Bond Road Study

CANDIDATE ROADS FOR RECONSTRUCTION WITH BOND MONEY

County Growth



Since 2000, Collin County has experienced phenomenal growth, roughly doubling its population in the past two decades

Impact of Growth

- Numerous subdivisions under construction
- Surging vehicle traffic
- Increased heavy truck traffic
- Additional "city work" requests
- Striping and signage requirements

Impact on County Roads

- Accelerate the rate of deterioration of county roads
- Cause edge cracking, shoving, and base failure
- Roads suffering significant distress will require reconstruction with reinforced base

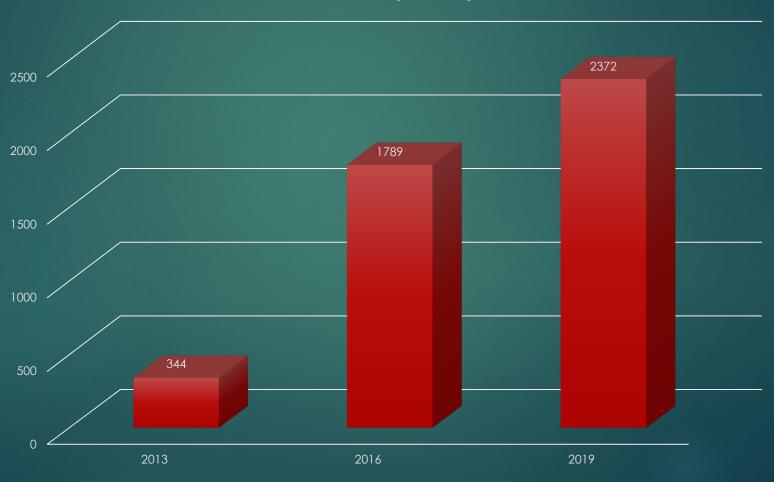
Candidate Roads

- ▶ Public Works identified 5 roads which should be excellent candidates for reconstruction with bond money
- All five roads are major arterials that connect with state maintained thoroughfares and have experienced substantial traffic growth over the past several years

Traffic Studies

Road	Vehicles Per Day	Date of Last Study
CR398	731	Dec 2017
CR557	2372	Oct 2019
CR407	5526	Oct 2022
CR168	831	Jan 2018
CR412	1994	Jun 2020





