FX

2021 Regional Transportation Priorities

EMRB Integrated Regional Transportation Master Plan

August 12, 2021



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1 Introduction

The Edmonton Metropolitan Region Board (EMRB) approved the Integrated Regional Transportation Master Plan (IRTMP) in June 2021. The Plan supports the Edmonton Metropolitan Region Growth Plan through an integrated Policy Framework implementing four strategies:

- connecting goods to market;
- getting people to jobs and services;
- optimizing the use of existing corridors ad infrastructure; and
- connecting modes and supporting modal shift.

The Project Evaluation Framework used to prioritize 2021 regional transportation projects utilizes the methodology adopted in the updated IRTMP Regional Transportation Prioritization Report (2021), which includes a three-level evaluation process applying an increasing level of rigor and evidence-based evaluation as projects move through the various stages of project development:

- Advance to Planning,
- Ready for Design, and
- Ready for Construction

The final phase of project development, Ready for Construction, utilizes the IRTMP platform within the Regional Travel Model to evaluate improvements to the network and demonstrate value for money. Detailed information on the Project Evaluation Framework and detailed methodology can be found in the IRTMP Regional Transportation Prioritization Report.

2 2021 Regional Transportation Priorities

Through a process that considered regionally significant transportation infrastructure projects, 142 projects were identified for evaluation in the 2021 Regional Transportation Priorities process. The list includes transit, roadway, and active transportation projects. These projects have been categorized into three project phases: Ready for Construction, Ready for Design, and Advance to Planning.

2.1 Transit Projects

There are only a few transit projects included in the prioritization process, though some are large, high value projects. Historically, the prioritization process has been used to support Alberta Transportation capital planning, and transit projects have only recently been added to the process. Transit has been growing in prominence in recent years and is an important component of achieving the mode shift objectives of the growth plan and IRTMP, resulting in several new projects now being considered. As a result, there are only a handful of transit projects that have been advanced to the Ready for Design and Ready for Construction phases, but several in the Advance to Planning stage. All transit projects identified in the prioritization process for 2021 involve dedicated transit infrastructure.

The Edmonton Metropolitan Transit Services Commission (EMTSC) was established in January 2021 with a mandate to improve regional transit and mobility. While the focus of the EMTSC will be on service planning and operations, the EMTSC has not yet completed work on the regional network or service planning. Therefore, all previously identified projects focused on a transit service (e.g., express bus routes, transit priority corridors, etc.) have been and consolidated into the EMTSC Network Planning Study, in the 2021 prioritization list and included as Advance to Planning.

It is anticipated that the EMTSC Network Planning Study will identify a series of new projects that will be added to the 2022 prioritization process. This approach balances the need to include transit in the prioritization process, but also to allow the EMTSC time to undertake their necessary planning so that projects identified form a cohesive network aligned with its service delivery plans for the region.

2.2 Roadway Projects

Roadway projects were segmented in Ready for Construction based on actual project status since they are staged as part of a larger study and will be ready to be constructed over time. Ready for Design and Advance to Planning projects are retained as a larger study rather than fragmenting them because they still need to be planned or designed, to support opportunities for staging different stages of the larger project.

2.3 Active Transportation Projects

No Active Transportation projects were identified in previous prioritization processes. The IRTMP identified gaps and consistency issues in the existing regional information regarding active transportation that limited the ability to identify specific projects. A "Regional Active Transportation Network Plan" has been included in the Advance to Planning phase. While this network plan is categorized as a medium priority based on the prioritization process, it is recommended that it be included as a top priority so that active transportation projects can be identified and included in future years' prioritization lists.

3 2021 Prioritization Results

All the project weighted scores were plotted on a bar chart for all three project phases to identify patterns and natural breaks in scores. Based on these natural breaks, projects in each phase are grouped into Top, Medium, and Lower priorities. This ensures a reasonable number of projects are identified in the Top Priorities for each phase. The target number of Top Priorities for Ready for Construction is 3-5, Ready for Design is 8-12, and Advance to Planning is 10-20. The chart and breaks are shown in Appendix A.

The projects within each group are not ranked and do not suggest any order of preference but have equal priority within the group. This reiterates that there is <u>no</u> number 1 ranked project with the highest regional priority that needs to be built first. Table 1, Table 2, and Table 3 below identify the priorities categorized into Top, Medium, and Low categories, further grouped into Transit and Roadway projects.

