



City of Colleyville City Council Worksession Agenda

City Hall
100 Main Street
Colleyville, Texas 76034
817. 503.1000
www.colleyville.com

Tuesday, January 29, 2013
6:00 p.m.

Executive Conference Room
Third Floor, City Hall

1. CALL TO ORDER

2. EXECUTIVE SESSION - In accordance with Texas Government Code Chapter 551, Subchapter D

Section 551.071 - Legal - Advice from City Attorney regarding drainage

Section 551.087 - Economic Development - Discuss or deliberate regarding commercial or financial information that the City has received from business prospects that the City seeks to have locate, stay, or expand in the City and with which the City is conducting economic development negotiations

3. PRESENTATION AND DISCUSSION

3a Discussion of the City of Colleyville infrastructure

4. ADJOURNMENT

I hereby certify this agenda was posted on City Hall bulletin boards Friday, January 25, 2013, by 5:00 p.m.

Amy Shelley
City Secretary

Any matter on this agenda may, at the discretion of the governing body, be opened for public comment and discussion.

If you plan to attend this public meeting and have a disability that requires special accommodations, please advise the City Secretary at least 48 hours in advance at 817.503.1133, and reasonable accommodations will be made to assist you.



City of Colleyville City Council Agenda Briefing

City Hall
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Agenda Number 1

Agenda Date 01/29/2013

Type Executive Session

Department City Secretary

Title

Section 551.071 - Legal - Advice from City Attorney regarding drainage

Section 551.087 - Economic Development - Discuss or deliberate regarding commercial or financial information that the City has received from business prospects that the City seeks to have locate, stay, or expand in the City and with which the City is conducting economic development negotiations

Attachments



City of Colleyville Colleyville City Council Worksession Agenda Briefing

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Agenda Number 3a

Agenda Date 01/29/2013

Number

Type Presentation and Discussion

Department Public Works

Title

Discussion of the City of Colleyville infrastructure

Explanation

Staff will make a presentation updating City Council on actions taken since the infrastructure workshop on December 8, 2011, and make recommendations for the 2013 and 2014 infrastructure rehabilitation programs.

Attachments

1. Infrastructure Presentation

Planning for the Future

Creating a Comprehensive Capital Improvement Plan

City Council Work Session
January 29, 2013



Overview of Presentation

- Refresher – Where We Are
- Maintenance Projects Versus Capital Improvement Projects
- The Specifics of a Capital Improvement Plan
- Policy Guidance and Priorities
- Next Steps



Objectives of this Work Session

- Understand:
 - o - What we own
 - o - The current needs
- Understand the difference between maintenance projects and capital improvement projects
- Get direction on FY2013 and FY2014 street projects
- Set a goal to eliminate unimproved streets in Colleyville by the year 2038



Refresher – Where We Are

Met last December to talk about:

- Infrastructure inventory (what we have)
- Construction and maintenance of infrastructure
- Infrastructure planning
- Need for a Capital Improvement Program (CIP)

The more we sweat in the planning, the less we bleed in the battle!

Admiral Hyman G. Rickover

What Has Been Done in the Last 12 Months

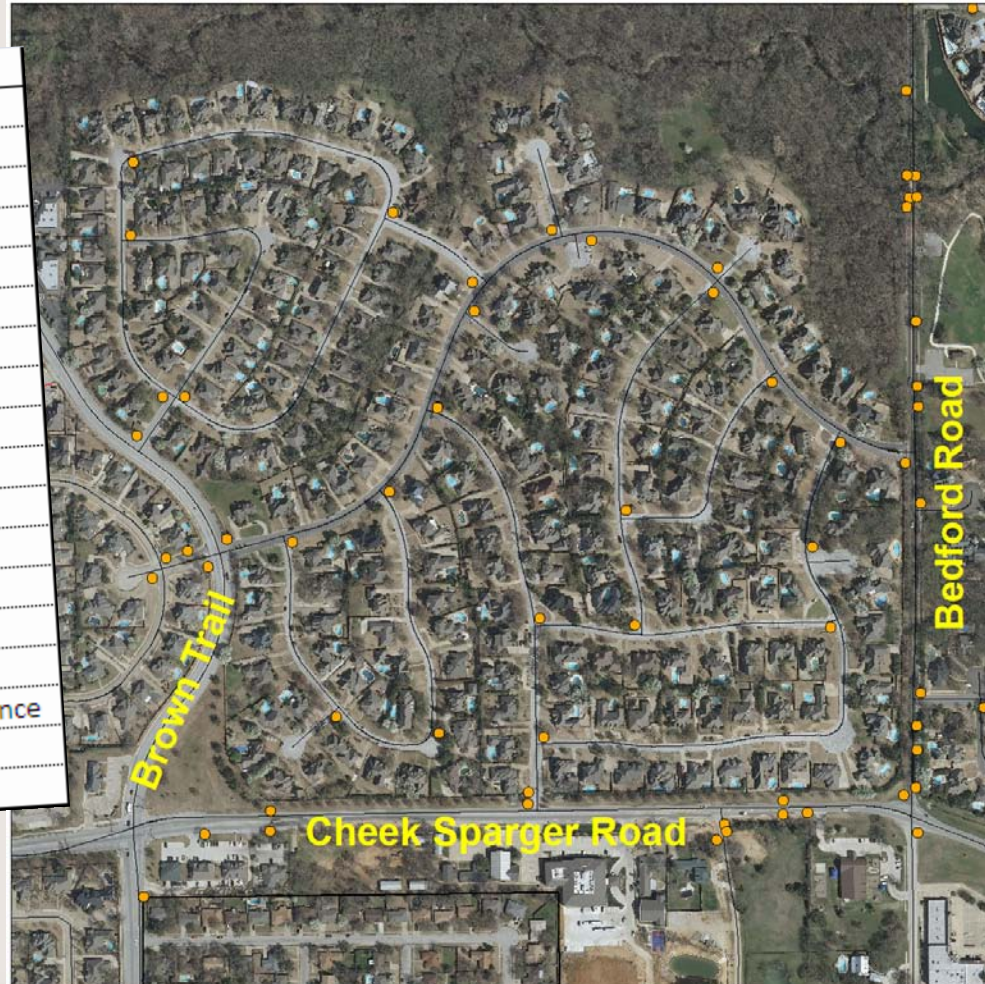
- Completed street inventory and assessment
- Continuing inventory of other infrastructure assets (ongoing process)
- Continuing to assess infrastructure conditions (ongoing process)
- Developed recommendations for FY13 and FY14 Projects

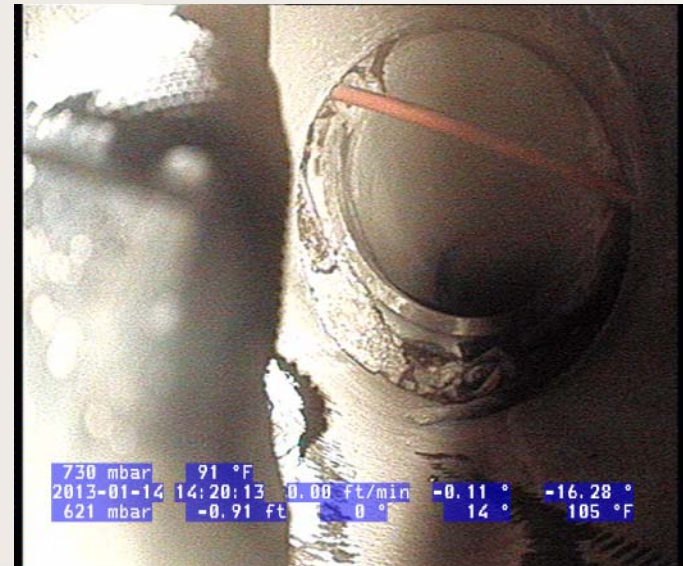


Street Sign Layer Being Created from Actual Field Inventory

ATTRIBUTE

Asset ID Number
Location
Street Number
Street Name
Sign Text
MUTCD Code
Dimension - Width
Dimension - Height
Sign Mounting Height
Support Type/Material
Sign Backing
Sheeting Type
Image
Install Date
Condition
Associated Work Orders/Maintenance
As Built - Plan Name
As Built - Plan Date





Infrastructure Assets



- Buildings
- Streets
- Water Lines
- Storm Pipes and Inlets
- Sewer Lines
- Playgrounds
- Street and Parking Lot Lights
- Signs, Signals and Pavement Markings
- Facilities
- Fleet Equipment
- Sidewalks
- Drainage Systems
- Technology Hardware
- Parking Lots

A Sample of Infrastructure Needs

Buildings

- City Hall Roof
- Sealing of City Hall Stone
- Central Fire Drainage
- HVAC Replacement

Drainage

- Low Water Crossings
- Ponderosa Subdivision
- Bill Simmons Drainage
- Brighton Oak Drainage Channel

Water Distribution

- Replace and/or Upsize 68,000 Feet of Pipe
- Replace 71 Valves
- Install 24 New Fire Hydrants

Sanitary Sewer

- Replace 9,000 Feet of Pipe
- Rehab 36 Manholes



Infrastructure Needs (CONTINUED)

Parks

- Cotton Belt Trail
- Pleasant Run Trail
- Glade Road Trail

Streets

- 44 Lane Miles of Unimproved Asphalt Non-local streets (15.6% of the network)
- 47 Lane Miles of Unimproved Asphalt Local Streets (16.7% of the network)

Miscellaneous

- Bedford Road Retaining Wall Replacement

Unimproved Streets

Pleasant Run Road
Glade Road
Cheek Sparger Road
Bransford Road
L.D. Lockett Road
Bedford Road
John McCain Road
McDonwell School Road
And many more!

Urgent Infrastructure Needs

- Bedford Road Retaining Wall
- City Hall Roof Repairs
- Glade - Bluebonnet Intersection
- Fire Protection (24 New Hydrants)
- Replacement of 2", 4" and 6" Water Lines
- Replacement of Clay Tile Sewer Lines
- Lavaca Trail Reconstruction
- Pleasant Run Road Reconstruction
- Bill Simmons Drainage Improvements
- Public Works Service Center





When it gets cold there is no room for vehicles that need maintenance



We have 34 employees at the service center and the lunch room only has room for 16!



Maintenance Versus Capital Improvement

What are **Maintenance Projects**?

- Routine and recurring work
- Extends the infrastructure's useful life
- Optimizes operations of the public infrastructure components
- Can be either “preventive” or “breakdown”

Examples:

- Mill and overlay street projects
- Water main emergency repairs
- HVAC preventive maintenance
- Pothole repair
- Waterline renewal
- Cleaning bar ditches



Maintenance Versus Capital Improvement

(CONTINUED)

What Constitutes a **Capital Project**?

- A new construction project (City Hall)
- Expansion of an existing facility (2nd floor of the Library)
- Renovation or replacement of an existing facility with the end result of the project having an increase in the asset category “value” (L.D. Lockett Pump Station)

Examples:

- Unimproved streets being reconstructed to standard
- Upsizing water and sewer lines to standard
- New waterlines being installed per master plan
- New sewer lines being installed per master plan
- New buildings
- New parks



What is a Maintenance Plan?

- Long-range forecast of maintenance needs
- Defined time frame tied to the useful life of the asset
- Identifies routine maintenance items
- Provides a planning schedule
- Allows for accurate budgeting
- Insures that the useful life of assets is extended as far as possible



What is a Capital Improvement Plan?