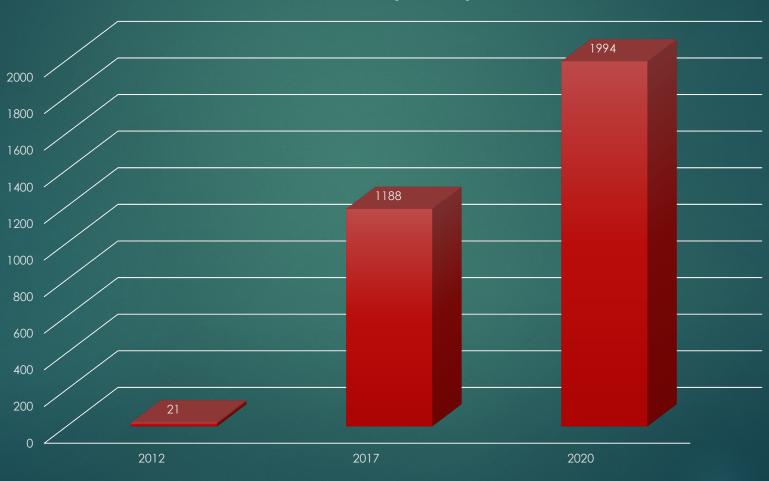
















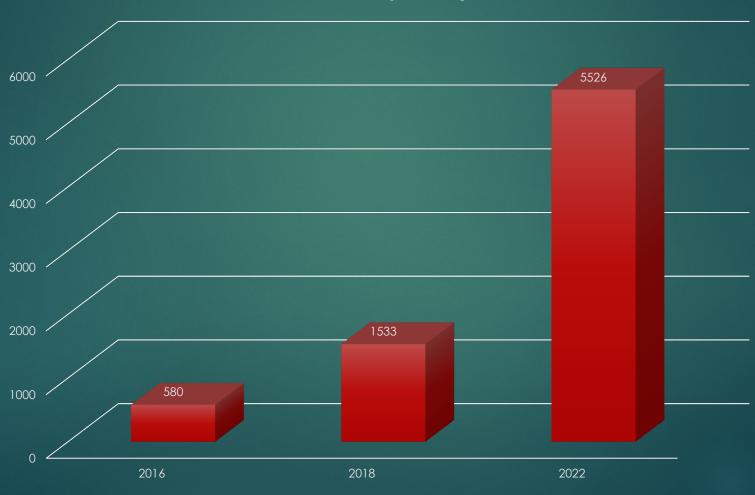
CR 412/CR1116

















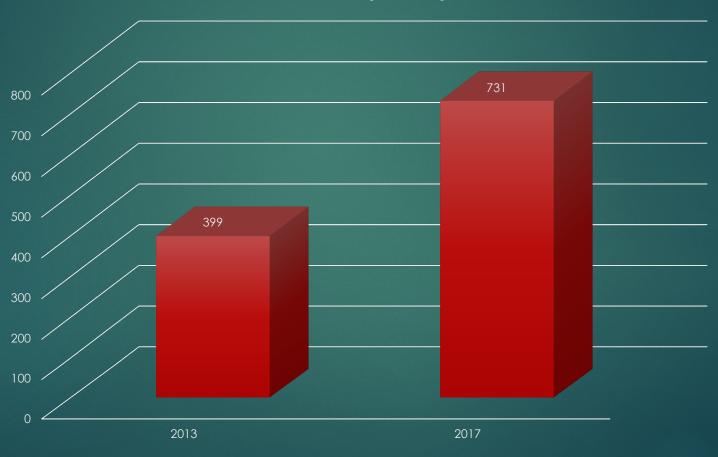






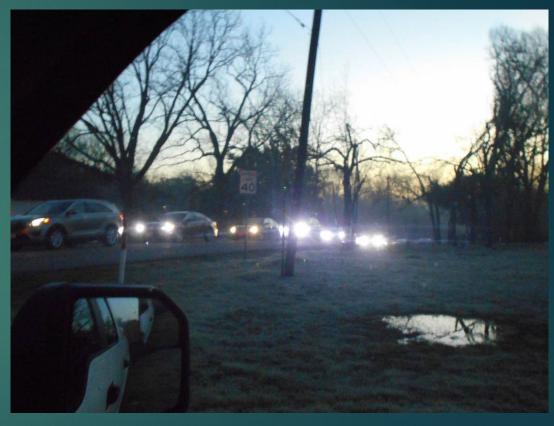






