

Collin County 2020 Draft Fiscally-Constrained Financial Transportation Plan

Summary

- The 2020 Funding Plan is fiscally constrained with no funding and financing gap. Total sources of funds are estimated to be \$928 million against \$928 million for an estimated 47 transportation improvement projects in Collin County.
- None of the projects examined are expected to generate sufficient revenues from tolls or other revenue sources to be financially feasible without significant public financial support. As a result, none of the projects evaluated were considered to be candidates for attracting private capital.
- Arterial and street projects that are not developed using Federal and State funding allocations would be financed through a General Obligation (G.O.) bond issued by Collin County. In accordance with Collin County policy, the County would finance 100% of project costs for roads that are outside a city's jurisdiction but within the county and 50% of costs for roads that are within a given city's jurisdiction.
- For the arterial and street improvements located within their respective jurisdictions, cities could use a variety of funding sources depending on availability. These include, but are not limited to, bonds, general fund, and other financial resources.
- TxDOT would provide 100% of the funds needed for two separate improvements to US 75, which include the widening of US 75 from 4 to 6 lanes between the Collin County Loop and SH 121 (N) and between Throckmorton Road and FM 455.
- Collin County would provide 100% of the funding needed for the widening of the Dallas North Tollway (DNT) frontage road from US380 to FM 428. This would be financed through the issuance of a G.O. bond.

Table 1: Sources of Funds, 2017 to 2020

Sources	2017	2018	2019	2020 and Beyond	Total
State Funds/Bonds				76,400,000	76,400,000
Federal					
Category 5: CMAQ	3,200,000	3,200,000	3,200,000	3,200,000	12,800,000
Category 6: Bridges	5,400,000	5,400,000	5,400,000	5,400,000	21,600,000
Category 7: STP-MM	13,400,000	13,400,000	13,400,000	13,400,000	53,600,000
Category 8: Safety	4,200,000	4,200,000	4,200,000	4,200,000	16,800,000
Subtotal Federal	26,200,000	26,200,000	26,200,000	26,200,000	104,800,000
Collin County					
Arterials and Streets	-	-	-	154,100,000	154,100,000
DNT Frontage Road	-	-	-	38,300,000	38,300,000
Subtotal Collin County	-	-	-	192,400,000	192,400,000
Cities (e.g. Allen, Frisco, McKinney)	-	-	-	136,600,000	136,600,000
Subtotal	26,200,000	26,200,000	26,200,000	431,600,000	510,200,000
NTTA				417,800,000	417,800,000
Total Sources	26,200,000	26,200,000	26,200,000	849,400,000	928,000,000
Total Uses					(928,000,000)
Funding and Financing Gap					-

Sources of Funds Assumptions

- Detailed financial plans for the Dallas North Tollway (DNT), the President George Bush Turnpike (PGBT), and the Sam Rayburn Tollway (SRT) projects in Collin County were not available. NTTA has stated that it would have the necessary funding available for 4 (out of 5) of the proposed improvements to the DNT, both of the proposed SRT projects, and the widening of the PGBT from the Denton County Line to the Dallas County Line. Except for the DNT frontage road improvements from US 380 to FM 428, it was assumed that the NTTA would develop these projects using its system financing and/or bond financing without any additional financial support from Collin County. Project completion dates are contingent on funding availability.
- Federal and State funding estimates are based on planned funding for FY14-16 extrapolated to 2017-20. Funding from gas tax revenues and traditional sources is estimated to be approximately \$26.3 million per year during this period. Historically, the amount that the county has received from TxDOT's funding categories 5 through 8 have varied significantly from year-to-year. From 2017 to 2020, total federal funding is estimated to be \$104.8 million. The final amount to be appropriated is subject to availability and changes in law. Funding amounts could change depending on future Federal transportation legislation.
- The estimated total cost of the proposed arterial and street projects is \$395.5 million. The total amount provided from cities located within the County is estimated to be \$136.6 million. Another \$104.8 million would be provided through Federal programs. Collin County would issue a G.O. bond for the estimated \$154 million in arterial and street projects that cannot be developed through Federal, State, NTTA, and local financial resources. The \$38.3 million DNT frontage road improvements would also be included in the estimated \$192.3 million bond. The issuance of the G.O. bond will likely require voter approval. The bond amount does not include issuance costs, which typically range from 2% to 5% of the total amount issued.
- Although previous County bond programs have included funding to augment State funding in order to give certain projects greater priority, it is assumed that TxDOT will completely cover the costs of the US 75 improvements. TxDOT funding for the US 75 improvements could potentially come from the 2015 bond program that requires voter approval in November 2014, a future bond issue, or other state resources.
- Approximately \$3.8 million could be also available from joint TIRZs in which Collin County has entered into with Allen, Lavon, McKinney, and Melissa with a 50% participation rate. Because these agreements typically require generated funds to be used within the TIRZ boundaries, TIRZ funds have not been in the 2020 financial plan.
- Table 2 provides a summary of the amount of funds that would be needed by Collin County and the cities for each proposed arterial and street project. The \$192.3 million bond issued by Collin County in Table 1 is net of Federal and State funding, but does include the \$38.3 million in frontage road improvements on the DNT.

