

Major Street Plan Analysis and Update



Appendix B

Prioritization Memorandum

Rapid City Area MPO Major Street Plan Prioritization

Introduction

The Rapid City Area Metropolitan Planning Organization (MPO) is conducting an analysis of its existing Major Streets Plan (MSP) with the intent of updating this Plan to remove proposed roadway segments that demonstrate slope, constructability, and alignment issues while developing conceptual alignments for key proposed segments. This effort builds off the preliminary review of alignment and constructability issues completed with the development of the MPO's RapidTRIP 2045 Metropolitan Transportation Plan.

This memorandum summarizes a planning-level prioritization of the existing MSP that was completed to identify the key roadway segments recommended for advancement to the conceptual alignment phase. The prioritization analysis used a series of planning-level data to screen the MSP roadway segments and assign each a score based on how well the segment aligns with the MPO's and local jurisdiction's goals for the planned network. This effort resulted in the identification of 40 different proposed segments from the existing MSP that are recommended for advancement to the conceptual alignment phase.

Data and Methodology

Data Sources

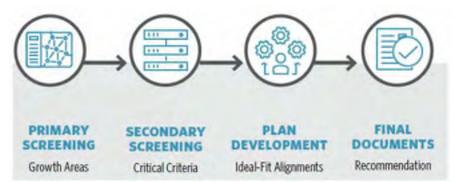
Data used in the planning-level prioritization analysis was sourced from the MPO and was developed as part of RapidTRIP 2045 Metropolitan Transportation Plan. This data includes the MPO's Travel Demand Model (TDM) outputs, including forecasted household and employment growth and forecasted daily traffic volumes; all TDM output forecasts are for future year 2045. Additional data used in the prioritization analysis included existing daily traffic volumes, topographic and alignment constraints identified in the RapidTRIP 2045 MTP, and runway protection zone (RPZ) areas for Ellsworth Air Force Base and Rapid City Regional Airport.

Methodology

The methodology used for the planning-level prioritization analysis, which is summarized in Figure

1, was based on a desktop GIS review of the existing MSP roadway alignments. Roadway segments were evaluated against the data discussed above and assigned scores based on their performance in serving future high growth areas.

Figure 1: MSP Prioritization Approach



Once the 40 roadway segments were scored, they were then ranked by score and assigned a priority level—high, medium, or low—based on how each compared to the other 39 segments.

Higher prioritization scores indicate that a road segment is in a high household and/or employment growth area and provide a connection between two or more segments demonstrating high existing daily traffic volumes or are forecasted to have high daily traffic volumes by 2045. Segments that demonstrate topographic or alignment constraints received a negative score, as did any segment located within a RPZ of the Ellsworth Air Force Base or the Rapid City Regional Airport. **Table 1** summarizes the prioritization scoring approach. **Appendix A** provides figures that illustrate the household growth, employment growth, existing and forecasted daily traffic volumes, and constraints data used for the prioritization analysis.

Range	Tier	Points	Range	Points			
Household Growth			Job Growth				
Increase of 25 HH's or Fewer	Low	0	Increase of 50 Jobs or Fewer	Low	0		
Increase of 26 - 50	Medium-Low	1	Increase of 51 - 100	Medium-Low	1		
Increase of 51 - 100	Medium	2	Increase of 101 - 500	Medium	2		
Increase of 101 - 150	Medium-High	3	Increase of 501 - 1,000	Medium-High	3		
Increase of 151 or More	High	4	Increase of 1,000 or More	High	4		
Existing V	olume		Future Volume				
Less than 1,000 ADT	Low	0	Less than 1,000 ADT	Low	0		
1,000 - 5,000 ADT	Medium-Low	1	1,000 - 5,000 ADT	Medium-Low	1		
5,000 - 10,000 ADT	Medium	2	5,000 - 10,000 ADT	Medium	2		
10,000 - 20,000 ADT	Medium-High	3	10,000 - 20,000 ADT	Medium-High	3		
20,000 or More ADT	High	4	20,000 or More ADT	High	4		
Topography Constraint			Alignment	Constraint			
Yes	Low	-1	Yes Low		-1		
No	High	0	No High (

Table 1: Prioritization Scoring Approach

Prioritized Roadway Segments

Staff of the MPO and local jurisdictions provided a list of key MSP roadway segments to be prioritized. This list comprised 26 segments within the MPO Area; **Table 2** summarizes the MPO-and local jurisdiction-identified segments that formed the basis of the prioritization analysis.

Table 2: MPO- and Local Jurisdiction-Identified MSP Segments

Roadway	Extent		
E Anamosa Street	Elk Vale Road to Reservoir Road		
Black Hills Boulevard	Catron Boulevard to Upper Spring Creek Road		
Bunker Drive	Alma Street to Country Road W		
Creek Drive	Marlin Drive to Old Folsom Road		
Degeest Drive	E Anamosa Street to Cheyenne Boulevard		
E-W Arterial S of Addison Avenue	HWY 16 to Black Hills Boulevard Extension		
E Fairmont Boulevard	Cambell Street to Elk Vale Road		
Krebs Drive	Commerce Road to Deadwood Avenue N		
N Lacrosse Street	Seger Drive to Country Road		
Les Hollers Way	Sheridan Lake Road to Catron Boulevard		
E Minnesota Street	Cambell Street to S Valley Drive		
Neel Street	E Anamosa Street to E Philadelphia Street		
Neva Way	N Haines Avenue to N Lacrosse Street		
N-S Collector	E of Tartan Court		
Nugget Gulch Road	Moon Meadows Drive to Motherlode Drive		
E Philadelphia Street	N Valley Drive to Reservoir Road		
Turbine Drive	E Anamosa Street to Eglin Street		
Falling Rock Road	Southern Terminus to Victoria Lake Road		
Nameless Cave Road	Northern Terminus to Schroeder Road		
Hidden Valley Road	Western Terminus to Bittersweet Road		
Sun Ridge Road	Western Terminus to Bittersweet Road		
E Anamosa Street	I-190 to Commerce Road		
Twilight Drive	Eastern Terminus to Hidden Springs Road		
Haugo Drive	Catron Boulevard to Moon Meadows Drive		
Villaggio Lane	Southern Terminus to Horsecreek Drive		
Promise Road/Healing Way Extension	U.S. 16 to U.S. 16B		

In addition to the segments identified for prioritization by MPO and local jurisdiction staff, several segments were identified for exclusion. These segments and the reasoning behind their exclusion are presented in **Table 3**.

Roadway	Extent	Reason			
Healing Way Moon Meadows Drive to Addison Avenue		Road profile already established			
E Anamosa Street Hogback		Beyond planning horizon			
Plaza Boulevard	North of E Anamosa Street	Connects to Anamosa and is highly dependent on development			
Sheridan Lake Road	W Main Street to Deadwood Avenue N	Existing development precludes route			
Proposed streets through Lien quarry	Various Locations	Beyond planning horizon			
N Saint Onge Street	W Chicago Street to Deadwood Avenue N	Road profile already established			
Jackson Boulevard W Main Street to W Omaha Street		Existing development precludes route			
E Anamosa Street	North Street to Elk Vale Road	Road profile already established			
N Neel Street Sweetbriar Street t Anamosa Street		Developer-led			
Reservoir Road	Homestead Street to E Anamosa Street	In area development plans			
E Minnesota Street	Vinecliff Drive to Jolly Lane	Road profile already established			
E Enchanted Pines 5 th Street to Parkview Drive		City to establish road profile			
N Valley Drive Homestead Street to E North Street		Developer-led			
N Degeest Drive / Hotel Way	North of Cheyenne Boulevard	Box Elder is building this segment			
Century Road	E North Street to E Anamosa Street	Road profile already established			

Table 3: MSP Segments Excluded from the Prioritization Analysis

An additional 14 segments were identified for prioritization based by evaluating those that are located within high household and employment growth areas. These segments were then prioritized based on the methodology described above. **Table 4** presents these additional segments.

Roadway	Extent
Bethpage Drive	Western Terminus to Sheridan Lake Road
Muirfield Drive	Western Terminus to Bethpage Drive
E Saint James Street	Western Terminus to E Saint Joseph Street
Dreamscape Road	Sammis Trail to U.S. 16
Southern Collector	U.S. 16 to Upper Spring Creek Road
Southern Collector Loop	Lamb Road to U.S. 16 north of Black Gap Road
Mercury Drive	Stellar Drive to Radar Hill Road
E Anamosa Street Extension	Reservoir Road to Radar Hill Road
Anderson Road	Long View Road to the E Anamosa Street Extension
Neva Way	143rd Avenue to Country Road
Elm Avenue	U.S. 16 to Field View Drive
E Enchanted Pines Drive	Gemstone Drive to E Minnesota Street
Creek Drive	U.S. 16 to Southern Terminus
Creek Drive	Northern Terminus to E Philadelphia Street

Table 4: Additional Prioritized MSP Segments

Figure 2 illustrates the current MSP, along with the segments that were identified for prioritization as well those identified for exclusion.

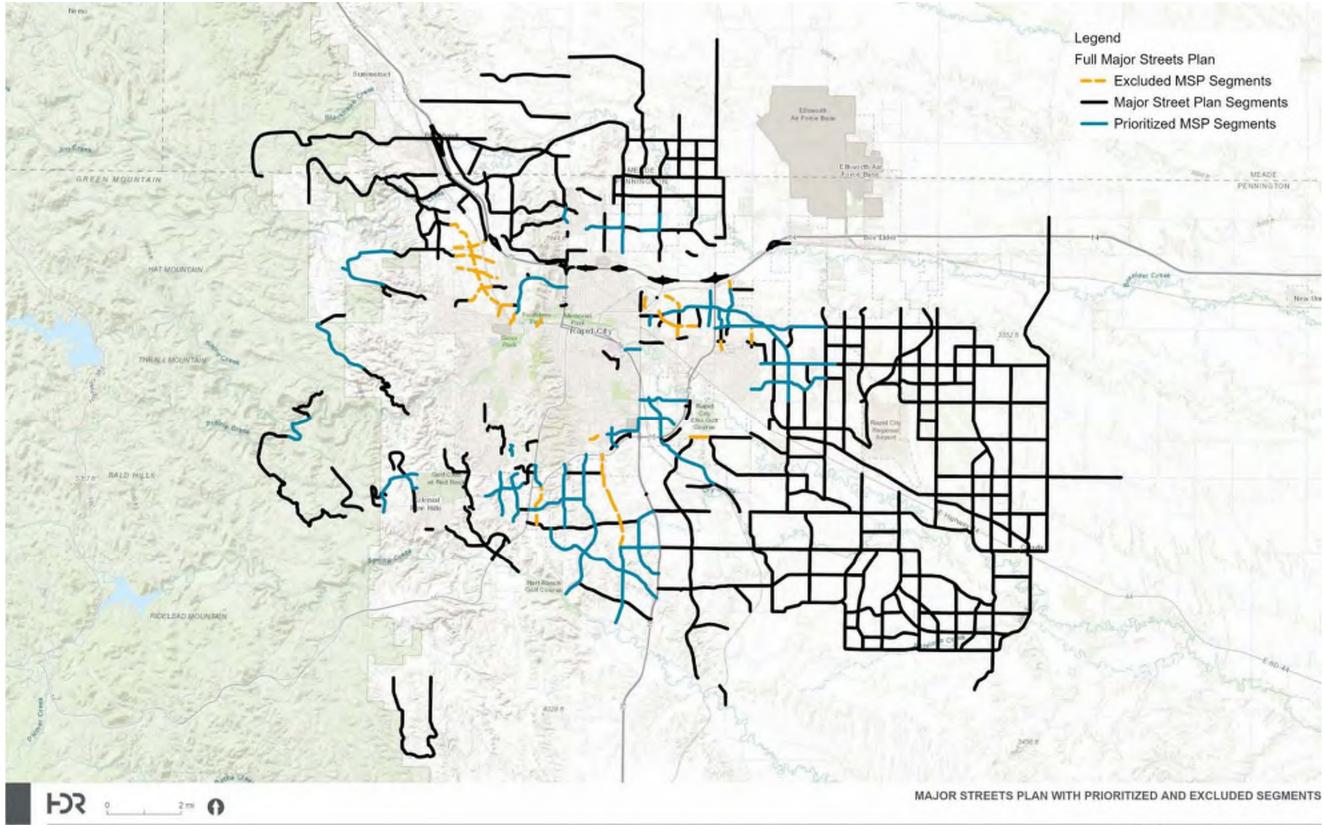


Figure 2: MSP with Prioritized and Excluded Segments

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Prioritization Results

This section of the memorandum provides an overview of the prioritization analysis results for the 40 MSP segments listed in **Tables 2** and **4**. The discussion of the results will focus on quadrants of the Rapid City Area MPO, defined as:

- Northern Growth Area: MPO Area north of I-90
- **Southern Growth Area**: MPO Area south of E Fairmont Boulevard, between Sheridan Lake Road and Highway 44
- Western Growth Area: MPO Area south of I-90 and west of Mount Rushmore Road
- Eastern Growth Area: MPO Area north of Highway 44 and east of Campbell Street

This section of the memorandum concludes with a summary of the full prioritization analysis for the MPO Area.

Northern Growth Area

The Northern Growth Area, defined as the MPO Area north of I-90, had four MSP segments included in the prioritization analysis. The four MSP segments prioritized were:

- Bunker Drive, from Alma Street to County Road W (ID 3)
- N Lacrosse Street, from Seger Drive to Country Road (ID 9)
- Neva Way, from N Haines Avenue to N Lacrosse Street (ID 14)
- Neva Way, from 143rd Avenue to County Road (ID 36)

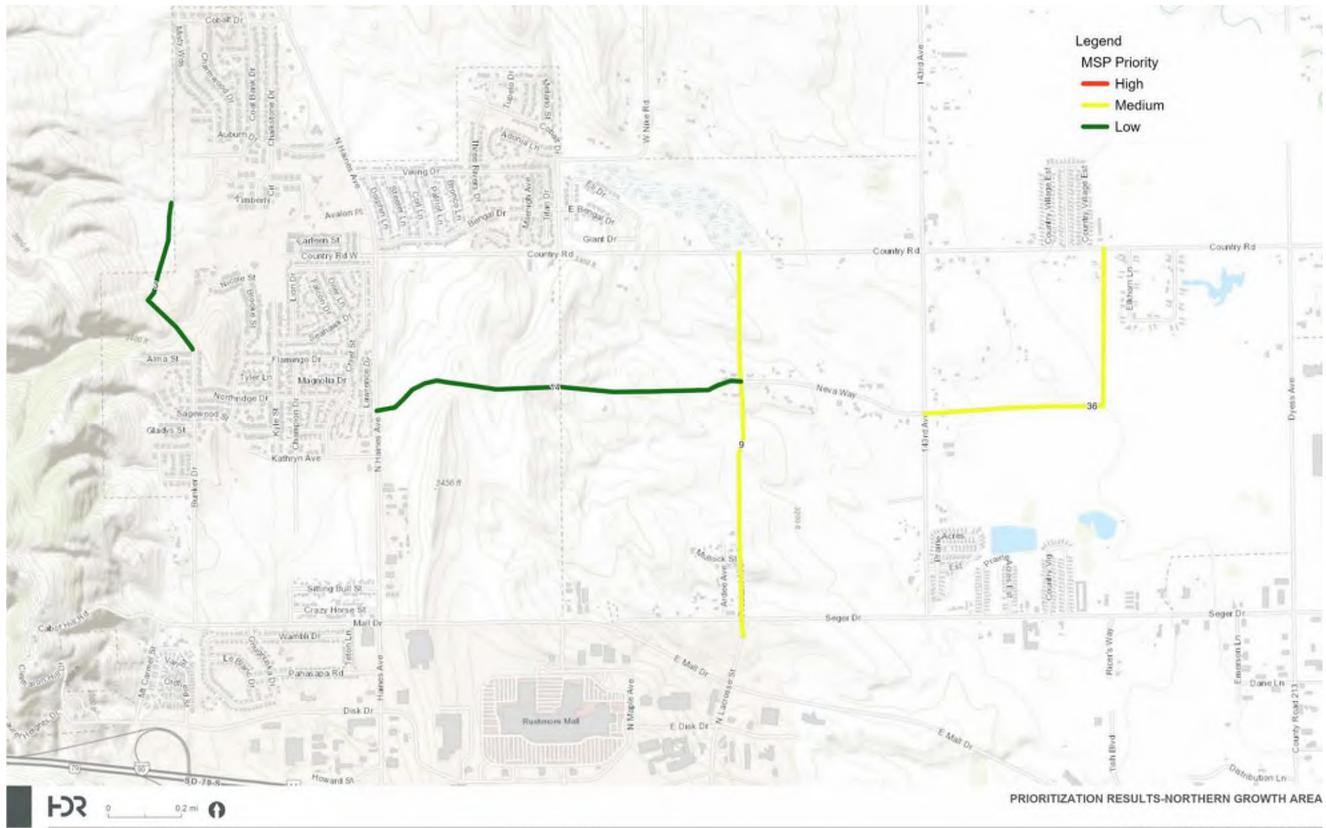
Figure 3 shows the priority level resulting from the analysis for the Northern Area Growth segments. As seen in **Figure 3**, the N Lacrosse Street and Neva Way from 143rd Avenue to Country Road segments recorded a "Medium" priority level while the Bunker Hill and Neva Way from N Haines Avenue to N Lacrosse Street segments recorded a "Low" priority.

The main factors influencing the prioritization scores in this area relate to the forecasted household and employment growth anticipated for this part of the MPO Area. While the Bunker Drive, Lacrosse Street, and eastern Neva Way segments are located in high household growth areas, the forecasted employment growth is relatively low. Similarly, the western Neva Way segment is located in an area expected to have both moderate household and employment growth.

Existing traffic volumes in this area are also relatively low, which influenced low scores for all four segments. Traffic volume forecasts for this area anticipate a relatively low increase by 2045, which also resulted in relatively low scores for this prioritization metric. Several of the segments, namely Bunker Hill Drive and the western Neva Way segment were identified as demonstrating topography and alignment constraints, which further reduced the prioritization scores for these segments.

While there is a need to address the high levels of future household and employment growth anticipated for this area, the relatively low growth in traffic volumes paired with the topographical constraints found in this part of the MPO Area see the need to construct these segments as being a lower priority for the MPO and local jurisdictions.

Figure 3: Prioritization Results for the Northern Growth Area



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Southern Growth Area

The Southern Growth Area, defined as the MPO Area south of E Fairmont Boulevard between Sheridan Lake Road and Highway 44, had the highest number of MSP segments included in the prioritization analysis with 17. The MSP segments prioritized in this area were:

- Black Hills Boulevard, from Catron Boulevard to Upper Spring Creek Road (ID 2)
- Creek Drive, from Marlin Drive to Old Folsom Road (ID 4)
- E-W Arterial south of Addison Avenue, from Highway 16 to Black Hills Boulevard Extension (ID 6)
- E Fairmont Boulevard, from Campbell Street to Elk Vale Road (ID 7)
- Les Hollers Way, from Sheridan Lake Road to Catron Boulevard (ID 10)
- E Minnesota Street, from Campbell Street to S Valley Drive (ID 11)
- North-South Collector, east of Tartan Court (ID 12)
- Nugget Gulch Road, from Moon Meadows Drive to Motherlode Drive (ID 15)
- Haugo Drive, from Catron Boulevard to Moon Meadows Drive (ID 24)
- Villaggio Lane, from Southern Terminus to Horsecreek Drive (ID 25)
- Promise Road/Healing Way Extension, from U.S. 16 to U.S. 16B (ID 26)
- Dreamscape Road, from Sammis Trail to U.S. 16 (ID 30)
- Southern Collector, from U.S. 16 to Upper Spring Creek Road (ID 31)
- Southern Collector Loop, from Lamb Road to U.S. 16 north of Black Gap Road (ID 32)
- Elm Avenue, from U.S. 16 to Field View Drive (ID 37)
- Enchanted Pines Drive, from Gemstone Drive to E Minnesota Street (ID 38)
- Creek Drive, from U.S. 16 to Southern Terminus (ID 39)

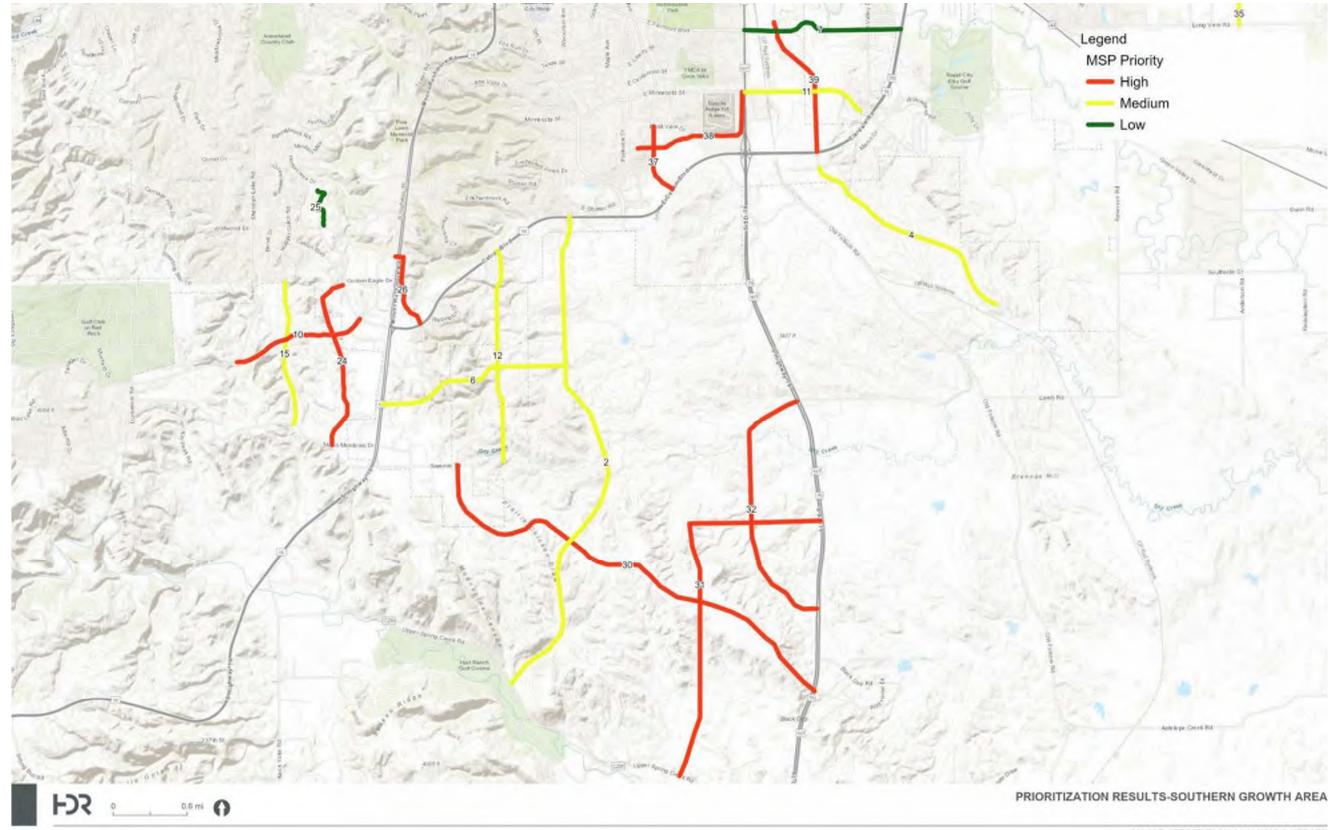
Figure 4 shows the priority level resulting from the analysis for the Southern Growth Area segments. As seen in **Figure 4**, most of the segments received a "High" priority score, while several were assessed as a "Medium" priority and two received a "Low" priority score.