- Identifies capital projects and equipment purchases
- Multi-year rolling plan updated yearly
- Generally five years out
- Provides a planning schedule
- Identifies options for funding
- Serves as link between comprehensive and strategic plans and the City's annual budget



Features of a Capital Improvement Plan

- A listing of the capital projects or equipment to be purchased
- The costs associated with each project or item of equipment
- Justification for the projects
- The projects ranked in order of preference
- The plan for financing the projects
- A timetable for the construction/acquisition of the projects

Benefits of a Capital Improvement Plan

- Allows for a systematic evaluation of all potential projects at the same time
- Has the ability to stabilize debt and consolidate projects to reduce borrowing costs (if debt financed)
- Serves as a public information and economic development tool
- Supports the City's comprehensive plan
- Focuses on preserving the City's infrastructure while ensuring the efficient use of public funds



Steps to Create a Capital Improvement Plan

- Take inventory of existing assets
- Establish and document strategic priorities
- Evaluate previously approved, unimplemented or incomplete projects
- Assess financial capacity
- Solicit, compile and evaluate new projects
- Prioritize projects
- Develop a financing plan
- Adopt the CIP



Replacement Cost by System



Streets:	\$282,000,000
Water Lines:	\$151,707,000
Sewer Lines:	\$121,861,000
Storm Sewer Pipes:	\$ 38,605,000
Public Buildings:	\$28,500,000
Sidewalks:	\$13,728,000
Parks and Playgrounds:	\$8,676,000
Technology:	\$1,757,800
Traffic Signs:	\$258,000
Total Replacement Cost:	\$647,092,800

Annual Reinvestment (Capital and Maintenance)

Cost Scenarios

Roads

@ 0.5% = \$1,410,000

@ 1% = \$2,820,000

@ 2% = \$5,640,000

Water Lines

@ 0.5% = \$758,535

@ 1% = \$1,517,070

@ 2% = \$3,034,140

Sewer Lines

@ 0.5% = \$609,305

@ 1% = \$1,218,610

@ 2% = \$2,437,220

Storm Sewers

@ 0.5% = \$193,025

@ 1% = \$386,050

@ 2% = \$772,100

Parks

@ 1% = \$86,760

@ 3% = \$260,280

@ 5% = \$433,000

Totals

\$3,057,625

\$6,202,010

\$12,316,460



How Can We Fund a CIP?

General Fund

Utility Fund

Drainage Fees

Impact Fees

Escrow Funds

CEDC Funds

County Bond Program

TIF

RTC (NCTCOG)

Federal Funds (FHWA/TxDOT)

Park Funds

Grants



A Starting Point (Annual \$)

Available Cash from General Fund:	\$575,000
General Fund Annual Budget:	\$1,500,000
Utility Fund:	\$1,000,000
Drainage Fund:	\$25,000
Available Cash from Drainage Fund:	\$75,000
TIF:	\$1,000,000
Roadway Impact Fees:	\$225,000
Utility Impact Fees:	\$250,000
Perimeter Street Fees:	\$150,000
CEDC:	\$300,000
** COG/TxDOT/CTY:	\$500,000
 TOTAL:	 \$5,600,000

