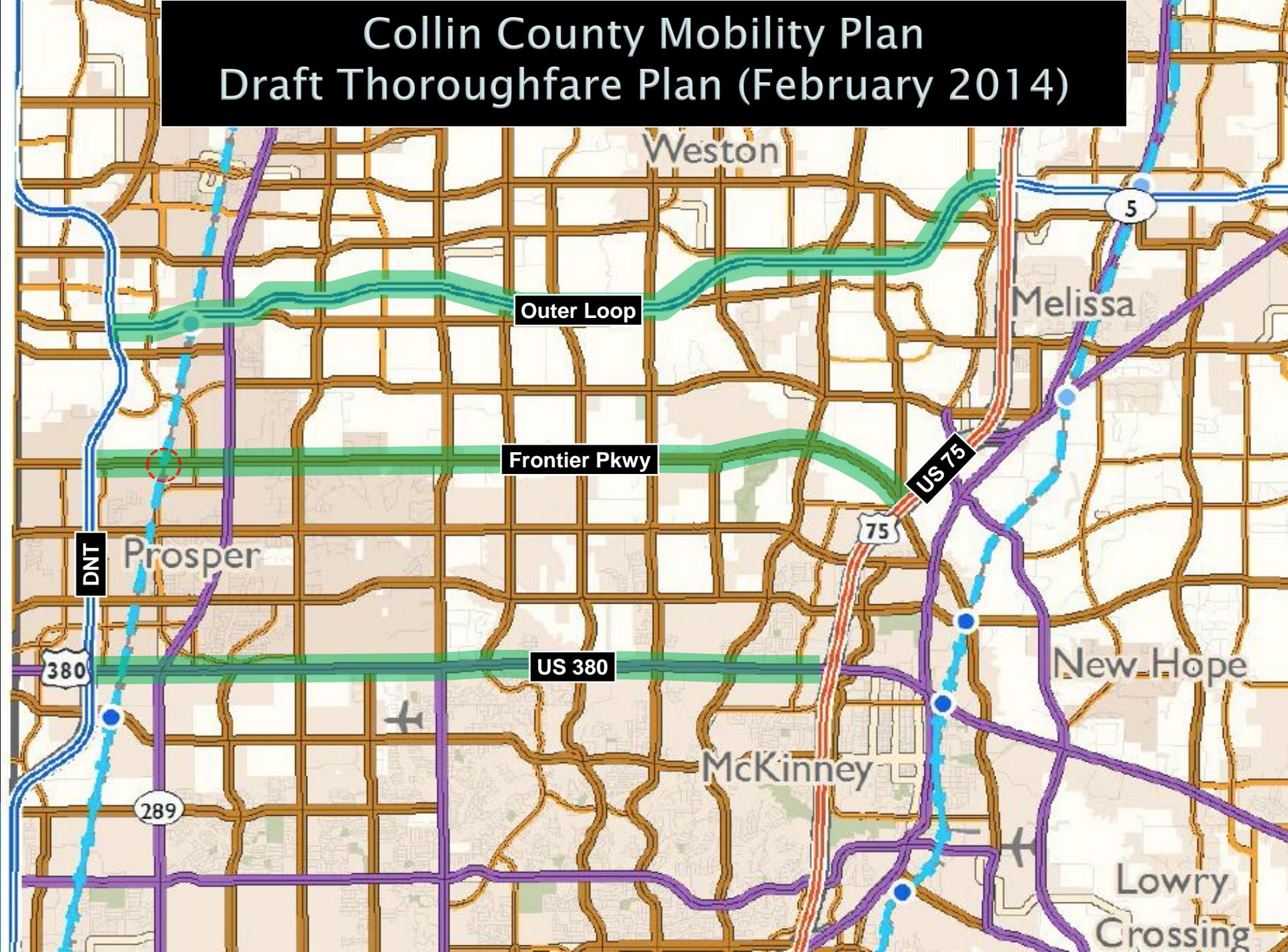




Frontier Parkway (DNT – SH 289)

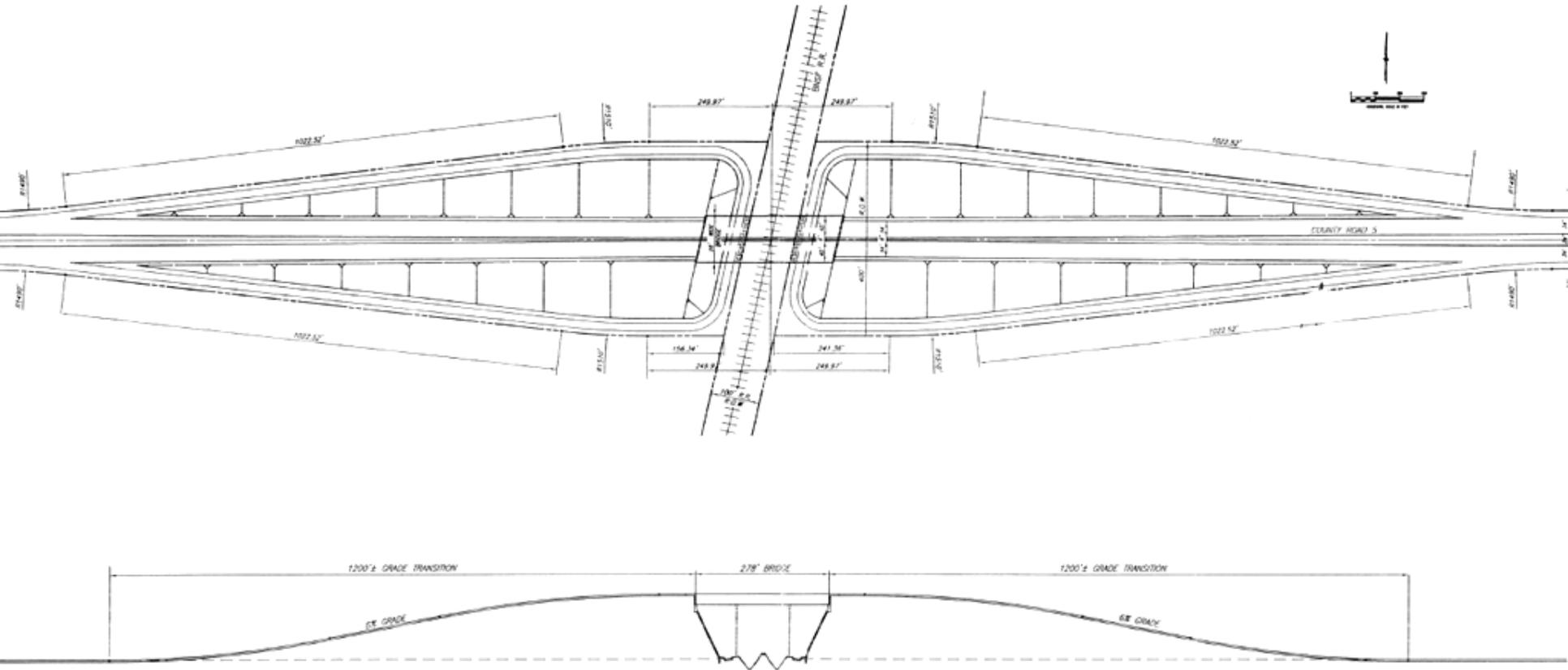
Collin County Mobility Plan Draft Thoroughfare Plan (February 2014)



COLLIN COUNTY FUNDING

- 2007: Collin County approved \$5,001,500 funding (50% of \$10,003,00 estimated total project cost) for the expansion of Frontier Parkway from 2 lanes to 6 lanes with at-grade crossing at BNSF RR. 50% matching funds committed by the City of Celina.
- March 2008: After discussions between Town of Prosper and City of Celina, exhibits were prepared by City of Celina engineer (Birkhoff) for road project showing a grade separated crossing alternative.