The resulting "High" priority scores for the segments found in the Southern Growth Area are mainly due to the high household and employment growth anticipated to occur in this part of the MPO Area. It is noted that the main Transportation Analysis Zone (TAZ) used to forecast household and employment growth in the Southern Growth Area covers a relatively large area, which can lead to inaccuracy when estimating exact locations of where future growth is anticipated to occur. Future study of this area could benefit from the disaggregation of the TAZ into several sub-areas to allow for more detailed growth analysis. In addition to the high household and employment growth, many of these segments connect corridors that demonstrate high daily traffic levels today or are forecasted to carry relatively high levels of daily traffic by 2045.

The segments identified as "Medium" priority received lower scores due to topographical and/or alignment constraints identified along them. Three segments were also seen to connect corridors with low existing and forecasted future daily traffic volumes.

The two segments receiving a "Low" priority score, Villaggio Lane and E Fairmont Boulevard, are found in areas with lower household and employment growth forecasts as well as lower existing and forecasted future daily traffic volumes. The E Fairmont Boulevard segment was also identified as having a topographical constraint impacting its current alignment.





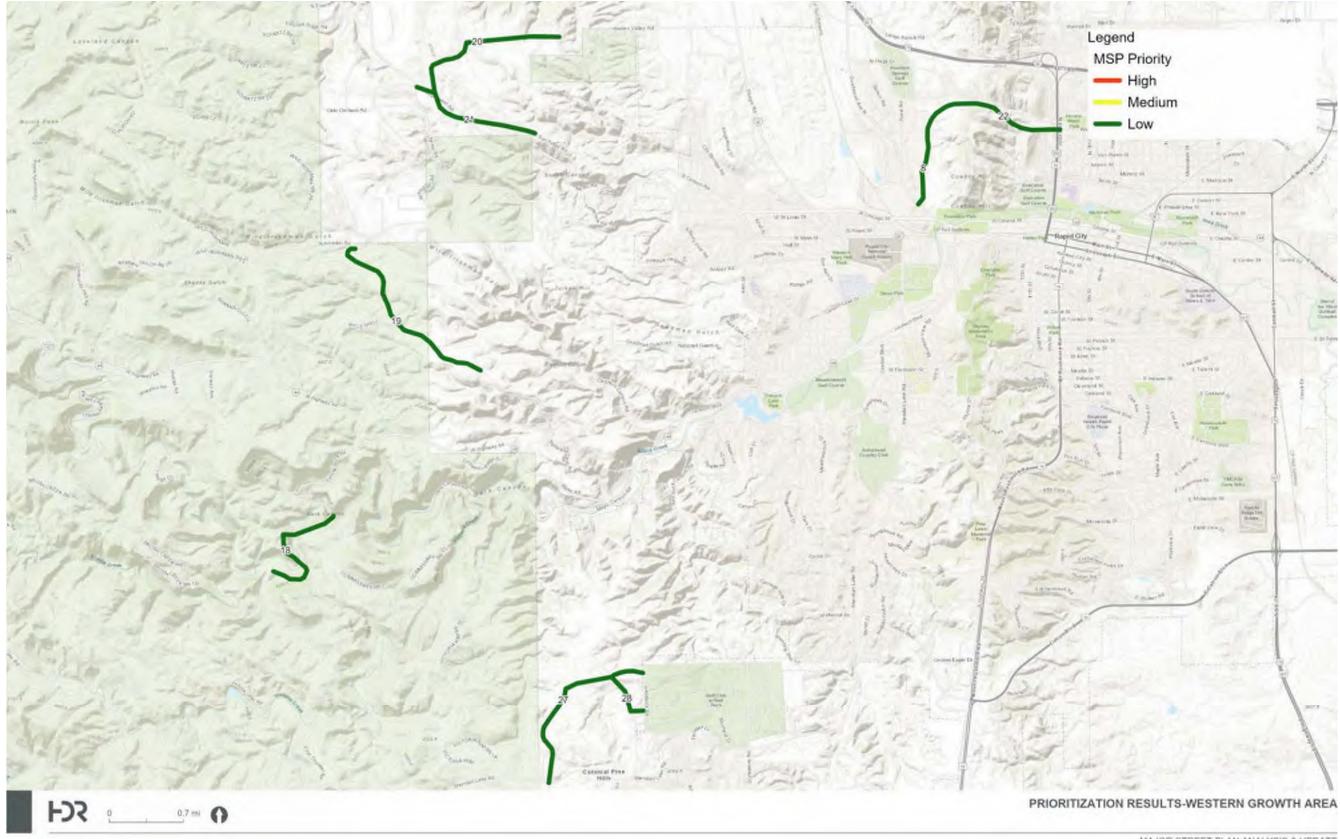
Western Growth Area

The Western Growth Area, defined as the MPO Area south of I-90 and west of Mount Rushmore Road, had eight MSP segments included in the prioritization analysis. The eight MSP segments prioritized were:

- Krebs Drive, from Commerce Road to Deadwood Avenue N (ID 8)
- Falling Rock Road, from Southern Terminus to Victoria Lake Road (ID 18)
- Nameless Cave Road, from Northern Terminus to Schroeder Road (ID 19)
- Hidden Valley Road, from Western Terminus to Bittersweet Road (ID 20)
- Sun Ridge Road, from Western Terminus to Bittersweet Road (ID 21)
- Anamosa Street, from I-190 to Commerce Road (ID 22)
- Bethpage Drive, from Western Terminus to Sheridan Lake Road (ID 27)
- Muirfield Drive, from Western Terminus to Bethpage Drive (ID 28)

Figure 5 shows the priority level resulting from the analysis for the Western Growth Area segments. All MSP segments found within the Western Growth Area received a "Low" priority score mainly due to the limited forecasted growth in households and employment through 2045. As household and employment growth is closely related to travel demand, it was seen that existing traffic volumes are expected to see limited growth through the year 2045, thus resulting in low scores for this prioritization element. Adding to the lower priority score results is the presence of topographical and alignment constraints impacting several of the segments, including Falling Rock Road, Hidden Valley Road, and Anamosa Street.

Figure 5: Prioritization Results for the Western Growth Area



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Eastern Growth Area

The Eastern Growth Area, defined as the MPO Area north of Highway 44 and east of E Saint Jospeh Street, had 11 MSP segments included in the prioritization analysis. The 11 MSP segments prioritized were:

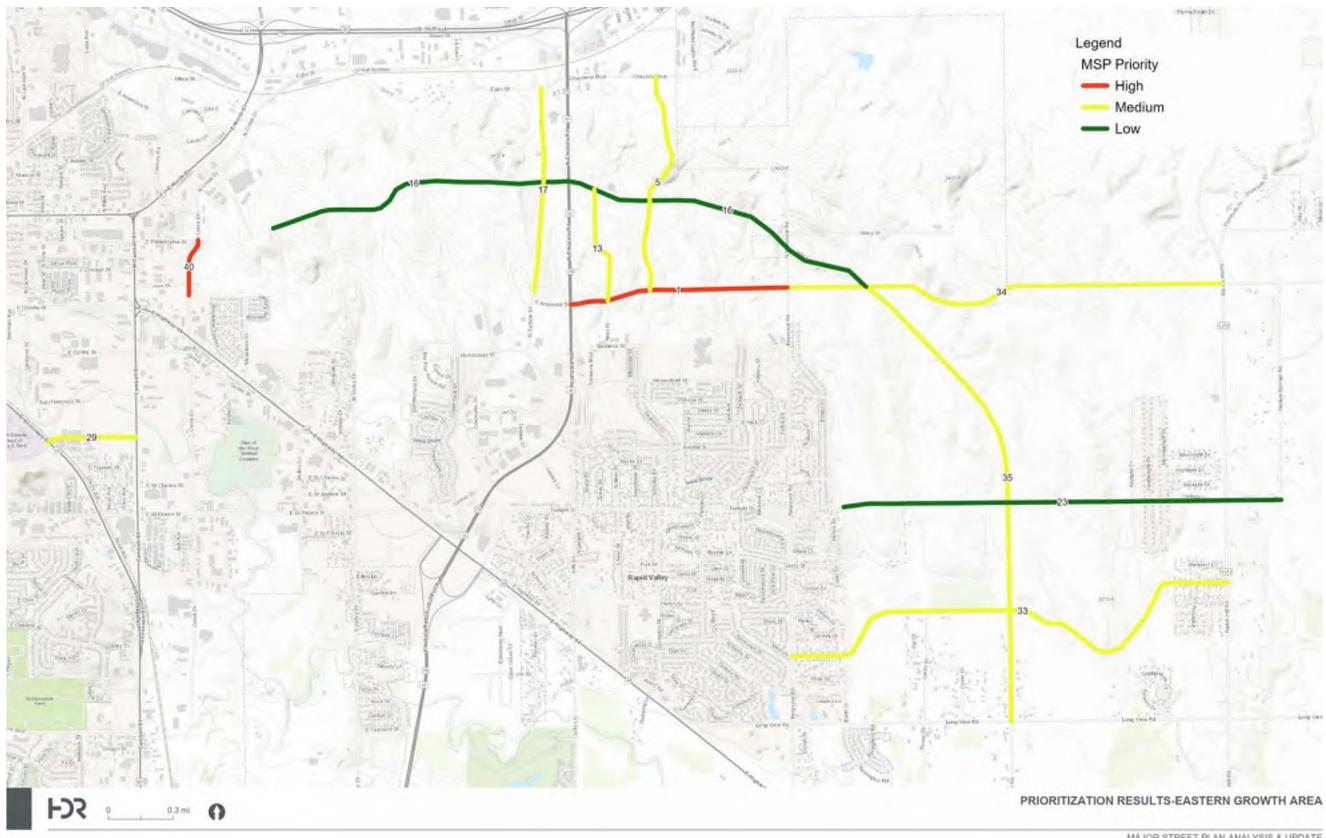
- E Anamosa Street, from Elk Vale Road to Reservoir Road (ID 1)
- Degeest Drive, from E Anamosa Street to Cheyenne Boulevard (ID 5)
- Neel Street, from E Anamosa Street to E Philadelphia Street (ID 13)
- E Philadelphia Street, from N Valley Drive to Reservoir Road (ID 16)
- Turbine Drive, from E Anamosa Street to Eglin Street (ID 17)
- Twilight Drive, from Eastern Terminus to Hidden Springs Road (ID 23)
- E Saint James Street, from Western Terminus to E Saint Joseph Street (ID 29)
- Mercury Drive, from Stellar Drive to Radar Hill Road (ID 33)
- E Anamosa Street Extension, from Reservoir Road to Radar Hill Road (ID 34)
- Anderson Road, from Long View Road to the E Anamosa Street Extension (ID 35)
- Creek Drive, from the Northern Terminus to E Philadelphia Street (ID 40)

Figure 6 shows the priority level resulting from the analysis for the Eastern Growth Area segments. As seen in **Figure 6**, the segments within the Eastern Growth Area received a range of priority scores, with two segments registering a "High" priority score, seven receiving a "Medium" priority score, and two receiving a "Low" priority score.

The Eastern Growth Area is expected to see substantial household and employment growth through 2045, which resulted in the segments located here receiving relatively high prioritization scores for those two metrics. However, low existing daily traffic volumes and moderate growth in traffic forecasts indicate that these segments are not likely to provide connections between the MPO Areas highest traveled future corridors through 2045. In terms of constraints, only the E Philadelphia Street and Turbine Drive segments demonstrated any type of constraint related to their alignments.

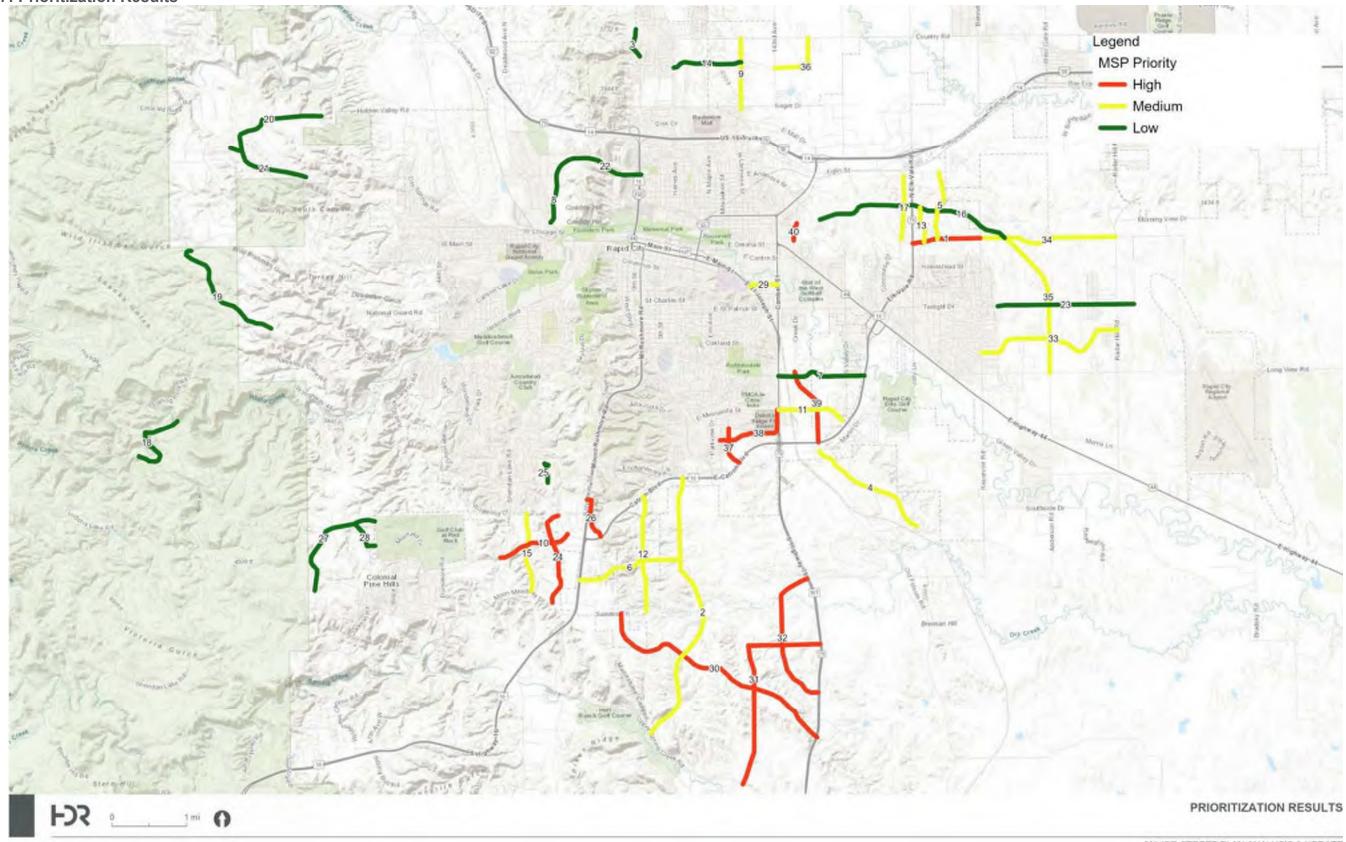
The resulting prioritization scores for all 40 corridors analyzed are shown in **Figure 7** while **Table 5** summarizes the individual scores for each segment.

Figure 6: Prioritization Results for the Eastern Growth Area



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Figure 7: Prioritization Results



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Table 5: Prioritization Analysis Results

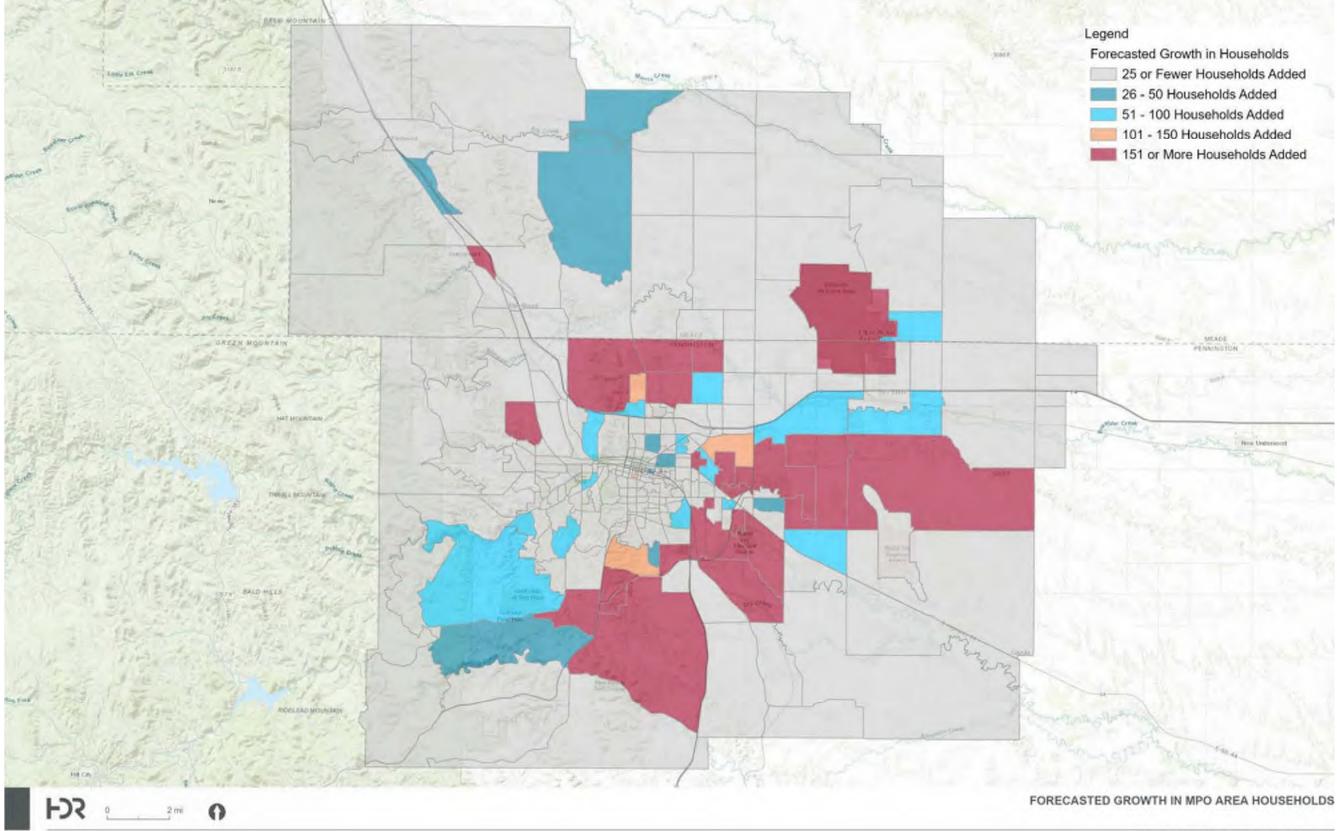
ID	Road Name	Extent	Household Growth	Job Growth	RC Airport RPZ	EAFB APZ	Existing ADT	Forecasted ADT	Topography Constraint	Alignment Constraint	Prioritization Score	Priority
26	Promise Road/Healing Way Extension	U.S. 16 to U.S. 16b	4	2	0	0	2	4	0	0	100	High
24	Haugo Drive	Catron Boulevard to Moon Meadows Drive	4	4	0	0	0	3	0	0	92	High
37	Elm Avenue	U.S. 16 to Field View Drive	4	3	0	0	3	2	-1	0	92	High
39	Creek Drive	U.S. 16 to Southern Terminus	4	2	0	0	2	3	0	0	92	High
10	Les Hollers Way	Sheridan Lake Road to Catron Boulevard	4	4	0	0	0	3	-1	0	83	High
30	Dreamscape Road	Sammis Trail to U.S. 16	4	4	0	0	0	2	0	0	83	High
32	Southern Collector Loop	Lamb Road to U.S. 16 north of Black Gap Road	4	4	0	0	0	2	0	0	83	High
40	Creek Drive	Northern Terminus to E Philadelphia Street	4	3	0	0	0	3	0	0	83	High
1	E Anamosa Street	Elk Vale Road to Reservoir Road	4	2	0	0	0	3	0	0	75	High
31	Southern Collector	U.S. 16 to Upper Spring Creek Road	4	4	0	0	1	1	-1	0	75	High
38	E Enchanted Pines Drive	Gemstone Drive to E Minnesota Street	4	3	0	0	0	2	0	0	75	High
6	E-W Arterial S of Addison Avenue	HWY 16 to Black Hills Boulevard Extension	4	4	0	0	0	1	-1	0	67	Medium
11	E Minnesota Street	Cambell Street to S Valley Drive	4	2	0	0	0	2	0	0	67	Medium
34	E Anamosa Street Extension	Reservoir Road to Radar Hill Road	4	2	0	0	1	1	0	0	67	Medium
35	Anderson Road	Long View Road to the E Anamosa Street Extension	4	2	0	0	0	2	0	0	67	Medium
2	Black Hills Blvd	Catron Boulevard to Upper Spring Creek Road	4	4	0	0	0	0	-1	0	58	Medium
4	Creek Drive	Marlin Drive to Old Folsom Road	4	3	0	0	0	0	0	0	58	Medium
5	Degeest Drive	E Anamosa Street to Cheyenne Boulevard	4	2	0	0	0	1	0	0	58	Medium
13	Neel Street	E Anamosa Street to E Philadelphia Street	4	2	0	0	0	1	0	0	58	Medium
15	Nugget Gulch Road	Moon Meadows Drive to Motherlode Drive	4	4	0	0	0	0	-1	0	58	Medium
29	E Saint James Street	Western Terminus to E Saint Joseph Street	0	0	0	0	3	4	0	0	58	Medium