The Project Maps shown in Appendix B identify Transit (Green), Active (Yellow) and Roadway (including railroad) (Blue) projects, and the "Index#" listed in the table below can be used to identify project locations in the maps.

Top Priorities		
Туре	Index#	Project
	ATP - 30	Bremner Regional Park and Ride
	ATP - 46	Leduc Regional Park and Ride
	ATP - 48	North St. Albert Park and Ride (north end of St. Albert Trail)
Transit	ATP - 53	Airport Rapid Transit (Heritage Valley to EIA)
	ATP - 55	Stony Plain Regional Park and Ride
	ATP - 78	EMTSC Network Planning
	ATP - 80	Campbell Rd Transit Centre to North St. Albert Park n Ride - Rapid Transit
	ATP - 1	Sherwood Park Freeway Argyll Road Anthony Henday Drive upgrade to minimum 6 basic lanes
	ATP - 3	Highway 15 / Manning Drive Anthony Henday Drive Highway 21 (Fort Saskatchewan) upgrade to 6-lane freeway, includes i/c at Highway 15/37/825
	ATP - 5	Highway 16 Campsite Road (Spruce Grove) Anthony Henday Drive upgrade to 6- lane freeway
	ATP - 6	Highway 16 Highway 21 Rge Rd 222 upgrade to 6-lane freeway
Roadway	ATP - 9	Highway 21 Baseline Road Township Road 542 upgrade to 6 basic lanes
	ATP - 14	Highway 2 50th Street (Leduc) Anthony Henday Drive update to core-collector system with minimum 12 basic lanes
	ATP - 23	Fowler Way - Ray Gibbon Drive to St Albert Trail upgrade to 4-lane arterial
	ATP - 69	Twp Rd 534/Aurum Rd (Anthony Henday Dr. to Highway 21) - Realignment of Road + New Interchange on Hwy 21
	ATP - 71	Township Road 510 Terwillegar Drive extension 9 Street new 4-lane expressway, includes I/c at QE2

 Table 1 - Advance to Planning Priorities

Advance to Planning - Medium Priorities		
Туре	Index#	Project
	ATP - 31	Beaumont Regional Park and Ride
	ATP - 37	Ellerslie Regional Park and Ride
	ATP - 47	NE Edmonton Park and Ride
Transit	ATP - 51	Rapid Transit between Windermere and Downtown Edmonton via U of A (via Terwillegar Drive)
	ATP - 56	Sturgeon Valley Regional Park and Ride
	ATP - 70	Windermere Park and Ride
Active	ATP - 79	Regional Active Transportation Network
	ATP - 11	97 Street (Highway 28) 167 Avenue / Castle Downs Road Anthony Henday Drive
	AIP - 11	upgrade to 6 basic lanes
	ATP - 12	Highway 28 Anthony Henday Drive Highway 28A upgrade to 4-lane rural arterial
	ATP - 18	46 Street at 50 Avenue in City of Leduc - Leduc Rail Road Grade Sep (initial study)
	ATP - 24	50 Street (Edmonton) Whitemud Drive 90 Avenue upgrade to 6-lane arterial
	ATP - 29	Highway 625 Grade Separation in Nisku
	ATP - 32	137 Avenue (Edmonton) Anthony Henday Drive 50 Street upgrade to 6-lane arterial
Roadway	ATP - 35	75 Street Argyll Road Fort Road upgrade to 6 basic lanes
	ATP - 39	Flyover on 17 St NE between Hwy 16 and Aurum Rd NE
	ATP - 40	Flyover on 48 St/Hwy 779 between Hwy 16A and Hwy 628
	ATP - 44	Flyover on Sherwood Dr between Hwy 16 and Aurum Rd NE - South crossing
	ATP - 67	TPC-PS Transit Priority Corridor between Capital Line and UofA via NAIT
	ATP - 75	Highway 21 (Highway 628 to Highway 16) Upgrade to Freeway; build interchanges
	ATP - 81	65 Avenue (Leduc) Highway 39 Grant MacEwan Boulevard new 4-lane expressway