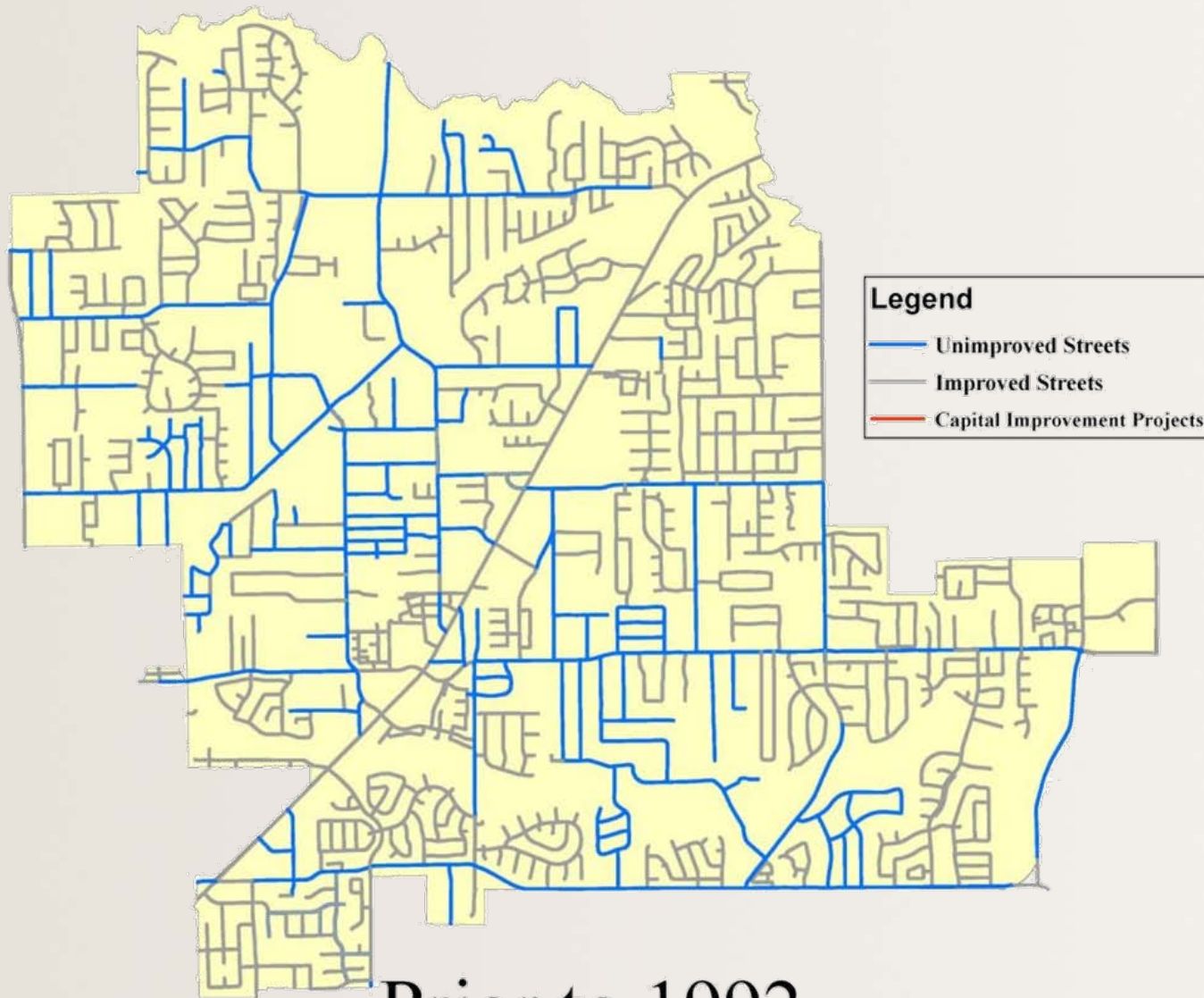


*** Average based on prior years experience. Subject to many constraints.*

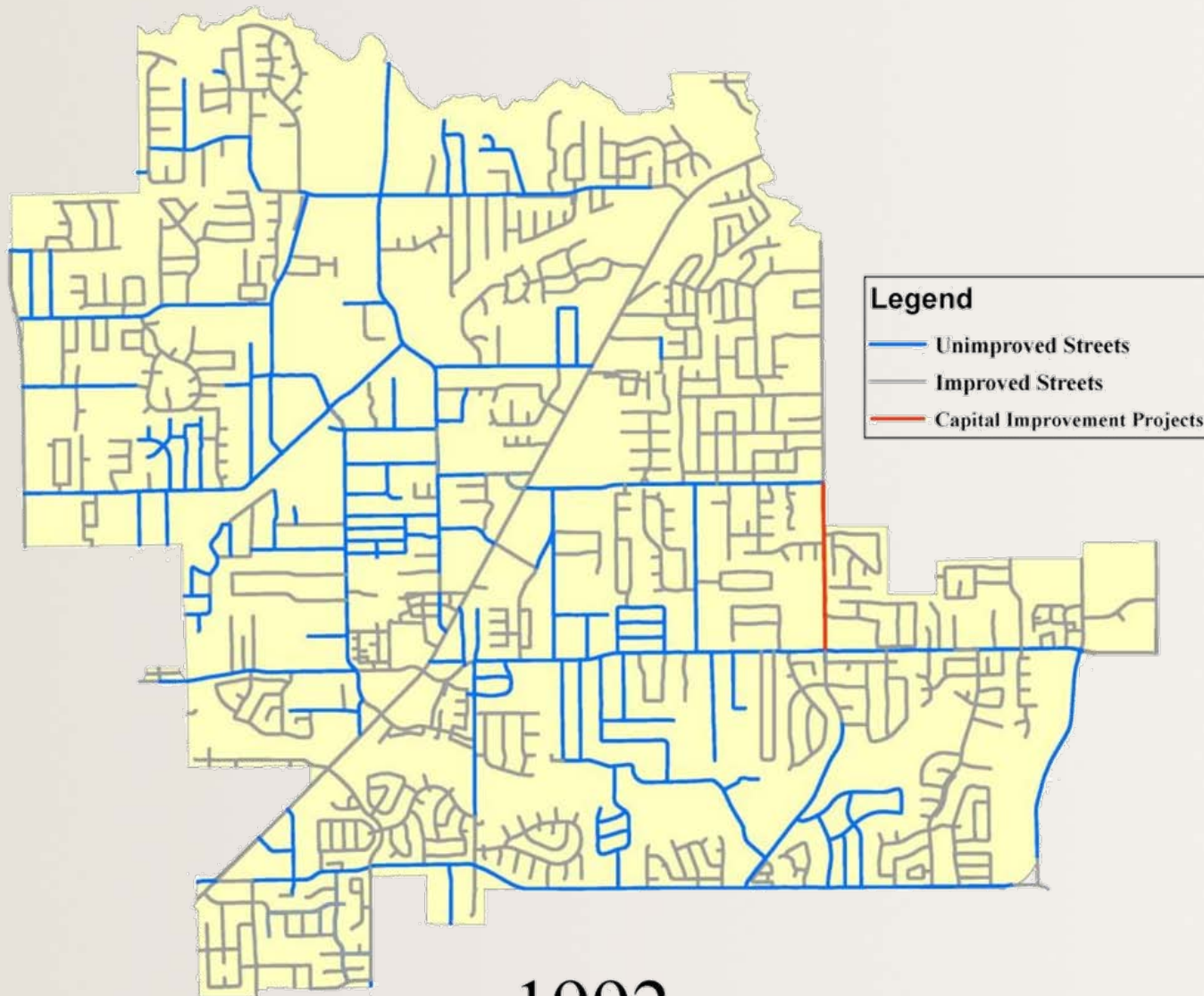


Streets

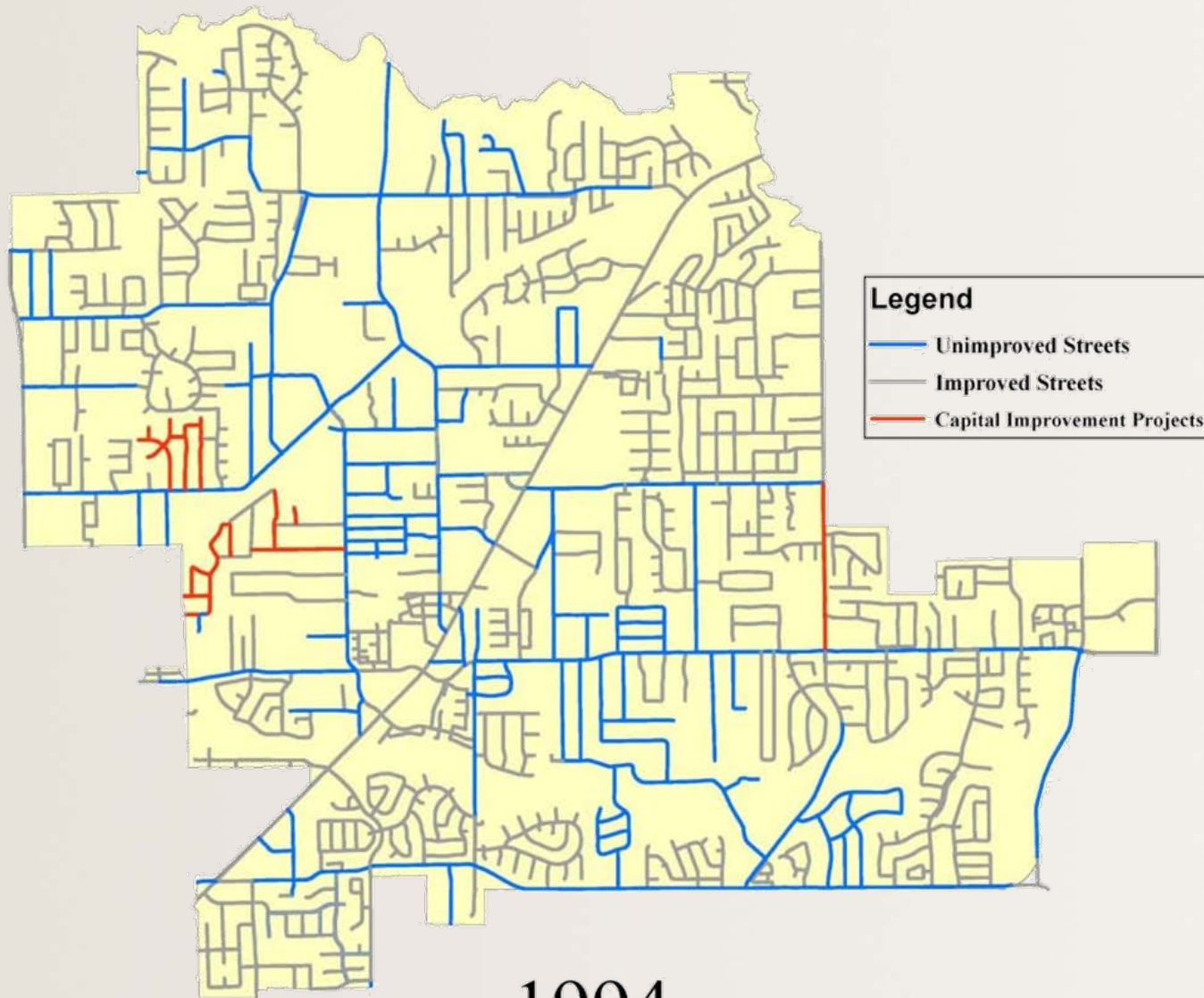




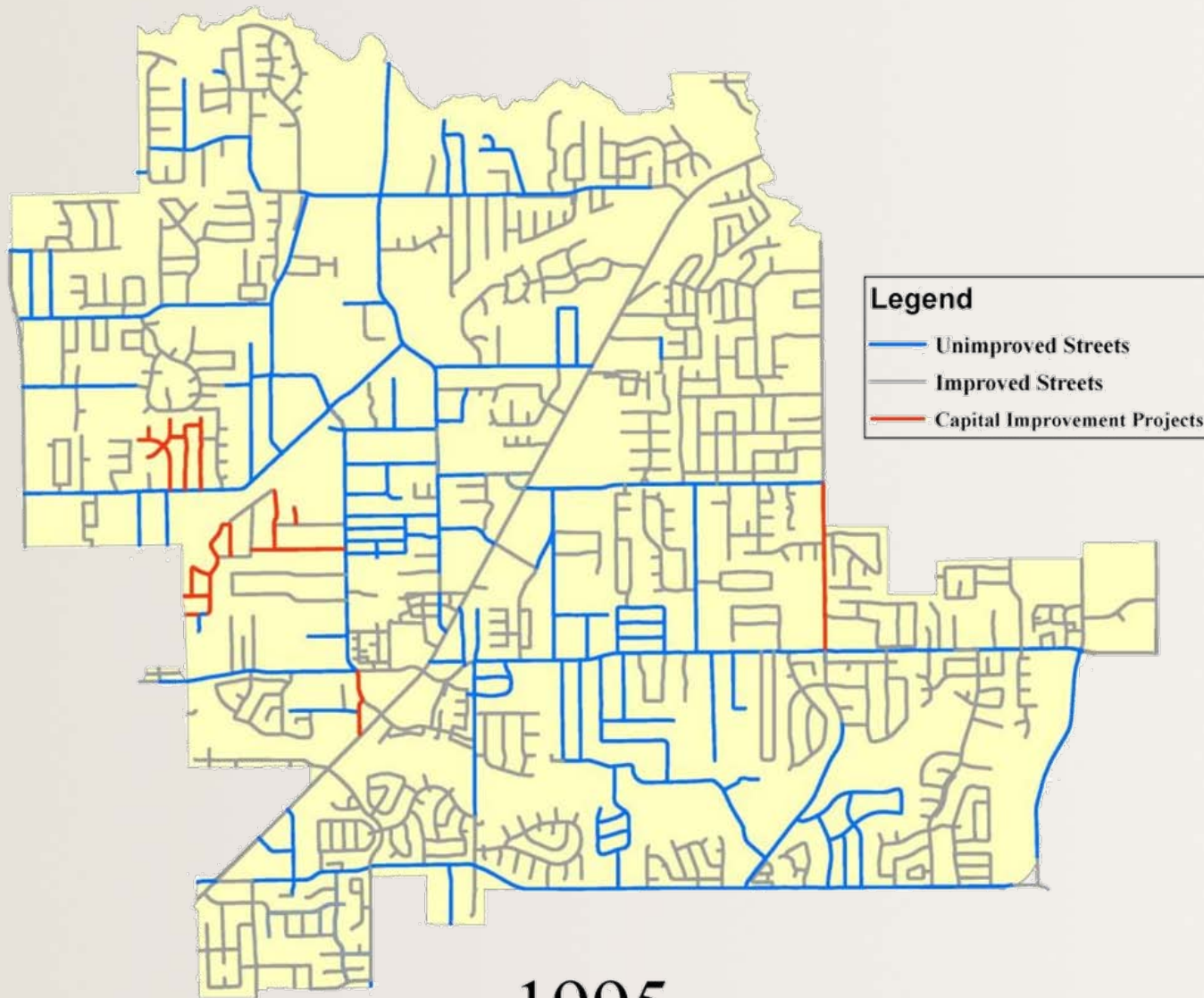
Prior to 1992

