

DATE: March 8, 2005

STAFF: Rick Richter

STUDY SESSION ITEM

FORT COLLINS CITY COUNCIL

SUBJECT FOR DISCUSSION

The purpose for this study session is to brief Council on the Pavement Management Program. Staff will present an overview of:

- The City's Computerized Pavement Management Program
- The street selection process for major maintenance
- Treatments utilized
- Pavement Management needs

The study session is intended to be informational. Comments, questions, and feedback are encouraged.

BACKGROUND

In 1989 the City began using a computerized Pavement Management program. This program allows staff to keep track of the City's street inventory by collecting condition data and selecting the most cost-effective treatments. It also assists in predicting future needs of the street system, taking into consideration the projected growth in street miles and the projected deterioration of the existing system.

The Pavement Management Program provides funding for repair and renovation of the City's street system. The program maintains 475 miles of City streets, including arterials, collectors, and residential streets. The maintenance performed includes both major and preventive treatments such as slurry seals, asphalt overlays, and reconstruction when necessary. Maintenance is also performed on curbs, gutter, sidewalks, shoulders, and medians.

This program has been fully funded since 2000. This allows staff to do more preventive maintenance treatments, saving money in the future.

ATTACHMENTS

1. 2004 Pavement Management Program Annual Report.

Pavement Management Program Annual Report

DECEMBER 2004



Transportation Service Area Engineering Department

Pavement Management Program Staff

Rick Richter, Pavement Management Engineer
Erika Keeton, Civil Engineer II
Angel Ontiveros, Construction Inspector
Bill Benson, Construction Inspector
Brenda Van Dyke, Engineering Traffic Technician
Darren Moritz, Construction Inspector
Kathleen Maddux, Construction Inspector
Doug Groves, Construction Inspector

Pavement Management Program Annual Report for 2004

The Pavement Management Program was extremely productive in 2004! We completed 38,000 feet (over 7 miles) of curb, gutter, and sidewalk repairs, installed 177 pedestrian access ramps, and reconstructed or overlaid seventeen (17) miles of paved roadway. Thirteen (13) miles of local streets were slurry sealed. The Pavement Management Program manages a variety of projects including overlays and sealcoats, Hot-in-Place recycling, crack seal, asphalt and concrete street patching, and curb, gutter, and sidewalk repair. The majority of this work is bid to private contractors (approximately 55% of the construction budget), while the City of Fort Collins Streets Department performs the remaining 45%.

The Overlay Project encompassed seventeen areas at various locations throughout the City in 2004 (see attached map and list). In many of these areas funds were combined with other projects to minimize the impact to residents and maximize construction efficiency. Pedestrian Access Funds were used to improve or install sidewalks and eliminate pedestrian hazards throughout the selected areas. One such location was Prospect Road between College Avenue and Timberline Road.

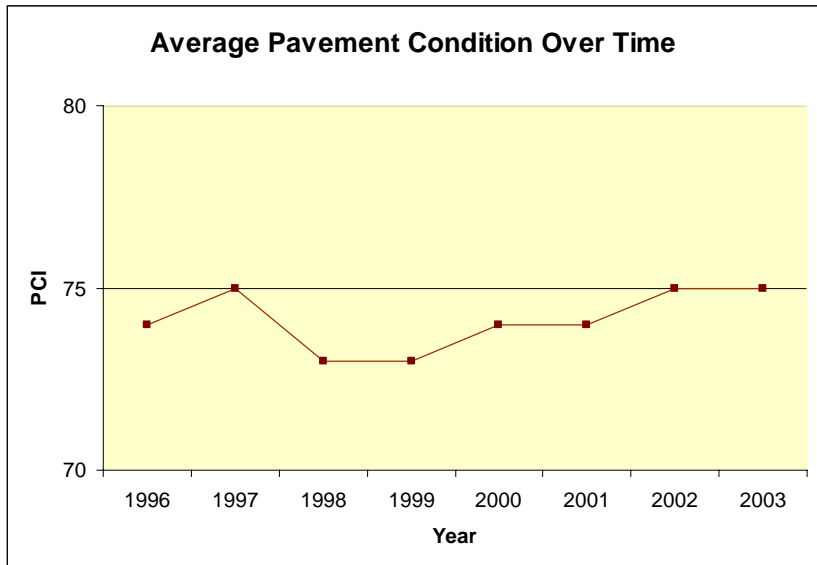
In a continuing effort to find cost-effective interim maintenance procedures to extend asphalt pavement life, an innovative procedure known as Hot-in-Place Recycling was used for the fifth year on six (6) miles of arterial streets. Two and one half (2½) miles were completed on Prospect Road between College Avenue and Timberline Road, and three and one-half (3½) miles were completed on Taft Hill Road between LaPorte Avenue and Valley Forge Avenue. The work was performed with specially designed equipment in a simultaneous multi-step process: heating, scarifying one inch of the existing pavement, applying a rejuvenating agent, thoroughly remixing and reshaping the old asphalt surface, and then placing a one-inch overlay of new hot mix asphalt pavement. This process allows for a single pass operation. The road can then be reopened immediately after the material is compacted, minimizing the total time lanes are closed to traffic.