Conceptual Bridge Layout (March 2008)



CITY OF CELINA, TEXAS

2007 COLLIN COUNTY BOND PROGRAM
COUNTY ROAD 5 AT BNSF R.R.
CONCEPTUAL BRIDGE LAYOUT

BIRKHOFF, HENDRICKS & CONWAY, L.L.P.
CONSULTING ENGINEERS
3942 GREENWALD AVE., #200
CELINA, TEXAS 75221 214-581-7500
MARCH 2008

Conceptual Bridge Layout (March 2008)



MAY 8, 2008

- Letter from Birkhoff to Celina City Manager, Jason Gray, with construction cost estimate difference of a 6 lane with at-grade crossing versus 4 lane with grade separated crossing. \$3.306M

DECEMBER 3, 2009

- Letter from Celina City Manager, Jason Gray, regarding cost participation options for the Town of Prosper, including grade separated crossing.
 - Option A: 6 lane with at-grade crossing at BNSF RR. Prosper and Celina share equally the 50% match from Collin County.
 - Option B: 4 lane with a grade separated crossing at BNSF RR. Prosper would pay 100% for the costs associated with a grade separated crossing.
 - Option C: Prosper not contribute to the project and be responsible for future design and construction of 10,300', 6 lane section of Frontier Parkway bordering Celina in the future.

PROSPER BOND COMMITTEE

- September 13, 2010: First Meeting of the Town of Prosper Bond Committee.
- February 8, 2011: Town of Prosper Bond Committee presents recommendations to Town Council.
- March 16, 2011: Town of Prosper emailed Celina City Manager, Jason Gray, to state Prosper's Bond Election to include \$3.65M for design and construction of the project based on the cost estimate (September 10, 2009) from Birkhoff's comparison of the 6 lane at-grade crossing versus the 4 lane grade separated crossing at BNSF RR.
- May 2011: Town of Prosper Bond Election passed.

TIGER GRANT APPLICATION

- September 16, 2011: Meeting between City of Celina and Town of Prosper.
 - September 26, 2011: U.S. Department of Transportation Tiger Grant Pre-Application submitted included a grade separated crossing on Frontier Parkway at BNSF RR. Application prepared for the City of Celina by their design engineer Birkhoff.
- 

CONTINUED DISCUSSIONS ON PROJECT

- December 13, 2011: Meeting between City of Celina and Town of Prosper.
 - January 9, 2012: Meeting between City of Celina and Town of Prosper.
- 

RTR FUNDING

- March 30, 2012: Town of Prosper letter to County Commissioner, Matt Shaheen, RTR fund request with overpass.
 - May 3, 2012: Meeting with County Commissioner, Duncan Webb, Collin County, City of Celina, Town of Prosper regarding RTR submittal. (The City of Celina did not show an overpass and Town of Prosper did.) Request for RTR funding did not include overpass.
 - October 10, 2012: RTR Funding approved \$4,354,177.
- 

FURTHER DISCUSSIONS ON PROJECT

- October 16, 2012: Meeting between City of Celina and Town of Prosper, including County Commissioner, Matt Shaheen.
- October 18, 2012: Memo from Town's CIP Project Manager to Lyle Drescher, Prosper Interim Town Manager, regarding "siding" in Prosper. The siding in Prosper is the longest of 3 sidings on the Madill Line. With three streets (First, Fifth, and Prosper Trail) within the limits of the siding, a complete stop of a 6,500' to 7,500' train has blocked these intersections for up to an hour. The slowing down of the trains causing the crossing at Frontier Parkway to be inaccessible for an extended period of time.

FURTHER DISCUSSIONS ON PROJECT (CON'T)

- February 7, 2013: Meeting between the City of Celina and Town of Prosper with Town Manager, Harlan Jefferson. Town of Prosper still requesting a grade separated crossing.
- Updated Funding Plan with RTR Funds included. Of the \$5,001,500 approved Collin County Funds, Celina used \$1,506,035 on other projects, so only \$3,495,465 remaining. Celina is not proposing giving any credit for the County funding towards Prosper's share. With the RTR funding, Celina would pay \$206,446.58 and Prosper would pay \$3,701,911.58. This is with no grade separated crossing. Celina is using Prosper's funds as it's required 50% match to Collin County.

City of Celina
County Road 5 (Frontier Pkwy.) Paving and Drainage Improvements
Updated Funding Plan w/ RTR Funds Included

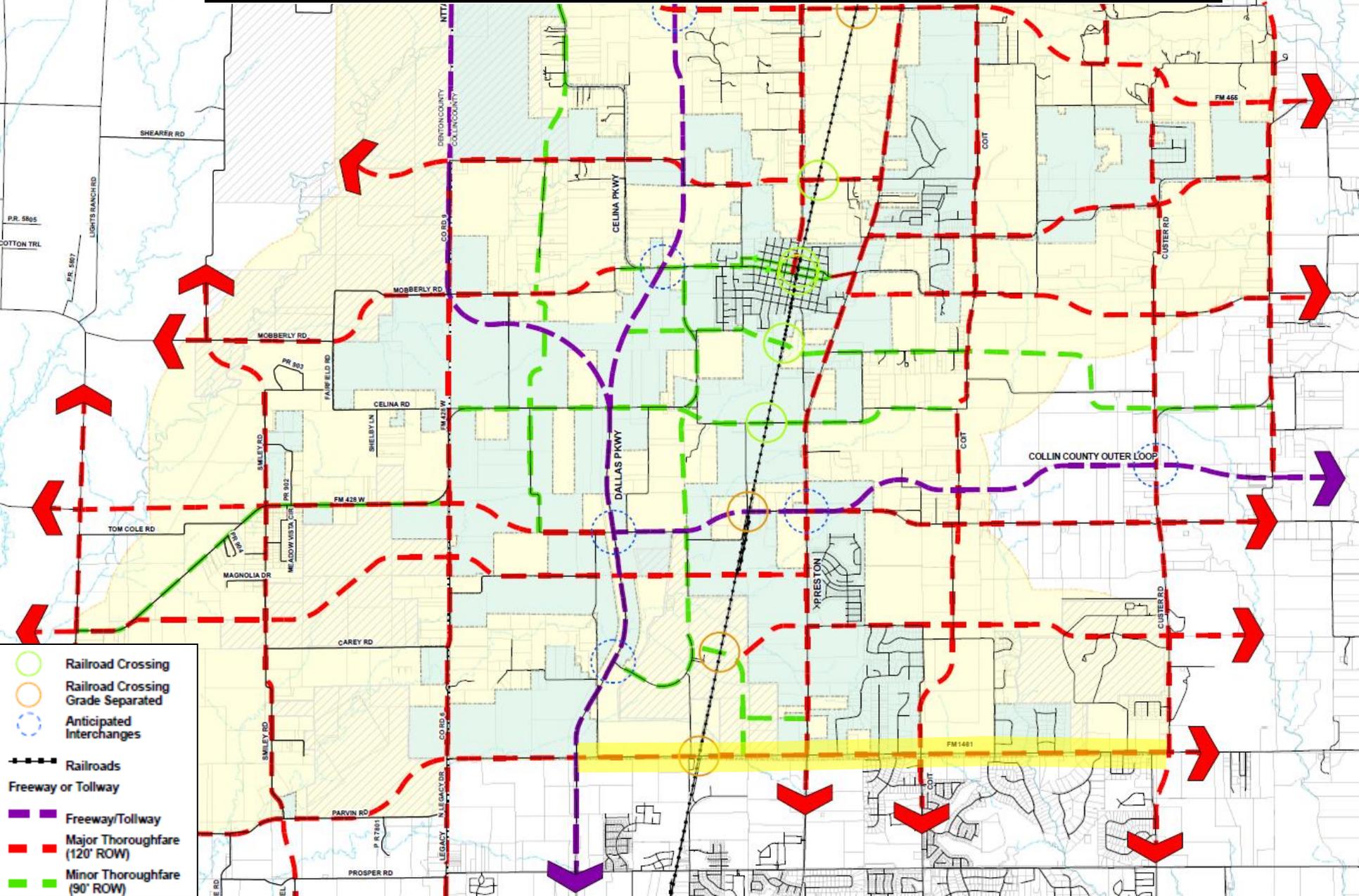
Total Project Budget:	\$	11,758,000
Collin County Funds Available:		
Total Collin County Funds Available:	\$	3,495,465
RTR Funds Available:	\$	4,354,177
Participating City Matching Funds		
Total Project Funding	\$	7,849,642
Remainder to be funded	\$	3,908,358
Current Funding by Cities		
City of Celina		
Collin County Funds		\$3,495,465
RTR Funds		\$2,177,088
Total Celina funding		\$5,672,553
City of Prosper		
RTR Funds		2,177,088
Difference in funding levels		
City of Celina		\$5,672,553
City of Prosper		2,177,088
Difference		\$3,495,465
Difference in Remaining to be funded and Prosper additional funding	\$	412,893
Split between the two cities	\$	206,446.58
Celina Total		\$5,878,999.58
Prosper Total		\$5,878,999.58