Table 5 continued

ID	Road Name	Extent	Household Growth	Job Growth	RC Airport RPZ	EAFB APZ	Existing ADT	Forecasted ADT	Topography Constraint	Alignment Constraint	Prioritization Score	Priority
33	Mercury Drive	Stellar Drive to Radar Hill Road	4	2	0	0	0	1	0	0	58	Medium
9	N Lacrosse Street	Seger Drive to Country Road	4	1	0	0	0	1	0	0	50	Medium
12	N-S Collector	E of Tartan Court	4	4	0	0	0	0	-1	-1	50	Medium
17	Turbine Drive	E Anamosa Street to Eglin Street	3	3	0	0	0	0	0	0	50	Medium
36	Neva Way	143rd Avenue to Country Road	2	2	0	0	1	1	0	0	50	Medium
7	E Fairmont Boulevard	Cambell Street to Elk Vale Road	4	2	0	0	0	0	-1	0	42	Low
14	Neva Way	N Haines Avenue to N Lacrosse Street	4	1	0	0	0	0	0	0	42	Low
16	E Philadelphia Street	N Valley Drive to Reservoir Road	3	3	0	0	0	0	-1	0	42	Low
23	Twilight Drive	Eastern Terminus to Hidden Springs Road	4	2	0	0	0	0	-1	0	42	Low
3	Bunker Drive	Alma Street to Country Road W	4	0	0	0	0	1	-1	0	33	Low
8	Krebs Drive	Commerce Road to Deadwood Avenue N	2	2	0	0	0	0	0	0	33	Low
22	E Anamosa Street	I-190 to Commerce Road	2	2	0	0	0	1	-1	0	33	Low
27	Bethpage Drive	Western Terminus to Sheridan Lake Road	2	1	0	0	0	2	0	-1	33	Low
28	Muirfield Drive	Western Terminus to Bethpage Drive	2	1	0	0	0	1	0	0	33	Low
25	Villaggio Lane	Southern Terminus to Horsecreek Drive	0	3	0	0	0	0	0	0	25	Low
19	Nameless Cave Road	Northern Terminus to Schroeder Road	0	0	0	0	0	0	0	0	0	Low
21	Sun Ridge Road	Western Terminus to Bittersweet Road	0	0	0	0	0	1	0	-1	0	Low
18	Falling Rock Road	Southern Terminus to Victoria Lake Road	0	0	0	0	0	0	-1	0	-8	Low
20	Hidden Valley Road	Western Terminus to Bittersweet Road	0	0	0	0	0	0	-1	-1	-17	Low

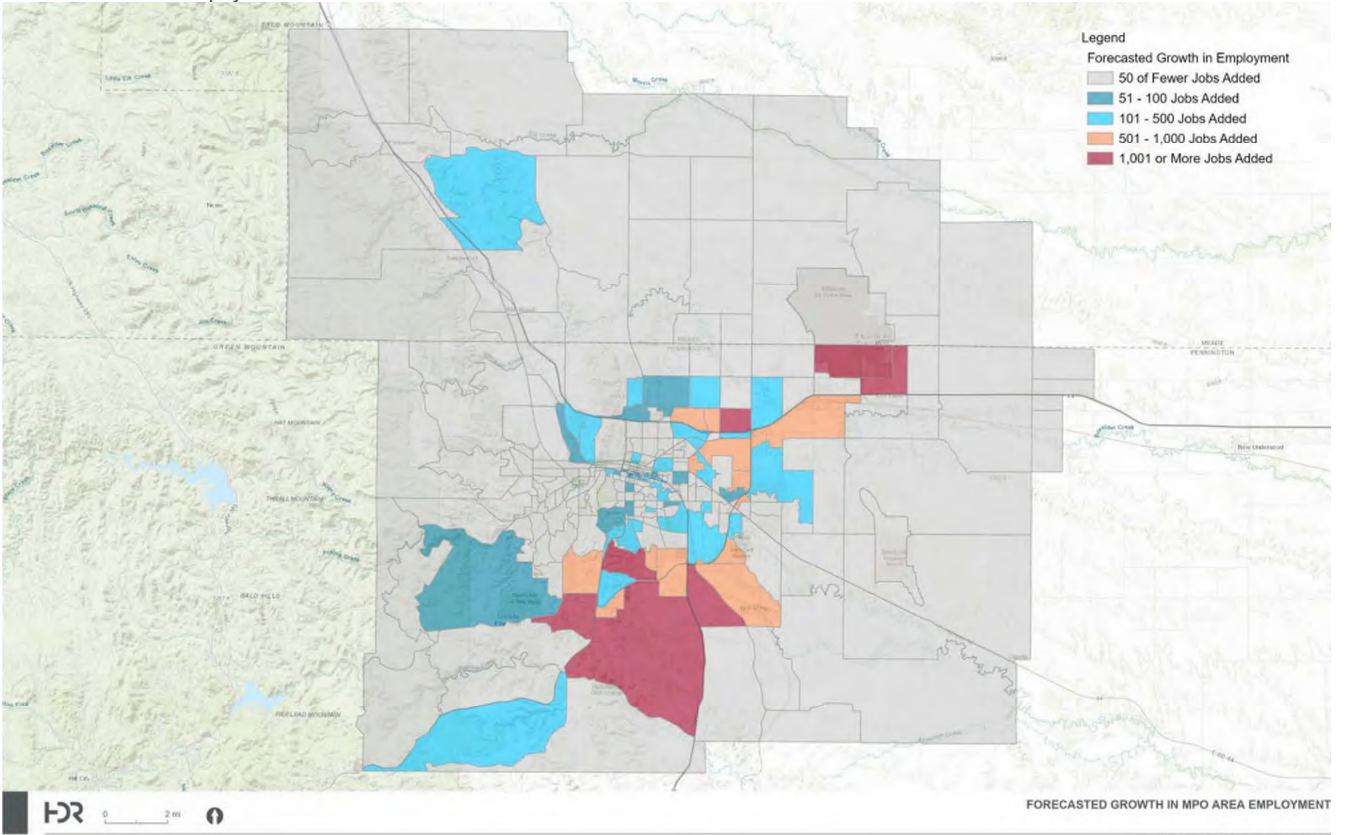
Appendix A Prioritization Analysis Data

Forecasted Growth in MPO Area Households



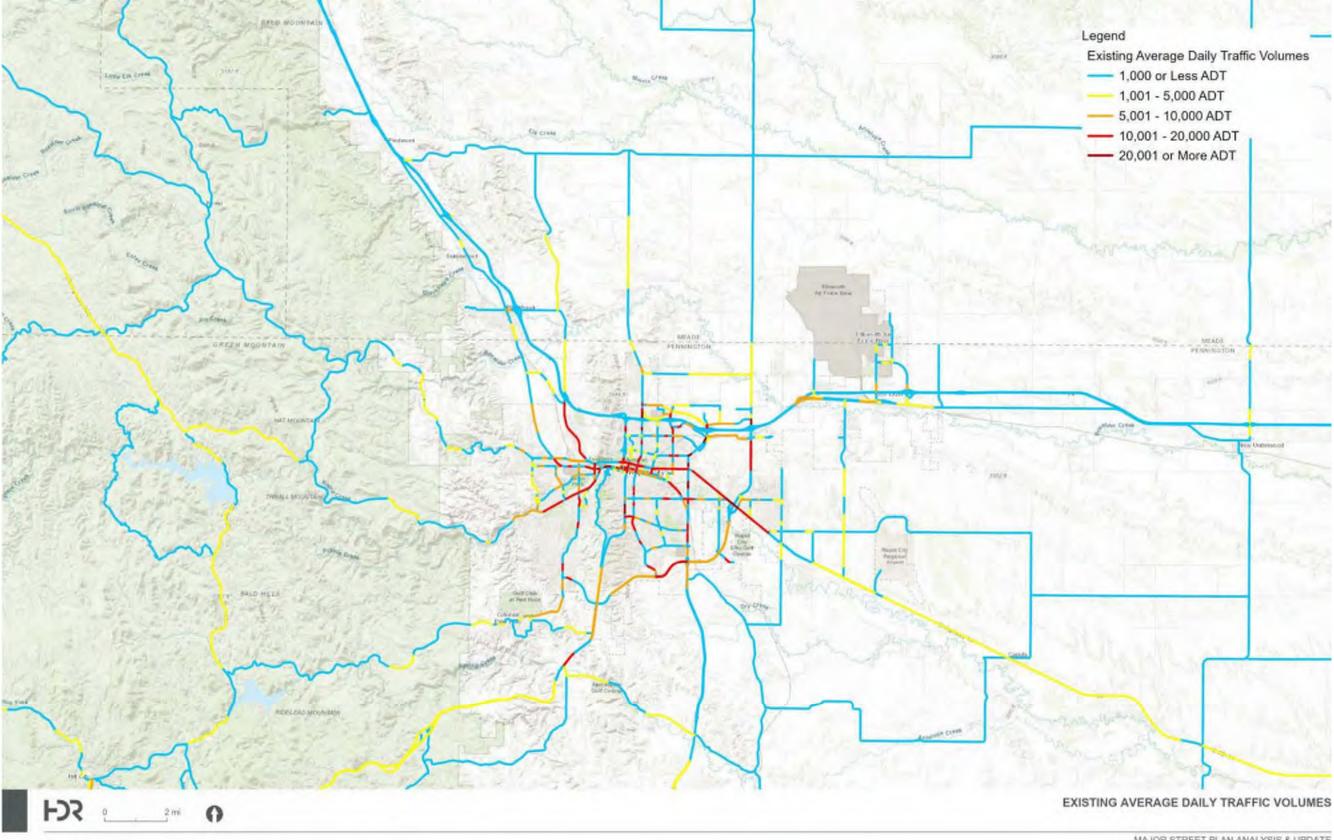
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Forecasted Growth in MPO Area Employment



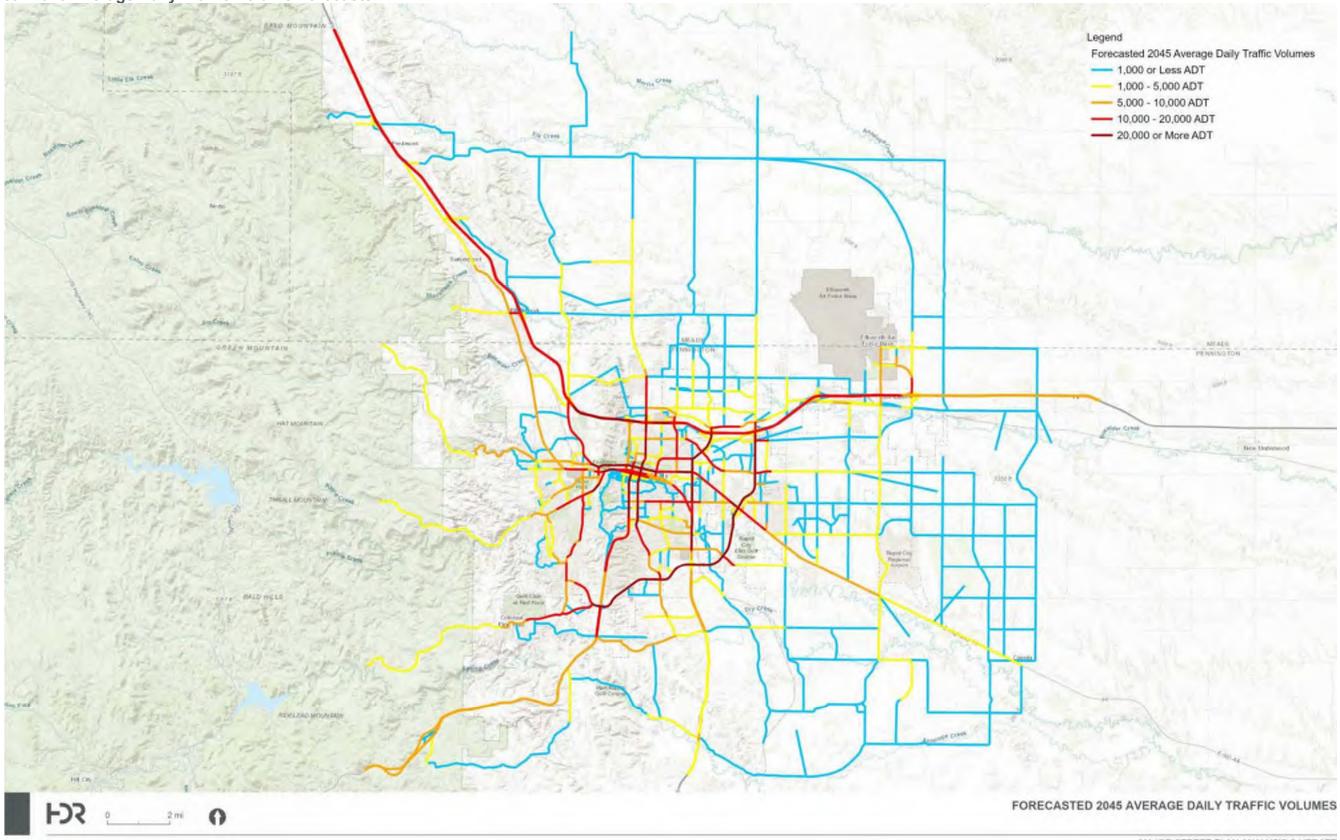
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Existing Average Daily Traffic Volumes



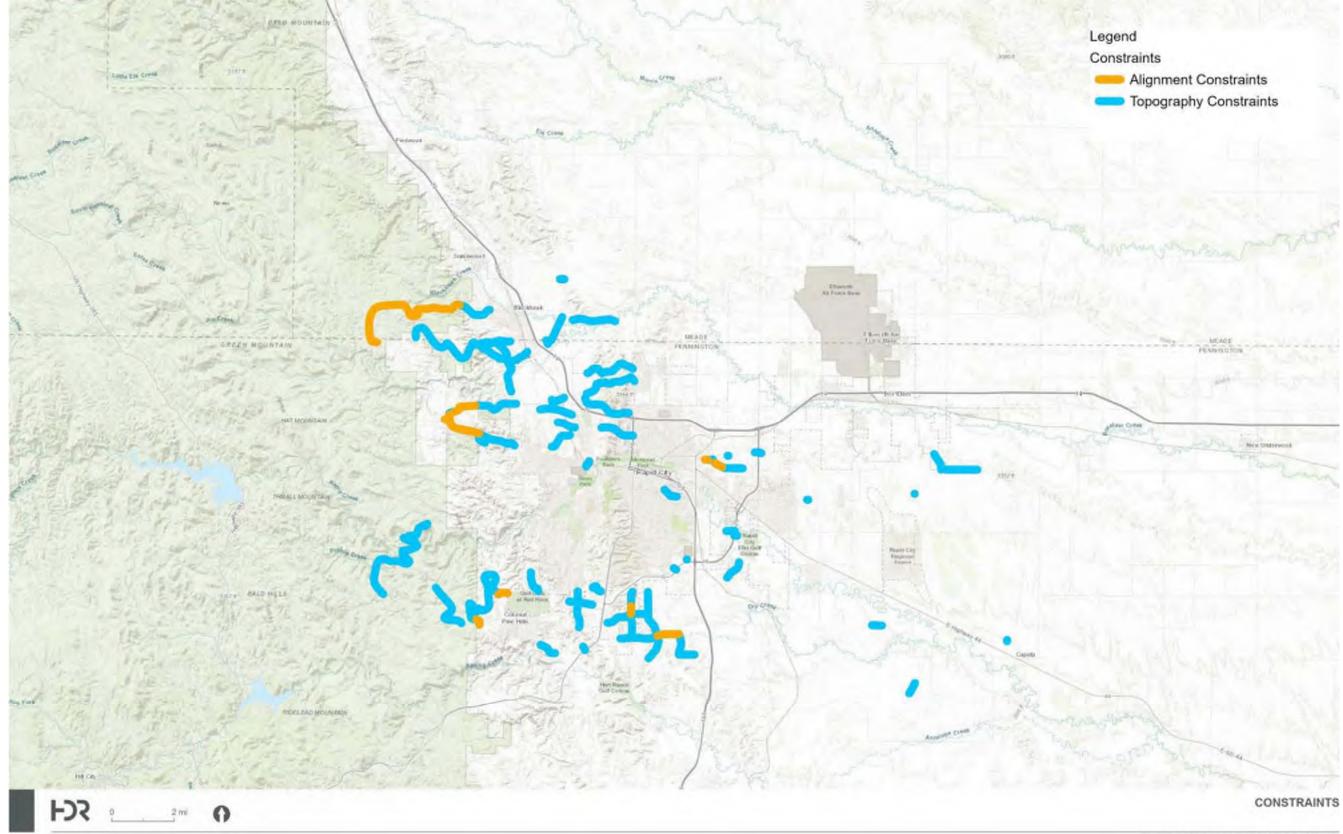
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Future Year 2045 Average Daily Traffic Volume Forecasts

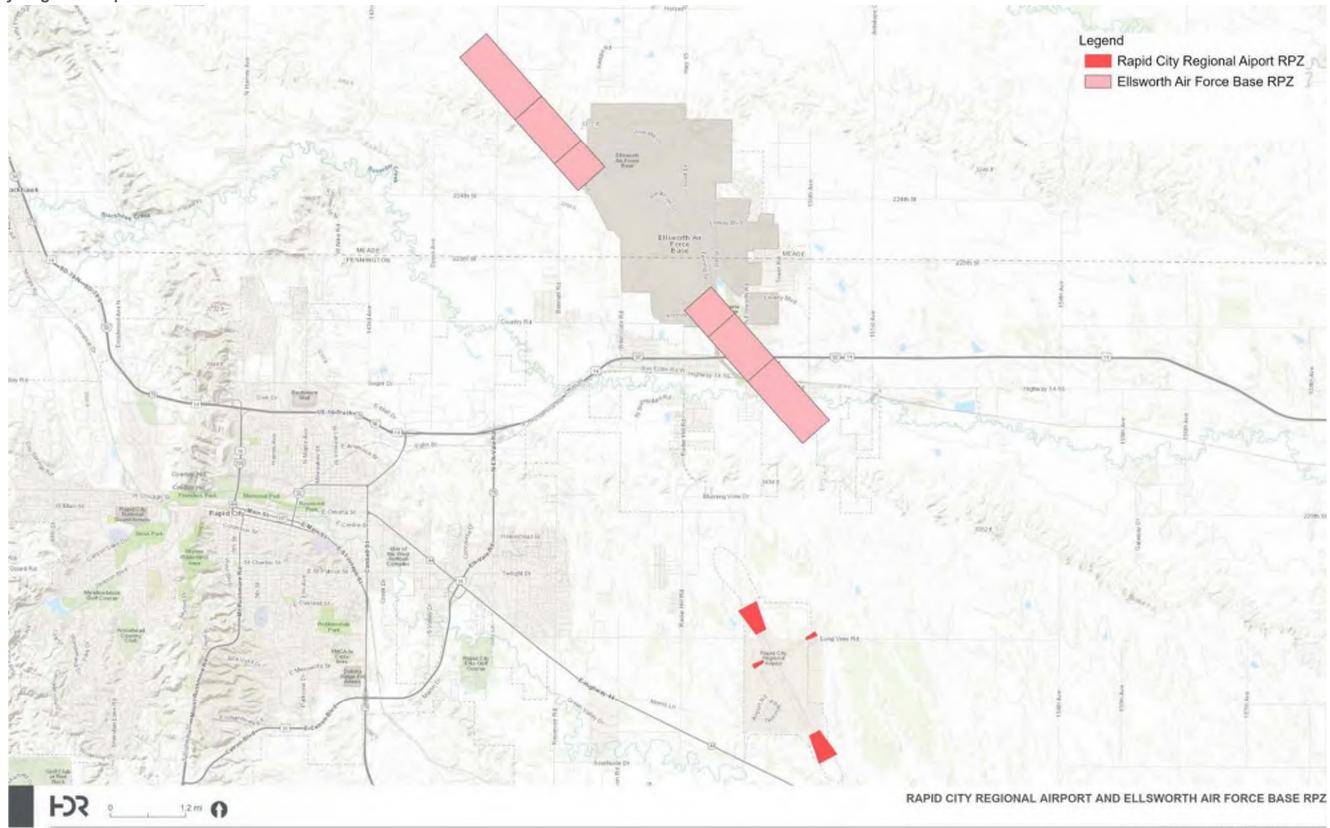


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Identified Topography and Alignment Constraints



Rapid City Regional Airport and Ellsworth Air Force Base RPZ



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Major Street Plan Analysis and Update



Appendix C

Public Involvement Summary



FSS





Public Meeting -Open House No.1 Meeting Summary

July 13, 2023

Rapid City Area MPO Major Street Plan Analysis and Update

Rapid City Area MPO July 24, 2023

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Public Meeting/Open House No. 1 Overview

Meeting Details

Date:	Thursday, July 13, 2023
Time:	4 PM to 6 PM
Location:	Rapid City Council Chambers & Community Room, City Hall
	300 6 th Street, Rapid City, SD 57701

Advertisements: Rapid City Journal (7/6/23), Native Sun News (7/5/23), project website, MPO website, and Facebook post. Additionally, a meeting invitation was emailed to RCAMPO Stakeholders.