Advance to Planning - Lower Priorities			
Туре	Index#	Project	
	ATP - 4	16A intersection improvements at Bevington Road, RR261 and Winterburn Road	
	ATP - 7	Terwillegar Drive extension Highway 2A 41 Avenue South new 4-lane expressway	
	ATP - 8	Highway 21 Highway 14 Highway 625 upgrade to 4-lane rural arterial	
	ATP - 10	Range Rd 222 Twp Rd 542 to Twp Rd 550 - Upgrade existing road	
	ATP - 13	Highway 2 south boundary Highway 2A upgrade to 6 basic lanes	
	ATP - 15	Highway 37 Highway 44 Highway 15 upgrade to 4-lane rural arterial	
	ATP - 16	Highway 39 Calmar Leduc upgrade to 4-lane rural arterial	
	ATP - 17	50 Avenue (Leduc) / Highway 39 74 Street Bridgeport Crossing / Alton Drive upgrade to 6-lane arterial	
	ATP - 19	Township Road 542 between Highway 21/NERC and Highway 830	
	ATP - 20	RGE RD 263 upgrade to 4 lanes between Highway 39 and Glen Park Road	
	ATP - 22	Highway 630 / Wye Road Highway 824 Highway 830 upgrade to 4-lane rural arterial	
Roadway	ATP - 25	Rge Rd 222 Ardrossan Highway 16 upgrade to 4-lane arterial	
	ATP - 26	Highway 825 Highway 37 Highway 643 upgrade to 4-lane rural arterial	
	ATP - 27	Highway 830 Highway 630 Highway 15 upgrade to 4-lane rural arterial	
	ATP - 33	170 Street (Edmonton) Yellowhead Trail 137 Avenue upgrade to 6-lane arterial	
	ATP - 34	41 Ave/Twp Rd 512 (50 St to Hwy 21) Upgrade existing road	
	ATP - 38	Flyover on 149 St NW between Yellowhead Hwy and 128 Ave NW	
	ATP - 41	Flyover on Campsite Rd between Hwy 16A and Hwy 628	
	ATP - 42	Flyover on Golden Spike Rd between Hwy 16A and Hwy 628	
	ATP - 43	Flyover on Range Rd 231 between Hwy 16 and Twnshp Rd 534	
	ATP - 50	Petroleum Way Closure and 17 Street Grade Separation	
	ATP - 76	Highway 627 (199 St to Highway 60) Twinning	
	ATP - 77	Nisku Spine Road (Highway 623 to Highway 2A/QE2) New Link	
	ATP - 82	Northeast River Crossing (NERC) Hwy 21/TwpRd 540 to Hwy 28A - second crossing of N. Saskatchewan River RoW protection	

Top Priorities			
Туре	Index#	Project	
Transit	RFD - 53	Metro Line (Blatchford to Campbell Road Transit Centre) - LRT Extension	
	RFD - 10	Highway 16 (Yellowhead Trail) 156 Street 50 Street upgrade to freeway	
	RFD - 13	Highway 16 Anthony Henday Drive Highway 21 upgrade to 8 basic lanes	
	RFD - 17	Highway 216 / Anthony Henday Drive Campbell Road Highway 15 (Manning Drive) upgrade to 6 basic lanes	
Roadway	RFD - 19	Highway 216 / Anthony Henday Drive 50 Street (south) Ray Gibbon Drive upgrade to 8 basic lanes	
	RFD - 27	Highway 625 Nisku (9 Street) Beaumont (Range Road) 241 upgrade to 4-lane expressway (signalized)	
	RFD - 61	Highway 15 84 Street 119 Street upgrade to 6-lane expressway	
	RFD - 62	Highway 16 Hwy 779 Anthony Henday Drive upgrade to 6-lane freeway	
	RFD - 79	St. Albert Trail (North City Limit to Boudreau Rd) Widening/Intersection Upgrades	