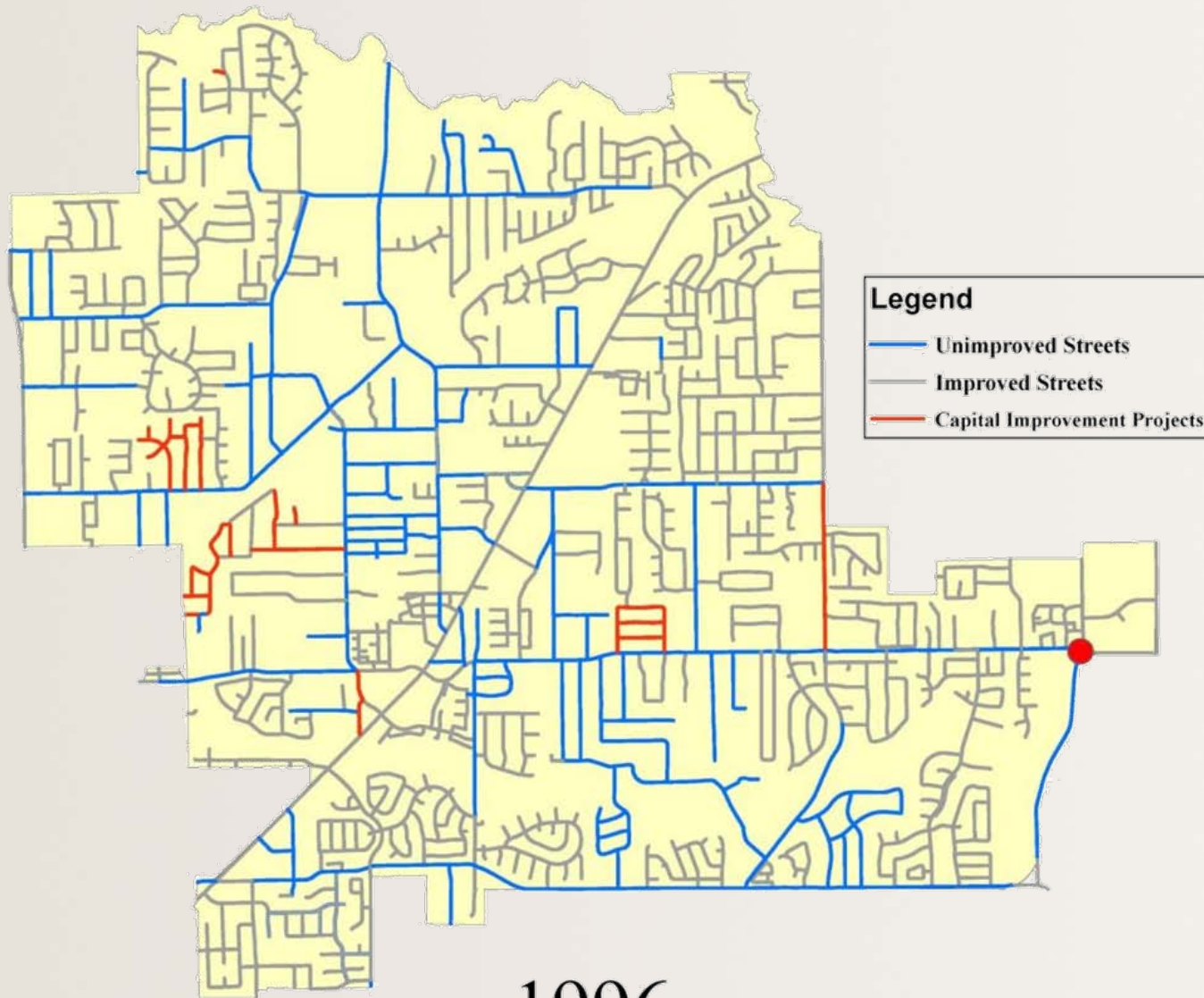


1992

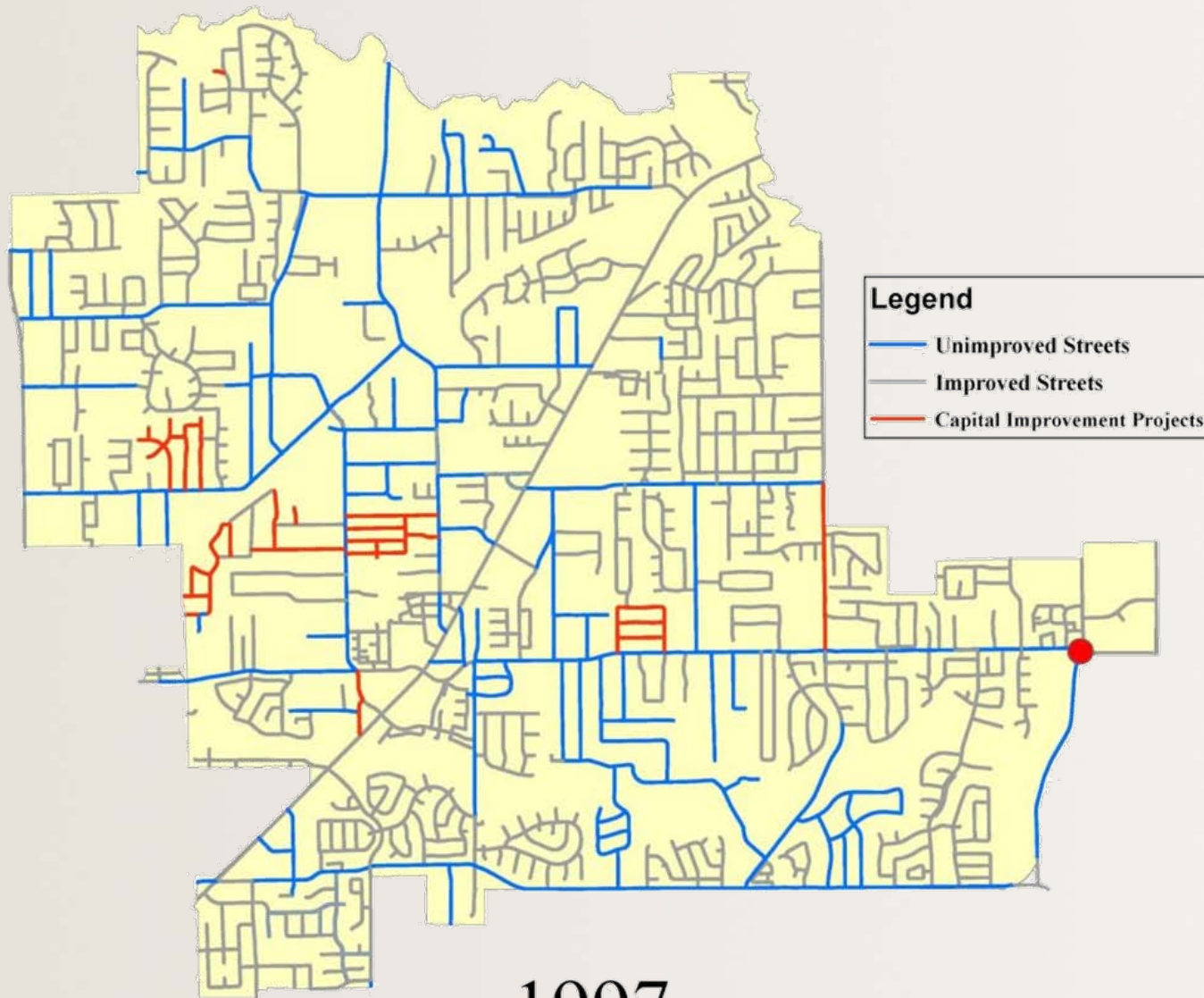


1994

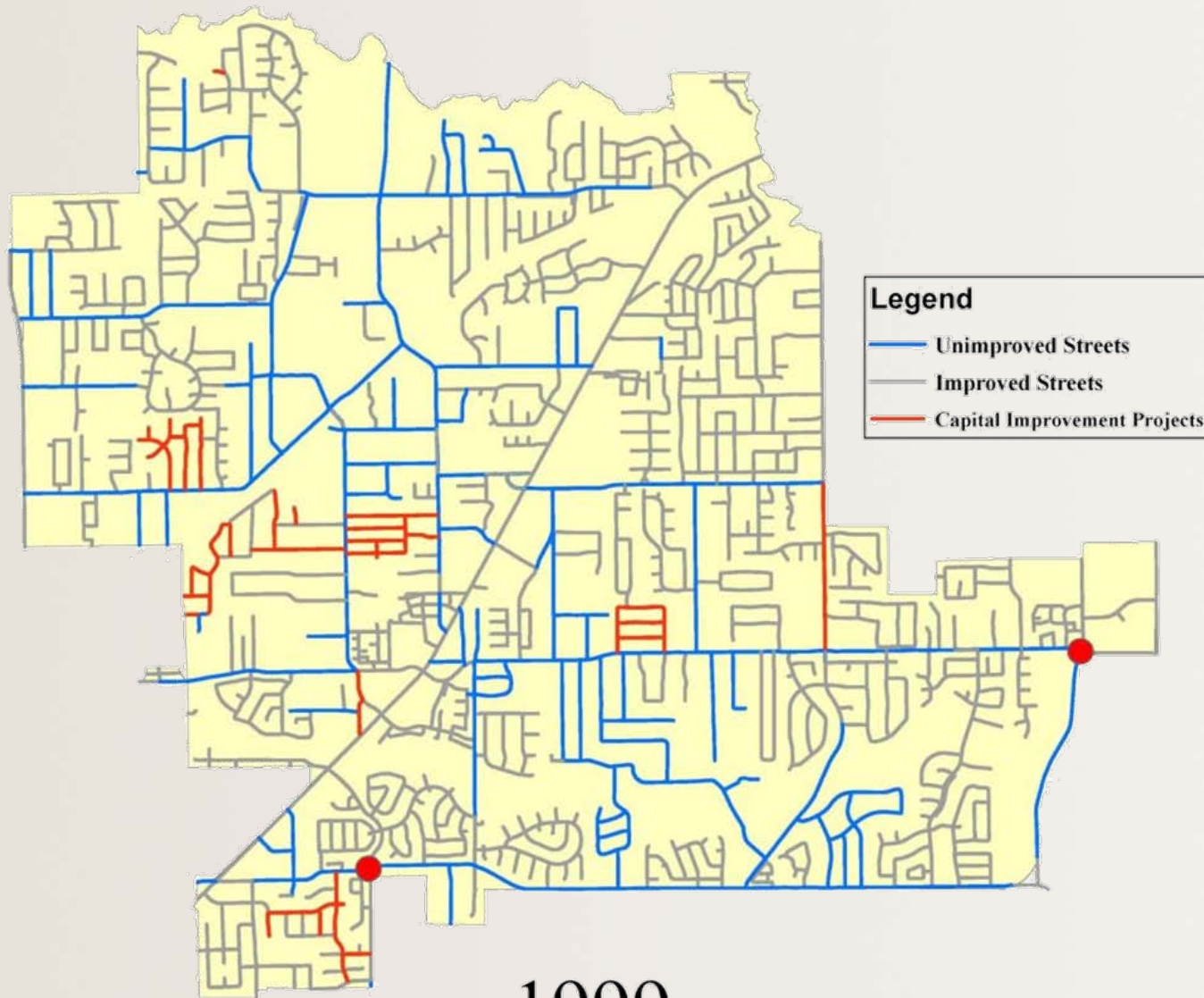


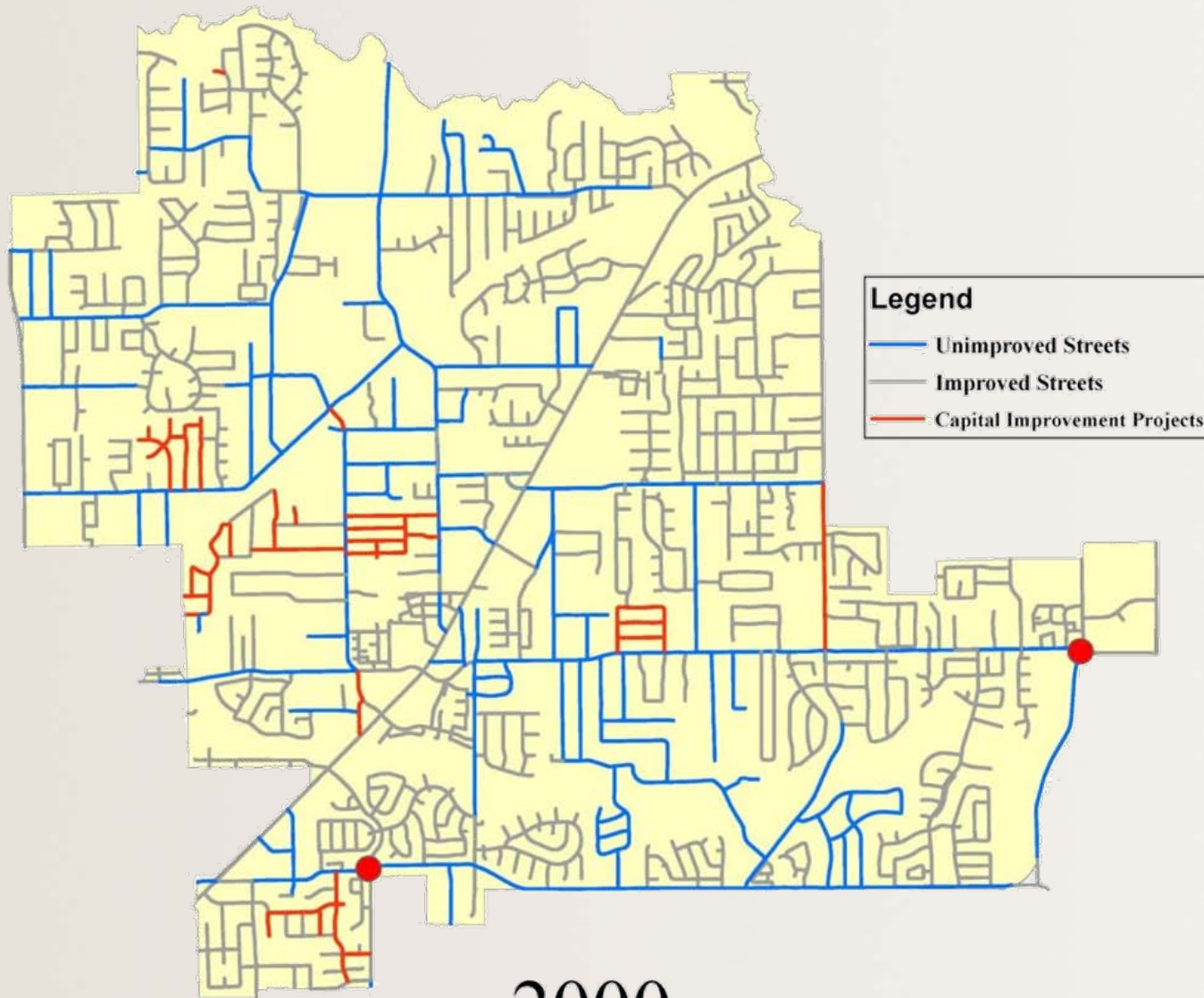


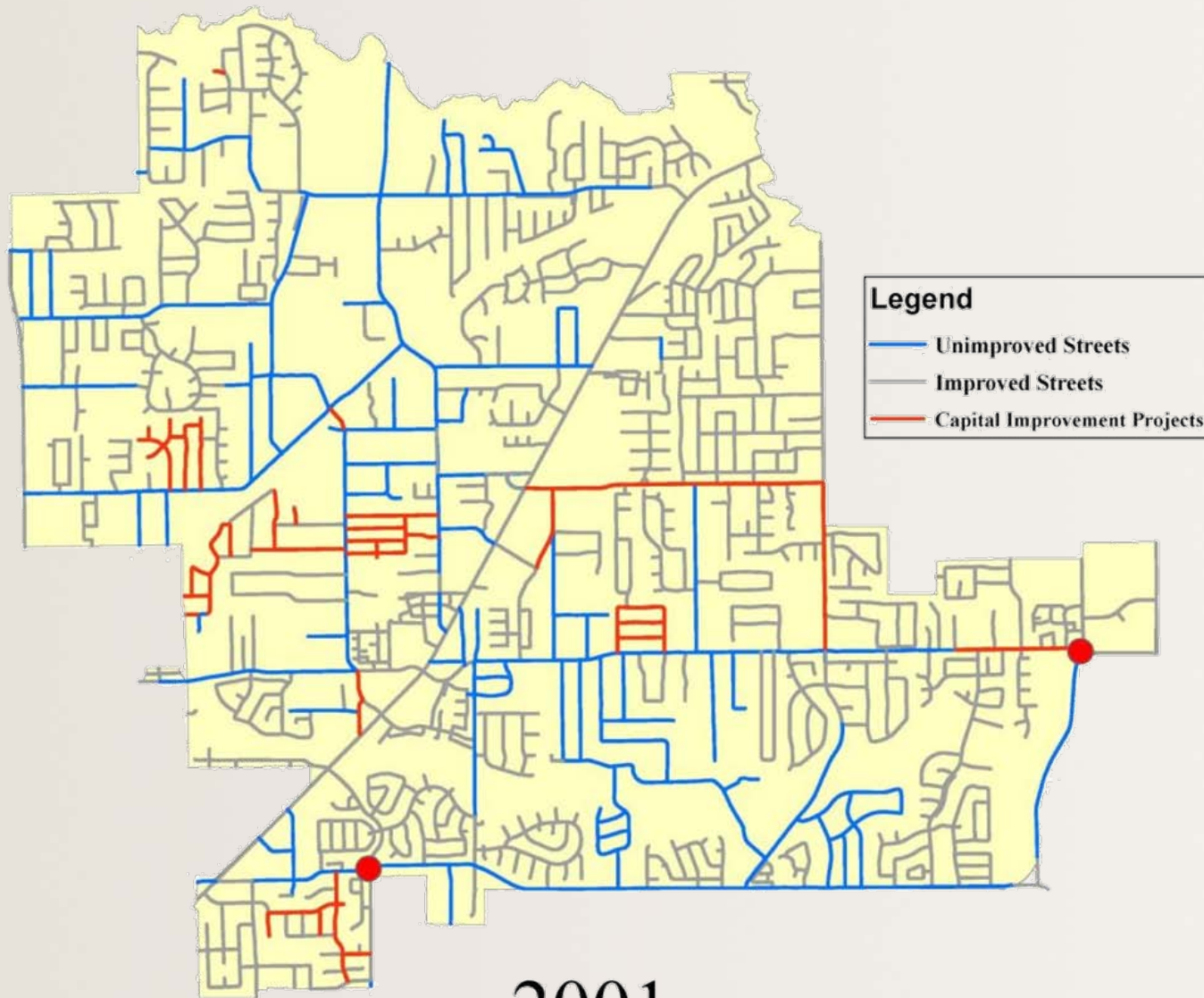
1996



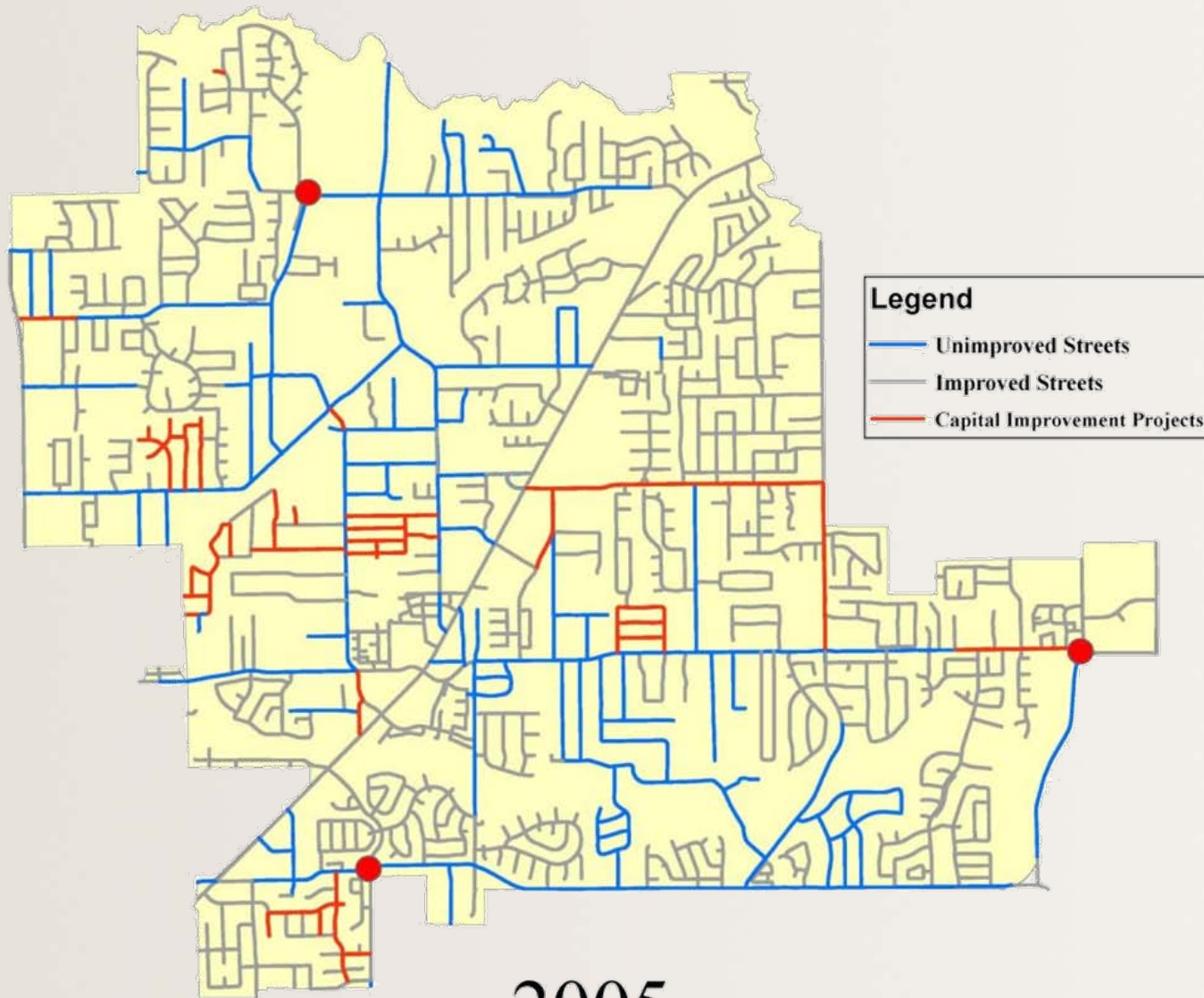
1997



