- “ Storm lift stations – 8
- “ Street lights – 2,800
- “ Traffic signals – 11
  - . And growing...



Sewer lift station near Porsburg Dam



## Utility Maintenance

- “ Water distribution system
  - . Annual fire hydrant flushing – April 15 to May 19
- “ Sewer collection system
  - . Weekly maintenance of lift stations



Master lift station off First Street SE



## Utility Maintenance

- “ Storm sewer maintenance – inlets & manholes
  - . Adopt-An-Inlet



## Utility Maintenance

- “ Street lights
  - . LED replacement program
- “ Underground locating



## Flood Prevention & Control

- “ Public Works Department also becomes heavily involved in crisis prevention & recovery



# Thank You



- “ Public Works
  - . Phone 667-3240
- “ [www.cityofmandan.com](http://www.cityofmandan.com)
  - . See Public Works Department section for more information