The project team hosted a public meeting/open house for the Rapid City Area MPO Major Street Plan Analysis and Update to present an overview of the project and gather feedback from the public and stakeholders. Approximately 25 attendees signed in for the meeting, including members of the consultant team, city staff, and SDDOT staff. An attendance sheet for the public meeting/open house can be found in Appendix A. A brief presentation was provided on rolling video loop in the Community Room to present the details and scope of the project and review the meeting materials. A copy of the presentation is included in Appendix C. Following the presentation attendees were asked to enter the City Council Chambers for an interactive maps and markers exercise to gain public feedback on the existing Major Street Plan and future Major Street Plan needs. Comments from the public could be provided in multiple forms including submission of a provided comment form, notes attached to the maps/markers exercise, email, or via the project website. Written comments received via comment cards, emails, and website submissions are noted in the Written Comments section of the meeting summary. Notes/suggestions provided via the maps/markers exercise have been consolidated and summarized in a table for reference.

Project Website

www.RCmajorstreets.com

All of the meeting materials, including the presentation, were placed on the project website for those who were unable to attend the in-person meeting/open house to review at their leisure. A total of four presentation video views were recorded on the project website.

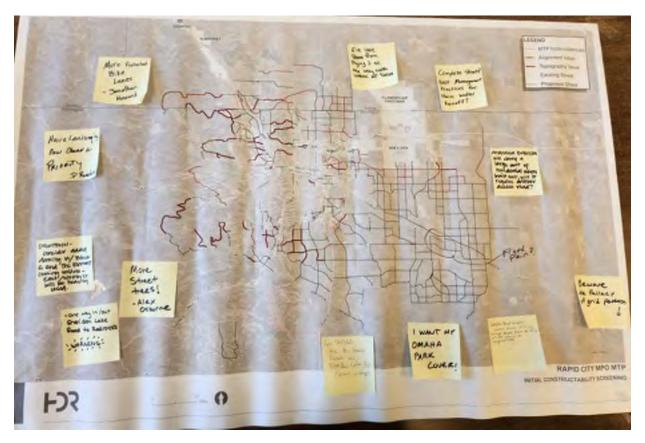
Written Comments

The written comment period associated with Public Meeting/Open House No. 1 began the evening of the meeting/open house and lasted through July 21, 2023. A total of five comment cards were received at the meeting and an additional card was mailed directly to HDR. Three comments were also received via the project website. All written comments are attached in Appendix B.

In summary, the written comments focused on providing four lane roads into/out of Rapid City, improvements to accommodate Ellsworth growth (Elk Vale/Haines), Highway 44 west of Rapid City, Harmony Heights area, southwest Rapid City (Sheridan Lake Road alternatives), and a looped bicycle route from Rapid City west into the hills and back.

Project website comments pertained to the area of 5th St/E. Minnesota St., Anamosa Street extension, and the Red Rock area.

The maps and markers exercise generated approximately 12 comments/suggestions. A summary of the comments associated with the maps/markers exercise is included in Appendix B.



Appendix A – Sign-in Sheets

PLEASE SIGN IN!

RCAMPO Major Street Plan Update

Date: 7/13/2023

Name	Email Address (check box to sign up for email updates)	Zip Code
Dustin Hamilton		
Mile Carlson		
Buttens		
Gunnar Ensz		
Matt Layman		
Janii Toerries		
ROFFILHALL		
Sava Odden		
Alex Osborne		
Lindsey Scachis		
Jonathan Howard		
Matt Schmake		
Donna Curry		
GANY WIETGREFE		

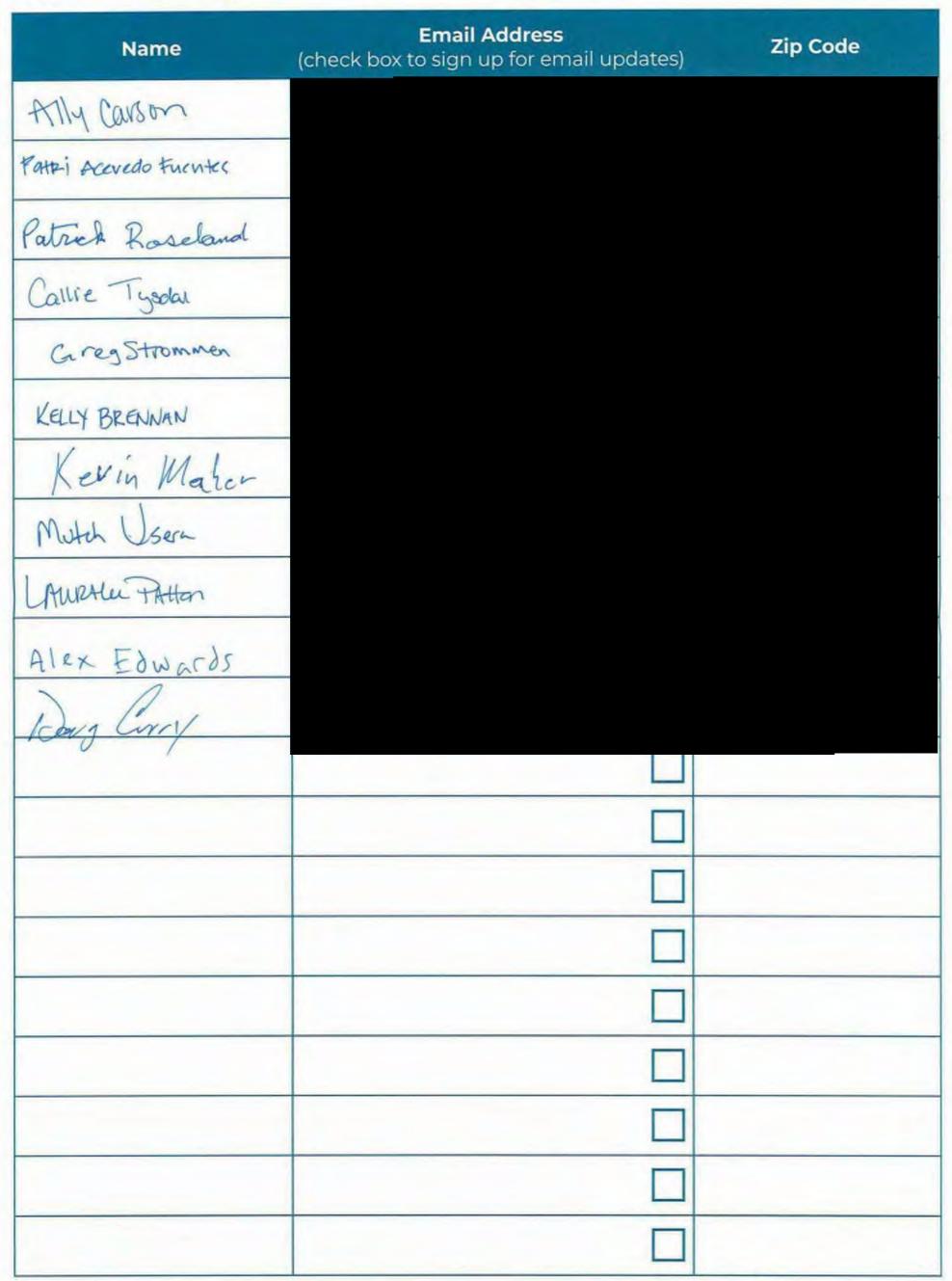




PLEASE SIGN IN!

RCAMPO Major Street Plan Update

Date: 1/13/2023





Appendix B – Scanned Comment Cards/Emails

COMMENT FORM

RCAMPO Street and Highway Plan Update

Please take a moment to fill out this comment form so our project team can better understand your questions and concerns.

Comment: ALL 10 ROADS, NTO RAFA CITY NEED TO BE Y-LANE on ZOY EARS. WITH POTENTIAL PEUELOPMENT ALONG HWY 385- THAT MEANS HWY 44- from HWY 385 TO PAPED MUST BE A 4-LAWE TO BADIP CITY LIMITS.



Please leave this card with a **project team member** today or mail in by **Friday, July 21, 2023: RCAMPO Major Street Plan** c/o HDR 703 Main Street #200 Rapid City, SD 57701



www.RCmajorstreets.com

COMMENT FORM

RCAMPO Street and Highway Plan Update

Please take a moment to fill out this comment form so our project team can better understand your questions and concerns.

Comment: TO ACCOMMODITE REVELENPMENT BETWEEN RAPID CITY + SILSWORTH NORTH OF T. 90 CONSIDER WIDENING + TOMPAOVING ELK VALE ROAD NORTH OF FLYING J TO ELK CREEK ROAD IN MEADE COUNTY. HAINES AVE FROM J.90 TO ELK CREEK ROAD NEEDS WIDEN ING & TOMPAOVEMENT. THAT MEANS ELK CREEK ROAD FROM NEEDS WIDEN ING & TOMPAOVEMENT. OF NEW UNDERWOOD NEEDS TO BE A MAIN EAST/WEST ROUTE BETWEEN PIED MONT TO ELLSWORTH AND SUTHERN MEADE COUNTY

Contact Information:

Metropolitan Planning Organization

First an	nd Last Name:
Phone	Number:
Email:	
	CITY OF

Kapia (

LIVE. WORK. GRO

a **project team member** today or mail in by **Friday, July 21, 2023: RCAMPO Major Street Plan** c/o HDR 703 Main Street #200 Rapid City, SD 57701

Please leave this card with



www.RCmajorstreets.com

COMMENT FORM

RCAMPO Street and Highway Plan Update

Please take a moment to fill out this comment form so our project team can better understand your questions and concerns.

Comment: A POPULAR DISTANCE BIRYCLE ROUTE IS OUT TO SAERIDAN LAKE FOR SHERIDAN LAKE ROAD FROM CANYON KAKE BIRE PATH, A GOOD 40:50 MILE BIRE LOOP WOULD BE OUT TO SAER DAN KAKE THEN NOATH TO HWY 44 ON HWY 385 + BACK TO RARIO CITY BIKE PATHS ON HWY 44



Please leave this card with a **project team member** today or mail in by **Friday, July 21, 2023: RCAMPO Major Street Plan** c/o HDR 703 Main Street #200 Rapid City, SD 57701



www.RCmajorstreets.com

COMMENT FORM

RCAMPO Street and Highway Plan Update

Please take a moment to fill out this comment form so our project team can better understand your questions and concerns.

Comment: for EALFACENCY + CONVENTENCE CONSIDER BY TENDING PAVED HARMONY HEIGHTS DRIVE WEST of HILLS TO HARMONY HEIGHTS EAST OF HILL. THERE IS A FARM PATH NOW BUT BLOCKED BY A GATE. THIS WOULD BE ONLY A MINOR (MAYBE Y2 MILE) SMALL PAUED STREET IMPROVEMENT.



Please leave this card with a **project team member** today or mail in by **Friday, July 21, 2023: RCAMPO Major Street Plan** c/o HDR 703 Main Street #200 Rapid City, SD 57701



COMMENT FORM

RCAMPO Street and Highway Plan Update

Please take a moment to fill out this comment form so our project team can better understand your questions and concerns.

Comment: MUST TAKE TRAFFIC OFF SHERIDAW LAKE PORD ON TO HWY 16 SOUTH OF CATRON. THRU TRAFFIC FROM RURAL HILL CITY + NEW DEVELOPMENTS BY ALONG MOON MEADOW COULD COME TO WALMART + AIRPORT ON AWIDENED NOON MEADOW PRIVE GETWEEN SHERIDAY LAKE ROAD TO HWY 16



Please leave this card with a **project team member** today or mail in by **Friday, July 21, 2023: RCAMPO Major Street Plan** c/o HDR

703 Main Street #200 Rapid City, SD 57701



COMMENT FORM

RCAMPO Street and Highway Plan Update

Please take a moment to fill out this comment form so our project team can better understand your questions and concerns.

CANCERA Finarn N Comment: 20 nund ON 9 furnt Ste P ANA In Venos. nexy O CCUTTING In



Please leave this card with a **project team member** today or mail in by **Friday, July 21, 2023: RCAMPO Major Street Plan** c/o HDR 703 Main Street #200 Rapid City, SD 57701



Maps & Markers Comments

- 1 Beware the fallacy of grid pattern!
- 2 Hawthorne Street Connection Partial access, driving through Boyd's East parking lot for access to neighborhood
- 3 I want my Omaha Park Cover!
- 4 Les Hollers Way should tie into horizontal curve on Sheridan Lake Road
- 5 More Street Trees!
- 6 One way in/out Sheridan Lake Road to Red Rocks WARNING
- 7 Downtown Consider added density w/Block 5 and the Element coming on line East/North St will be heavily used
- 8 More protected bike lanes
- 9 Elk Vale Road From Flying J all the way north lateral of base
- 10 Complete Streets? Best management practices for storm water runoff?
- 11 Have landscaping new cross a priority
- 12 Anamosa extension will carry large amount of residential when built out will require another access road?

Online Comments

Please look at the area south of 5th and Minnesota St and south of Parkview toward 5th street.

There are so many new apartments in this area and it's so congested at different times of the day. Stumer road cant take all the traffic either.

1

Also, could someone check why the snow plow doesn't come all the way down 5th Street? They come down as far as Minnesota. They should really go all the way down to 5th and Catron or Elk Vale not sure of the roads.

- I live in the Copperfield Subdivision. My primary interest is for the
- 2 alignment and completion of Anamosa. However, I am also interested in the overall plan and am willing to comment across the entire area.
- 3 Looking for information on future plans for egress/Red Rock area

Appendix C – Presentation

Rapid City Area MPO Major Street Plan Analysis & Update

Public Meeting #1 July 13, 2023



ReStore

Goals of Meeting

- Introduce the Public to the Project
- Solicit Feedback on Project Priorities
- ✓ Provide Information for Continued Public Involvement



What is RCAMPO?

Rapid City Area Metropolitan Planning Organization

- **RCAMPO** Area
 - Rapid City
 - Boxelder
 - Summerset
 - Piedmont
 - Pennington County
 - Meade County
 - Black Hawk
 - Rapid Valley

Rapid City Area Metropolitan Planning Organization

Provides a comprehensive and cooperative program of transportation planning in the Rapid City metropolitan area



Project Background Information

- Initial Rapid City Major Street Plan (MSP) Developed and Adopted in 1990
- Many alignments have become dated due to changes in land use, development, and construction projects
- Multiple RCAMPO Agencies have adopted their own Major Street Plans which lead to inconsistencies between adjacent agencies
- A cursory review was completed as part of the 2020 RCAMPO Metropolitan Transportation Plan
- Project will expand on prior process and develop conceptual alignments for selected corridors

Goals of Major Street Plan Update and Project Process

- ✓ Review existing Major Street Plan
- Eliminate streets from priority analysis list based on:
 - 1. Stakeholder & public feedback
 - 2. Construction feasibility
 - 3. Likelihood of being developed in the next 20 25 years
- ✓ Add streets to analysis if new potential connections or routes are identified
- ✓ Further Analyze top 40 corridors/segments
- Package analysis into a finalized plan for developers and the municipalities to reference in the future



Major Streets

Major Streets Are:

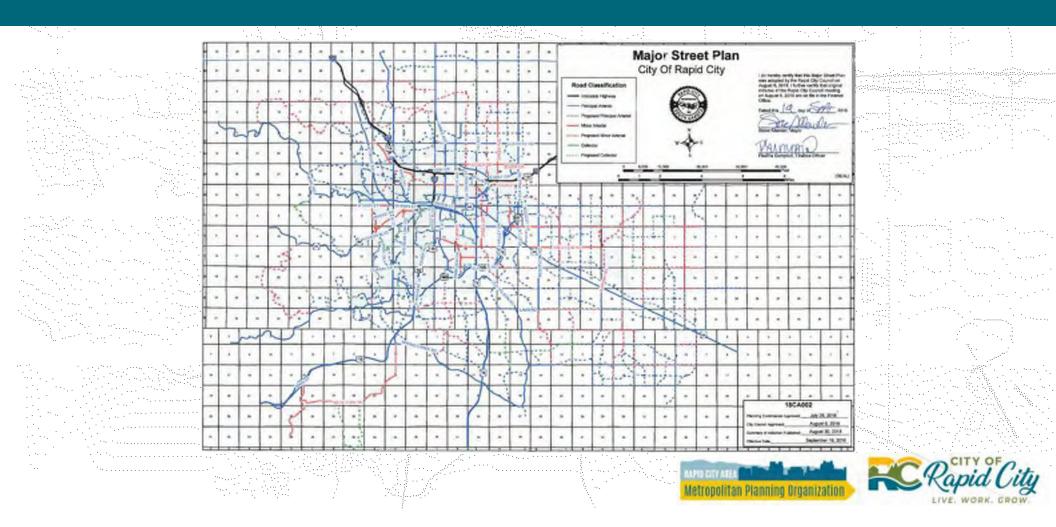
- Move large amount of traffic between interstates, highways or destinations
- Busy roads with traffic signals, turn lanes, shared-use paths, etc.
- Well-maintained
- Qualified to serve as emergency routes
- Prioritized during snow removal operations
- Connections that improve flow of traffic through the city

Major Streets Aren't:

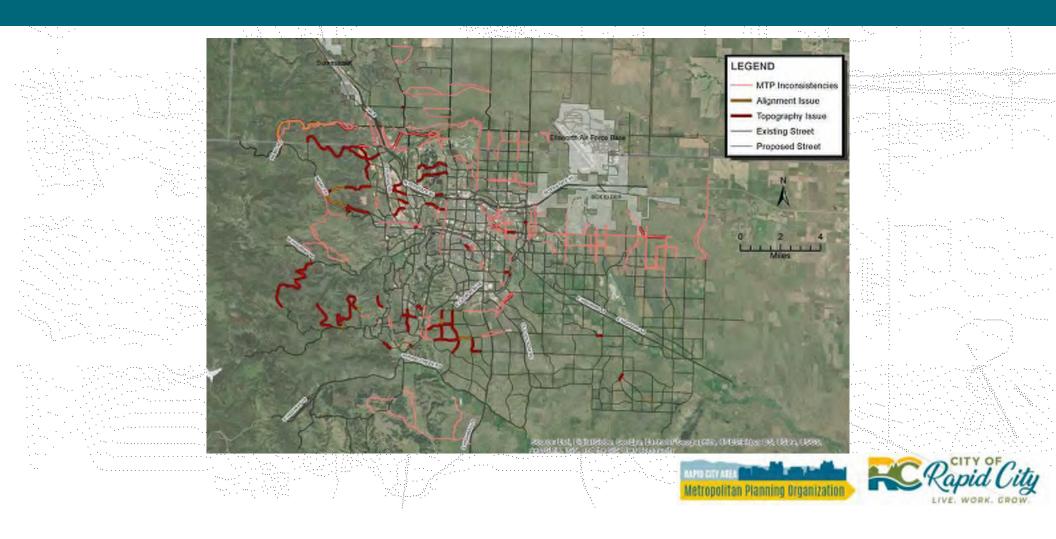
Local neighborhood streets
Industrial or commercial roads
Dead-end roads
Dirt or unmaintained roads



