

50 Mile Asphalt Program and Joint Jurisdiction Issues

Overview and Options

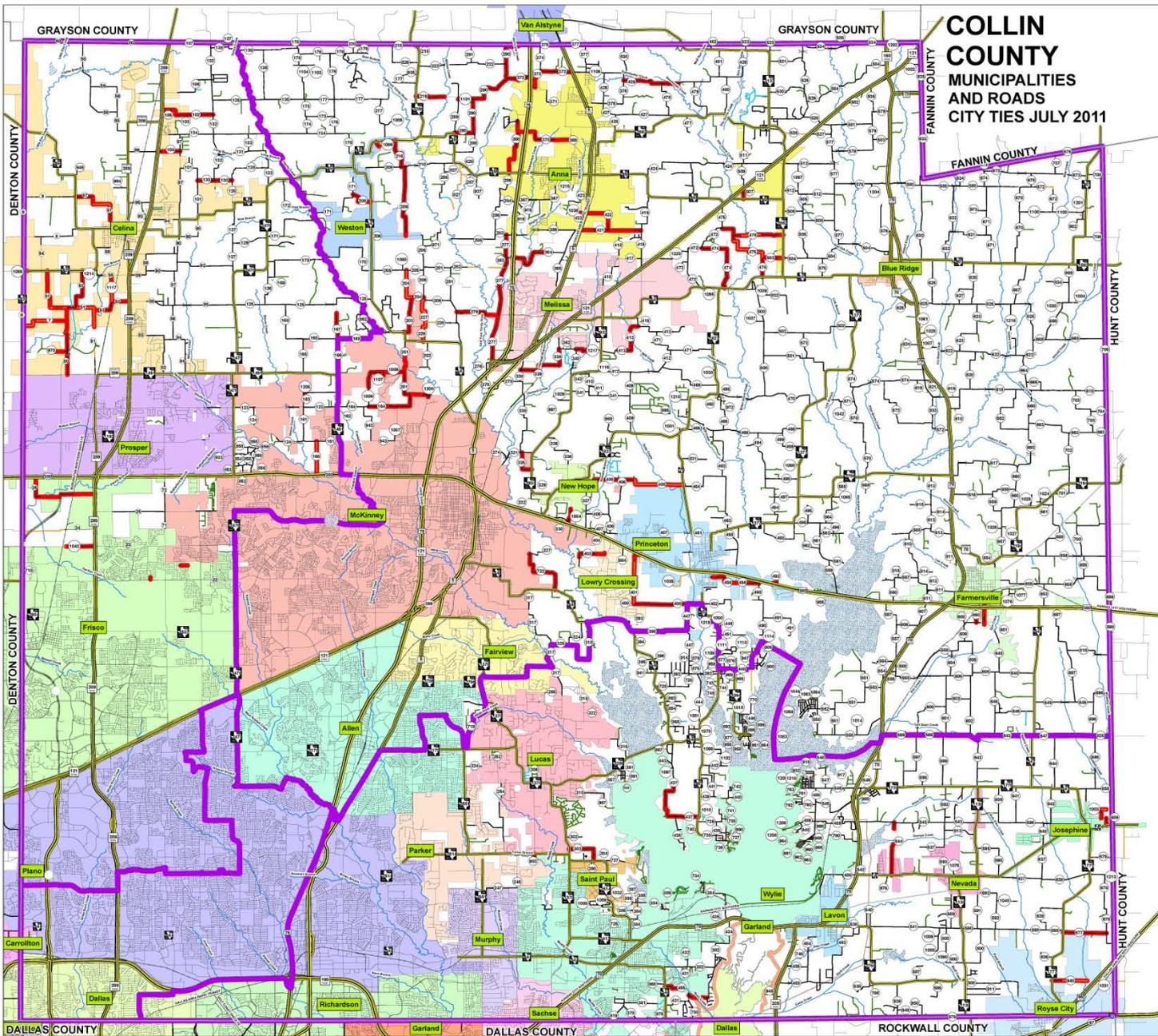
50 Mile Program

- Operational from 2005 to Present
- Scheduled Completion – 2014
- 170 miles remaining to pave (spring 2011)
- 120 miles remaining (fall 2011)
- 86 miles have Mutual Boundaries