ADDRESSING ACCESS CONCERNS

- February 7, 2013: Celina expressed concern with Light Farms Development maintaining access to CR 51, a collector roadway adjacent to the BNSF RR.
 - February 26, 2013: Town of Prosper Town Council approved professional engineering services agreement for evaluation of design alternatives for a grade separated crossing at BNSF RR.
 - March 6, 2013: Email to City of Celina notifying them that Town of Prosper hired a consultant to evaluate design alternatives that would meet Prosper's desire for a grade separated crossing at BNSF RR while maintaining Celina's desire for adequate access to CR 51.
- 

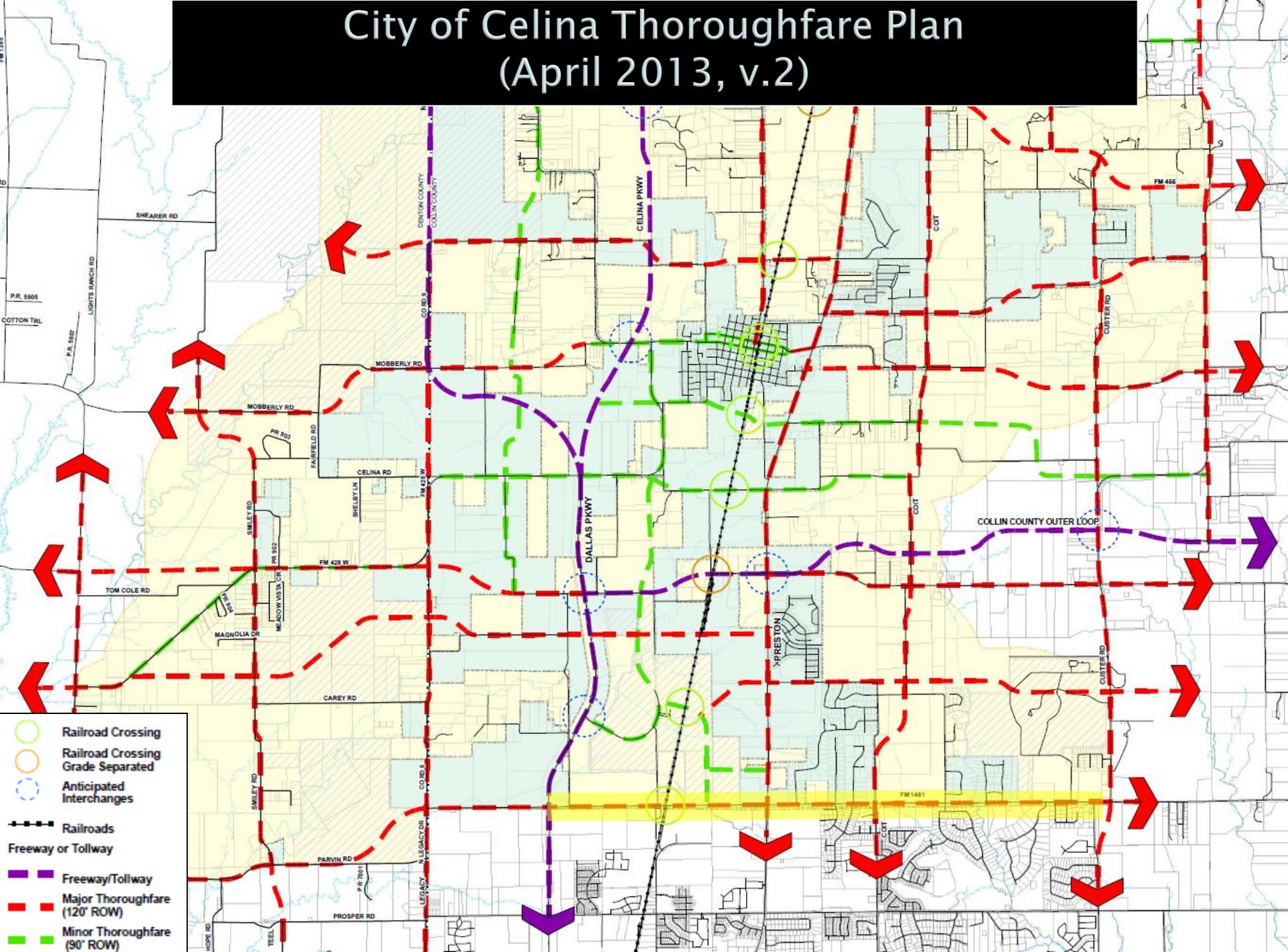
- April 8, 2013: Celina's proposed Thoroughfare Plan shows a grade separated crossing on Frontier Parkway at BNSF RR. Comprehensive Plan adopted also recommends 5 at-grade crossings.