Table 2: Funding Requirements for Street and Arterial Projects, 2020

Project	County	City	Total
5th St/Parkwood Blvd	4,850,000	4,850,000	9,700,000
5th St/Parkwood Blvd	1,900,000	1,900,000	3,800,000
Alma Rd	3,250,000	3,250,000	6,500,000
Alma Rd	2,550,000	2,550,000	5,100,000
Bethany Dr/Lucas Rd/FM 1378	15,250,000	15,250,000	30,500,000
Coit Rd	5,350,000	5,350,000	10,700,000
Coit Rd.	5,350,000	5,350,000	10,700,000
Coit Rd.	4,350,000	4,350,000	8,700,000
Cotton Gin Road	1,600,000	1,600,000	3,200,000
Chelsea Blvd/Hardin Rd	3,000,000	3,000,000	6,000,000
FM 2478/Custer Rd	6,350,000	6,350,000	12,700,000
FM 2514/Parker Rd	4,600,000	4,600,000	9,200,000
FM 2514/Parker Rd	5,350,000	5,350,000	10,700,000
FM 2514/Parker Rd	5,600,000	5,600,000	11,200,000
FM 2551/Murphy Rd.	14,550,000	14,550,000	29,100,000
FM 455	3,100,000	-	3,100,000
FM 455	900,000	900,000	1,800,000
FM 546	3,300,000	3,300,000	6,600,000
FM 982	22,700,000	-	22,700,000
Independence Pkwy	7,950,000	7,950,000	15,900,000
Lake Forest Dr	2,350,000	2,350,000	4,700,000
Park Blvd	2,800,000	2,800,000	5,600,000
Ridgeview Dr	8,800,000	8,800,000	17,600,000
SH 121	18,300,000	-	18,300,000
SH 121	24,200,000	-	24,200,000
SH 205	12,900,000	-	12,900,000
SH 5/Greenville Ave	2,550,000	2,550,000	5,100,000
SH 5/Greenville Ave	430,000	430,000	860,000
SH 5/Greenville Ave	5,440,000	5,440,000	10,880,000
SH 5	1,185,000	1,185,000	2,370,000
SH 5	3,285,000	3,285,000	6,570,000
SH 78	28,000,000	-	28,000,000
Shiloh Rd	4,400,000	4,400,000	8,800,000
Stonebrook Pkwy	4,700,000	4,700,000	9,400,000
Woodbridge Pkwy	2,250,000	2,250,000	4,500,000
Windhaven Pkwy	2,350,000	2,350,000	4,700,000
US 380	13,100,000	-	13,100,000
Arterials and Streets	258,900,000	136,600,000	395,500,000