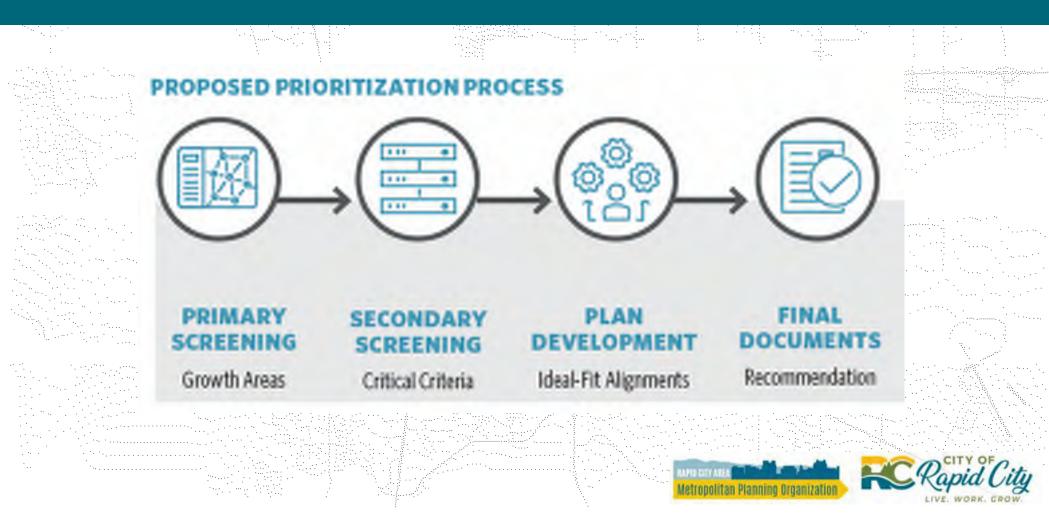
Existing Adopted MSP (2018)



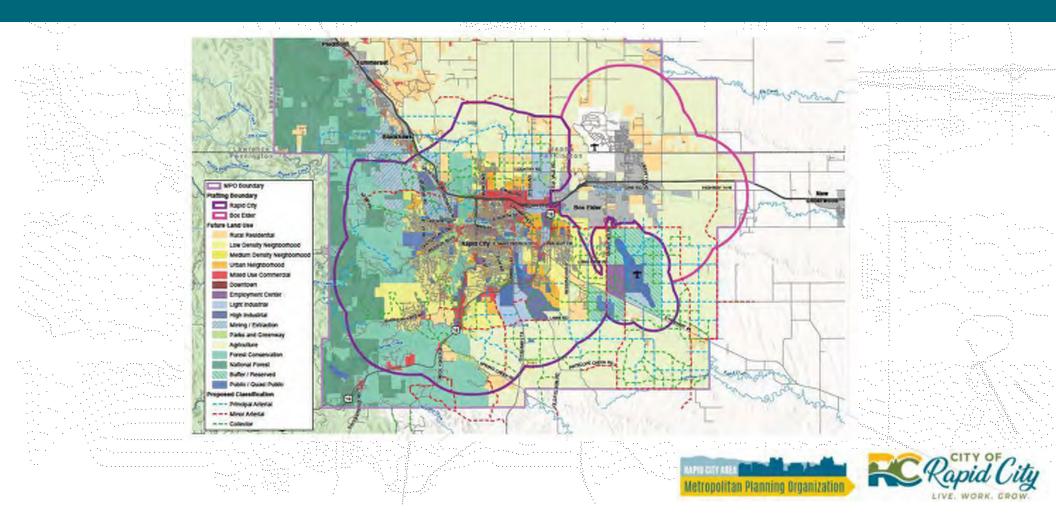
MSP Initial Analysis (2020)



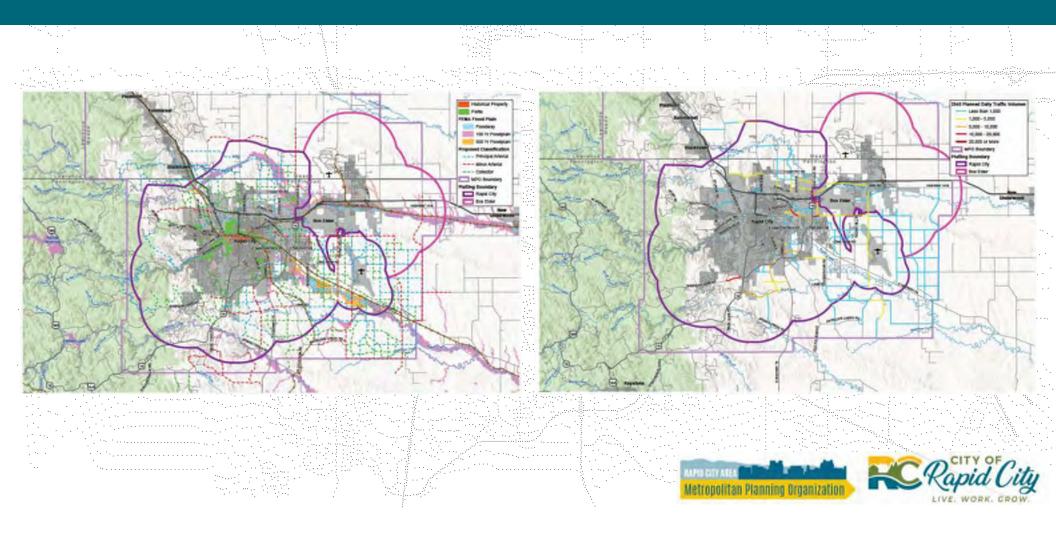
MSP Analysis Approach



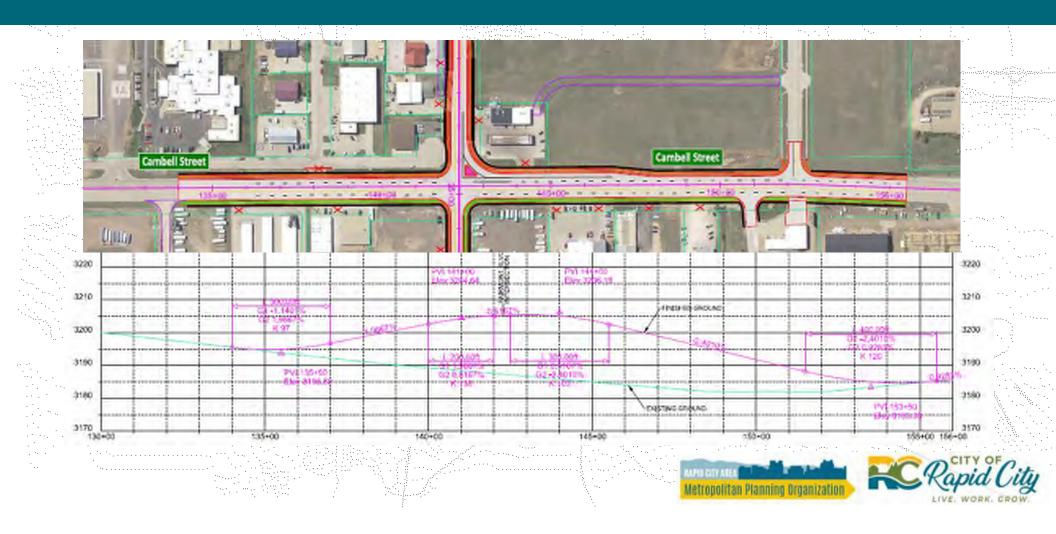
Primary Screening – Growth Areas



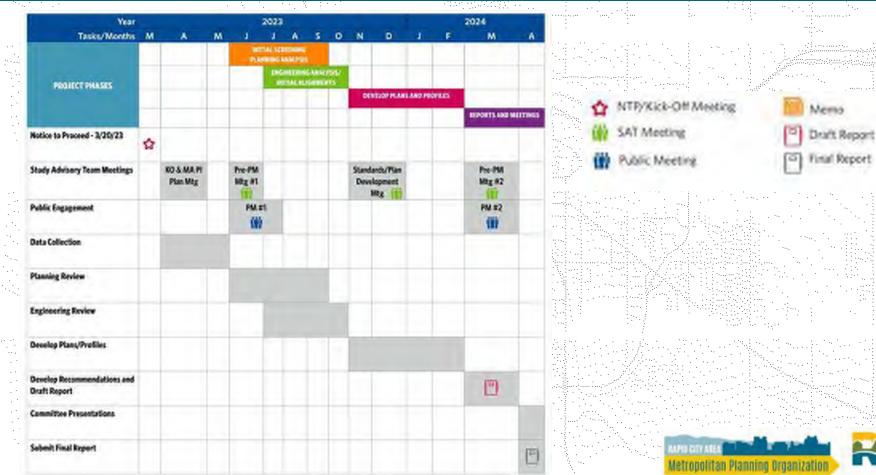
Secondary Screening – Critical Criteria



Alignment/Concept Plan Development for Selected Corridors



Schedule





The Role of the Public

 Provide your thoughts and reasoning as to which corridors should be prioritized for development of a conceptual plan and profile

 Your input will be used in the screening process to help identify priority corridors

 Provide your comments by using the provided comment forms, through the project website, or by participating in the open house maps and markers exercise



COMMENT FORM

Rapid City Area Metropolitan Planning Organization

Please take a moment to fill out this comment form so our project team can better understand your questions and concerns.

Contact Information: First and Last Name

Comment

Phone Number

Please leave this card with a project team member today or mail in by Friday, July 21, 2023

PCAMPO Major Street Plan 703 Main Street #200 Regist City: SD \$770



Stay Involved!

 Stay involved throughout the duration of the project at: <u>www.RCmajorstreets.com</u>

✓ Ask questions through the project website

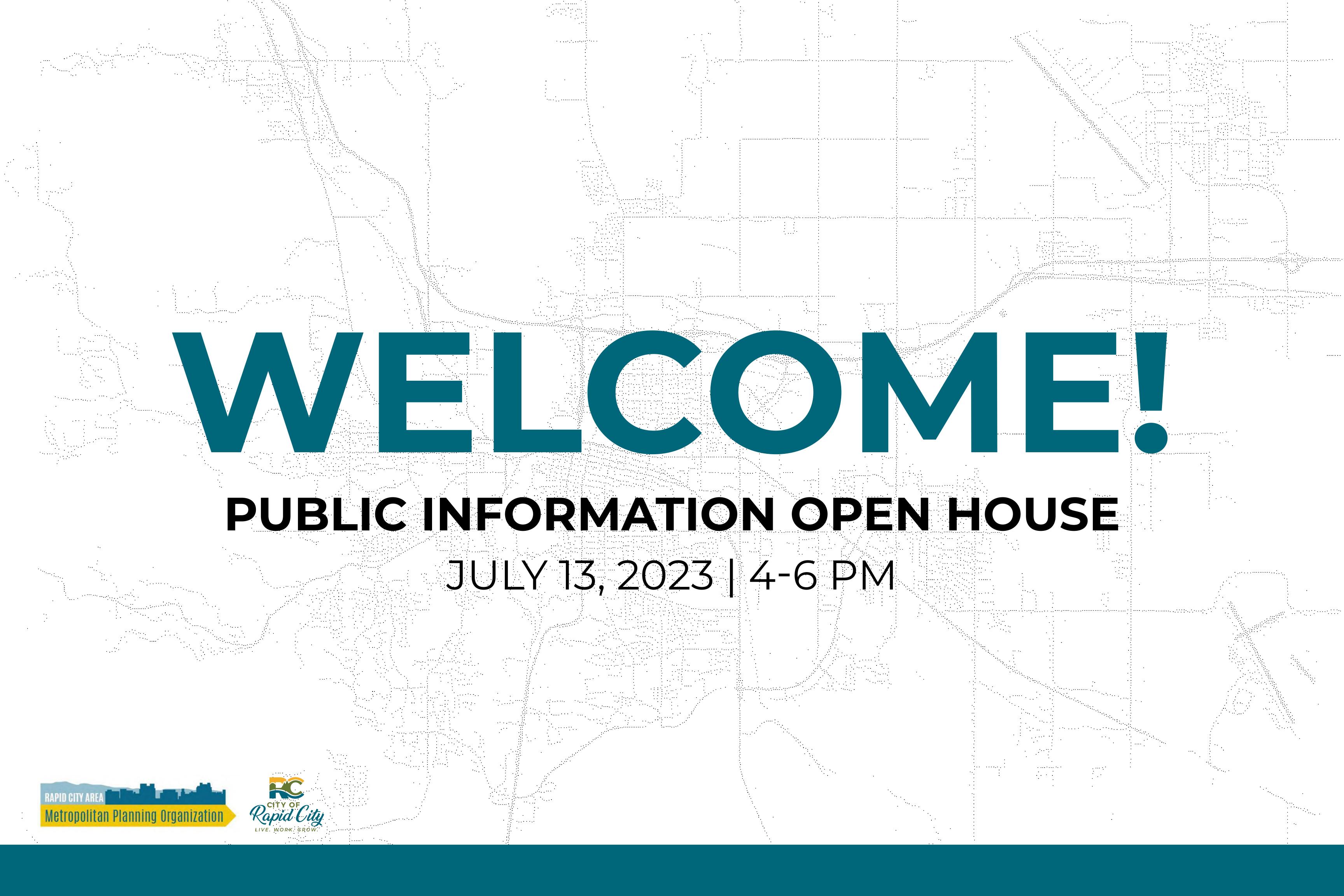
✓ MPO Social Media (Facebook)