City of Celina Thoroughfare Plan (April 2013, v.1)

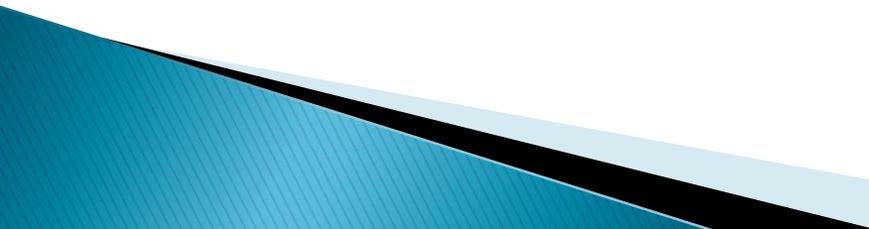


- April 30, 2013: City of Celina adopts Thoroughfare Plan removing grade separated crossing at BNSF RR. All other major East–West thoroughfares continue to recommend at-grade separated crossings.

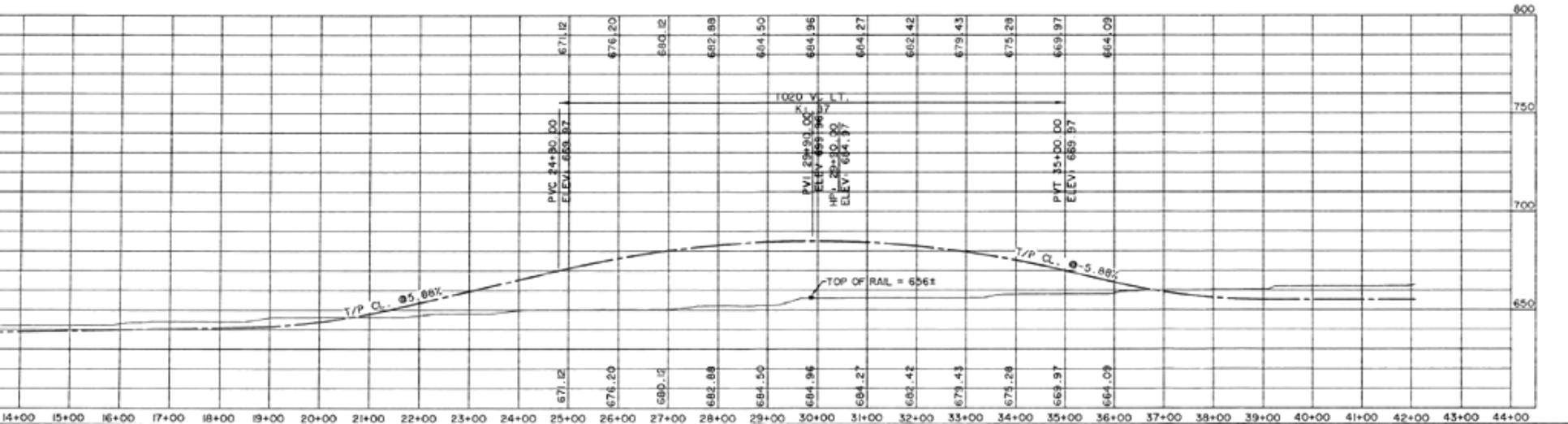
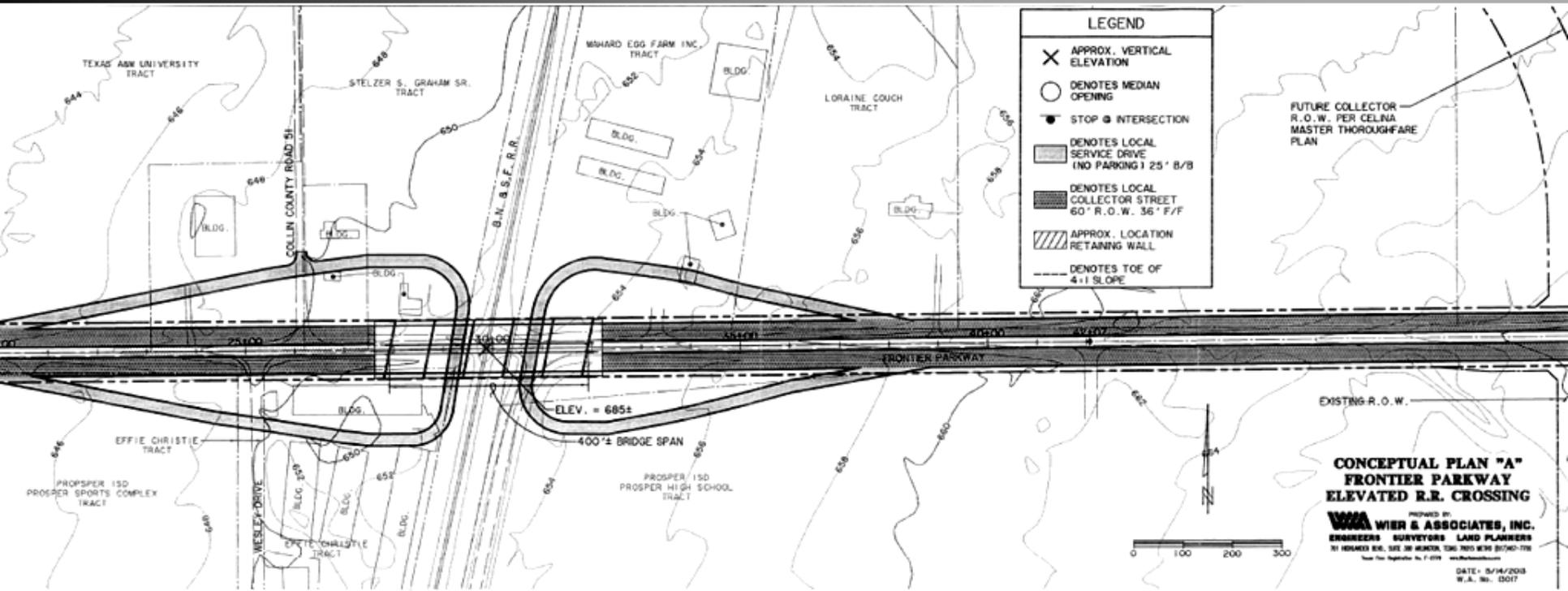
City of Celina Thoroughfare Plan (April 2013, v.2)



ADDRESSING ACCESS CONCERNS (CON'T)