Uses of Funds Assumptions

- Table 3 provides a general summary of the transportation projects that would be needed to reduce congestion beginning in 2020. This table includes the NTTA and non-NTTA projects that will be developed by 2020 or shortly thereafter. Although NTTA has indicated that the Sam Rayburn Tollway (SRT) from the DNT to US 75 will be developed by 2022, this project has been included since the expected completion date is reasonably close to 2020 and there is a demonstrated need.
- Cost estimates were based on benchmarks provided by NCTCOG of \$1.25 million/lane mile for arterials & street projects and \$4.0 million/lane mile for highway improvements. These benchmarks were inflated to 2020 dollars using a 2.5% annual inflation rate and were calculated to be \$1.5 million/lane mile for arterial & street improvements and \$4.6 million/lane mile for highway projects. Project cost estimates include right-of-way and a 30% contingency.
- Cost data for DNT, PBGT, and SRT projects in Collin County were not available. An estimate of costs was developed using the per lane mile highway benchmark of \$4.6 million (2020\$).
- Provided that all environmental and 3rd party approvals are received, construction for selected arterial and street projects could begin as early as 2017. These projects would be developed using traditional funding sources, e.g. TxDOT categories 5 through 8, and later supplemented by the proposed bond issue and funding from the cities.
- Transit projects have not been included in the detailed project list, but can be added to this list depending on project need.

Table 3: Summary Uses of Funds, 2020 Mobility Plan

Uses	
US 75	76,400,000
Arterials and Streets	395,500,000
DNT Frontage Road	38,300,000
Subtotal	510,200,000
NTTA	
DNT	112,300,000
PGBT	146,900,000
SRT	158,600,000
Subtotal NTTA	417,800,000
Total	928,000,000

Table 4 lists the TxDOT and NTTA highway projects, major and minor arterial, and street projects that have been determined to be needed based on the results of Jacobs' traffic model. This model used inputs provided by North Central Texas Council of Governments (NCTCOG) as well as forecasts of population growth, traffic growth, level of service, and congestion patterns. While some of these projects are included in NCTCOG's plan, others have been added as a result of this analysis.

