

# Pavement Management Plan

## Public Informational Meeting

for the

City of Excelsior

WSB Project No. 1140-61

**Excelsior**



# Background

- August 20, 2007 – Council authorizes Phase 1 including field investigation of pavement conditions
- Field measurements completed in accordance with U.S. Army Corps of Engineers Pavement Management Methodology
- Field measurement of distress types and severity including:

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# Pavement Distress Types

- Alligator cracking
- Block cracking
- Transverse cracking
- Edge cracking
- Surface settlements

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# Pavement Distress Types



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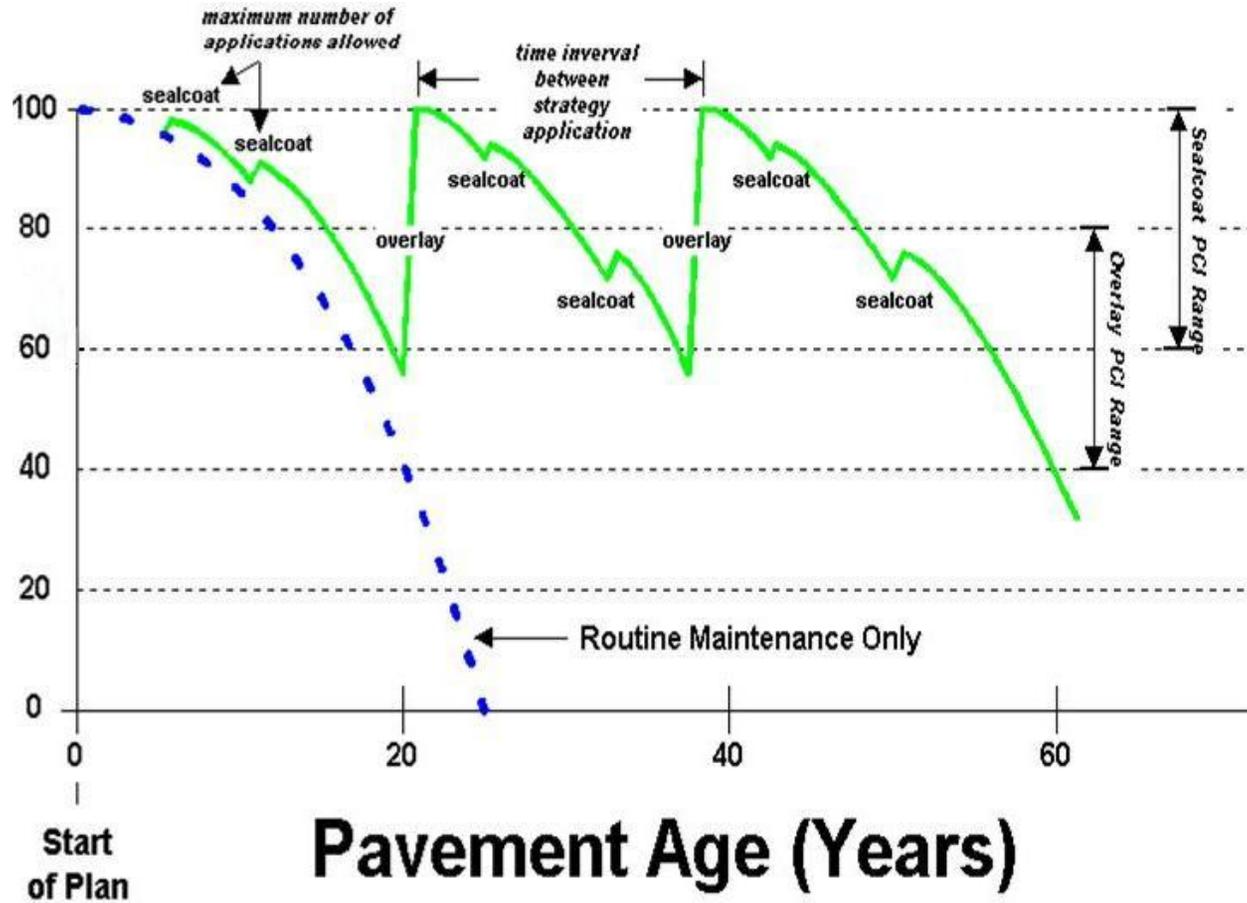
# Pavement Management

- Field data measured and calculated
- Basis for calculation of overall condition index (OCI)
- OCI calculated for each section of street in the City
- OCI values are basis for determination of maintenance technique vs. total reconstruction
- Basis for ranking and establishment of project areas

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# Overall Condition Index



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# Maintenance/Rehabilitation Techniques

- **Seal Coating (Chip Seal)** – application of emulsion with new surface – seals and protects existing pavement
- **Crack Filling** – Routing and sealing of cracks with rubberized material typically done with both seal coat and mill and overlay

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# Maintenance/Rehabilitation Techniques

- **Mill and Overlay** – edge milling and new wearing surface to re-establish roadway crown and improve rideability
- **Reconstruction** – complete removal and replacement of existing pavement, ability to address underground utility deficiencies