Mutual Boundary Road

- Any recognized road sharing a common boundary with an incorporated municipality
- Can be shared by County/Municipality or by Municipality/Municipality



COLLIN COUNTY

MUNICIPALITIES AND ROADS

CITY TIES JULY 2011



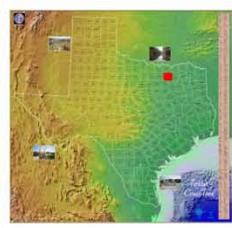
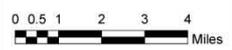
Public Works
Road and Bridge
JULY 28, 2011

FY 2011 - 2014 UPGRADE TO ASPHALT PROJECTS
CITY COST PARTICIPATION

ROADS WITH CITY TIES:
 COMMISSIONER BOUNDARY:

CITY ROAD EXTENT SUBJECT TO CHANGE

- US HWY
- STATE HWY
- BUSINESS SPUR
- FRHWY
- COUNTY ROAD
- CITYWAY
- PRIV-NOT COLLIN COUNTY
- PRIV-COLLIN COUNTY
- ROCK-COLLIN COUNTY
- CONCRETE-COLLIN COUNTY
- DRFT-COLLIN COUNTY
- PRIVATE



Pending Road Projects – 79 Total

Anna – 15

Celina – 13

McKinney – 13

Melissa – 6

Weston – 5

Princeton – 4

Royce City – 4

Wylie – 4

Farmersville – 2

Frisco – 2

Lowry Crossing – 2

New Hope – 2

Garland – 1

Josephine – 1

Lavon – 1

Lucas – 1

Nevada – 1

Parker – 1

St. Paul – 1

Ramifications of Rock Roads

- Road Degradation
- Health Letters/Dust Control
- Safety
- Monetary Impact
- Vehicle Maintenance

Rock Road Degradation



- According to Colorado State University study, 1 vehicle causes 2.5 tons of rock loss per mile per year
- Assuming 200 cars per day, up to 500 tons of fine dust will be released into the atmosphere per year
- In addition, rock particulate matter is dispersed into the atmosphere through a mixture of weather events such as wind and rain which pollute the environment
- In FY 2010, Public Works spread 34,144 tons of rock to replace material lost through erosion

Dust Cloud Formation



Dust Cloud Formation (cont.)



Health Letters/Dust Control



- In FY '10, Public Works processed 783 health letters and oiled 169.2 miles of county roads

CR557



Safety

- Braking distances suffer
- Vehicular control diminishes
- Restricted to Prima Facie speed limits
- Visibility (line of sight) impaired



Monetary Impact



- The cost to replace rock material in FY2010 was \$633,712
- The Department spent \$320,955 to oil roads for dust control in the same year

Vehicle Maintenance

- Increased maintenance costs due to dusty road conditions
- More frequent inspections and component replacements
- Conditions affect both private vehicles and County equipment

Economic Challenges

- PW contacted each municipality with joint jurisdiction of county roads
- All declined to cost participate in road improvements due to fiscal concerns



Sample Pending Road Projects

Anna

CR 474 (1.953 miles)

Cost participation to facilitate this project upgrade - **\$37,000**

Anna/Van Alstyne

CR 372 (.748 miles)

Cost participation to facilitate this project upgrade - **\$38,250**

CR 290 (4.353 miles)

Cost participation to facilitate this project upgrade - **\$21,875**

Project Cost Estimates

Improvement estimates for other projects could be substantially higher as some of the mutual boundary roads are entirely within City limits

* In this instance, we would revert to our recently adopted cost matrix to estimate the project

Options for Paving MB Roads

1. County absorbs the cost of improvements to upgrade only those road segments within County jurisdiction

Options for Paving MB Roads

2. County absorbs all improvement expenses and requests bordering municipalities to pay all future maintenance costs associated with that road hence forward

Options for Paving MB Roads

3. Public Works meets with each respective City Manager/City Council and proposes an annual payback plan i.e. 5-10 years, 10-20 years, etc.