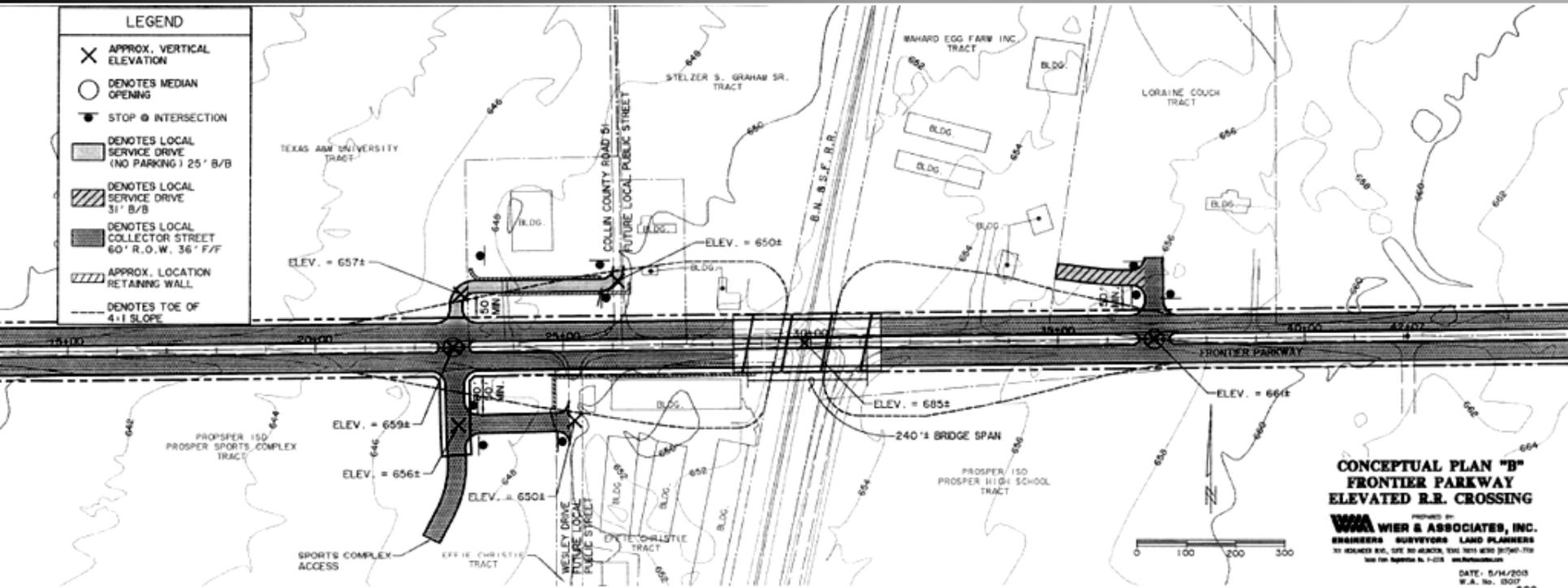
- June 6, 2013: Meeting with City of Celina showing options for overpass to address access concerns. Mentioned that if the Texas A&M property were purchased by Light Farms, a realignment of CR 51 would be possible to address the access concerns and potential for a grade separated crossing.
- 

Conceptual Bridge Layout "A" (March 2008)



Conceptual Bridge Layout "B" (June 2013)

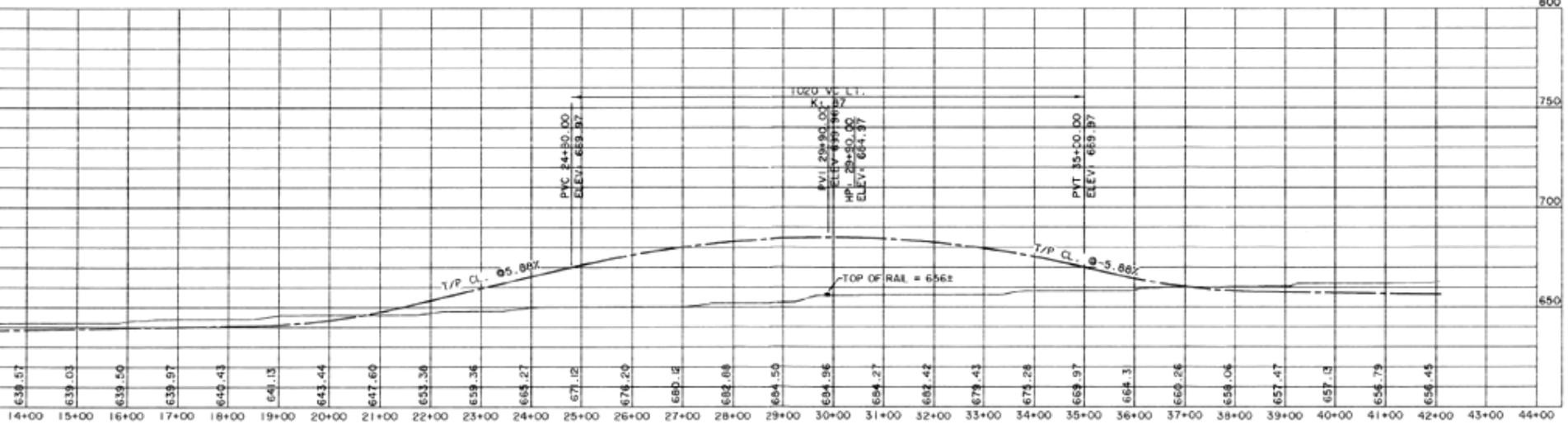
- LEGEND**
- ✕ APPROX. VERTICAL ELEVATION
 - DENOTES MEDIAN OPENING
 - STOP @ INTERSECTION
 - ▭ DENOTES LOCAL SERVICE DRIVE (NO PARKING) 25' B/B
 - ▨ DENOTES LOCAL SERVICE DRIVE 31' B/B
 - ▩ DENOTES LOCAL COLLECTOR STREET 60' R.O.W. 36' F/F
 - ▧ APPROX. LOCATION RETAINING WALL
 - DENOTES TOE OF 4:1 SLOPE



**CONCEPTUAL PLAN "B"
FRONTIER PARKWAY
ELEVATED R.R. CROSSING**

PREPARED BY:
WMA WIER & ASSOCIATES, INC.
ENGINEERS SURVEYORS LAND PLANNERS
30 REDBANK BLVD., SUITE 300 ALBERTA, TEXAS 75011-4530 (972) 467-7700
See 100 Appendix B to 1-128. 06/14/2013