Taft Hill Road

Avenue and Timberline Road, and three and one-half (3½) miles were completed on Taft Hill Road between LaPorte Avenue and Valley Forge Avenue. The work was performed with specially designed equipment in a simultaneous multi-step process: heating, scarifying one inch of the existing pavement, applying a rejuvenating agent, thoroughly remixing and reshaping the old asphalt surface, and then placing a one-inch overlay of new hot mix asphalt pavement. This process allows for a single pass operation. The road can then be reopened immediately after the material is compacted, minimizing the total time lanes are closed to traffic.

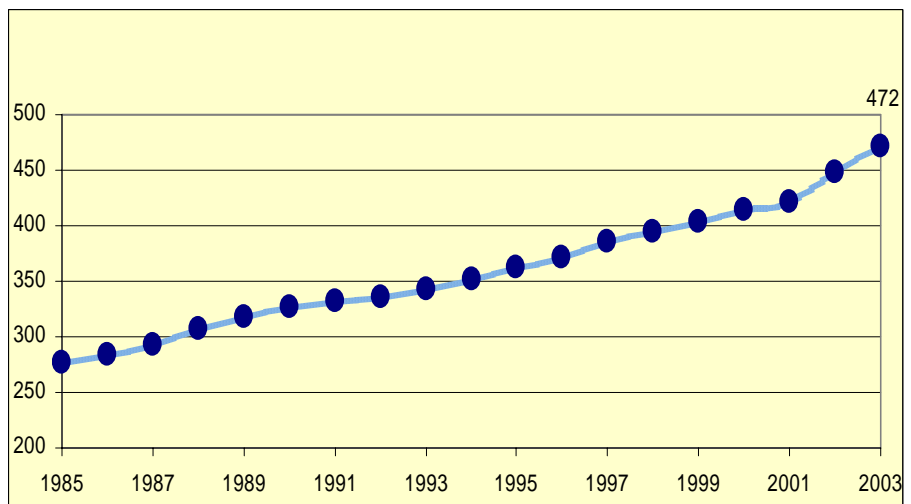
It is the goal of the City of Fort Collins to maintain an overall street pavement condition number of at least 75 on a scale of 1 to 100. A current rating number of 75, as of the end of 2003, was confirmed when street condition data was collected and analyzed. Pavement condition data is collected on a three-year cycle; local streets are collected the first year, collectors and arterials the second year, and then one year is skipped. This ensures that our data is no more than three years old.



With the Council’s approval of the 2004/2005 budget, our project is fully-funded and we will be able to provide the most cost-effective maintenance possible on our street system through 2005.

Growth in Street Miles

The street system continues to grow, as shown by this graph. The funding requirements of the Pavement Management Program increase by 6.5% per year, which accounts for inflation and the growth of the City’s street system.



We are committed to finding new and innovative treatments such as Hot-in-Place Recycling to maximize the effectiveness of our maintenance dollars. In addition, we will continue to ensure quality construction by updating construction standards, monitoring excavation permits, and implementing routine maintenance strategies that reduce future maintenance costs

Pedestrian Access Program

The Pedestrian Access Program got a bit of a late start this year, but still placed 16 new ramps and over 5,500 lineal feet of sidewalk in 2004. This program targets maintenance of existing sidewalk facilities throughout the City, as well as installation of pedestrian access ramps. We also partner with the Street Maintenance Program to repair or install sidewalks adjacent to a proposed asphalt overlay. One prominent location this year included Prospect Road between Stover and Lemay. Here, sidewalks were widened or newly constructed on both the north and south sides of Prospect, making an important connection to local schools.

The Pedestrian Access Program also assists property owners in repairing existing public sidewalks that are defective and considered to be tripping hazards. The Municipal Code requires property owners to maintain and repair the sidewalks adjacent to their properties. The City recognizes that this requirement creates a hardship for some property owners, so a “50/50” cost sharing program was established to assist in paying for needed repairs. We had our biggest participation in recent history in 2004, taking in over \$25,000 from property owners for their share of essential repairs.



Granite pavers were installed as part of the City’s Art in Public Places program on several Pedestrian Access sites this year. The artwork was created by local school children and then sandblasted onto the granite. The pavers are then set in the wet concrete for all pedestrians to enjoy. The pavers are easy to install, very functional, and are a great way to include the students of our community. A new artwork contest is currently underway for future designs to be placed in 2005.



2004 Street Maintenance Program