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# OCI Ranking/Priority

- 91 – 100 New Condition – Do nothing
- 61 – 90 Routine maintenance (seal coating/crack filling )
- 31 – 60 Overlay
- 0 – 30 Total Reconstruction

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# City of Excelsior

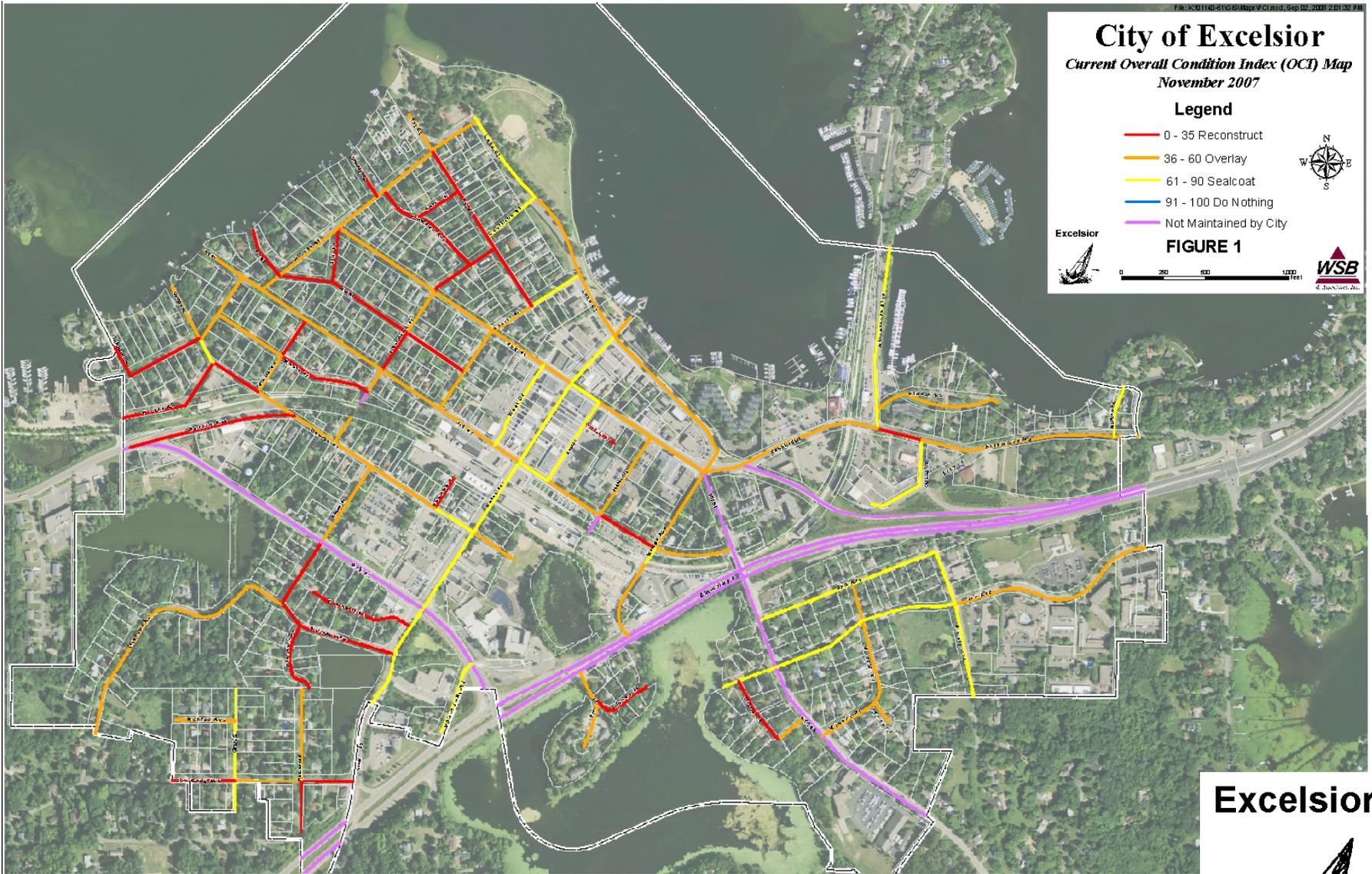
Current Overall Condition Index (OCI) Map  
November 2007

## Legend

- 0 - 35 Reconstruct
- 36 - 60 Overlay
- 61 - 90 Sealcoat
- 91 - 100 Do Nothing
- Not Maintained by City



**FIGURE 1**



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# Program Development

- Initial prioritization based on OCI
- OCI is reflection of pavement condition only
- Priority supplemented with underground utility information
  - Watermain break history
  - System deficiencies – size, capacity, quality
  - Sanitary sewer visual inspections
  - Storm water needs