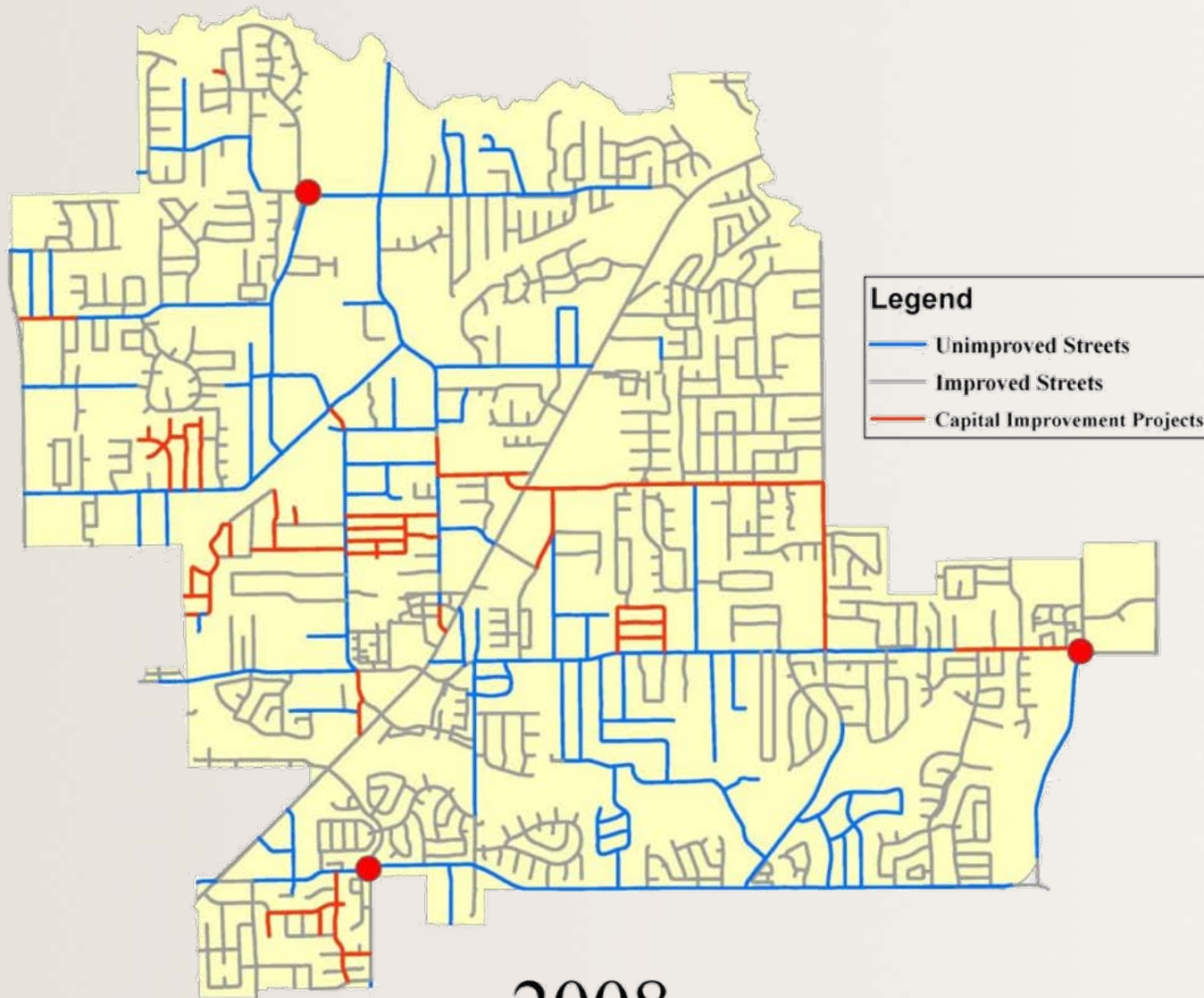




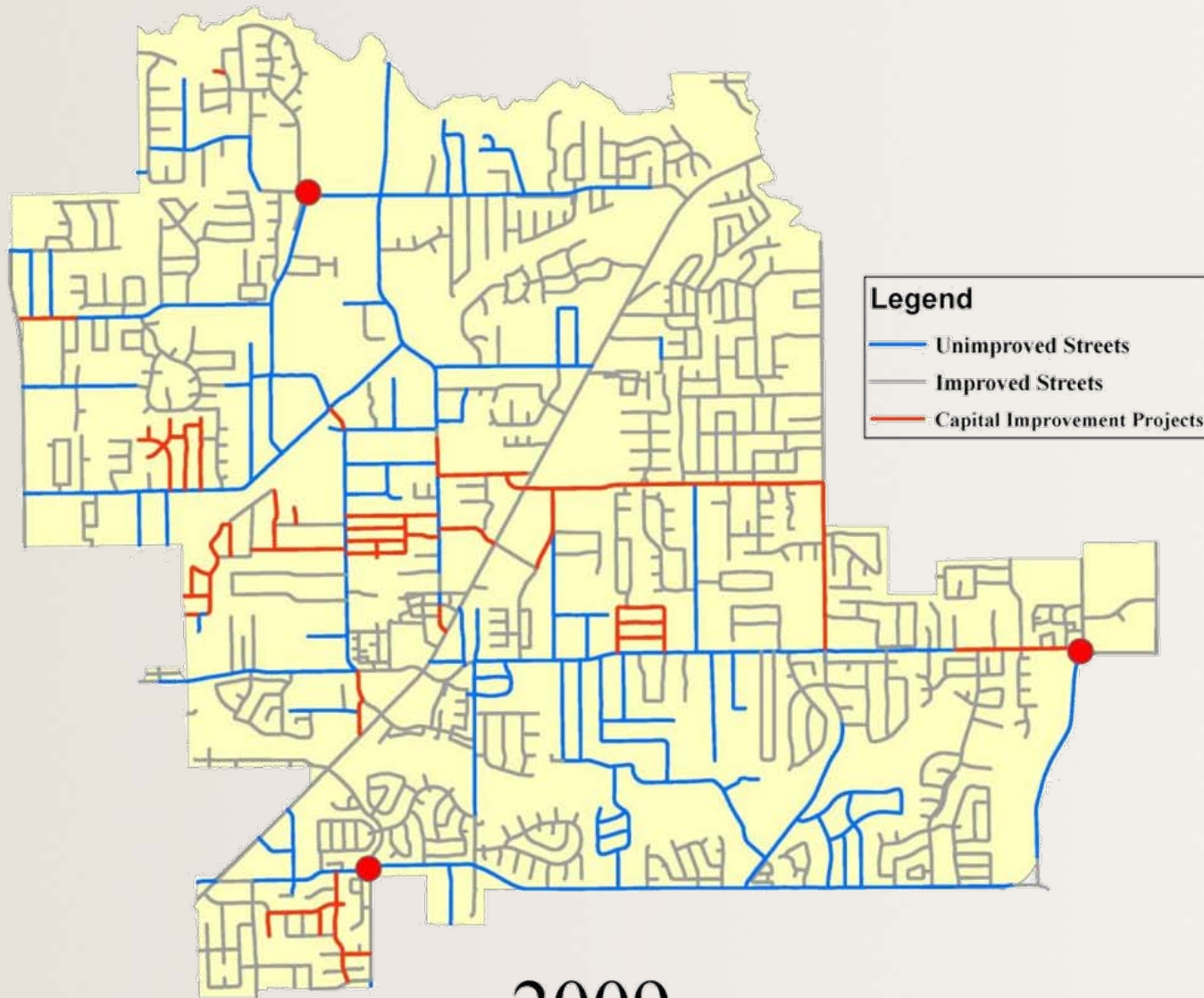
2001



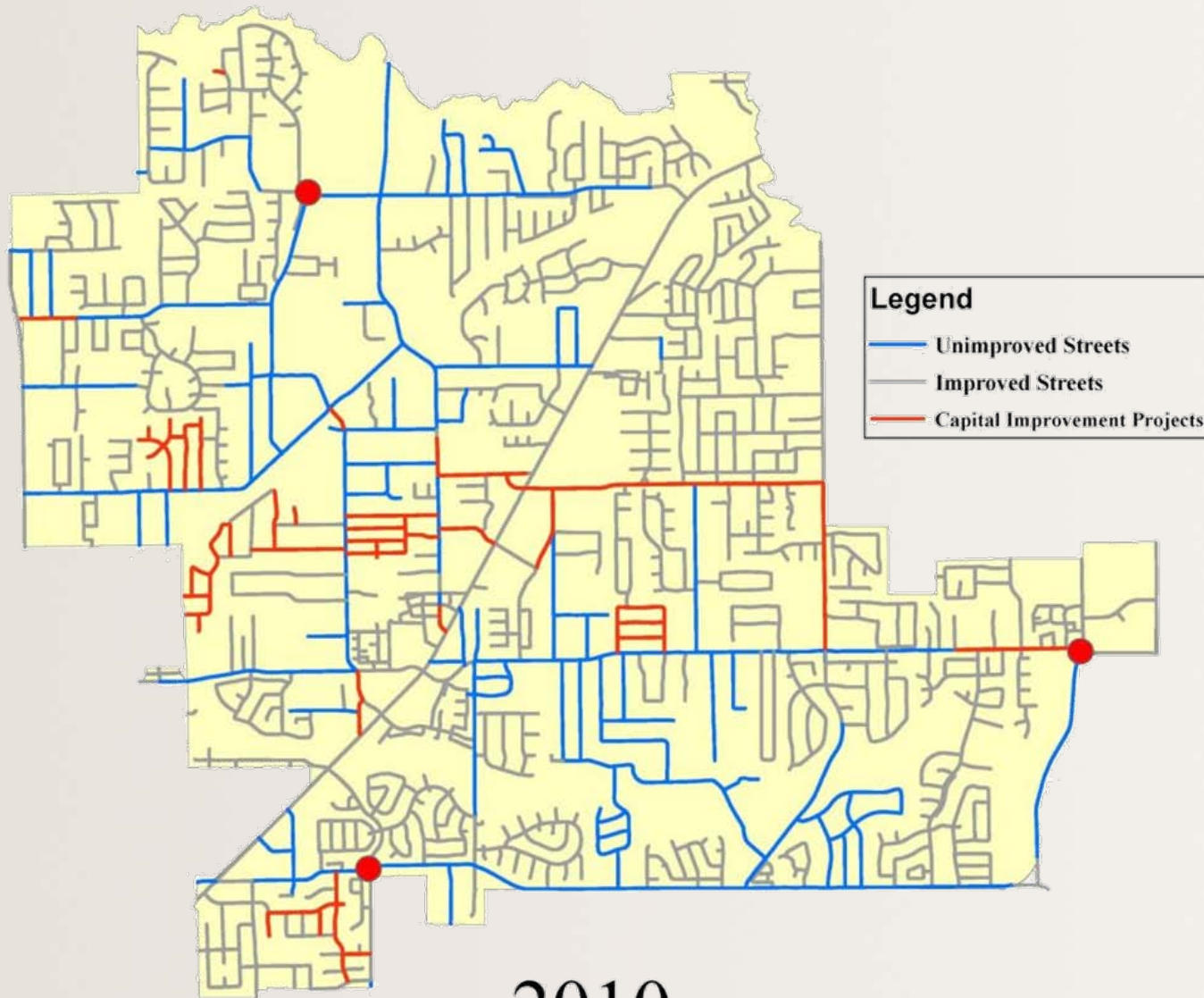
2005



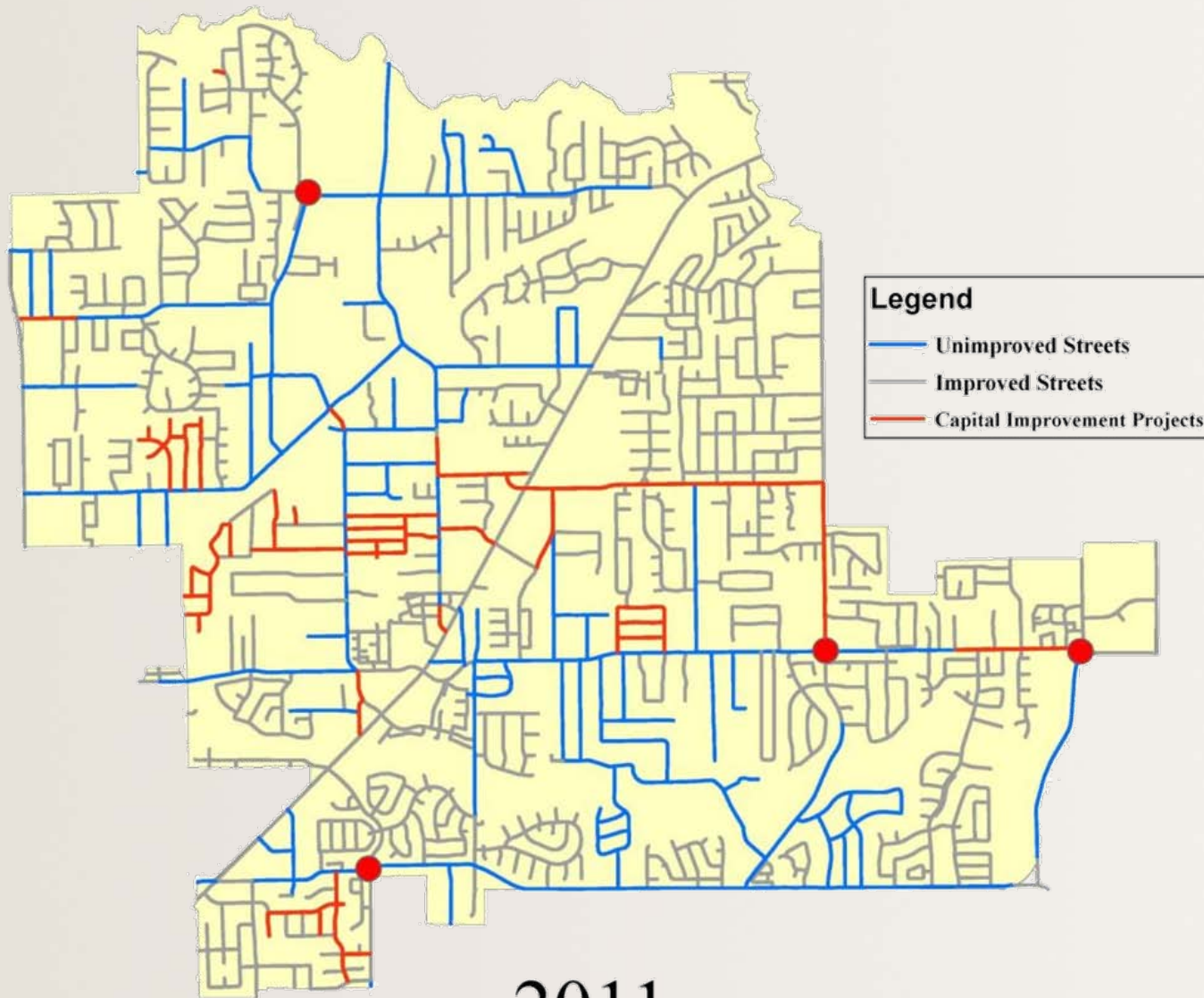
2008



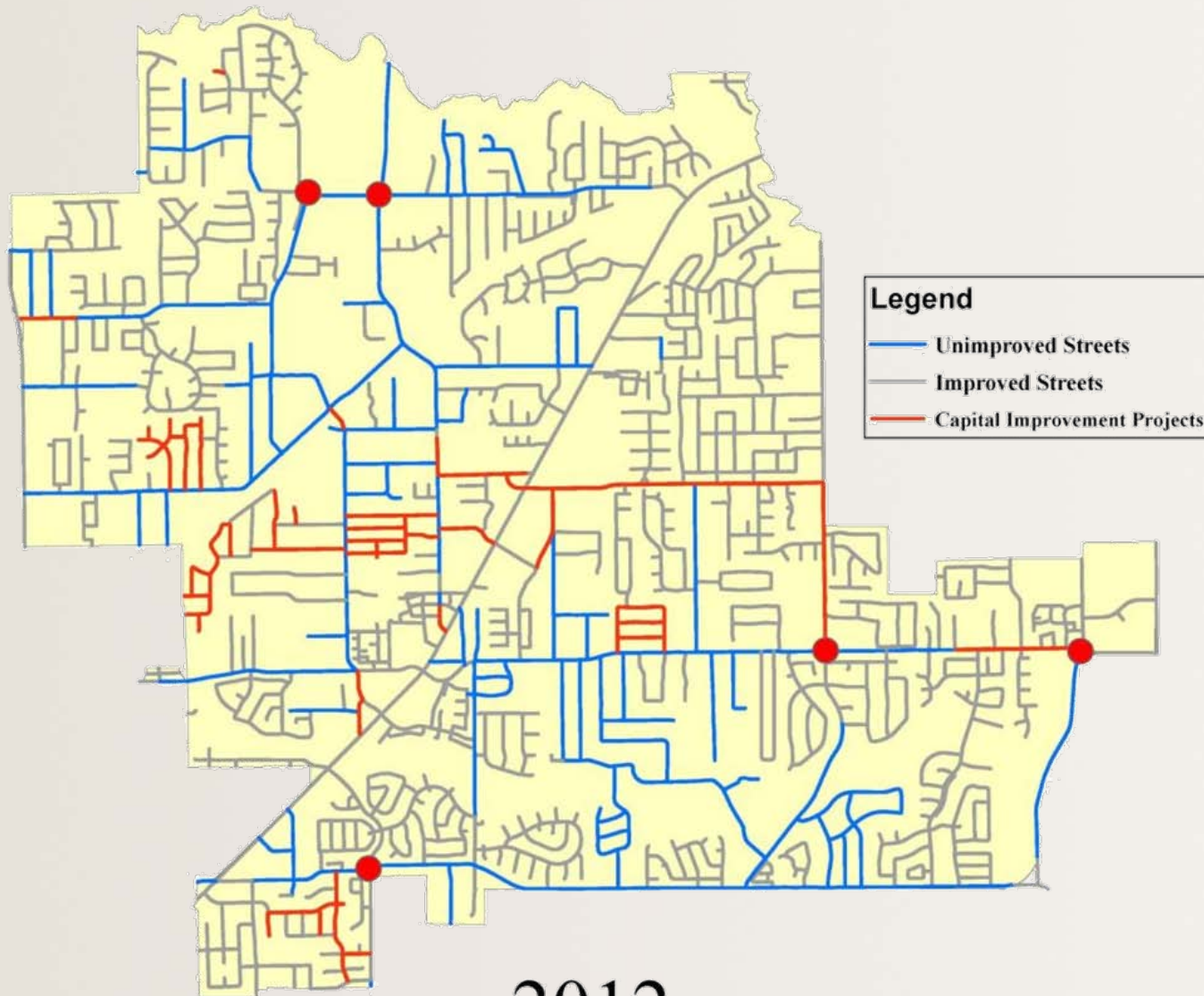
2009



2010



2011



Refresher – Where We Are on Streets

September 2, 2008

Resolution R-08-3110 adopted the 10-year plan for streets and intersections and set a \$1.15 million funding level for street maintenance

December 2011

ARA (an engineering consulting firm) was hired to conduct a pavement condition assessment of all public streets