Table 4: Detailed Uses of Funds, 2020 Mobility Plan

Project	From	To	Improvement	Lane Miles	Arterial Cost	Freeway Cost	ROW	Contingency	Total	NTTA Y/N	Responsible Entity
					1,500,000	4,600,000	10%	30%			
NTTA											
Dallas North Tollway Frontage Rd	US 380	FM 428	Widen 2 lane road to 4 lanes frontage road	5.94		27,324,000	2,732,400	8,197,200	38,300,000	N	Collin County
Dallas North Tollway	Dallas Co Line	SH 121	Widen Mainline from 6 to 8 lanes	14.50		66,700,000	6,670,000	20,010,000	93,400,000	Y	NTTA
Dallas North Tollway Frontage Rd	Warren Pkwy	SH 121	Widen 2 lanes to 3 lanes	0.44		2,100,000	210,000	630,000	3,000,000	Y	NTTA
Dallas North Tollway	Windhaven	Spring Creek Pkwy	add NB entrance and SB exit ramps	0.44		2,100,000	210,000	630,000	3,000,000	Y	NTTA
Dallas North Tollway	FM 428	Denton Co Line	New 2 lane frontage road	1.99		9,200,000	920,000	2,760,000	12,900,000	Y	NTTA
President George Bush Turnpike	Denton Co Line	Dallas Co Line	Widen Mainline from 6 to 8 lanes	22.80		104,900,000	10,490,000	31,470,000	146,900,000	Y	NTTA
Sam Rayburn Tollway	Denton Co Line	Dallas North Tollway	Widen Mainline from 6 to 8 lanes	2.20		10,200,000	1,020,000	3,060,000	14,300,000	Y	NTTA
Sam Rayburn Tollway	Dallas North Tollway	US 75	Widen Mainline from 6 to 8 lanes	22.40		103,040,000	10,304,000	30,912,000	144,300,000	Y	NTTA
NTTA Subtotal						325,600,000	32,556,400	97,669,200	456,100,000		
Project	From	To	Improvement	Lane Miles	Arterial Cost	Freeway Cost	ROW	Contingency	Total	City Y/N	Responsible Entity
					-	4,600,000	10%	30%			
Collin County											
US 75	Collin County Loop	SH 121 (N)	Widen Mainline from 4 to 6 lanes	7.80		35,900,000	3,600,000	10,800,000	50,300,000	N	TxDOT
US 75	Throckmorton Rd	FM 455	Widen mainline 4 lanes to 6 lanes	4.05		18,600,000	1,900,000	5,600,000	26,100,000	N	TxDOT
5th St/Parkwood Blvd	Stonebook Pkwy	Warren Pkwy	Widen 4 lanes to 6 lanes	4.58	6,900,000		700,000	2,100,000	9,700,000	Y	Frisco
5th St/Parkwood Blvd	Main St	Stonebook Pkwy	Widen 2 lanes to 4 lanes	1.78	2,700,000		300,000	800,000	3,800,000	Y	Frisco
Alma Rd	Stacy Rd	Eldorado Pkwy	Widen 4 lanes to 6 lanes	3.04	4,600,000		500,000	1,400,000	6,500,000	Y	Allen
Alma Rd	Hedgcocxe Rd	Exchange Pkwy	Widen 4 lanes to 6 lanes	2.43	3,600,000		400,000	1,100,000	5,100,000	Y	Allen
Bethany Dr/Lucas Rd/FM 1378	FM 982	FM 2551	Widen 2 lanes to 4 lanes (partially unfunded)	14.50	21,800,000		2,200,000	6,500,000	30,500,000	Y	Multi-juris./City
Coit Rd	Lebanon Rd	Main St/FM 3537	Widen 4 lanes to 6 lanes	5.08	7,600,000		800,000	2,300,000	10,700,000	Y	Frisco
Coit Rd.	FM 3537/Main St.	Panther Creek Pkwy	Widen 4 lanes to 6 lanes	5.04	7,600,000		800,000	2,300,000	10,700,000	Y	Frisco
Coit Rd.	Panther Creek Pkwy	US 380	Widen 4 lanes to 6 lanes	4.10	6,200,000		600,000	1,900,000	8,700,000	Y	Frisco
Cotton Gin Road	Library St	S 5th St	New 4 lanes	1.56	2,300,000		200,000	700,000	3,200,000	Y	Frisco
Chelsea Blvd/Hardin Rd	Stacy Rd	SH 121	Widen 2 lanes to 4 lanes	2.88	4,300,000		400,000	1,300,000	6,000,000	Y	Allen
FM 2478/Custer Rd	US 380	FM 1461	Widen 2 lanes to 4 lanes	6.06	9,100,000		900,000	2,700,000	12,700,000	Y	McKinney
FM 2514/Parker Rd	Springhill Estates	FM 2551	Widen 4 lanes to 6 lanes	4.30	6,500,000		700,000	2,000,000	9,200,000	Y	Parker