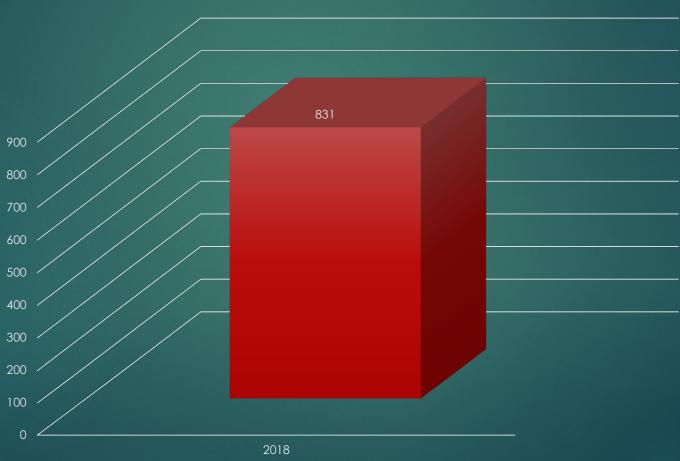
















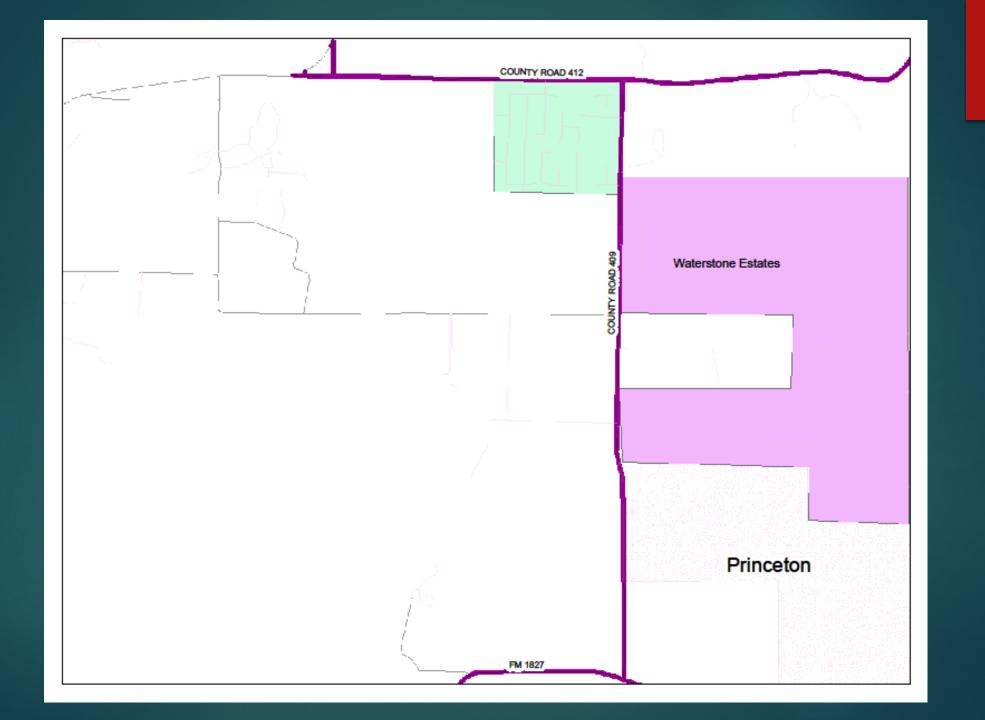


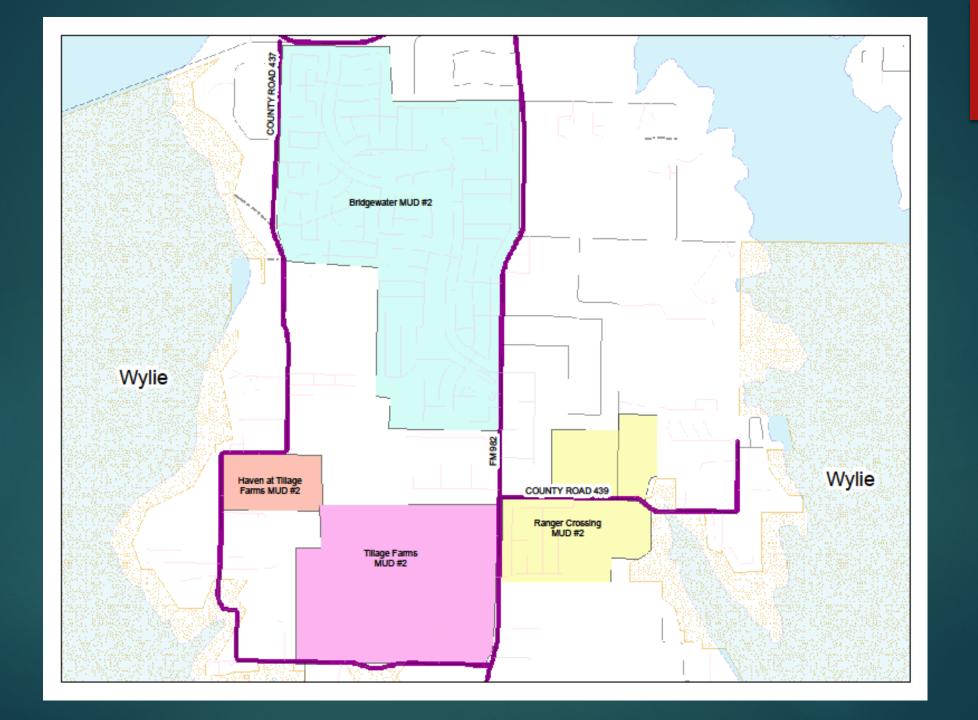


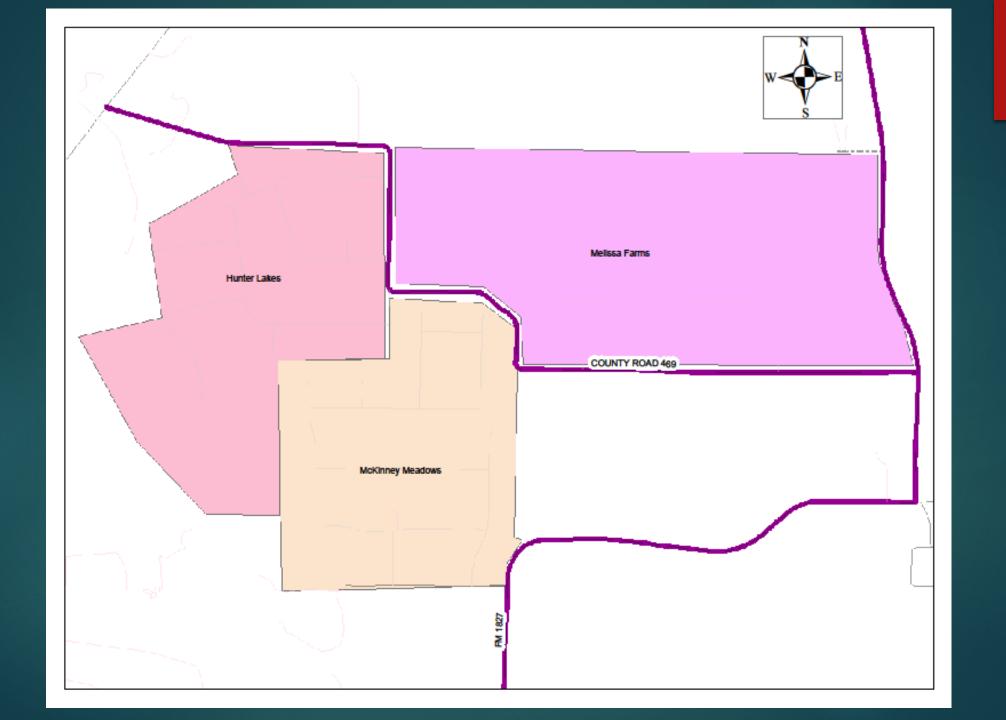


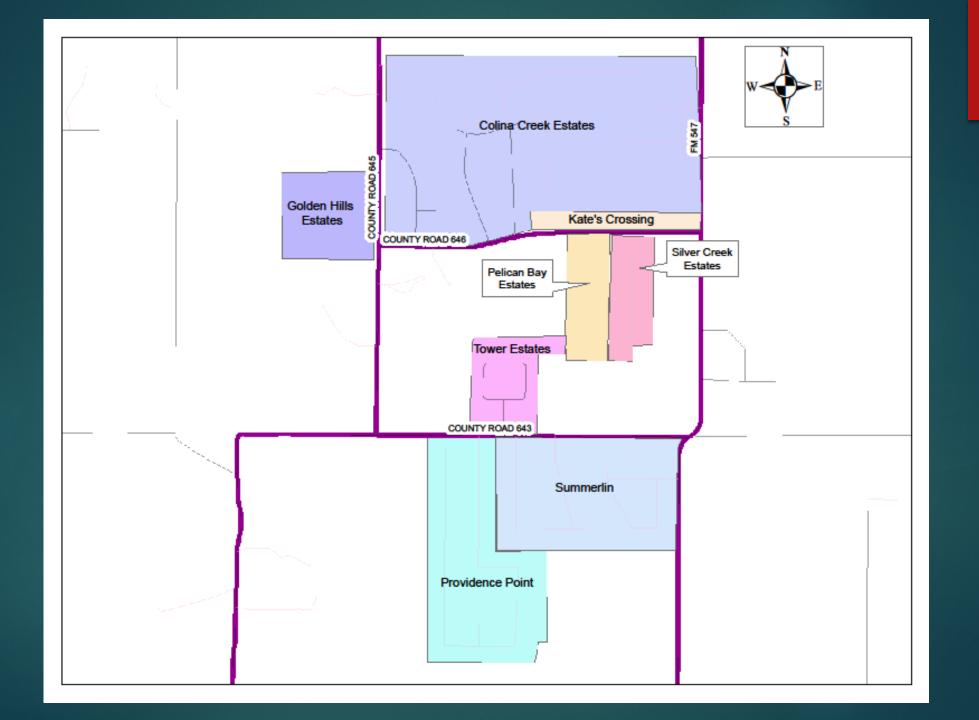
Infrastructure Impact

- ▶ Public Works has further determined a host of county roads that have suffered due to extensive development occurring in the immediate vicinity, typically related to subdivision construction.
 - ► CR409
 - ► CR471
 - ► CR437
 - ► CR439
 - ► CR469
 - ► CR645
 - ► CR646