March 6, 2012

City Council adapted the FY12 maintenance plan per staff's recommendations

May 31, 2012

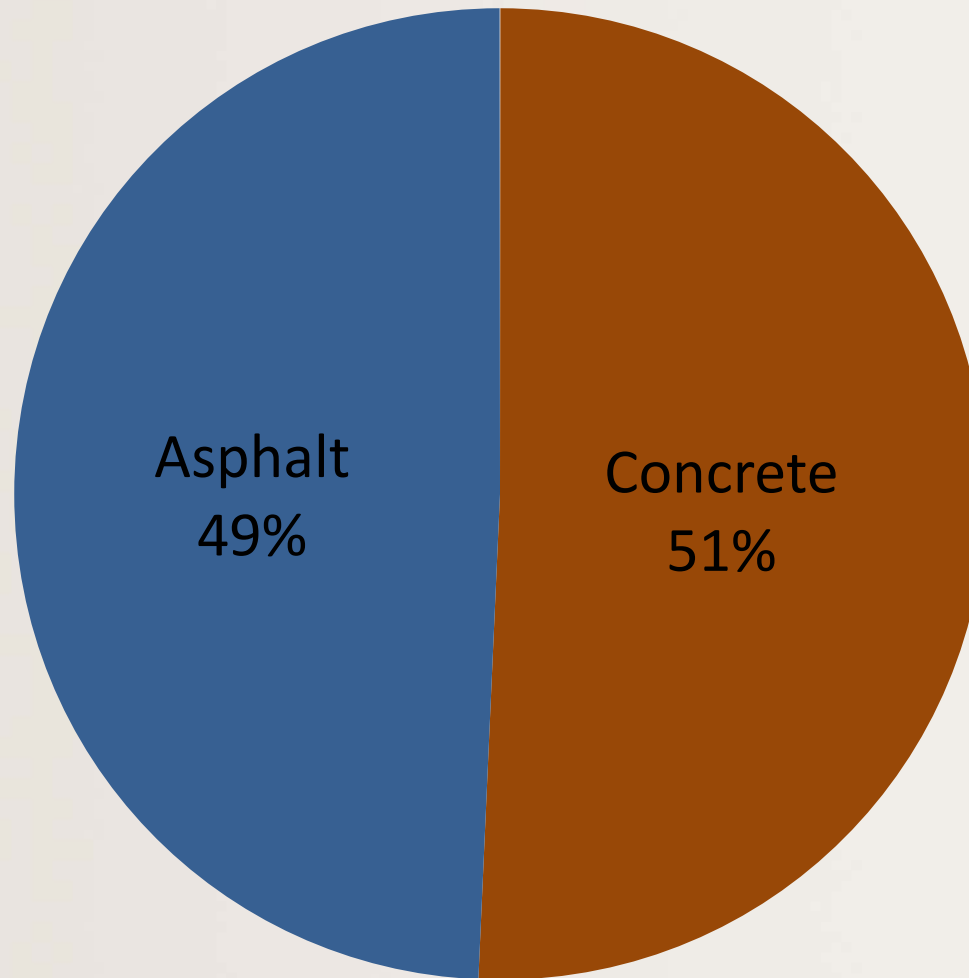
City Council was given a report performed by staff that identified an annual need of \$2.7 million to maintain the current level of service on roadway assets

November 5, 2012

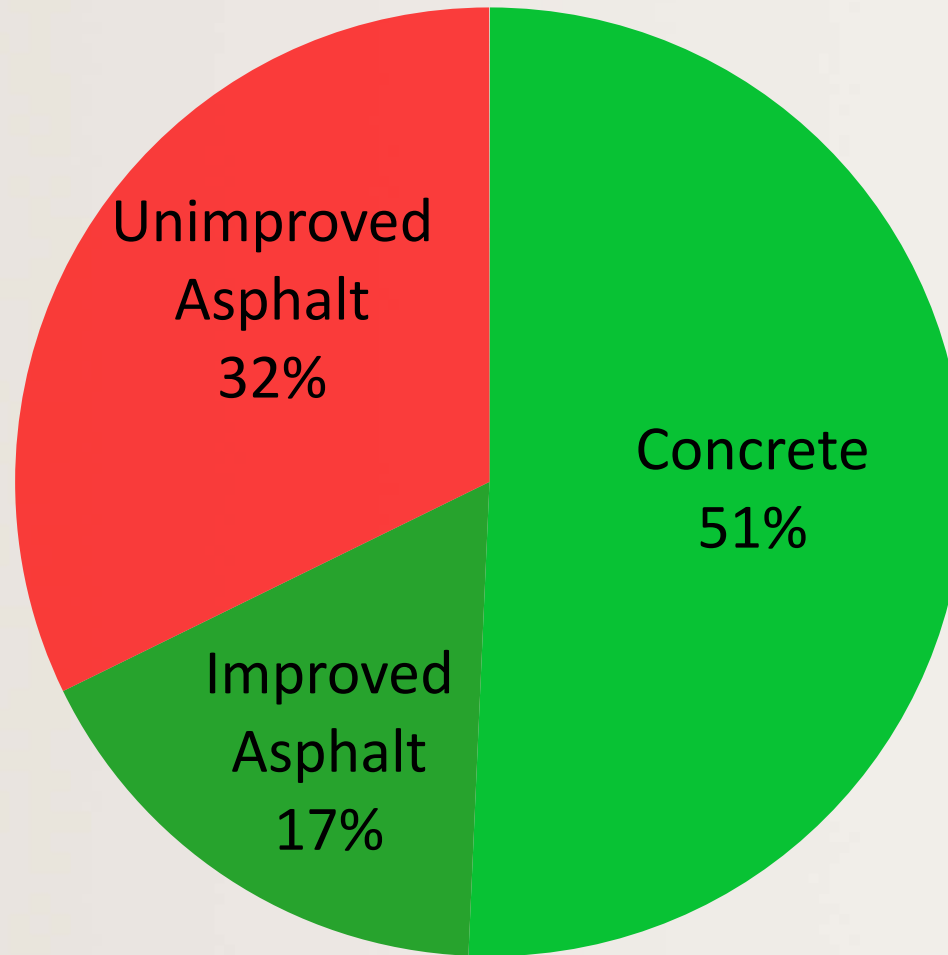
Pre-council presentation on infrastructure management and rehabilitation policies and practices