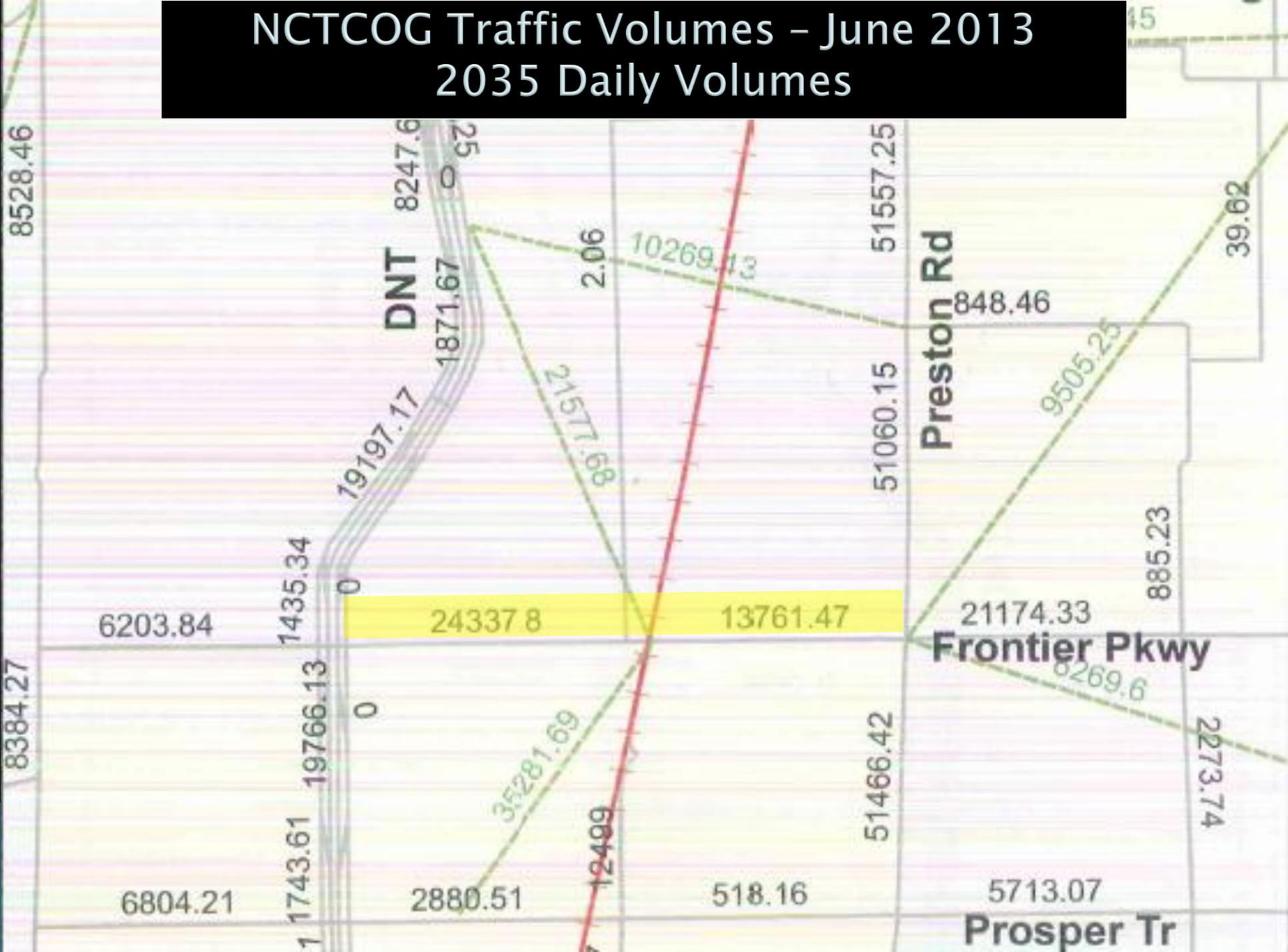
DATE: 6/14/2013
W.A. No. 0307



NCTCOG INVOLVEMENT

- September 2013: Mobility-2013 traffic projections map prepared by NCTCOG.

NCTCOG Traffic Volumes - June 2013 2035 Daily Volumes



NCTCOG INVOLVEMENT (CON'T)

- December 18, 2013: Meeting with Michael Morris, City of Celina, Town of Prosper. Presented with updated counts not showing support for a grade separated crossing. Told to plan for crossing.

LATEST DISCUSSIONS ON PROJECT

- March 5, 2014: Meeting with NCTCOG and Collin County to discuss.
 - June 3, 2014: Follow-up meeting with NCTCOG and Collin County.
- 

Frisco – Eldorado Parkway



Dallas North Tollway

BNSF Railroad

Eldorado Pkwy.

Preston Road

Google earth

Frisco – Eldorado Parkway



14,400 VPD

12,800 VPD

Eldorado Pkwy.

Research Road

North County Road

Warren Sports Complex

Google earth

Prosper / Celina – Frontier Parkway



10/18/2013
1995 2013

N

Google earth

Prosper / Celina – Frontier Parkway



10/18/2013

Dallas North Tollway

BNSF Railroad

12,869 VPD

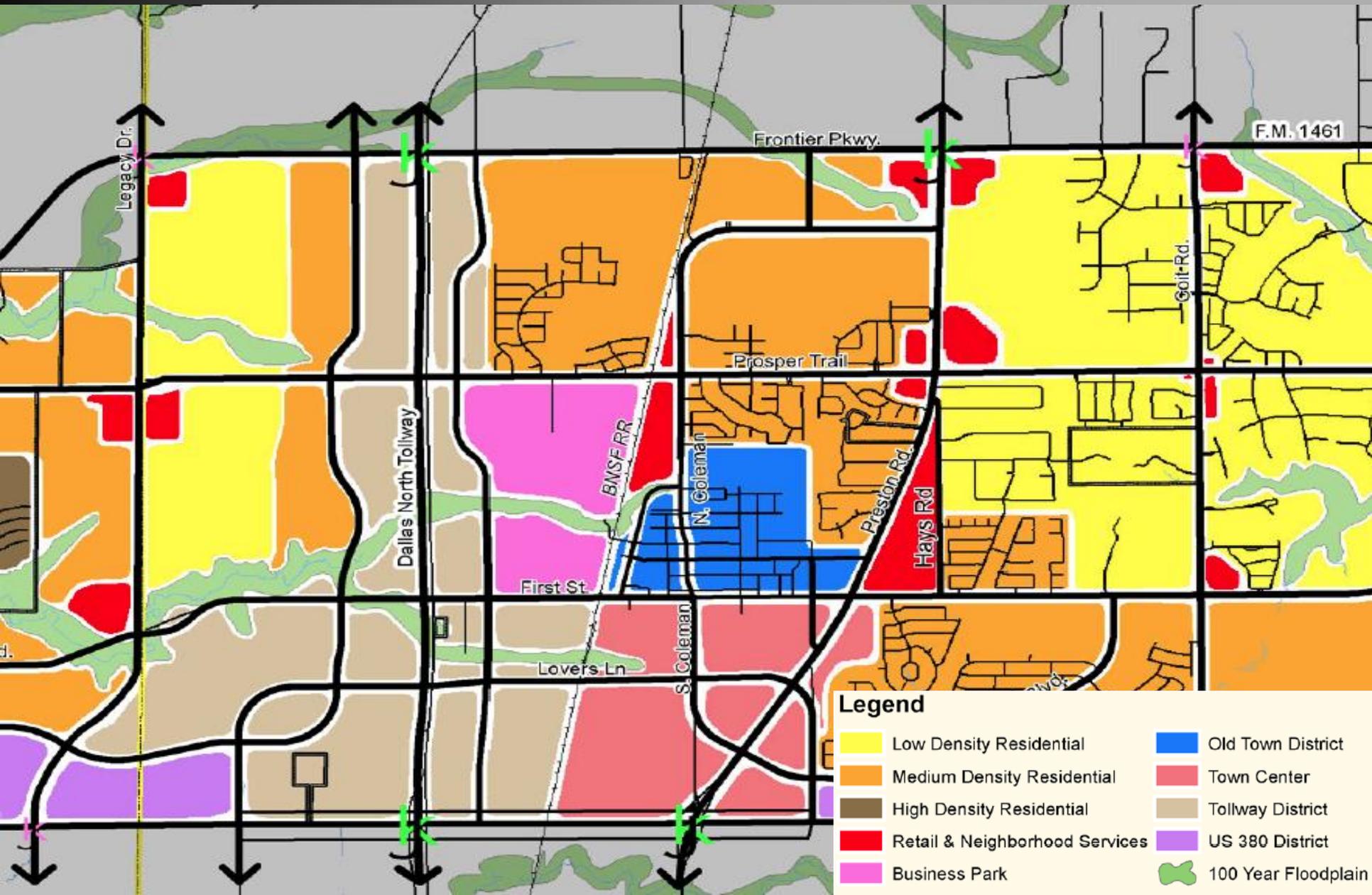
12,416 VPD

Frontier Pkwy.