Highest ADT from Jan. 2018 to Feb. 2023 County maintained, no city shared boundaries

Precinct	Name	ADT	Surface	TFP	NOTE	
3	W Outer Loop Rd	9,829	Concrete			
3	County Road 392	2,556	2-Course	M6D		
1	County Road 166	2,246	Concrete	P6D		
3	County Road 469	1,760	2-Course	P6D		
1	County Road 1214	1,510	НМАС			
3	County Road 1116	1,416	2-Course	M6D		
3	County Road 125	1,336	2-Course	M6D	West end	
2	County Road 546	1,252	2-Course			
3	County Road 412	1,188	2-Course	M4D		
3	County Road 448	1,179	2-Course			
3	County Road 325	1,099	2-Course			
2	Bozman Rd	1,068	НМАС			
3	County Road 504	1,013	2-Course			
3	County Road 496	985	2-Course	M4D		
3	County Road 559	961	2-Course			
3	County Road 552	955	2-Course			
3	Lone Star Rd	927	2-Course	M4D		
3	County Road 561	884	2-Course			
2	County Road 549	866	2-Course	P6D		
3	County Road 324	826	2-Course			
3	County Road 553	793	2-Course			
3	County Road 825	770	2-Course	M4D		
2	County Road 593	749	2-Course	M4D		
3	Old Valdasta Rd	703	2-Course			
3	County Road 550	690	2-Course			
ADT Total 37,561						

Highest ADT from Jan. 2018 to Feb. 2023

Precinct	Name	ADT	Surface	City Involved
2	Sachse Rd	10,468	2-Course	Wylie
1	Rockhill Pkwy	10,089	2-Course	Frisco
3	W Outer Loop Rd	9,829	Concrete	
3	Milrany Ln	6,017	Concrete	Melissa
3	County Road 407	5,526	2-Course	Princeton & McKinney
1	Lynn Stambaugh Pkwy	3,582	2-Course	Celina
3	McIntyre Rd	3,414	2-Course	McKinney
3	E Outer Loop Rd	3,247	Concrete	Anna
3	County Road 371	2,741	2-Course	Anna
2	Elm Dr	2,664	НМАС	Wylie
3	County Road 392	2,556	2-Course	
2	Kreymer Ln	2,536	2-Course	Wylie
3	County Road 557	2,372	2-Course	Farmersville
3	County Road 375	2,366	2-Course	Van Alstyne
3	County Road 376	2,254	2-Course	Anna
1	County Road 166	2,246	Concrete	
3	Taylor Blvd	2,068	2-Course	Anna
2	Pleasant Valley Rd	2,055	2-Course	Wylie
2	Dublin Rd	2,044	нмас	Plano, Murphy & Parker
1	County Road 97	2,020	2-Course	Celina
3	E Hazelwood St	1,865	2-Course	Princeton
1	County Road 55	1,784	2-Course	Celina
1	County Road 123	1,775	2-Course	McKinney
3	County Road 469	1,760	2-Course	
2	County Road 543	1,759	2-Course	Nevada
	ADT Total	89,037		21 roads involve 13 Cities

County Road 392 from FM 546 to FM 982

Current Condition

- 2 lanes
- Existing ROW: XX'
- Current Volume: 1,681 daily (year 2014)

Proposed Improvement

- Under consideration for improvements due to two new Princeton ISD schools being constructed at the intersection of CR 728, new subdivisions & future MUD
- Widen to 4 lanes and add turn lanes
- Proposed ROW: 120'
- Design Year Volume: 2,353 daily (year 2041)
- Buildout Year Volume: X,XXX daily (year N/A)
- Est. Construction Cost: \$9.4M (does not include ROW cost)







County Road 557 from SH 78 to US 380

Current Condition

- Length: 1.7 miles / Existing ROW width: 50 feet
- 2 lanes with poor pavement condition. Identified drainage, safety & site distance issues (tight curves).
- Traffic Volume: 1,681 vehicles per day (year 2014)

Proposed Improvement

- County Master Thoroughfare Plan project under consideration because it is a major north-south connection for drivers to go to and from US 380 and SH 78, west of Farmersville
- Project would include the construction of the first 2 lanes and turn lanes of ultimate 4-lane divided thoroughfare
- Proposed ROW width: 100 feet
- Buildout Year Volume: X,XXX daily (year N/A)
- Est. Construction Cost: \$8.7M (does not include ROW cost)