FM 2514/Parker Rd	FM 2551	FM 1378	Widen 4 lanes to 6 lanes	5.06	7,600,000		800,000	2,300,000	10,700,000	Y	Parker
FM 2514/Parker Rd	FM 1378	Park Blvd	Widen 2 lanes to 4 lanes	5.36	8,000,000		800,000	2,400,000	11,200,000	Y	Saint Paul
FM 2551/Murphy Rd.	FM 2514/Parker Rd	FM 2170	Widen 2 lanes to 6 lanes	13.84	20,800,000		2,100,000	6,200,000	29,100,000	Y	Allen
FM 455	Wild Rose	SH 121	Widen and realign 2 lanes to 4 lanes	1.46	2,200,000		200,000	700,000	3,100,000	N	Collin County
FM 455	US 75	CR 286	Widen 2 lanes to 4 lanes	0.84	1,300,000		100,000	400,000	1,800,000	Y	Anna
FM 546	CR 317	SH 5	Widen 2 lanes to 4 lanes (unfunded from CR 317 to Airport Rd)	3.14	4,700,000		500,000	1,400,000	6,600,000	Y	McKinney
FM 982	FM 546	US 380	Widen 2 lanes to 4 lanes	10.82	16,200,000		1,600,000	4,900,000	22,700,000	N	Collin County
Independence Pkwy	SH 121	Virginia Pkwy	Widen to 6 lanes (SH 121 to Eldorado Pkwy)	7.58	11,400,000		1,100,000	3,400,000	15,900,000	Y	Frisco
Lake Forest Dr	SH 121	Eldorado Pkwy	Widen 4 lanes to 6 lanes	2.26	3,400,000		300,000	1,000,000	4,700,000	Y	McKinney
Park Blvd	FM 1378	FM 2514	Widen 2 lanes to 4 lanes	2.64	4,000,000		400,000	1,200,000	5,600,000	Y	Wylie
Ridgeview Dr	Alma Rd	US 75	Widen 2 lanes to 4 lanes and new 4 lanes	8.32	12,500,000		1,300,000	3,800,000	17,600,000	Y	Allen
SH 121	US 75	FM 545 (Melissa road)	Widen 2 and 4 lanes to 6 lanes (unfunded for 6 lanes)	8.74	13,100,000		1,300,000	3,900,000	18,300,000	N	Collin County
SH 121	FM 545 (Melissa Road)	SH 160	Widen 2 lanes to 4 lanes (unfunded from FM 455 to SH 160)	11.52	17,300,000		1,700,000	5,200,000	24,200,000	N	Collin County
SH 205	SH 78	Collin County Line	Widen 2 lanes to 4 lanes	6.16	9,200,000		900,000	2,800,000	12,900,000	N	Collin County
SH 5/Greenville Ave	Spur 399	FM 546/Industrial Blvd	Widen 4 lanes to 6 lanes	2.42	3,600,000		400,000	1,100,000	5,100,000	Y	McKinney
SH 5/Greenville Ave	Fairview Ave (S)	Stacy Road	Widen 2 to 4 lanes	0.38	600,000		60,000	200,000	860,000	Y	Fairview
SH 5/Greenville Ave	SH 121	Fairview Ave (S)	Widen 2 to 4 lanes	5.22	7,800,000		780,000	2,300,000	10,880,000	Y	Fairview
SH 5	FM 455	CR 369	Widen lanes to 6 lanes	1.14	1,700,000		170,000	500,000	2,370,000	Y	Anna
SH 5	Tennessee St.	FM 543	Widen 2 to 4 lanes	3.14	4,700,000		470,000	1,400,000	6,570,000	Y	McKinney
SH 78	FM 6	CR 557	Widen 2 to 4 lanes	13.30	20,000,000		2,000,000	6,000,000	28,000,000	N	Collin County
Shiloh Rd	Parker Rd	14th St	Widen 4 lanes to 6 lanes	4.20	6,300,000		630,000	1,900,000	8,800,000	Y	Plano
Stonebrook Pkwy	Legacy Dr	Longhorn Trail	New 6 lanes divided	4.44	6,700,000		700,000	2,000,000	9,400,000	Y	Frisco
Woodbridge Pkwy	Hooper Rd	SH 78	Widen 2 lanes to 4 lanes and new 4 lanes	2.12	3,200,000		300,000	1,000,000	4,500,000	Y	Sachse
Windhaven Pkwy	Parkwood Blvd	Spring Creek Pkwy	Widen 4 lanes to 6 lanes	2.26	3,400,000		300,000	1,000,000	4,700,000	Y	Plano
US 380	Airport Dr	Bridgefrommer Rd	Widen 4 to 6 lanes	6.24	9,400,000		900,000	2,800,000	13,100,000	N	Collin County
Arterials and Streets				187.95	282,300,000	-	28,310,000	84,900,000	395,500,000		
US 75				7.80		35,900,000	3,600,000	10,800,000	76,400,000		
Non-NTTA Projects				195.75	282,300,000	35,900,000	31,910,000	95,700,000	471,900,000		
Total									928,000,000		