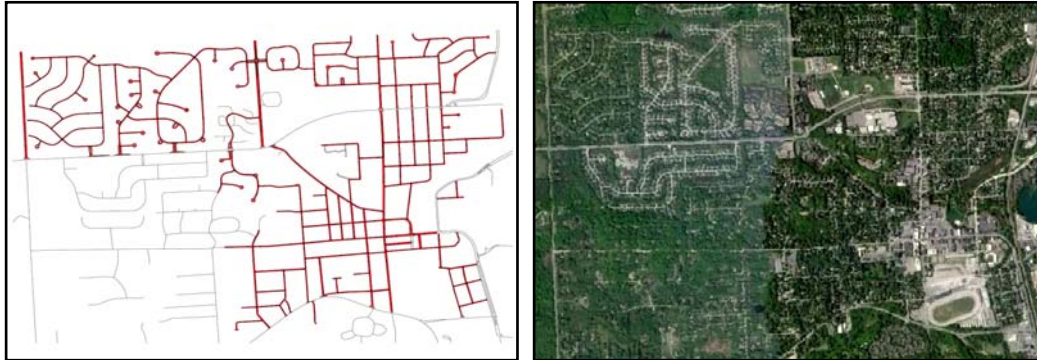


## Northville Municipal Pavement Management System

Northville, Michigan



**Spalding DeDecker Associates, Inc. (SDA)** provided detailed pavement evaluation and inventory of Northville's approximately 25-mile-long roadway network. The information obtained was used to develop a Municipal Pavement Management System, complete with multiple budget scenarios and a conceptual 10-year work plan to help the City determine appropriate funding levels.

### **Field Investigation**

- Visual inspection of pavements in accordance with the established PASER method
- Data collection of varying distresses in multiple types of pavement
- Evaluation of sidewalk, utilities, and curb & gutter to assist in future repair recommendations

### **Data Organization and Pavement Criteria**

- Created network containing more than 170 pavement segments based on Overall Condition Index (OCI), Repair Priority, Pavement Use, and Pavement Classification
- Developed unique deterioration curves to account for each type of pavement according to materials (asphalt, concrete, overlaid concrete) and thickness (standard or heavy duty)

### **Summary of Network**

- Provided detailed analysis of current network conditions based on obtained information

### **10-Year Work Plan Results and Recommendations**

- Implemented computer software analysis to provide conceptual 10-year work plan based on predicted annual expenditures
- Output included Budget Summary, Budget Surplus, and Segment Repair Recommendations Reports
- Additional analysis included Network Backlog and Work Plan Distribution
- Alternate budget scenarios provided to help determine future expenditure requirements

### **Pavement Life**

- Typical extended service life gains for various pavement treatments
- Overview of the costs and benefits associated with various preventive maintenance, rehabilitation, and reconstruction repairs

#### **OWNER / CLIENT**

City of Northville

#### **PROJECT START - END**

August 2011 – November 2011

#### **SDA PROJECT NO.**

NP11-040