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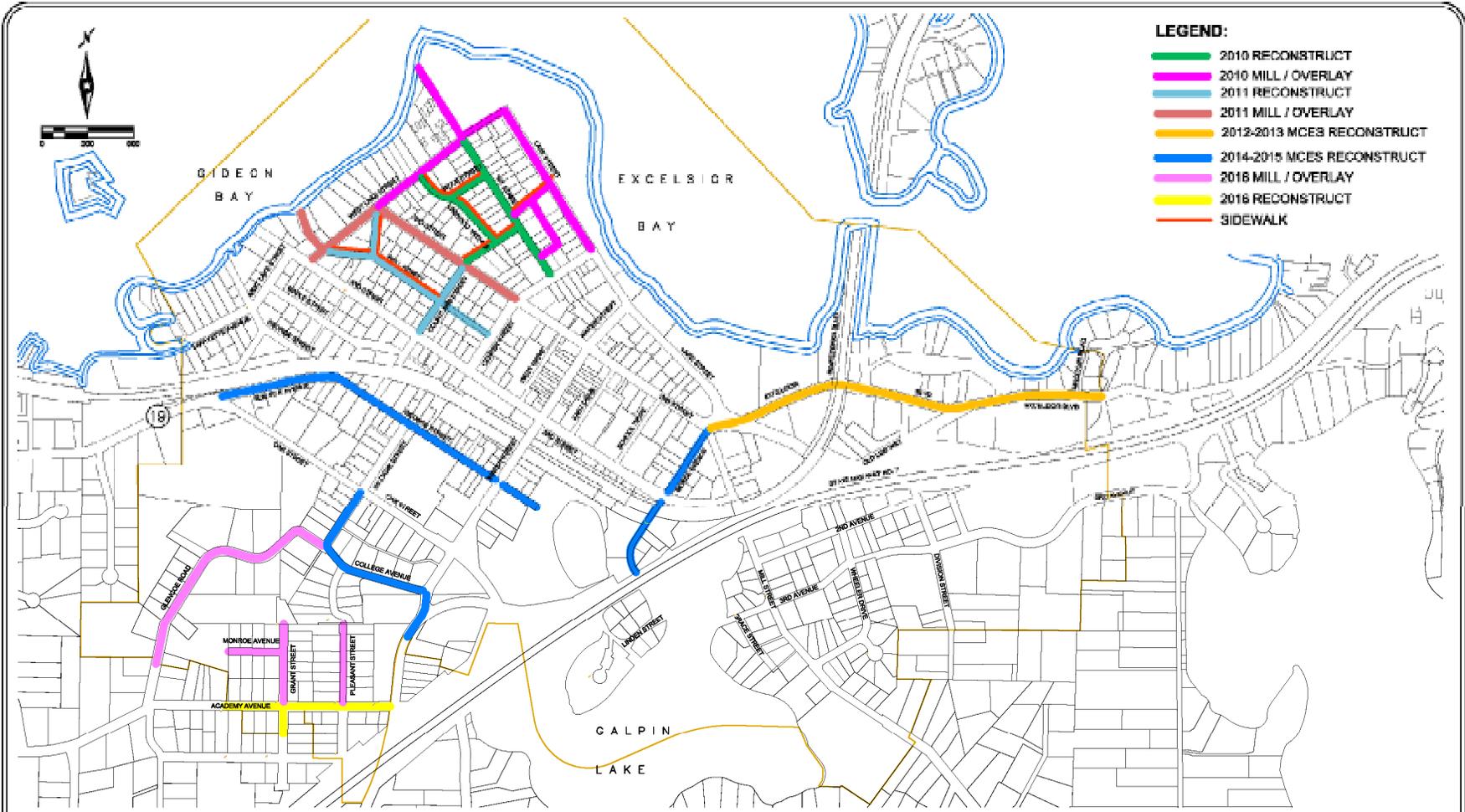


# Program Development (cont'd)

- Status of underground utilities can influence decision of maintenance versus reconstruction
- Border line mill and overlay streets can be changed to reconstruction status based on infrastructure needs and history

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PAVEMENT MANAGEMENT PLAN

EXCELSIOR, MINNESOTA

EXCELSIOR



WSB Project No. 01140-61

February 12, 2010

FIGURE 1



# Opinion of Cost

DESCRIPTION	STREETS	SANITARY SEWER	WATER MAIN	STORM SEWER	TOTAL
2010 RECONSTRUCT	\$498,600.00	\$274,900.00	\$327,800.00	\$58,800.00	\$1,160,100.00
2010 MILL & OVERLAY	\$255,300.00	\$ -	\$ -	\$ -	\$255,300.00
2011 RECONSTRUCT	\$417,900.00	\$262,900.00	\$248,300.00	\$132,100.00	\$1,061,200.00
2011 MILL & OVERLAY	\$106,900.00	\$ -	\$ -	\$ -	\$106,900.00
2012-2013 MCES RECONSTRUCT	\$1,513,300.00	\$ -	\$ -	\$646,900.00	\$2,160,200.00
2014-2015 MCES RECONSTRUCT	\$1,456,600.00	\$66,200.00	\$ -	\$558,100.00	\$2,080,900.00
2016 MILL & OVERLAY	\$175,500.00	\$ -	\$ -	\$ -	\$175,500.00
2016 RECONSTRUCT	\$320,000.00	\$116,100.00	\$174,200.00	\$ -	\$610,300.00
<b>TOTAL</b>	<b>\$ 4,744,100</b>	<b>\$ 720,100</b>	<b>\$ 750,300</b>	<b>\$1,395,900</b>	<b>\$ 7,610,400</b>