Table 2 - Ready for Design Priorities

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Ready for Design - Medium Priorities		
Туре	Index#	Project
Transit	RFD - 50	Capital Line (Clareview to NE Edmonton) - LRT Extension
	RFD - 1	Ray Gibbon Drive Anthony Henday Drive Giroux Road upgrade to 8 basic lanes
	RFD - 3	Ray Gibbon Drive Giroux Road Highway 633 / Villenueve Road upgrade to 6 lanes expressway
	RFD - 5	135 Street (Heritage Valley Trail) Anthony Henday Interchange
	RFD - 7	Highway 15 Highway 830 Highway 45 upgrade to 4-lane rural arterial, includes i/c at Hwy 830
	RFD - 8	Manning Drive 137 Avenue Anthony Henday Drive Upgrade to 6-lane arterial
	RFD - 11	Highway 16 (Yellowhead Trail) 50 Street Victoria Trail upgrade to 6 basic lanes
	RFD - 12	Highway 16 Cloverbar Road Highway 21 upgrade to 6 basic lanes
	RFD - 14	170 Street Grade Separation
	RFD - 18	Highway 216 / Anthony Henday Drive Highway 14 to 50 Street (south) upgrade to 6 basic lanes
	RFD - 22	Highway 2 Highway 2A 50th Street (Leduc) upgrade to 8 basic lanes
	RFD - 26	Highway 60 Highway 19 North Saskatchewan River new re-aligned 4-lane freeway
Roadway	RFD - 29	Whitemud Drive (Highway 628) 231 Street (Hillview Road) Lewis Estates Blvd / Guardian Rd upgrade to 4-lane expressway
nouuway	RFD - 30	Highway 628 Highway 779 Highway 60 upgrade to 4-lane rural arterial
	RFD - 31	Highway 628 / Whitemud Drive Highway 60 Anthony Henday Drive upgrade to 6- lane freeway
	RFD - 35	50 Street (Edmonton) 41 Avenue South Anthony Henday Drive upgrade to 6 basic lanes
	RFD - 43	41 Ave S Terwillegar Drive extension Allard Way upgrade to 4-lane arterial 70km/h
	RFD - 44	41 Ave S 91 Street / Nisku Spine Road 17 Street new 4-lane expressway
	RFD - 45	91 Street (Edmonton) 41 Avenue South Ellerslie Road upgrade to 4 basic lanes
	RFD - 46	Flyover 50th Street in Edmonton
	RFD - 59	Vinca Bridge Refurbishment and Upgrade
	RFD - 60	NSR from Hwy 623 to Airport road (2 basic lanes)
	RFD - 68	Nisku Spine Road (25 Ave to TR510) Twinning
	RFD - 71	Whitemud Drive / Highway 628 (231 Street to Highway 60)13 Twinning
	RFD - 80	Flyover on Range Rd 231 between Hwy 16 and Twnshp Rd 534
	RFD - 81	Highway 628 Anthony Henday Drive Highway 21 upgrade to 4-lane expressway