Project Contact: Dustin Hamilton – HDR (605) 791-6103 Dustin.Hamilton@hdrinc.com





Appendix D – Meeting Displays



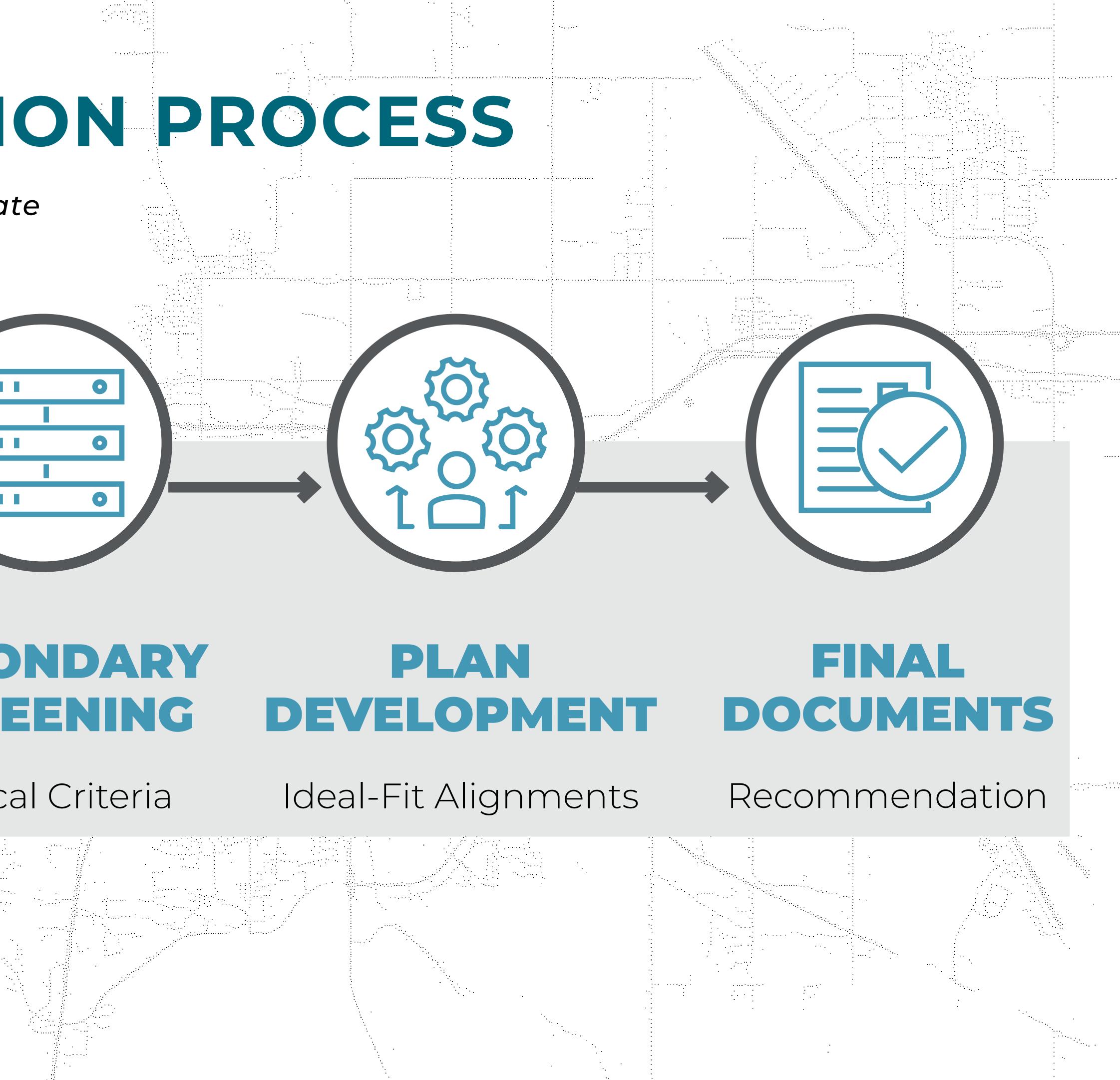


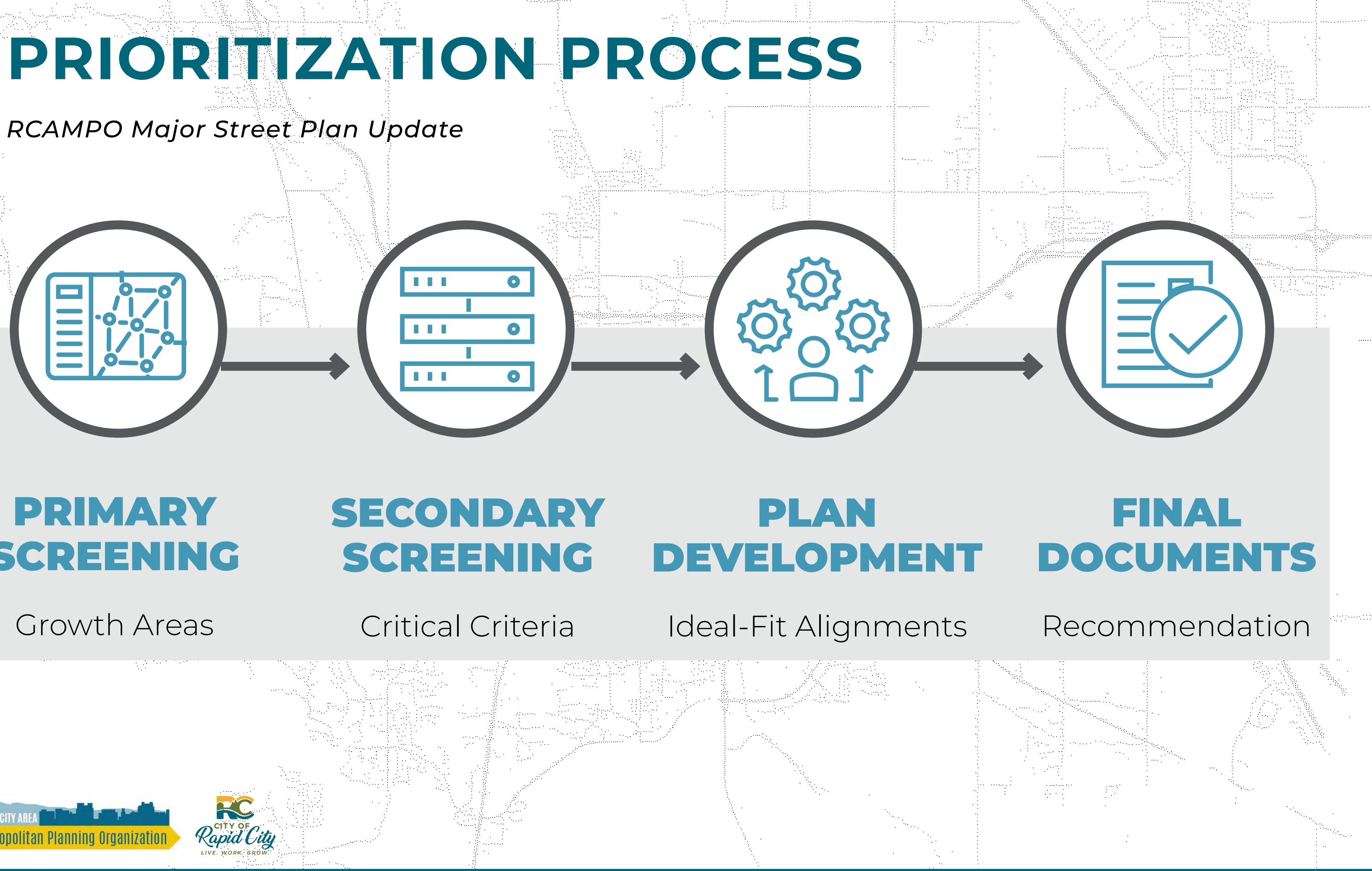
RCAMPO Major Street Plan Update

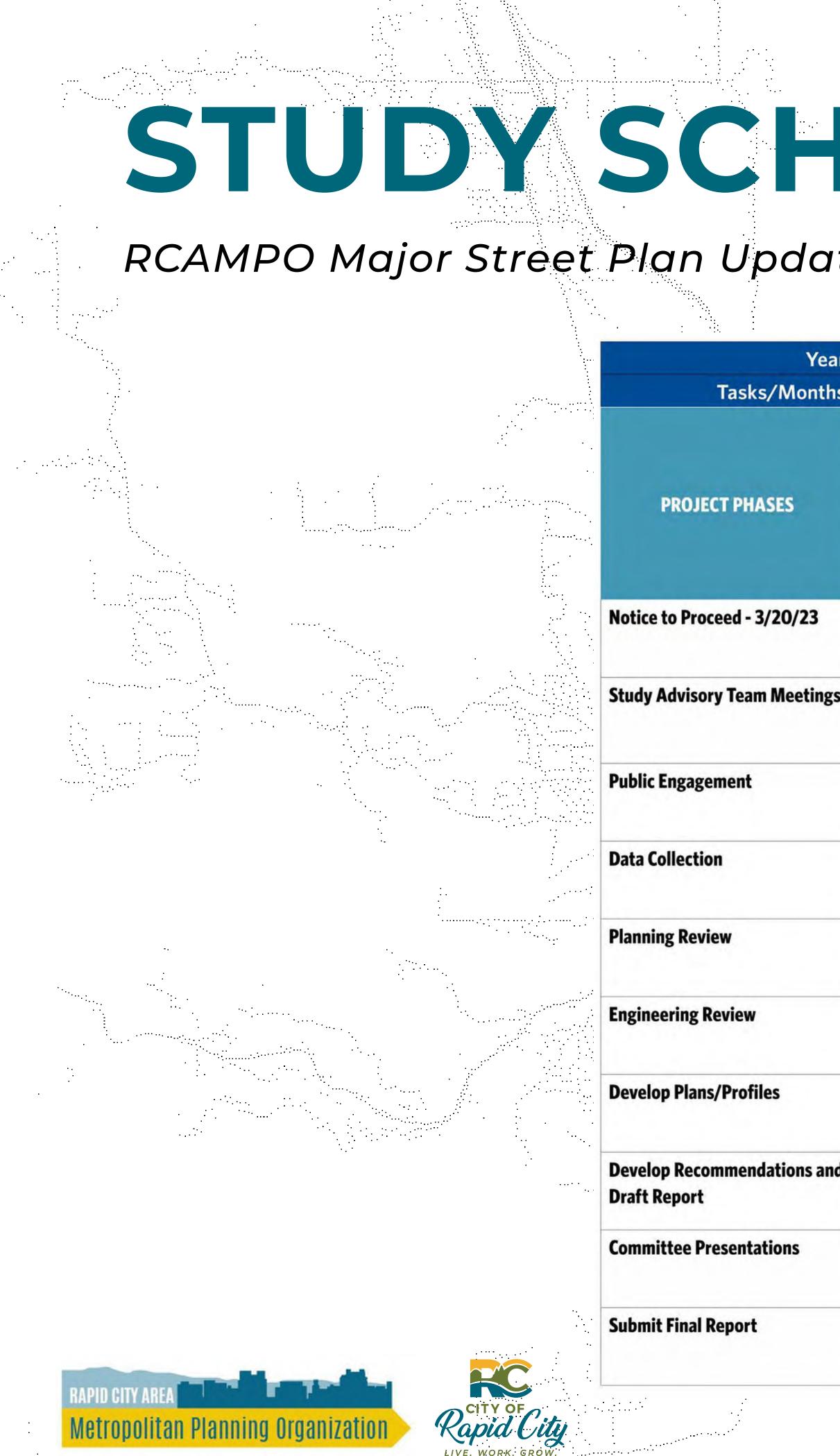
PRIMARY SCREENING

SECONDARY PLAN SCREENING

Growth Areas

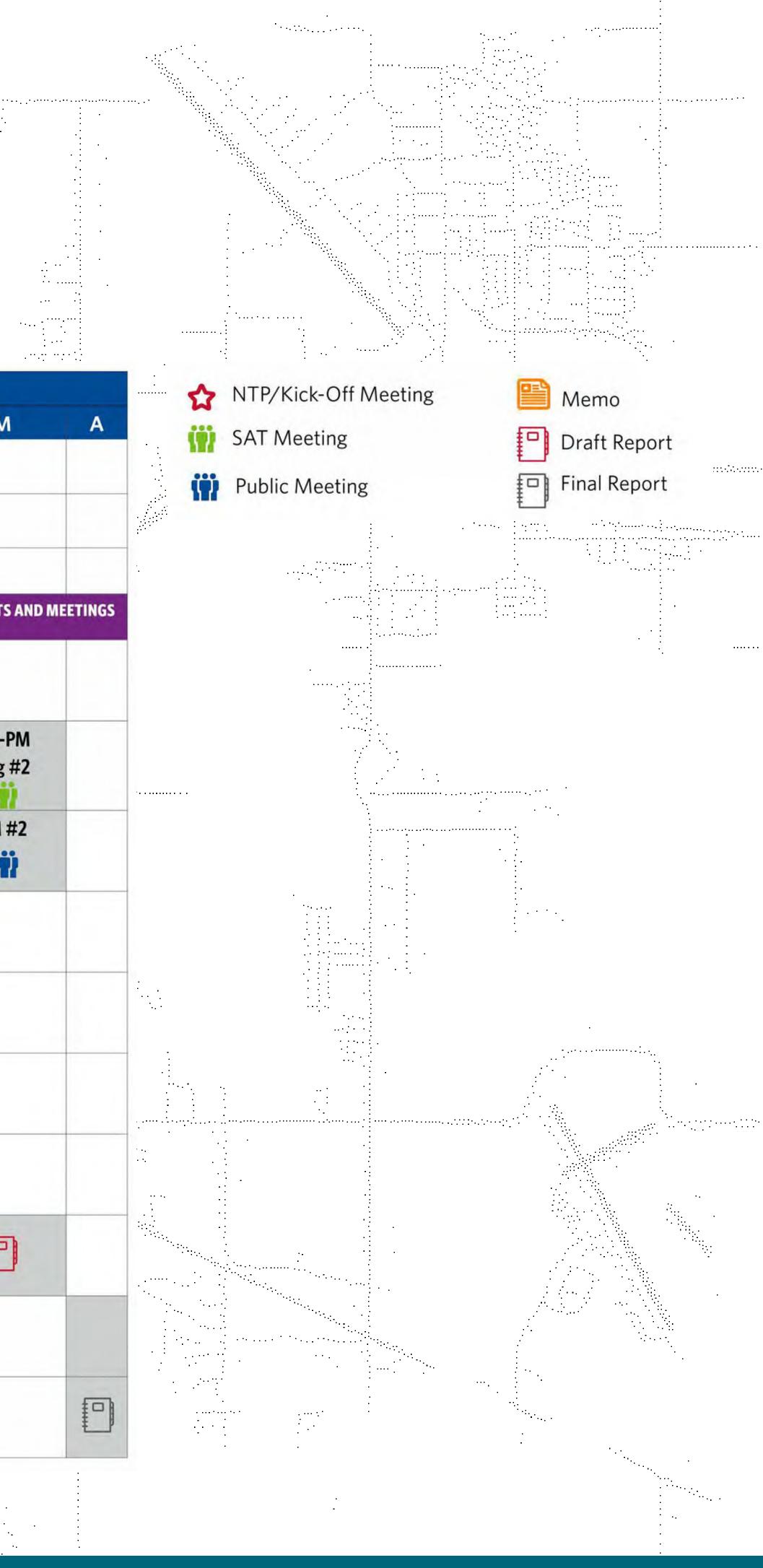


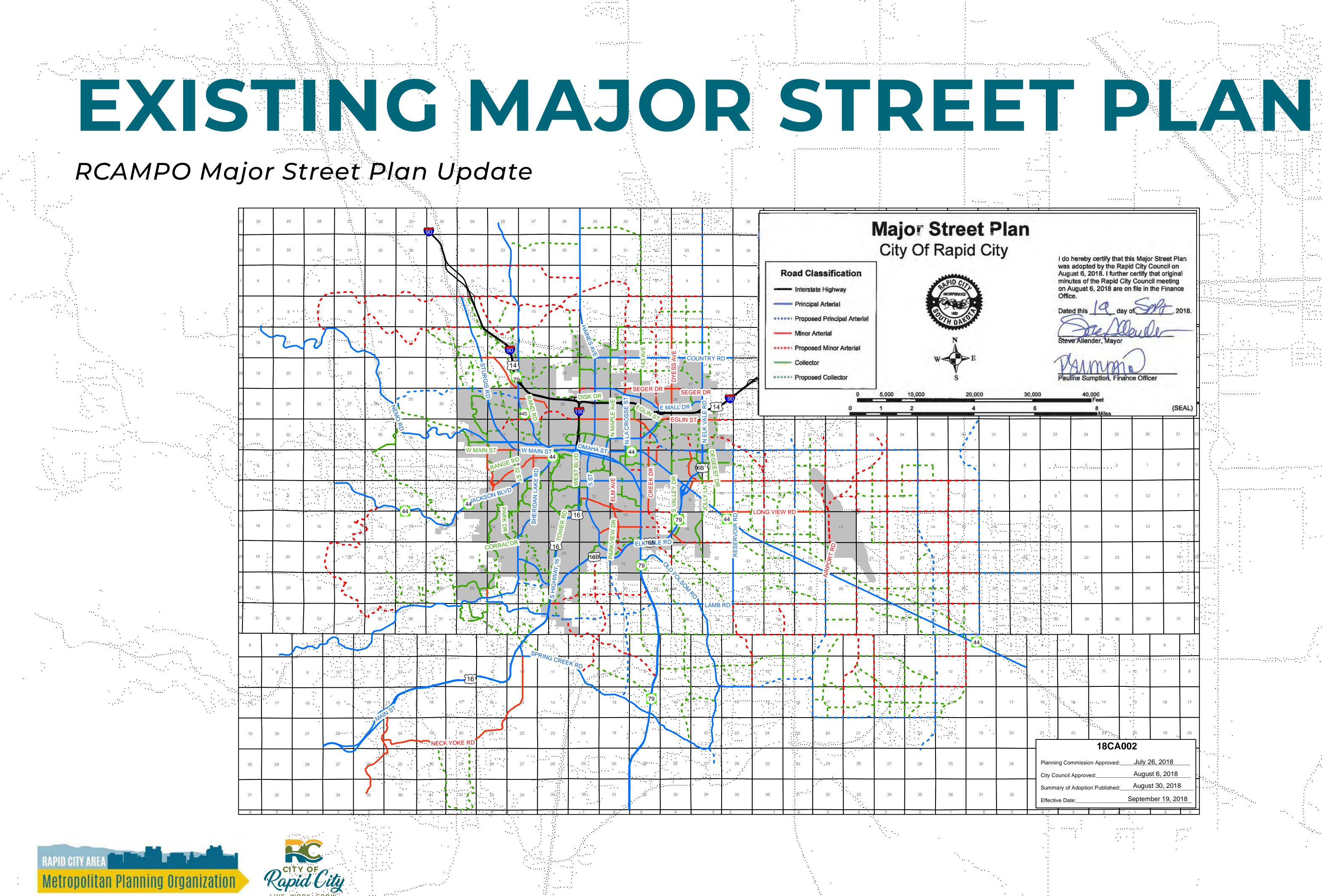




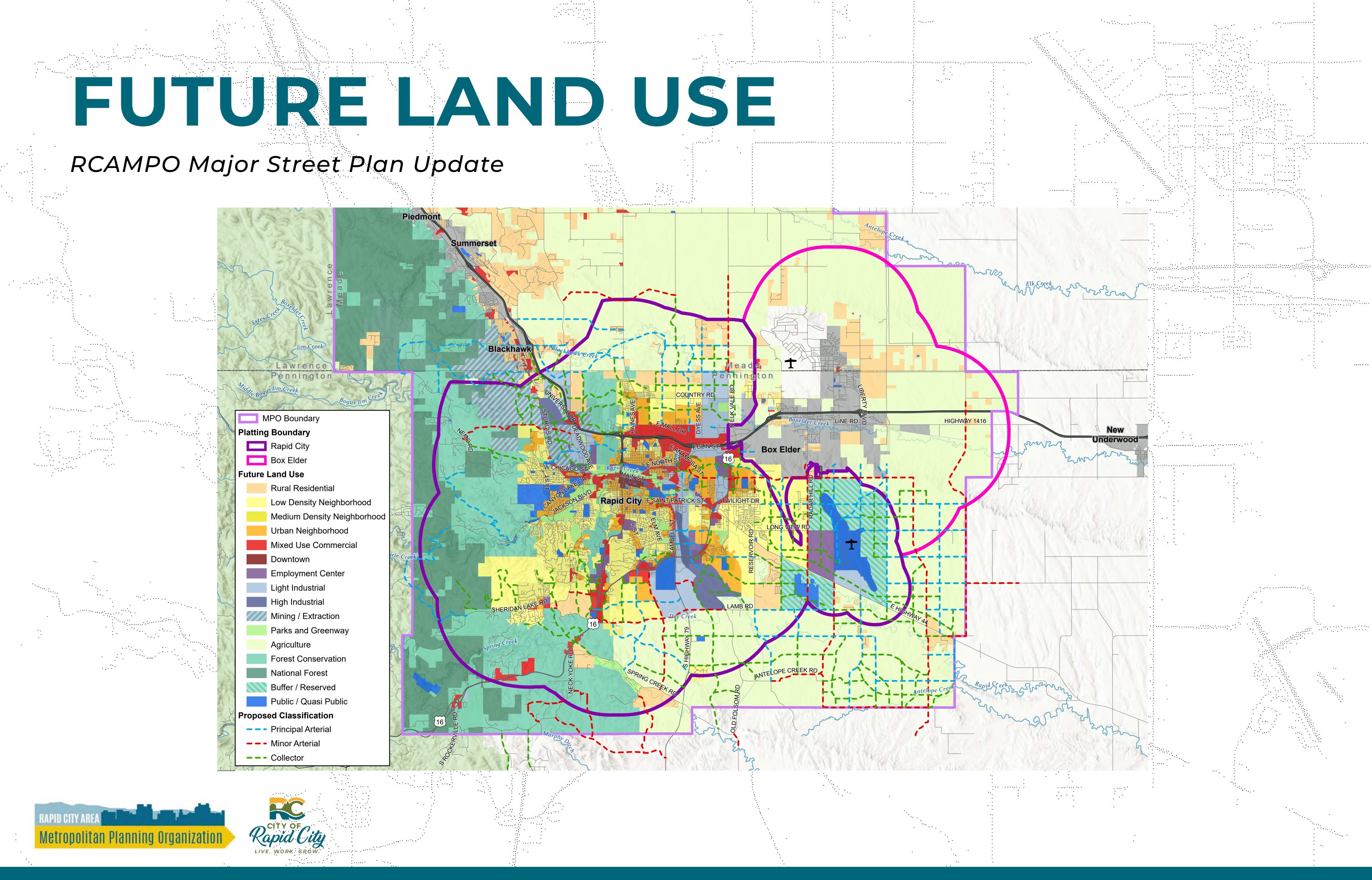
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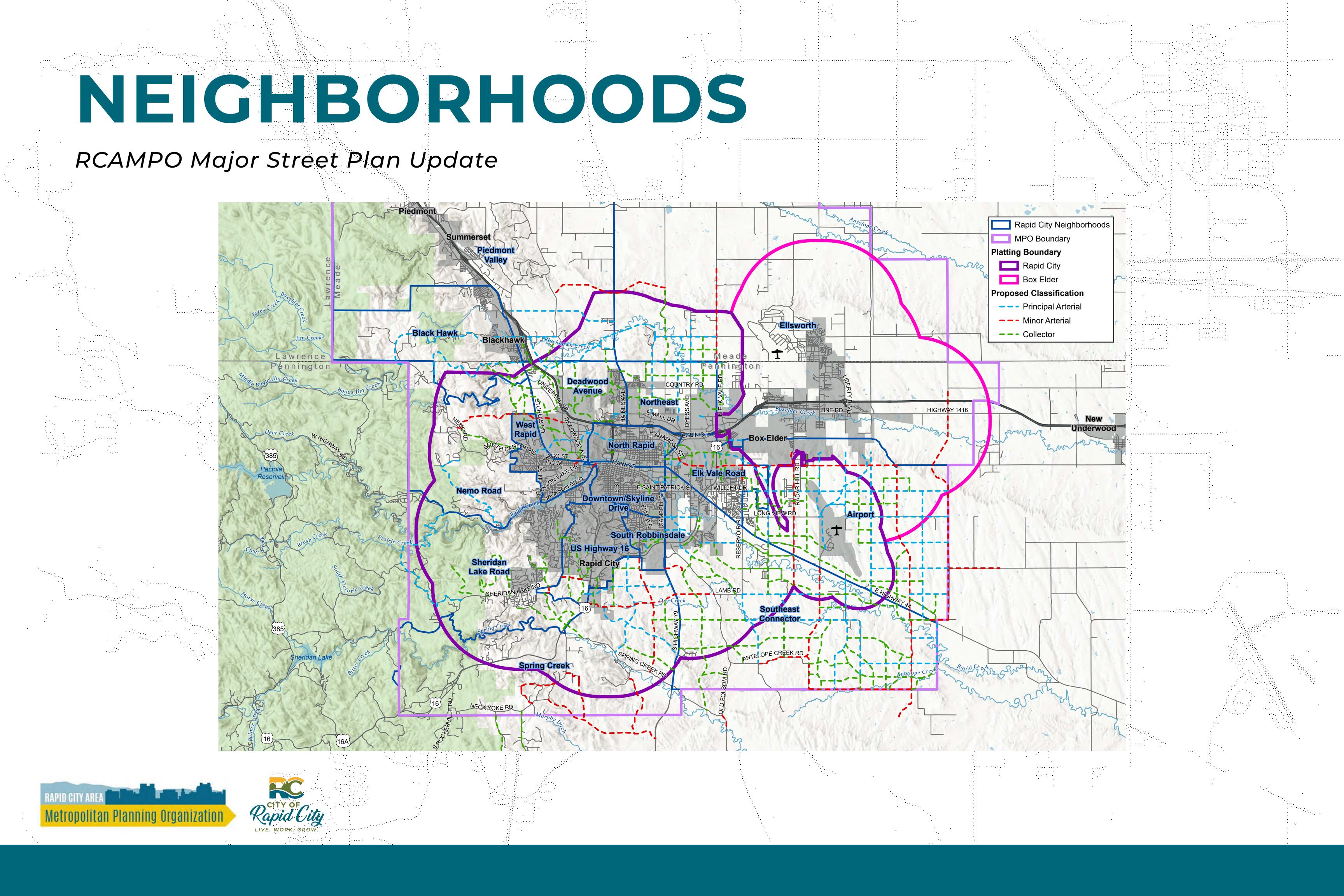
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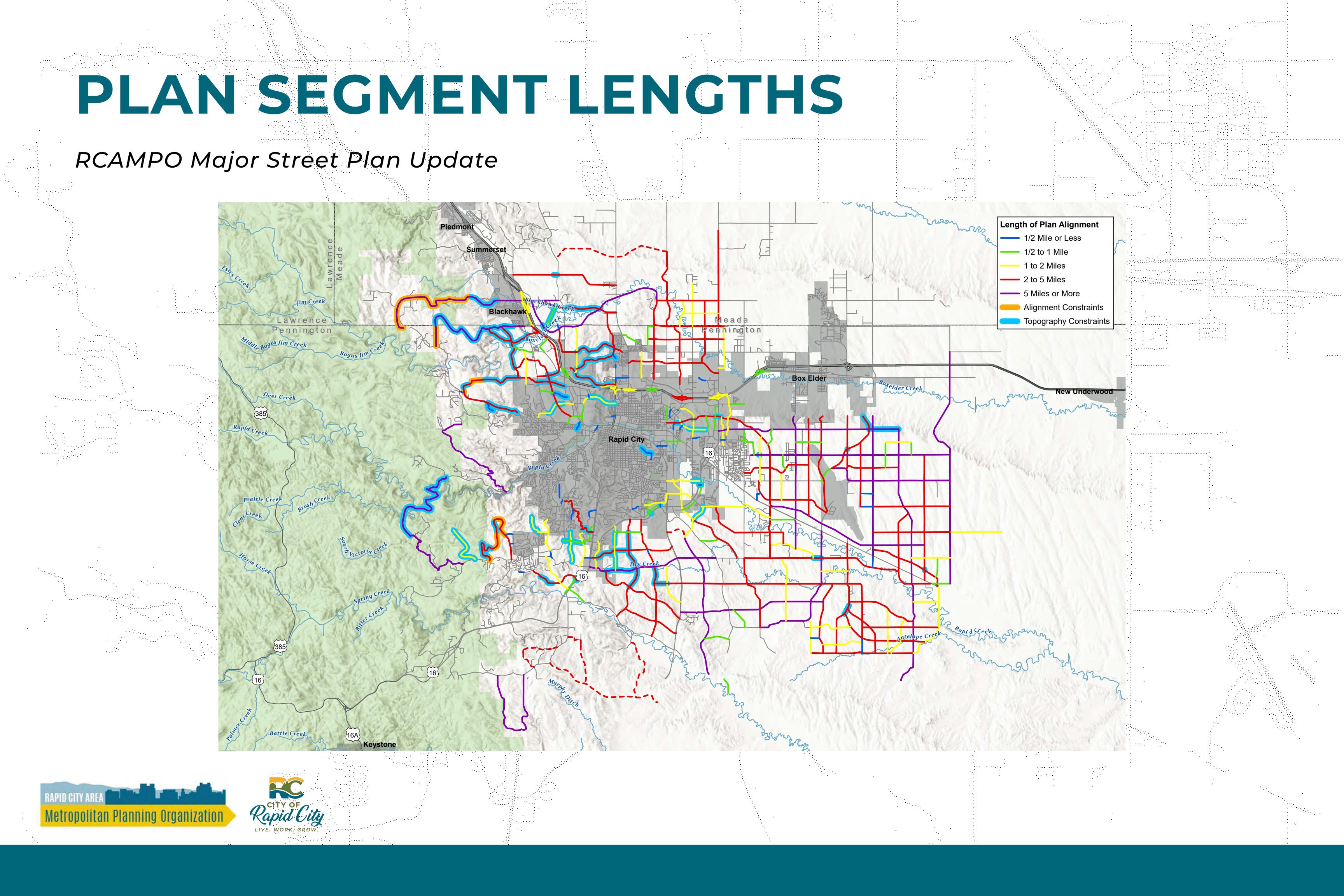