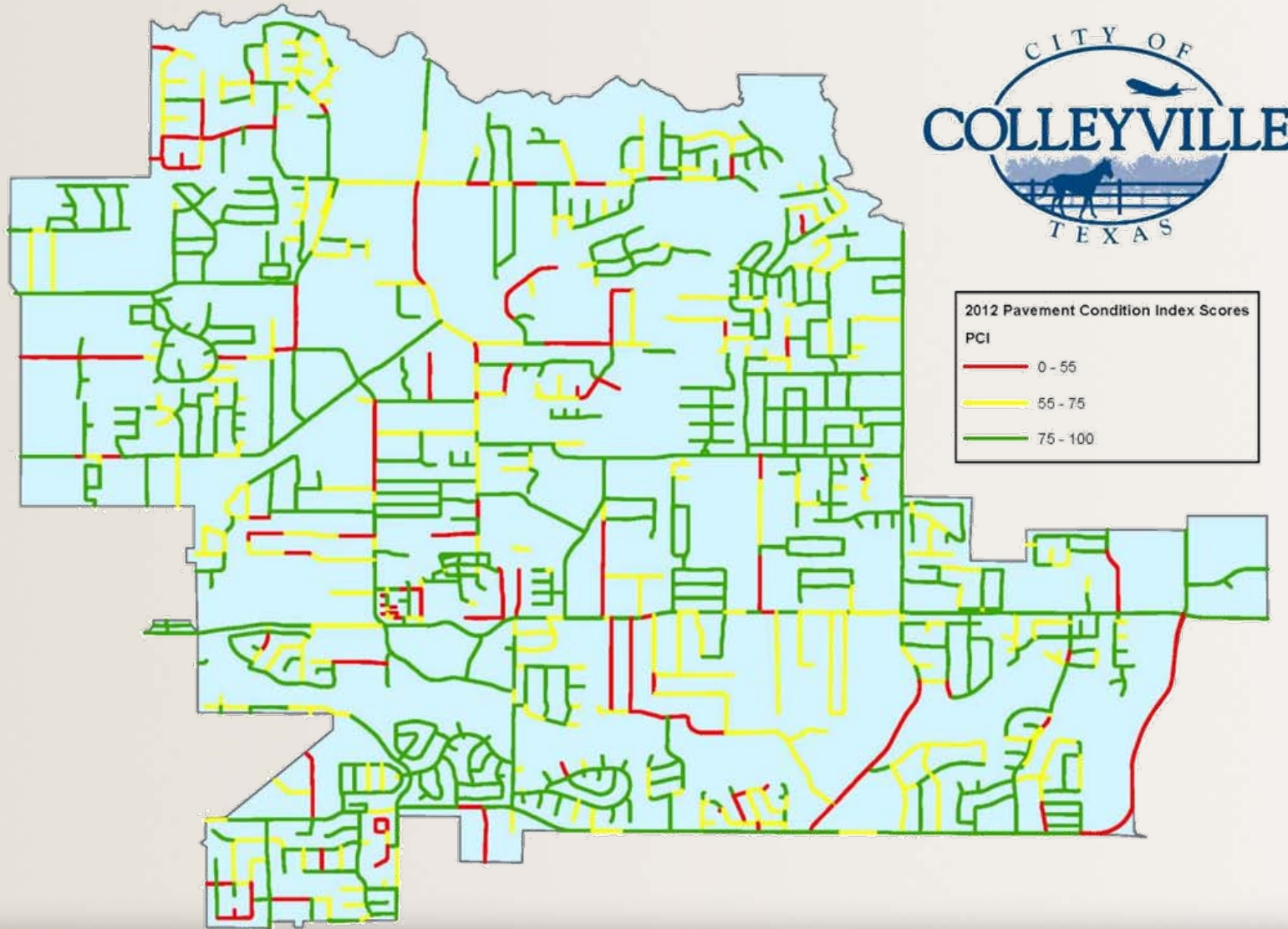
Street System Makeup



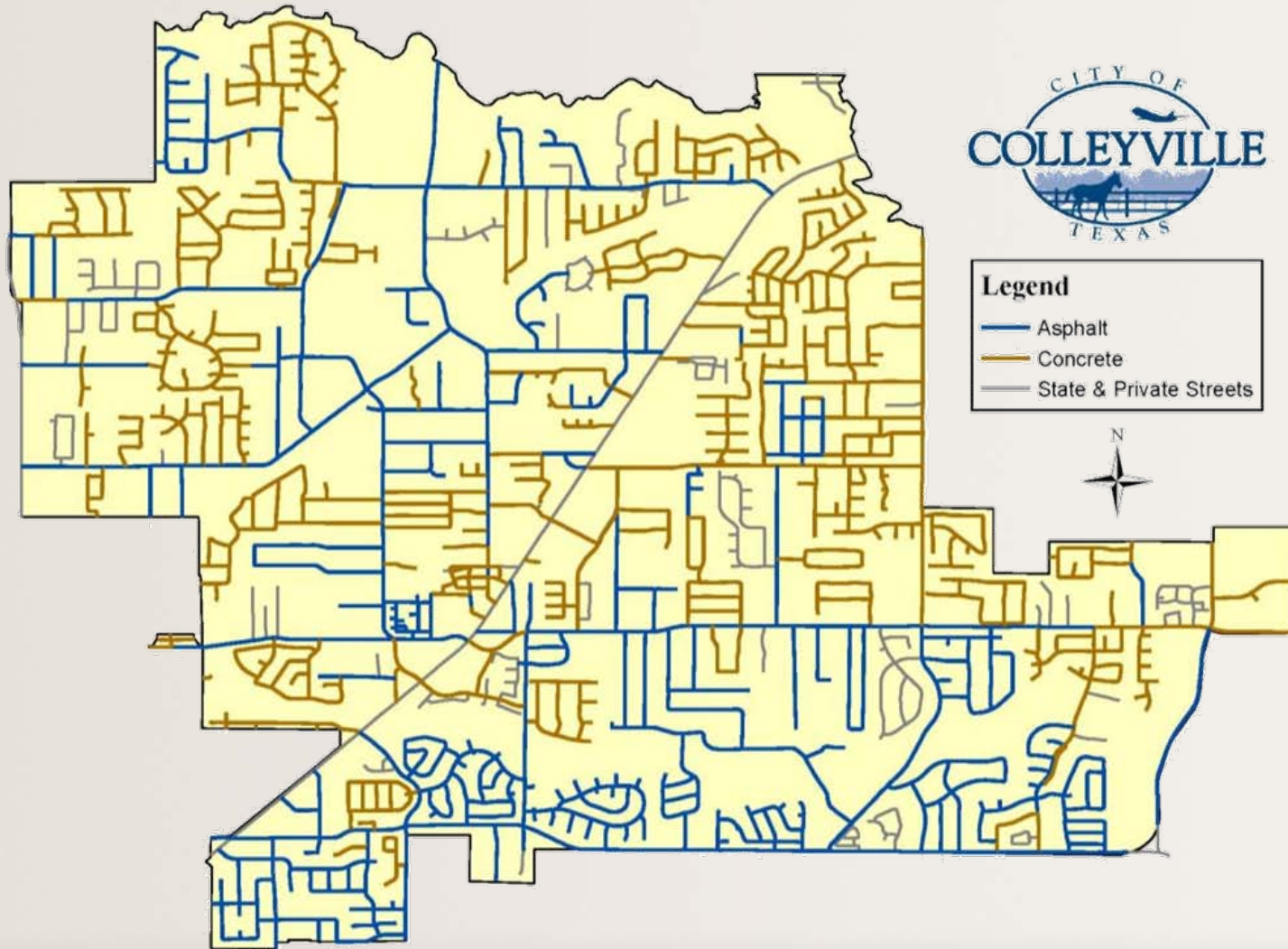
Street System Makeup



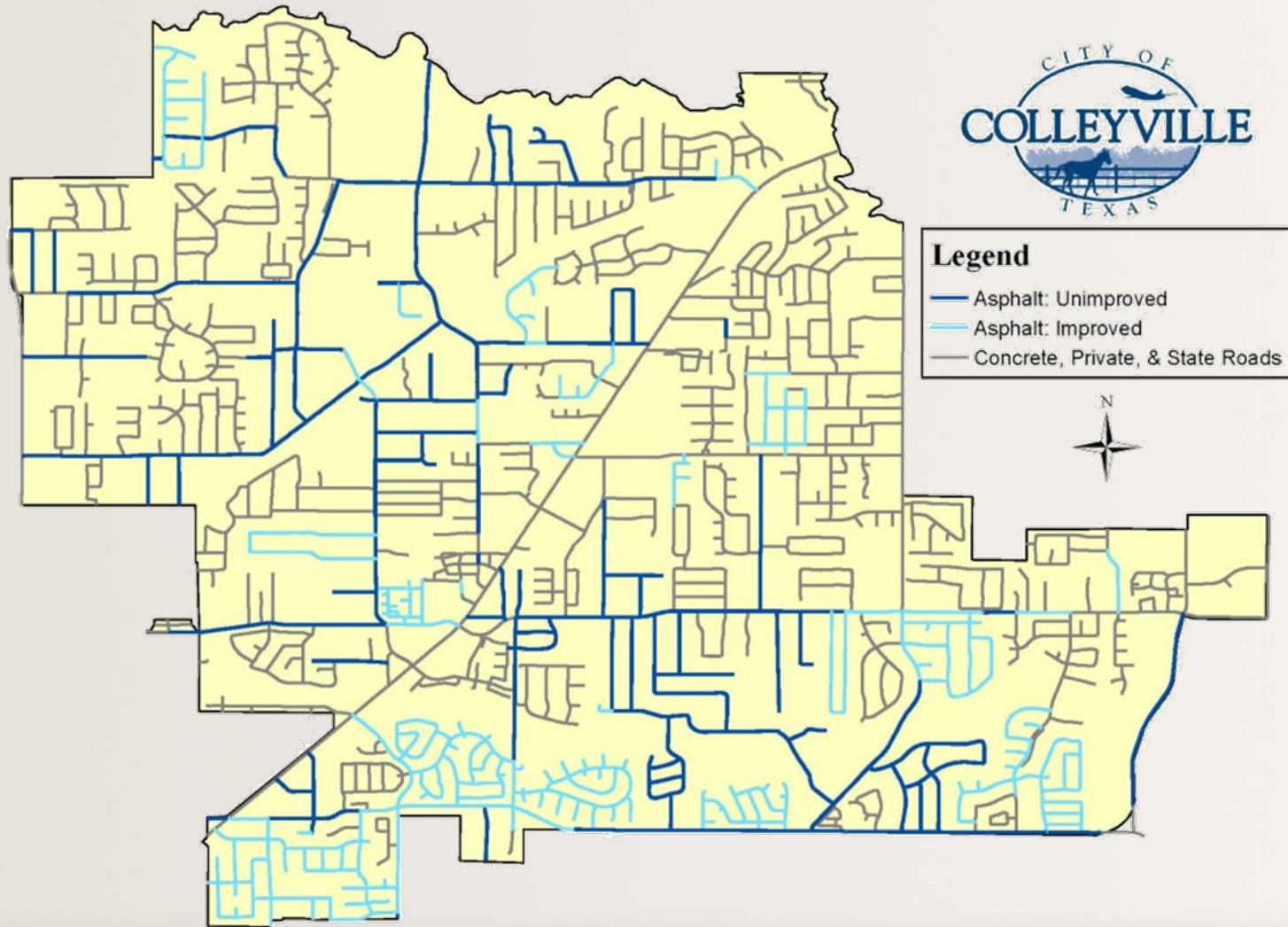
City Wide Pavement Condition Index



Asphalt and Concrete Streets



Asphalt Streets - Improved & Unimproved



Maintenance Versus Capital Improvement Expenditures in Regards to Streets

▪ Where Should We Spend “Maintenance Dollars”?

- On streets that have been built to the current standard, or
- As an interim measure, on unimproved streets until the street can be rebuilt

Concrete streets and asphalt streets built to the current standard should receive the majority of the maintenance dollars

▪ Where Should We Spend “CIP Dollars” ?

- To bring unimproved streets into compliance with the current standard

Once all streets have been built to standard, the majority of funding for streets can for maintenance of the system



Staff Recommendation (Policy)

The focus of the existing funding allocated for street rehabilitation should be to reconstruct the remaining 32.3 percent of the street network to the current standard. This should be done on a neighborhood approach where possible as opposed to individual streets scattered throughout the City.



As the percentage of unimproved streets continues to drop, then dollars can be shifted back to maintenance

2008 Street Rehabilitation Program

FISCAL YEAR	PROJECT NAME OR LOCATION
FY 2009	<i>Reconstruction</i>
	Tara Plantation Subdivision
	<i>Intersections</i>
FY2010	Glade Road & Pool Road
	<i>Reconstruction</i>
	Ponderosa Lane
	Saddlebrook Subdivison
	Elm Street
	Apple Valley Drive
FY2011	<i>Intersections</i>
	Pleasant Run & John McCain
	<i>Reconstruction</i>
	Black Drive
	Brentwood Drive
	Pembrooke Pkwy. West
FY 2012	<i>Intersections</i>
	Jackson Rd. & Cheek Sparger
	Martin Pkwy. & Cheek Sparger
	<i>Reconstruction</i>
	Frontier Court
	Brentwood Court
	<i>Intersections</i>
	Glade Rd. & Riverwalk Dr.
	McDonwell School & Westcoat

FISCAL YEAR	PROJECT NAME OR LOCATION
FY2013	<i>Reconstruction</i>
	Chapelwood Drive West
	Chapelwood Court
	Central Drive
	Kenshire Drive
FY2014	<i>Reconstruction</i>
	Woodcrest Lane
	Woodcrest Court
	Bettinger Drive
	Waller Lane
FY2015	<i>Reconstruction</i>
	Acuff Lane
	Shadowood Trail
	Cliffwood Drive
FY2016	<i>Reconstruction</i>
	Cottage Oak Lane
FY2017	<i>Reconstruction</i>
	Shadowood Road
FY2018	<i>Reconstruction</i>
	Coachman Lane
	Maplewood Trail

Proposed 2013 Construction Program

Maintenance

- From the 2008 Program:
 - o Rehabilitate Frontier Ct (2012)
 - o Central Drive(2013) and
 - o Kenshire Drive(2013)
- Rehabilitate Windview Estates (Full depth reclamation)



Capital

- From the 2008 Program:
 - o Initiate design on Ponderosa Lane, McCain Lane and Kingston Drive (2010)
- Upsize 2", 4" and 6" water lines and install 24 new hydrants
- Widen Mission Lane
- Cheek Sparger and Jackson Roundabout Construction
- Cheek Sparger and Bedford Roundabout Construction
- Pleasant Run Trail and Road Reconstruction
- Begin design of Glade Road Improvements

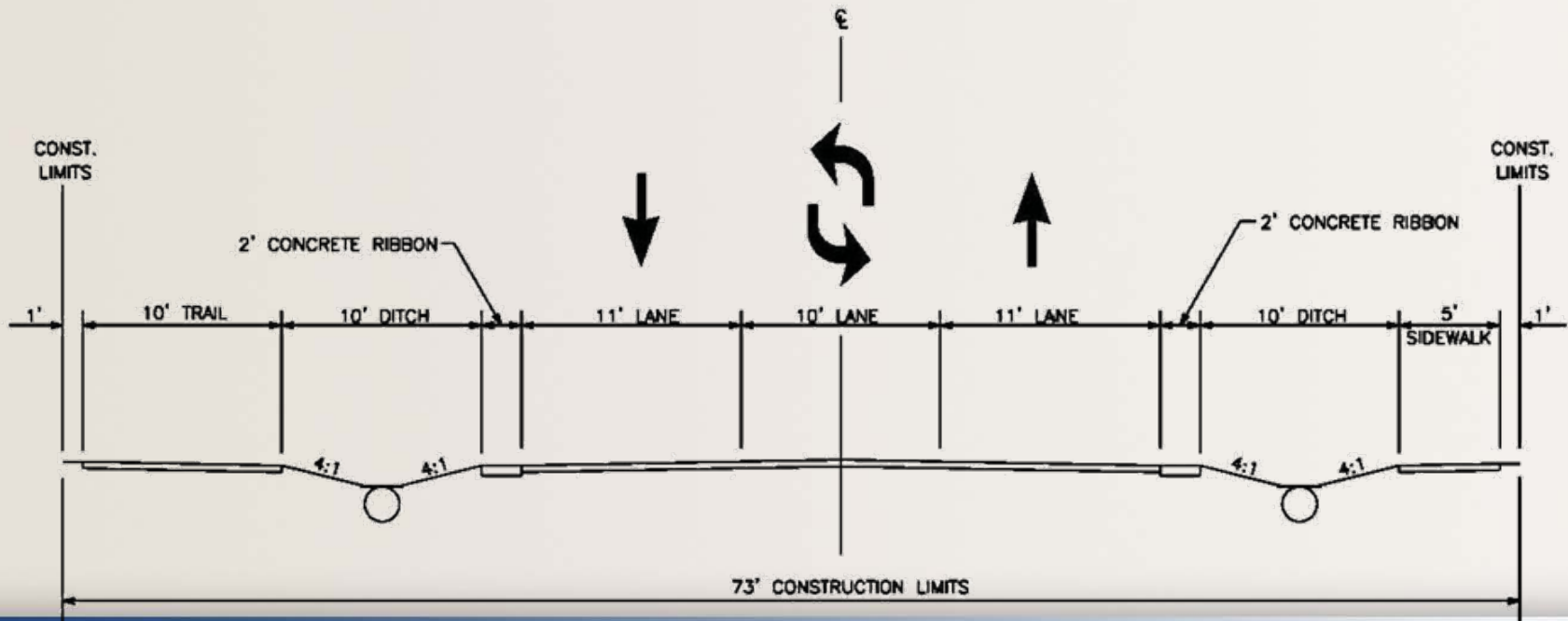


Pleasant Run Road



A Different Approach

A modified street cross-section incorporating ribbon curbs and gentle drainage swales with underground storm sewers may be a solution to maintain the “rural feel” but still have an adequate street section and properly engineered drainage systems. A center turn lane is most appropriate at intersections.



Proposed 2013 Construction Program

Maintenance

- From the 2008 Program:
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 - o Kenshire Drive(2013)
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- Cheek Sparger and Bedford Roundabout Construction
- Pleasant Run Trail and Road Reconstruction
- Begin design of Glade Road Improvements

2014 Construction Program

Maintenance

- Reconstruct Jewel Estates (Reclamation)



Capital

- From the 2008 Program:
 - o Reconstruct Ponderosa Lane, McCain Lane and Kingston Drive (2010)
 - o Reconstruct Bettinger Drive (2014) and Waller Lane (2014)
- Reconstruct Lavaca Trail from Precinct Line to Mustang
- Begin Reconstruction of Glade Road between Pool and Heritage
- Replace Bedford Road retaining wall

Next Steps

- Complete 2012 Street Rehab Program
- Approve 2013 and 2014 Construction Program
- Execute 2013 and 2014 Construction Programs
- Develop 2014-2018 Capital Improvement Program for all components of Colleyville's infrastructure

Questions and Discussion