Ready for Design - Lower Priorities		
Туре	Index#	Project
	RFD - 4	Ray Gibbon Drive Highway 633 / Villenueve Road Highway 2 new 4-lane freeway
	RFD - 6	Highway 14 Highway 21 east boundary upgrade to 4-lane rural arterial
	RFD - 9	Highway 16 Highway 43 Jennifer Heil Way (Spruce Grove) upgrade to freeway,
		includes i/c at Hwy 43
	RFD - 15	Terwillegar Drive 41 Avenue South Rabbit Hill Road upgrade to 4-lane arterial (frontage roads)
	RFD - 16	Terwillegar Drive Ellerslie Road Whitemud Drive upgrade to 6 basic lanes
	RFD - 20	Highway 21 south boundary Highway 625 upgrade to 4-lane rural arterial
		Highway 2 Highway 642 (Morinville) north boundary upgrade to 4-lane rural
	RFD - 23	arterial
	RFD - 24	Highway 44 Highway 16 Highway 37 upgrade to 4-lane rural arterial
	RFD - 28	Highway 625 Beaumont (Range Road) 241 Highway 21 upgrade to 4-lane rural arterial
	RFD - 32	Wye Road Clover Bar Road Highway 21 upgrade to 6-lane arterial
	RFD - 33	Highway 643 Highway 28A Highway 38 upgrade to 4-lane rural arterial with realignment near Gibbons
	RFD - 34	50 Street (Edmonton) 41 Avenue South 22 Avenue upgrade to 4-lane arterial
	RFD - 36	Highway 2A south boundary Highway 2A realignment upgrade to 4-lane arterial with realignment
	RFD - 38	Manning Drive Fort Road 66 Street upgrade to 6 basic lanes
Roadway	RFD - 40	Highway 28A Township Road 560 Highway 28 upgrade to 4-lane freeway with realignment at Gibbons
	RFD - 42	107 Avenue (Edmonton) 170 Street Groat Road upgrade to 6-lane arterial
	RFD - 47	Highway 627 (Anthony Henday Dr. to 199 St) - new link
	RFD - 48	Highway 642 (Highway 2 to East Boundary Road) - intersection improvements
	RFD - 49	Heritage Valley Trail 41 Avenue South Ellerslie Road new 4-lane urban arterial
	RFD - 52	Nisku Spine Road Southfork Road Airport Road new 4-lane expressway
	RFD - 55	127 Street (St. Albert) Anthony Henday Drive Township Road 544 new 4-lane arterial
	RFD - 57	Spruce Grove Regional Park and Ride
	RFD - 65	Highway 16 (Interchange at 830)
	RFD - 66	QE2 Highway/Ellerslie Rd. Interchange Upgrading
	RFD - 67	Highway 15 (Manning Dr.) near Meridian Street Interchange
	RFD - 69	Highway 16 (Highway 824 to Elk Island Park) Access management
	RFD - 70	Anthony Henday Drive (50 St. Northeast Overpass) Interchange
	RFD - 72	QE2 Highway/Highway 2A Interchange New Interchange
	RFD - 73	Anthony Henday Drive (Add 137 Ave Ramps) Interchange
	RFD - 74	Ray Gibbon Drive (Villeneuve Rd. to Highway 37) Extend-first 2 lanes
	RFD - 75	Anthony Henday Drive (109/111 Ave Overpass) Interchange
	RFD - 76	Ray Gibbon Drive (Highway 37 to Highway 2) Extend-first 2 lanes
	RFD - 77	Highway 623 C. W. Gaetz Road Nisku Spine Road upgrade to 4-lane arterial



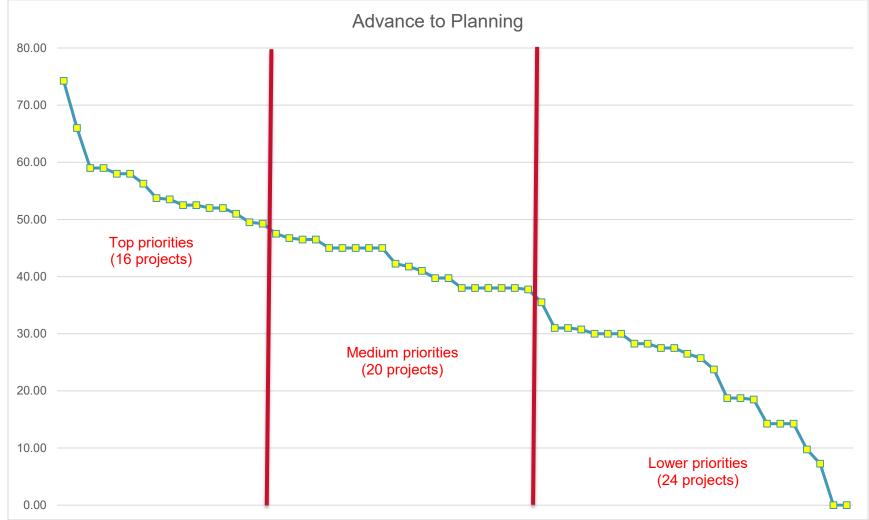
	Ready for Design - Lower Priorities			
Туре	Index#	Project		
	RFD - 78	50 Avenue (Leduc) / Highway 39 74 Street Bridgeport Crossing / Alton Drive upgrade to 6-lane arterial		
	RFD - 82	Highway 643 (Highway 28A to Agrium) - Signals and Intersection Upgrades		
	RFD - 83	Highway 28 Highway 28A north boundary upgrade to 4-lane rural arterial with realignment at north boundary		