Preston Road

Google earth

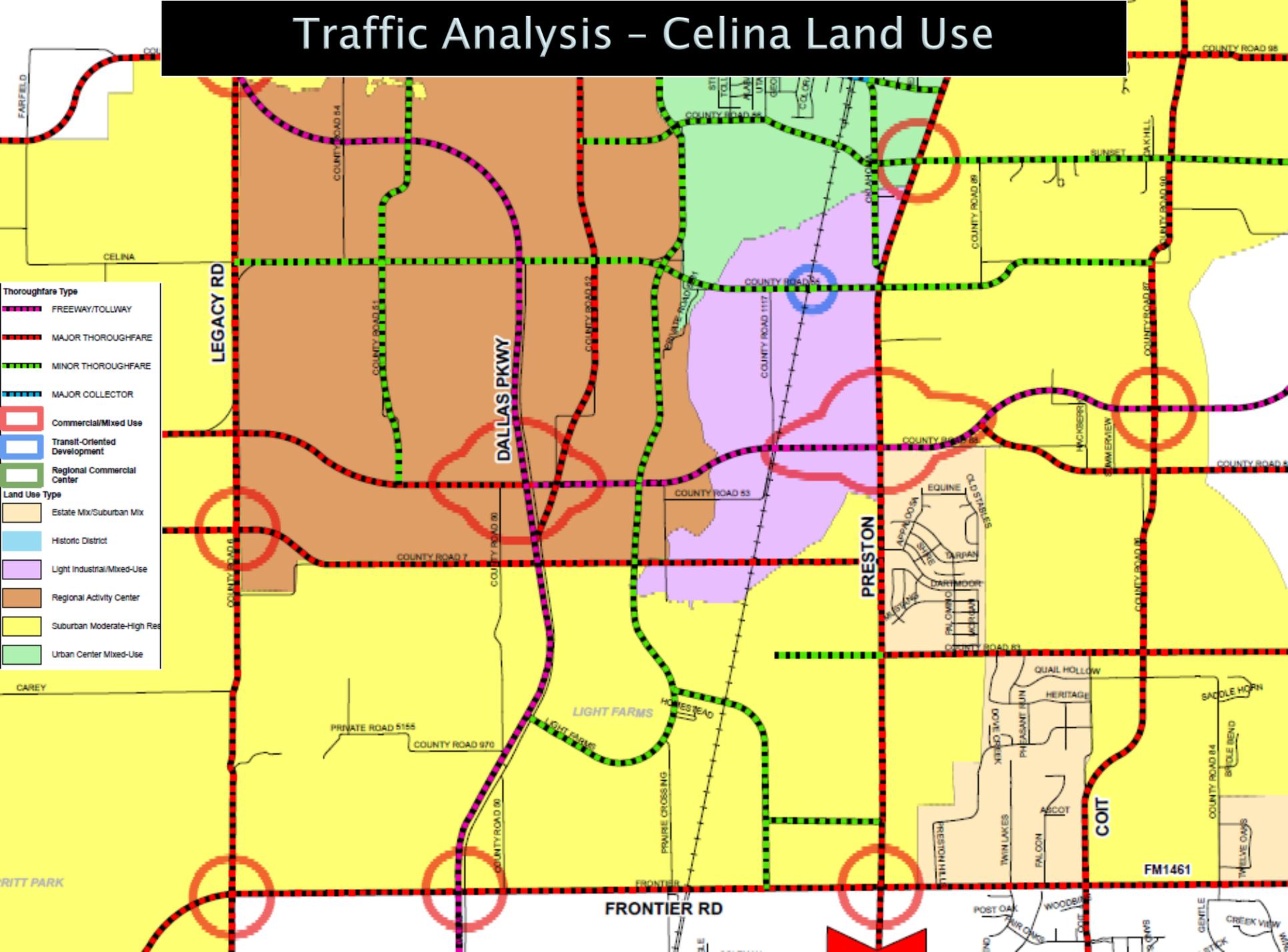
Traffic Analysis - Prosper Land Use



Legend

- | | |
|--------------------------------|---------------------|
| Low Density Residential | Old Town District |
| Medium Density Residential | Town Center |
| High Density Residential | Tollway District |
| Retail & Neighborhood Services | US 380 District |
| Business Park | 100 Year Floodplain |

Traffic Analysis - Celina Land Use



Build-Out Traffic Projection

Build-Out Trip Generation for Frontier Parkway (DNT - SH 289)
Town of Prosper 03/27/2014