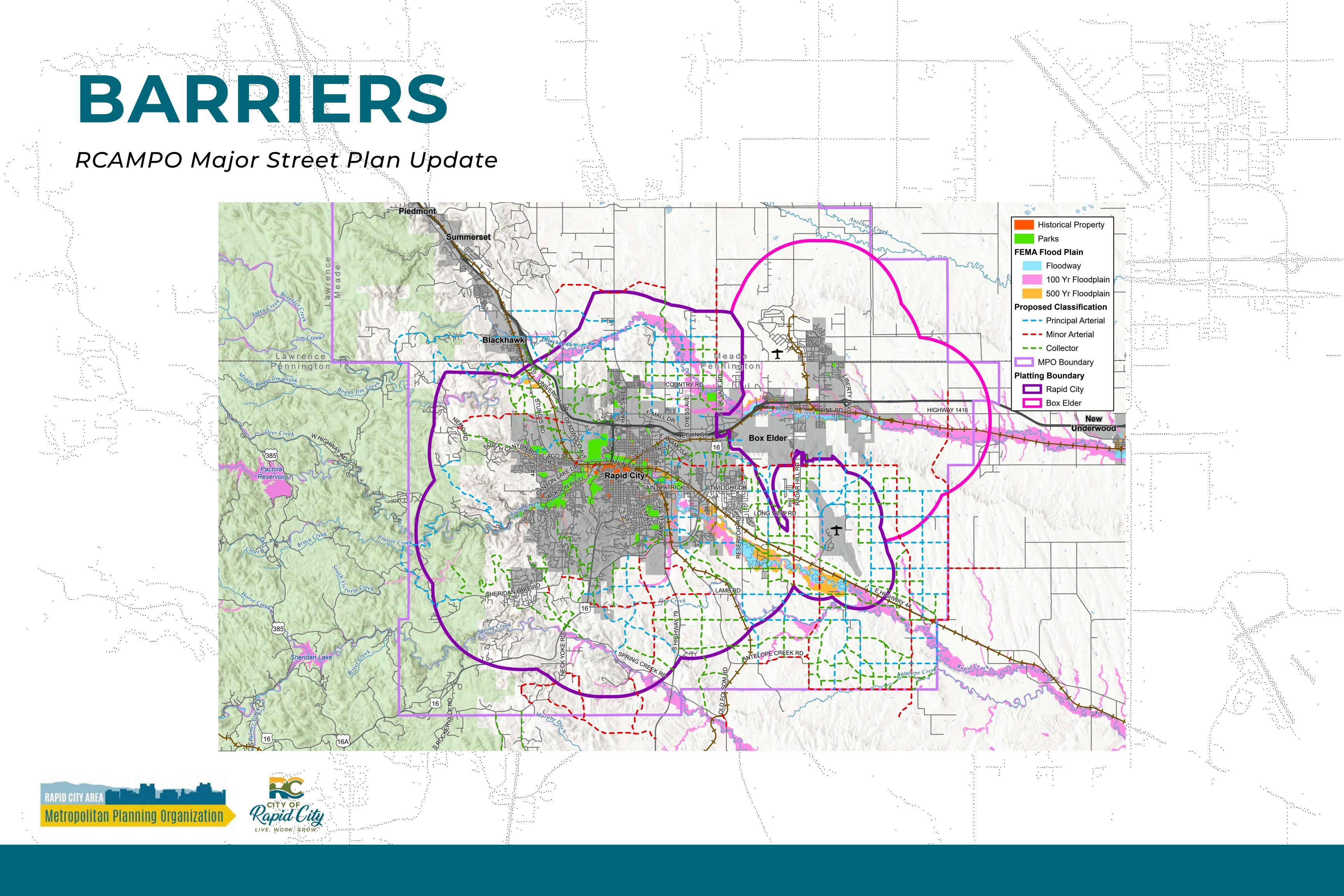


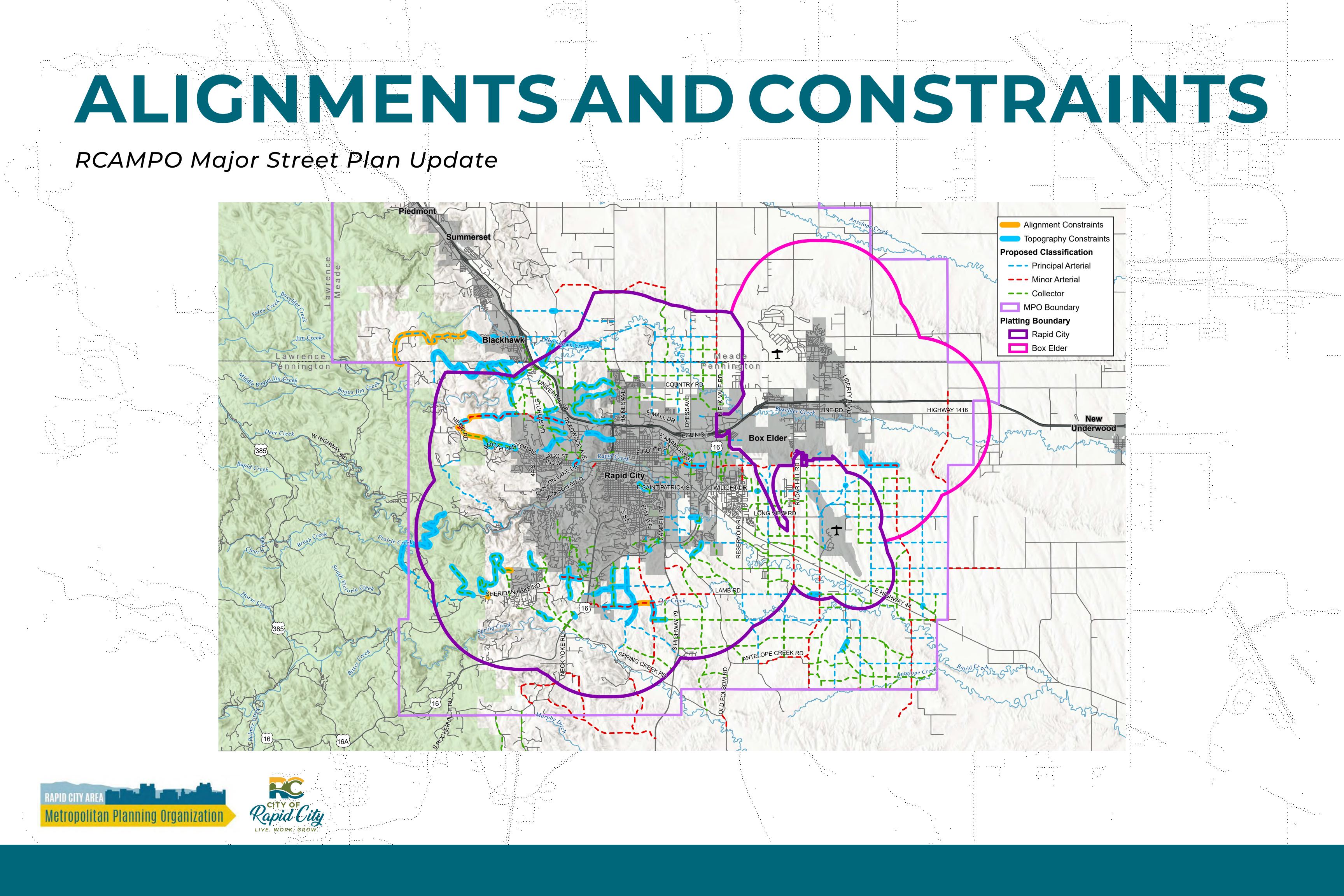
..... was adopted by the Rapid City Council on August 6, 2018. I further certify that original he Rapid City Council meeting , 2018 are on file in the Finance Dated this 19 day of Soft, 2018. Finance Officer . 18 22 23 27 30 25 35 12 16 20 21 18CA002 July 26, 2018 Planning Commission Approved:____ August 6, 2018 City Council Approved August 30, 2018 Summary of Adoption Published:___ September 19, 2018 Effective Date •••••

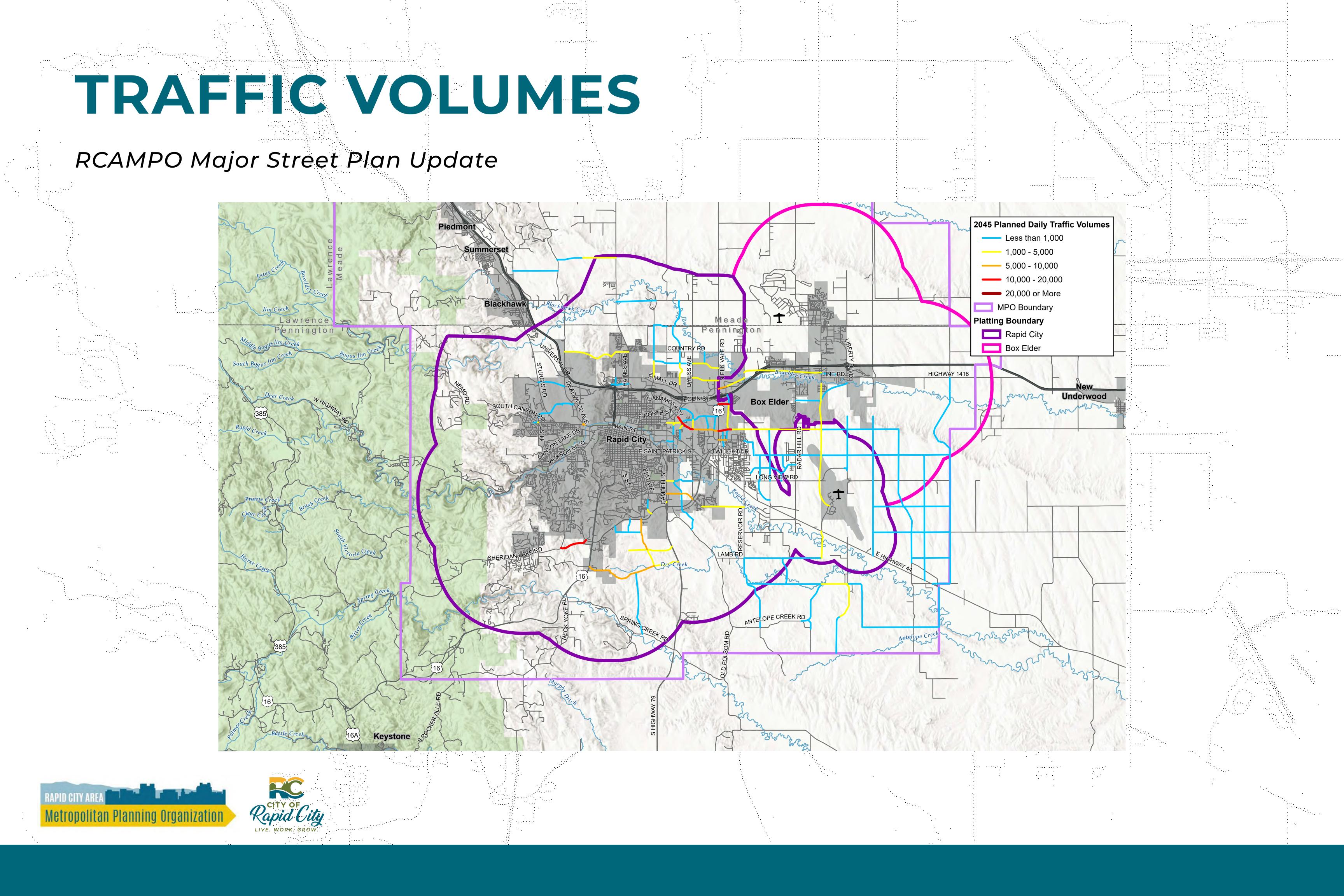


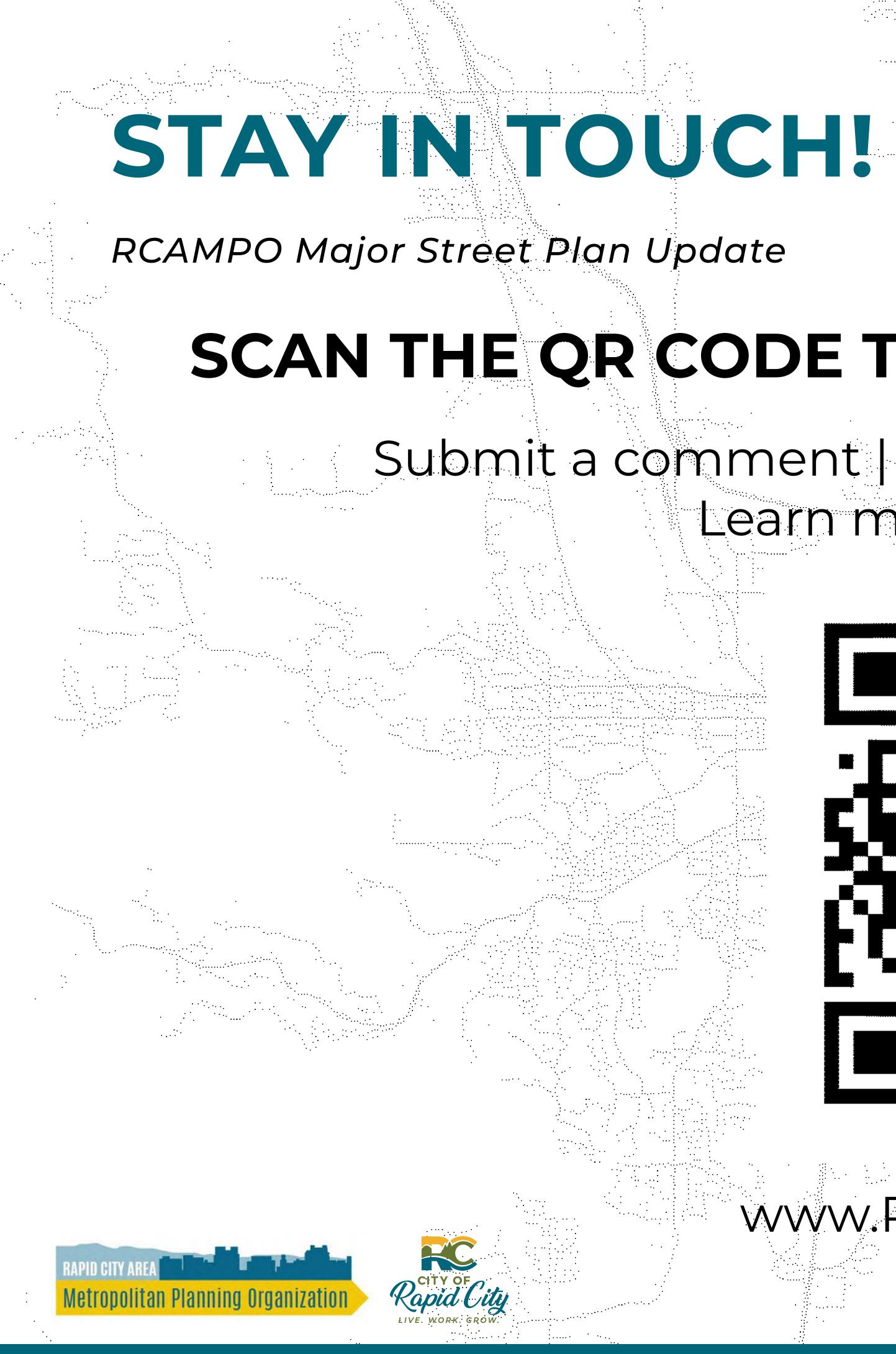












SCAN THE QR CODE TO VISIT THE PROJECT WEBSITE! Submit a comment | View and share meeting materials Learn more about the project









Public Meeting -Open House No. 2 Meeting Summary

May 28, 2024

Rapid City Area MPO Major Street Plan Analysis and Update

Table of Contents

Public Meeting/Open House No. 2 Overview						
Meeting Details	2					
Project Website	2					
Written Comments	3					
Appendix A – Sign-in Sheets						
Appendix B – Scanned Comment Cards/Emails/Maps-Markers Summary						
Appendix C - Presentation						
Appendix D - Meeting Displays						

Public Meeting/Open House No. 2 Overview

Meeting Details

Date:	Thursday, May 28, 2024	
Time:	4 PM to 6 PM	
Location:	Rapid City Council Chambers & Community Room, City Hal	
	300 6 th Street, Rapid City, SD 57701	

Advertisements: Rapid City Journal (5/21/24), Native Sun News (5/22/24), project website, MPO website, and Facebook post. Additionally, a meeting invitation was emailed to RCAMPO Stakeholders.

The project team hosted a public meeting/open house for the Rapid City Area MPO Major Street Plan Analysis and Update to present an overview of the project and gather feedback from the public and stakeholders. Approximately 16 attendees signed in for the meeting, including members of the consultant team, city staff, and SDDOT staff. An attendance sheet for the public meeting/open house can be found in Appendix A. A brief presentation was provided on rolling video loop in the Community Room to present the details and scope of the project and review the meeting materials. A copy of the presentation is included in Appendix C. Following the presentation attendees were asked to enter the City Council Chambers for an interactive maps and markers exercise to gain public feedback on the existing Major Street Plan and future Major Street Plan needs. Comments from the public could be provided in multiple forms including submission of a provided comment form, notes attached to the maps/markers exercise, email, or via the project website. Written comments received via comment cards, emails, and website submissions are noted in the Written Comments section of the meeting summary. Notes/suggestions provided via the maps/markers exercise have been consolidated and summarized in a table for reference.

Project Website

www.RCmajorstreets.com

All the meeting materials, including the presentation, were placed on the project website for those who were unable to attend the in-person meeting/open house to review at their leisure. A total of four presentation video views were recorded on the project website.

Comments

The written comment period associated with Public Meeting/Open House No. 2 began the evening of the meeting/open house and lasted through June 14, 2024. No comment cards have been received at this time.

Con	Comment			
I loo	I look forward to being updated on what is happening now			
and	and what is planned for the future. We use streets everyday			
and	it is frustrating to not see repairs in side streets,			
resid	dential areas, ALL of the attention seems to be on major			
stree	streets all of the time!			
*Res	*Response Sent 6/12/24			
This	is a very detailed "plan" but i would like to see more			
infor	information on how this "plan" will be executed. Like so			
man	many other plans and traffic studies in Rapid City we get this			
very	nice picture of what the city can become but like other			
"pla	ns" it never seems to come to reality. I would like to see			
am	ore comprehensive plan on timeline and cost and stick			
with	with it so we can see this done and improve our			
tran	transportation movement across town.			
*Res	sponse Sent 6/12/24			
	sure who I address this email to, but will there be another			
publ	ic meeting to discuss the road plan?			
We	own a home at 7711 Bittersweet Rd and the road plan has a			
Road	connecting Bittersweet Rd to Sun Ridge rd and crosses			
dire	ctly across our property.			
I tall	I talked with Kip Harrington with the city a few years ago and he			
said	said this road could not cross our property without our			
арри	oval. Is that correct?			
	nk you and looking to speaking with someone in regards to			
	the road plan.			
	sponse Sent 6/12/24			
	ere are the funds coming from to pay for these road			
	ansion projects?			
	sponse Sent 6/12/24			
	1. I commend the interagency cooperation and			
	encourage it to continue.			
	2. I also suggest the plan be reviewed and affirmed			
	every 2 to 3 years as still relevant to plunse budgets.			
	3. I recognize the 40 Top Projects as reasonable, but I			
	do not understand why the full extension of Anamoa			
	continuing from Elk Vale to the terminus at Diamond			
	Ridge Road is not part of the Eastern Growth Area			
	Project 1. It's need and ability to serve is obvious. Is it			
	impractical to build? I believe the prospect if a school			
	north of Anamosa forsees this roadway at a minimum			
	to be rated a collector if not arterial street.			