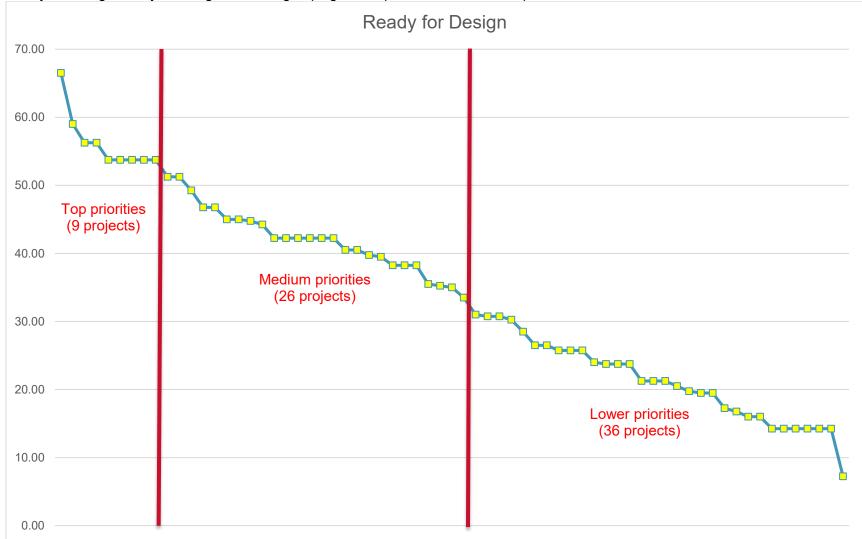
Туре	RFC#	Project		
	Top Priorities			
	RFC - 1	Highway 19 Range Road 261 Range Road 252A upgrade to 4-lane rural arterial		
		with realignment around airport third runway		
Roadway	RFC - 3	Highway 628 Highway 779 215 Street (Winterburn Road) upgrade to 2-lane rural arterial		
	RFC - 9	65 Avenue (Leduc) Grant MacEwan Boulevard to Highway 2 new 4-lane		
	KFC - 9	expressway, Includes interchange at QE2		
Medium Priorities				
Transit	RFC - 11	SLRT-A Capital Line (Century Park to Ellerslie Road) - LRT Extension		
	RFC - 2	Highway 60 Highway 16A Highway 16 upgrade to 4-lane expressway		
Roadway	RFC - 6	Ray Gibbon Drive Anthony Henday Drive Highway 633 / Villenueve Road upgrade to 4 basic lanes		
	RFC - 10	Nisku Spine Road TR510 to Airport Road 4-lane arterial 70 km/h		
	RFC - 12	Twp Rd 510 (RR244 to 50 Street) - upgrade existing, excludes i/c at QE2		
Lower Priorities				
Deedway	RFC - 8	Highway 28A Highway 15 Highway 28 upgrade to 4-lane rural arterial		
Roadway	RFC - 13	Highway 2 at Cardiff Rd Interchange		

Table 3 - Ready for Construction Priorities

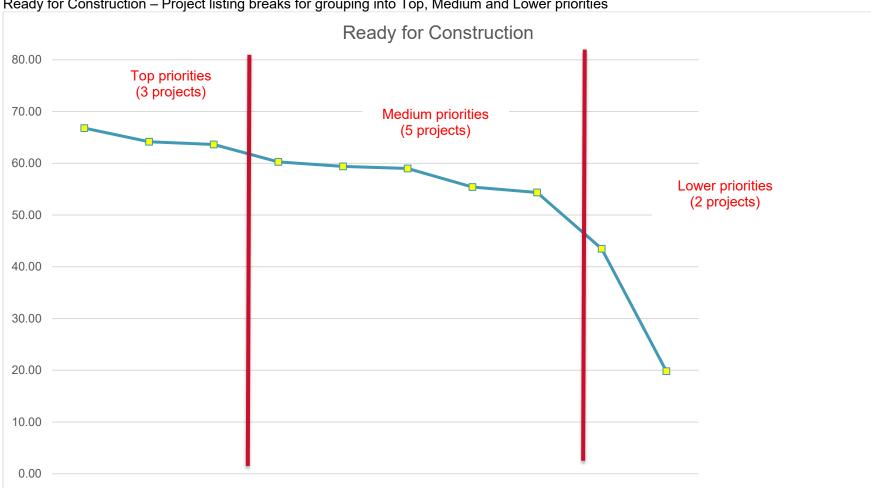
Appendix A – Project Grouping

Advance to Planning - Project listing breaks for grouping into Top, Medium and Lower priorities