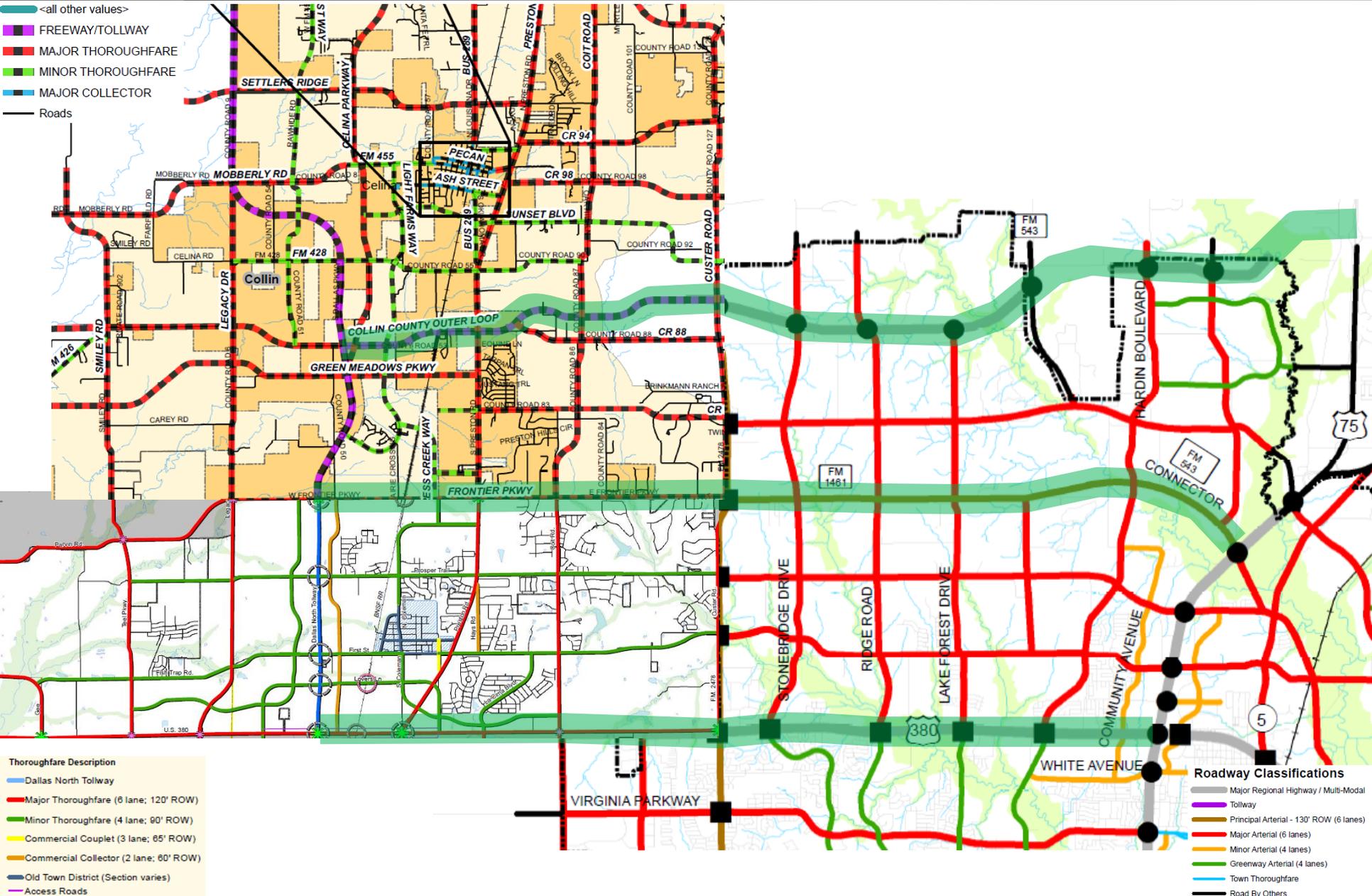
area	town	land mass (acres)	land use	land mass (%)	land mass (acres)	du per acre	FAR (%)	quantity	units	trip rate	daily trips	pass-by %	% to study corr.	daily trips
1	Celina	1295	single family	80%	1,036	3		3,109	du	9.52	29,594		10%	2,959
			office	10%	130		20%	1,128	kft ²	11.03	12,447		10%	1,245
			shopping ctr	10%	130		20%	1,128	kft ²	42.70	48,184	34%	10%	3,180
2	Celina	327	single family	80%	261	3		784	du	9.52	7,462		20%	1,492
			office	10%	33		20%	285	kft ²	11.03	3,138		20%	628
			shopping ctr	10%	33		20%	285	kft ²	42.70	12,150	34%	20%	1,604
3	Celina	473	single family	80%	378	3		1,135	du	9.52	10,805		25%	2,701
			office	10%	47		20%	412	kft ²	11.03	4,544		25%	1,136
			shopping ctr	10%	47		20%	412	kft ²	42.70	17,593	34%	25%	2,903
4	Celina	157	single family	80%	125	3		376	du	9.52	3,582		25%	896
			office	10%	16		20%	137	kft ²	11.03	1,507		25%	377
			shopping ctr	10%	16		20%	137	kft ²	42.70	5,832	34%	25%	962
5	Celina	180	single family	80%	144	3		431	du	9.52	4,105		50%	2,052
			office	10%	18		20%	157	kft ²	11.03	1,726		50%	863
			shopping ctr	10%	18		20%	157	kft ²	42.70	6,683	34%	50%	2,205
6	Celina	355	single family	80%	284	3		852	du	9.52	8,112		25%	2,028
			office	10%	36		20%	309	kft ²	11.03	3,412		25%	853
			shopping ctr	10%	36		20%	309	kft ²	42.70	13,208	34%	25%	2,179
7R	Prosper	15	shopping ctr	100%	15		20%	133	kft ²	42.70	5,673	34%	30%	1,123
7S	Prosper	15	single family	100%	15	2.5		37	du	9.52	351		50%	176
8	Prosper	336	single family	100%	336	2.5		840	du	9.52	7,999		10%	800
9	Prosper	95	high school	100%	95			2,500	students	1.71	4,275		40%	1,710
10	Prosper	200	single family	30%	60	2.5		150	du	9.52	1,428		60%	857
			regional park	40%	80			80	acre	4.57	366		100%	366
			stadium	30%	60			10	employee	10	100		100%	100
11	Prosper	264	single family	100%	264	2.5		660	du	9.52	6,288		5%	314
12A	Prosper	67	multi family	50%	34	15		503	du	6.65	3,342		30%	1,002
			office	30%	20		25%	219	kft ²	11.03	2,414		30%	724
			shopping ctr	20%	13		25%	146	kft ²	42.70	6,231	34%	30%	1,234
12B	Prosper	25	multi family	50%	13	15		188	du	6.65	1,247		10%	125
			office	30%	8		25%	82	kft ²	11.03	901		10%	90
			shopping ctr	20%	5		25%	54	kft ²	42.70	2,325	34%	10%	153
13	Prosper	108	multi family	50%	54	15		810	du	6.65	5,387		20%	1,077
			office	30%	32		25%	353	kft ²	11.03	3,892		20%	778
			shopping ctr	20%	22		25%	235	kft ²	42.70	10,044	34%	20%	1,326
14	Prosper	132	single family	100%	132	2.5		330	du	9.52	3,142		10%	314
15	Prosper	223	single family	100%	223	2.5		558	du	9.52	5,307		10%	531
16	Prosper	42	single family	100%	42	2.5		105	du	9.52	1,000		10%	100
17	Prosper	15	shopping ctr	100%	15		20%	133	kft ²	42.70	5,673	34%	10%	374

43,539

RESOLUTIONS RECENTLY PASSED

- On July 8, 2014: Celina City Council passes a resolution opposing a grade separated crossing at BNSF RR. Essentially terminating mediation process both municipalities had been working on with NCTCOG.
 - On July 22, 2014: Prosper Town Council passes a resolution supporting a grade separated crossing at BNSF RR.
- 

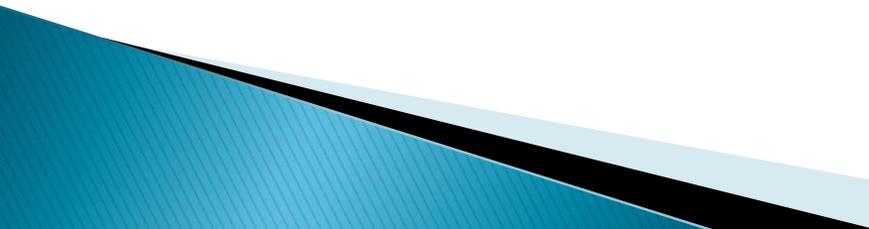
Superimposed Thoroughfare Plans



FACTS

- Frontier Parkway is one of only four major east-west arterials that will directly connect the North Dallas Tollway and US Highway 75 between US HWY 380 and Grayson County Line (approximately 13 miles).
 - US 380 (In Prosper/Frisco); Outer Loop (Celina); FM 455 (Celina) – Celina shows at-grade crossings for both the Outer Loop and FM 455, but not Frontier Parkway.
- The City of McKinney considers the continuation of Frontier Parkway (FM 1461) as a Principal Arterial.
- The BNSF RR crosses and routinely stops at the siding across the intersections of First Street, Fifth Street and Prosper Trail creating long delays at Frontier Parkway.
- Prosper High School is adjacent to the intersection, placing the students, parents and staff at risk of train-related accidents and delays.
- The district plans to build a major sports stadium immediately west of the tracks emphasizing the need for easy access and egress during sporting events.
- At-grade crossing affects police, fire and emergency medical services response times to residents and property east and west of the tracks for both Prosper and Celina.
- A grade separated crossing is essential to the long term health and safety of residents, businesses and visitors for both Celina and Prosper.
- The proposed grade separated crossing was included in the Town of Prosper's 2011 Bond Committee list of projects, overwhelmingly approved by voters.
- Celina has proposed contributing \$200,000 of the \$11,758,000, whereas Prosper has pledged \$3,650,000 if constructed with a grade separated crossing.

CONCLUSION/RECOMMENDATION

- Need Collin County involvement in regional decision to plan for a grade separated crossing at BNSF RR and Frontier Parkway to allow for increased future mobility of the corridor between the municipalities of City of Celina, Town of Prosper and City of McKinney.
 - City of Celina to amend thoroughfare to show overpass and allow for future ROW.
 - CR 51 to be shown on Collin County thoroughfare plan to allow for adequate separation from a grade separated crossing.
- 

ANY QUESTIONS?