Ready for Design - Project listing breaks for grouping into Top, Medium and Lower priorities



Ready for Construction - Project listing breaks for grouping into Top, Medium and Lower priorities

Appendix B – Project Maps

Figure 1 - Road Projects

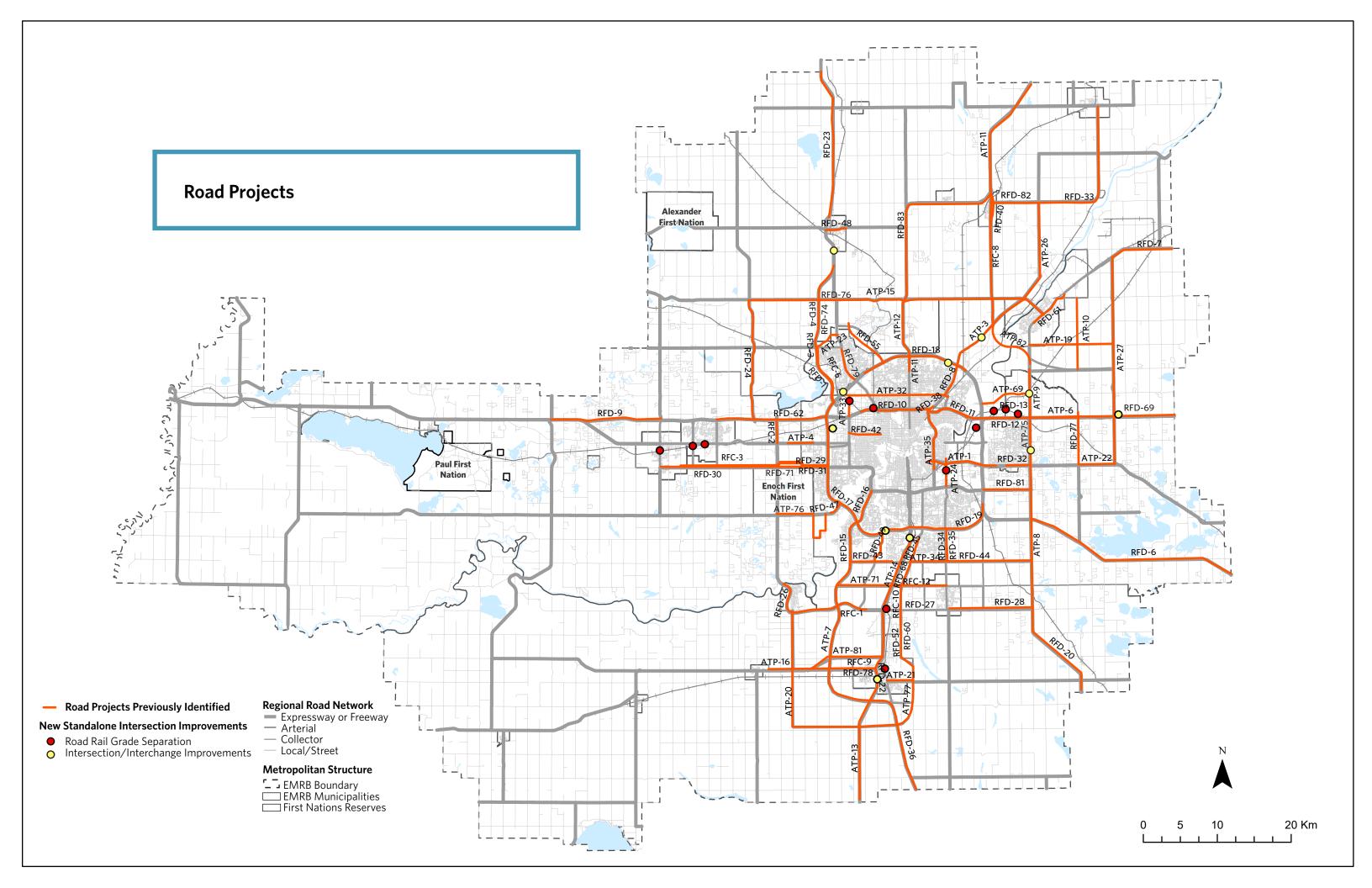


Figure 2 - Transit Projects