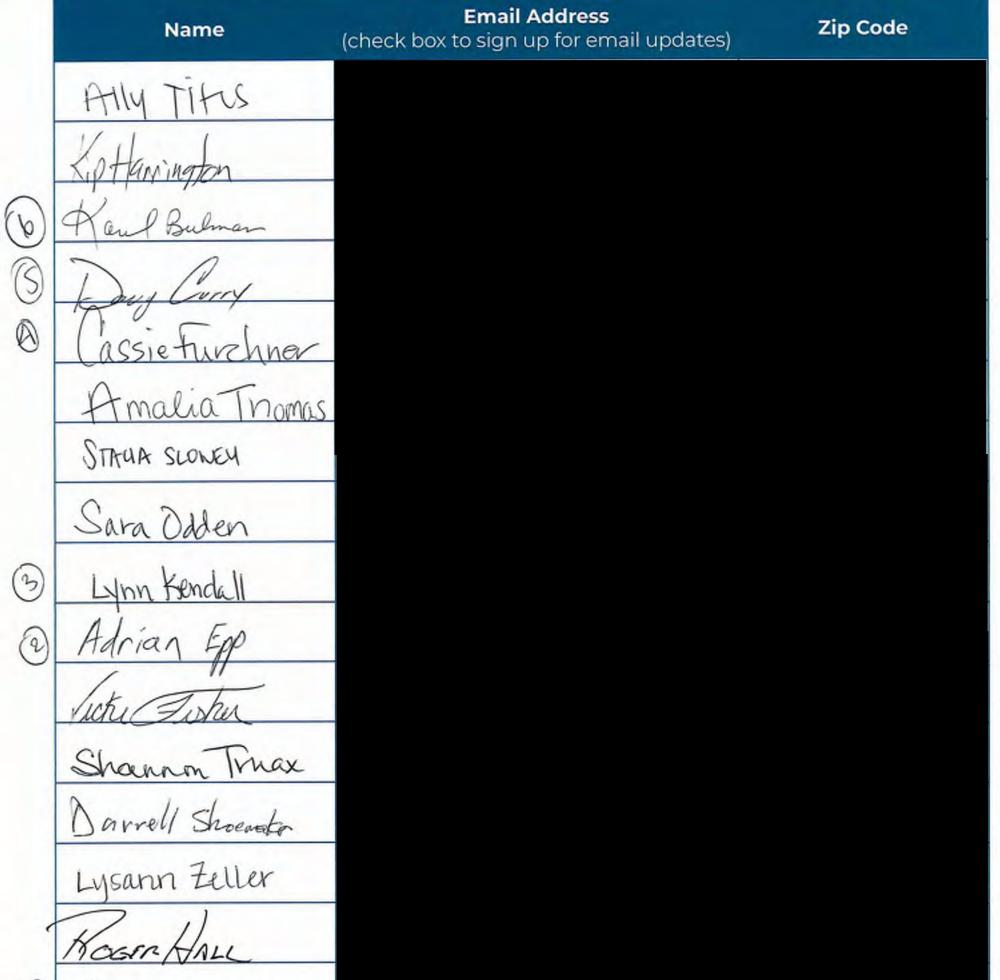
4. Eventually north/south traffic on Concourse will also bring substantial flows to an intersection with	
Anamosa heading East and West. Has to be likely in	
next 10 years.	
Reporting the proposed road between West Blvd area	
(Anamosa) and the bypass of the gap road (West Main). We	
believe that this road would reduce the heavy traffic through	
the gap (downtown area) by about 10%. We own more than	
50% of the land for the road from the Comer of Harmony Hts	;
lane and south plaza blvd. Most of the balance is owned by	
Hanson-Larsen and they have said that they will not oppose	
the road being built.	
Creek Drive is labeled as a Minor Arterial on the Major Stree	t
Plan. As shown in the attached Exhibit (Rapid Map) nearby	
to the west (approx. 1,228 ft) is a Principal Arterials, N.	
Cambell street and to the east (approx. 1,265 ft) is a Minor	
Arterial, Mickelson Drive. The need for this street to be a	
Minor Arterial is not warranted with the current street	
connections that exist. As the development of this area is	
occurring, the need for Creek Drive does not exist as this wil	L
become a Mobile Home Park which will access from E.	
Philadelphia Street. The current proposed draft of this street	
section adversely affects this property, rendering it unusable	
and dividing it in half.	

Appendix A – Sign-in Sheets

PLEASE SIGN IN!

RCAMPO Major Street Plan Update

Date: 5/28/24



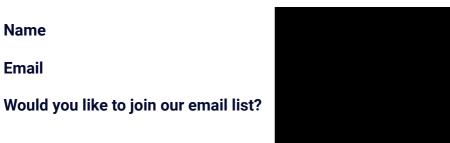
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*KOTA NEWS - 9410 pmx

Appendix B – Scanned Comment Cards/Emails



Comment

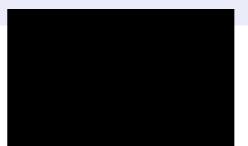
I look forward to being updated on what is happening now and what is planned for the future. We use streets everyday and it is frustrating to not see repairs in side streets, residential areas,. ALL of the attention seems to be on major streets all of the time!

Name

Email

Comment

This is a very detailed "plan" but i would like to see more information on how this "plan" will be executed. Like so many other plans and traffic studies in Rapid City we get this very nice picture of what the city can become but like other "plans" it never seems to come to reality. I would like to see a more comprehensive plan on timeline and cost and stick with it so we can see this done and improve our transportation movement across town.





[You don't often get email from contact@rcmajorstreets.com. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.



Hello there,

Not sure who I address this email to, but will there be another public meeting to discuss the road plan?

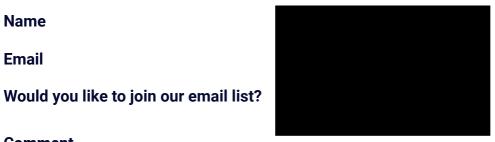
We own a home at **an experimental and** and the road plan has a Road connecting Bittersweet Rd to Sun Ridge rd and crosses directly across our property.

I talked with Kip Harrington with the city a few years ago and he said this road could not cross our property without our approval. Is that correct?

Thank you and looking to speaking with someone in regards to the road plan.

66 [1] PDF Document · 13.2 MB [1]

Sent from my iPhone



Comment

Where are the funds coming from to pay for these road expansion projects?

COMMENT FORM

RCAMPO Street Plan Update

Please take a moment to fill out this comment form so our project team can better understand your questions and concerns.

I commend the interage pin cooperation & encourage if to c Comment: ¹ suggest the Plan be reviewed + affirmed every 2 to 3 years as still 40 Top Projects as reasonablere coanize but not extension of Anamosa continuira Va Fustern is not Our Grow 19 Serve ADVIDUS. rf nt. Anamosa School Arospict north a minimum to be rated a collector it not as roadwan



Please leave this card with a **project team member** today or mail in by **Friday, June 14, 2024: RCAMPO Major Street Plan** c/o HDR 703 Main Street #200

Rapid City, SD 57701



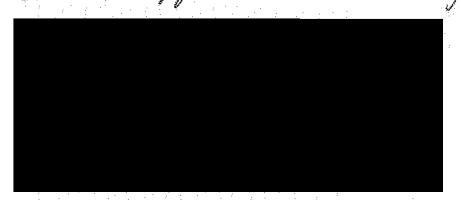
www.RCmajorstreets.com

rentually north/south traffic a Concourse will also bring substantial flows to an intersection with Anamosa hundring East a west. Has to be likely in next 10 years.

COMMENT FORM RCAMPO Street Plan Update

Please take a moment to fill out this comment form so our project team can better understand your questions and concerns.

comment: Real of my, the proposed vood between the west Blud Mel And MOD and the by plass of the 4 up v and (west main) we ter jere (hot this vood would very the heavy traffic through the only (downtown wea) by about 10% we own nove from 50% of method, for the v and from the Comment of the non this fore and south plaza Blud, most of the balance is owned by flow son - for and had had be most in all not appose the vood being built



Please leave this card with a **project team member** today or mail in by **Friday, June 14, 2024: RCAMPO Major Street Plan** c/o HDR 703 Main Street #200 Rapid City, SD 57701



www.RCmajorstreets.com

June 14, 2024

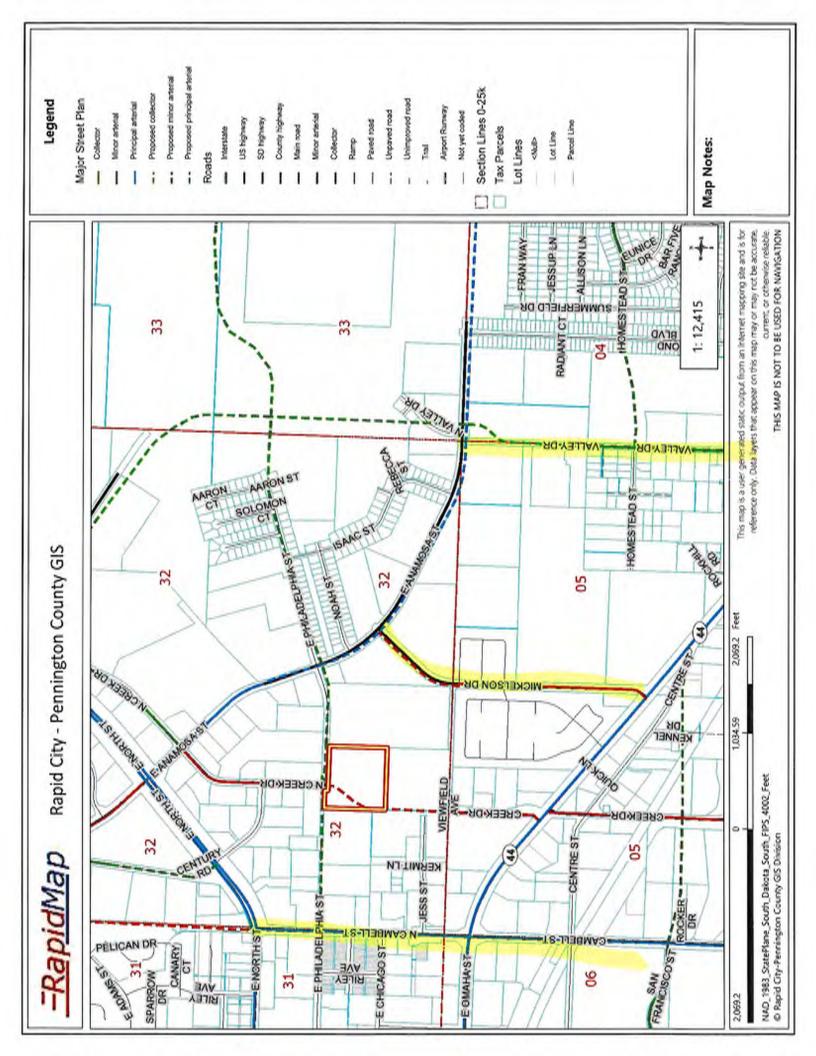
City of Rapid City Dept. of Community Development Attn. Kip Harrington 300 6th Street Rapid City, SD 57701

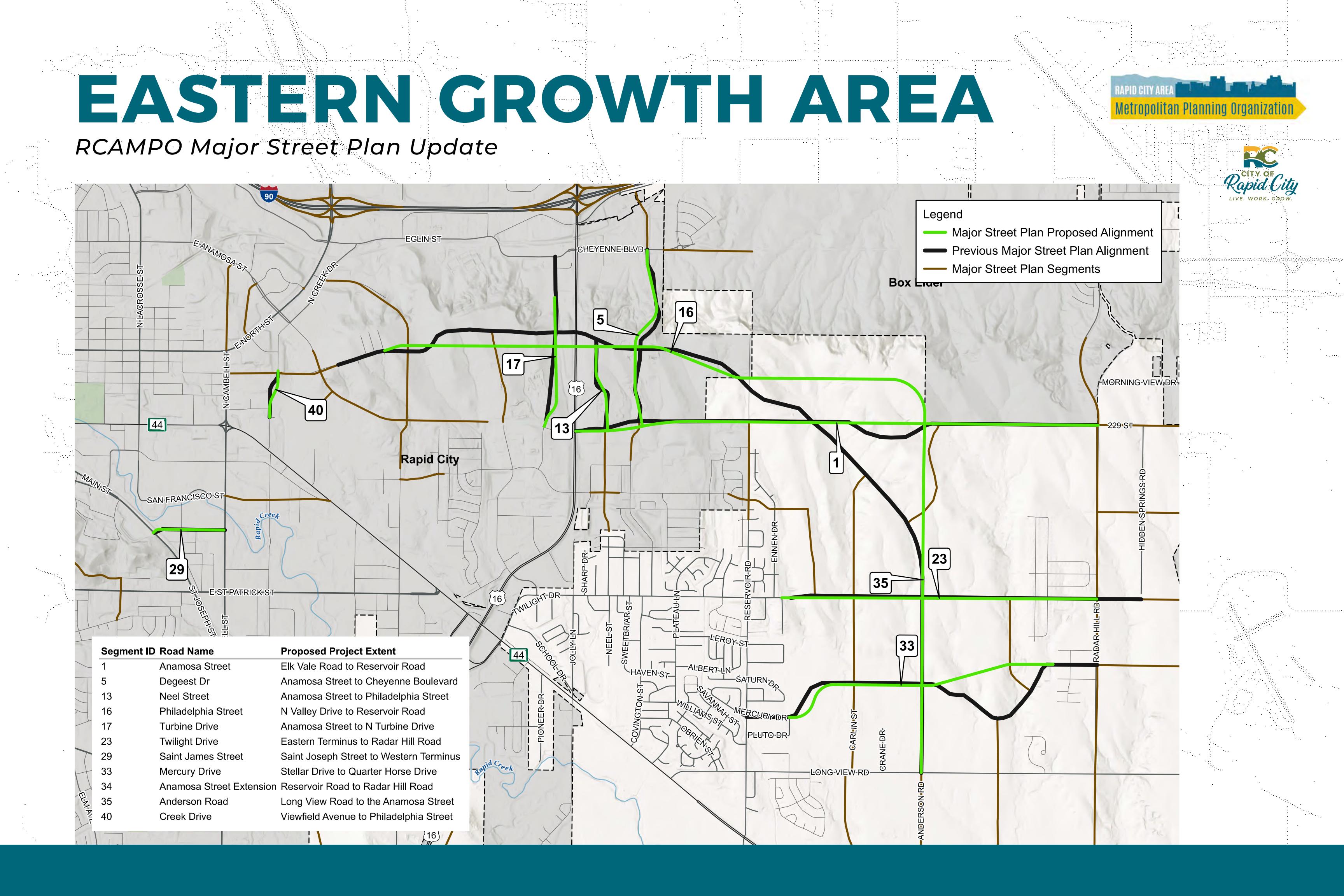
RE: Creek Drive Proposed on the Major Street Plan Property Tax ID 39340; Segment ID: 40

Creek Drive is labeled as a Minor Arterial on the Major Street Plan. As shown in the attached Exhibit (Rapid Map) nearby to the west (approx. 1,228 ft) is a Principal Arterial, N. Cambell Street and to the east (approx. 1,265 ft) is a Minor Arterial, Mickelson Drive. The need for this street to be a Minor Arterial is not warranted with the current street connections that exist. As the development of this area is occurring, the need for Creek Drive does not exist as this will become a Mobile Home Park which will access from E. Philadelphia Street. The current proposed draft of this street section adversely affects this property, rendering it unusable and dividing it in half.

We look forward to hearing from your team on this.







Appendix C – Presentation

Rapid City Area MPO Major Street Plan Analysis & Update Public Meeting #2 May 28, 2024



Goals of Meeting



Provide Update on Project and Present Initial Recommendations



Solicit Feedback on Conceptual Alignments

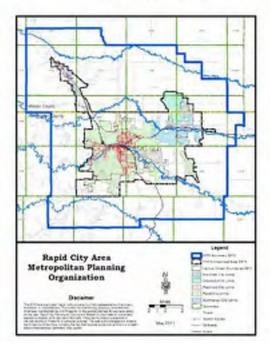


Continued Public Involvement



What is RCAMPO?

RCAMPO Area



- Rapid City
- Boxelder
- Summerset
- Piedmont
- · Pennington County
- Meade County
- Black Hawk
- Rapid Valley

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Provides a comprehensive and cooperative program of transportation planning in the Rapid City metropolitan area.



Project Background Information

- Initial Rapid City Major Street Plan (MSP) developed and adopted in 1990.
- Many alignments have become dated due to changes in land use, development, and construction projects.
- A cursory review was completed as part of the 2020 RCAMPO Metropolitan Transportation Plan.
- This project expanded on prior process and developed conceptual alignments for selected corridors.
- A public meeting was held in the summer of 2023 to assist in the prioritization process to select 40 segments to further study and develop conceptual alignments.



Goals of Major Street Plan Update and Project Process

- Review existing Major Street Plan.
- Prioritize 40 roadway segments to focus analysis on.
 - Add new potential connections during review process.
- Complete further analysis and alignment development for the top 40 segments identified in the prioritization process.
- Package analysis into a finalized plan for developers and the municipalities to reference in the future.



Major Streets

Major Streets Are:

- Streets that move large amounts of traffic between interstates, highways or destinations.
- Busy roads with traffic signals, turn lanes, shared-use paths, etc.
- ✓ Well-maintained.
- ✓ Qualified to serve as emergency routes.
- Prioritized during snow removal operations.
- Connections that improve flow of traffic through the city.

Major Streets Aren't:

X Local neighborhood streets.

X Industrial or commercial roads.

X Dead-end roads.

X Dirt or unmaintained roads.

Examples:

- Anamosa Street
- 5th Street
- Saint Joseph Street
- Fairmont Boulevard



MSP Analysis Approach

PROPOSED PRIORITIZATION PROCESS



PRIMARY
SCREENINGSECONDARY
SCREENINGPLAN
DEVELOPMENTFINAL
DOCUMENTSGrowth AreasCritical CriteriaIdeal-Fit AlignmentsRecommendation



Data Sources and Methodology

Data Sources:

RCAMPO Travel Demand Model (TDM)

- Household, employment growth areas
- Forecasted 2045 traffic volumes

Existing daily traffic volumes

Topographic constraints

Alignment/barrier constraints

Runway protection zones

- Ellsworth Air Force Base
- Rapid City Regional Airport



Prioritization Results

MPO, local jurisdiction staff, and the public identified key MSP segments.

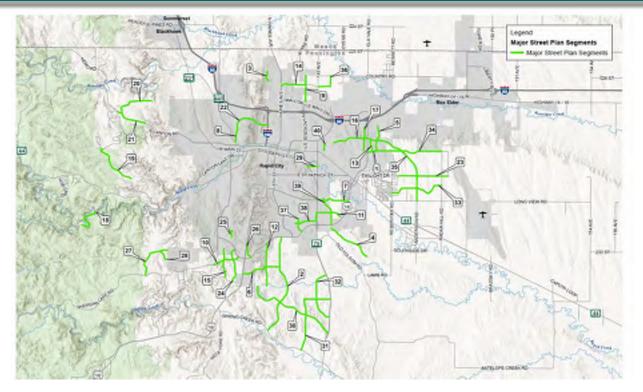
- · 26 segments identified for concept development
- 15 segments recommended for exclusion. Reasons for exclusion:
 - Existing or planned alignments already developed or considered.
 - Not likely to develop within planning horizon.
 - Planned to be constructed by others.

• 14 additional MSP segments identified through scoring analysis

• Based score/ranking with regard to location within high household and employment growth areas as well as constraints.



MSP Prioritization Results





Alignment/Concept Plan Development for Selected Segments

- Design Criteria used to develop concept segments (40):
 - Design speed
 - Grades
 - Curvature
 - Typical section
- Considered topography, existing development, environmental constraints, and identified special considerations.

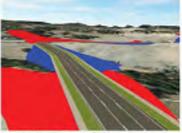
- Validated that proposed alignment can reasonably meet design criteria and is constructable.
- Identified segments which cannot reasonably achieve design criteria.
- Utilized 2023 City LiDAR data as baseline topography surface.



Example Concept Segment Overview

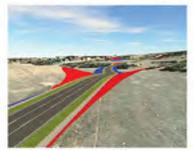
Muirfield Drive Western Terminus to Prestwick Rd

Classification: Collector Corridor Length: 3,100 FT Estimated Quantities Road Surface: 11,023 SY Earthwork Cut (Red): 31,831 CY Earthwork Fill (Blue): 67,057 CY



Isometric looking West at station 31-00

Segment ID: 28

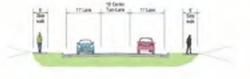


Isometric looking Southeast at station 2+00

Proposed Typical Section 3 Lane Collector



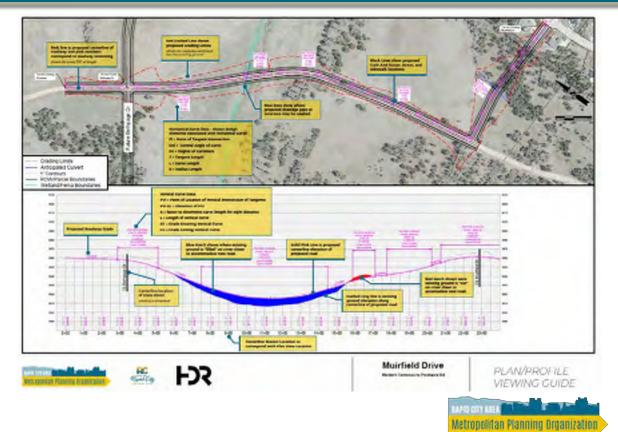
Segment Overview







Example Concept Segment Plan and Profile





Growth Areas

MPO Growth Areas Northern Growth Area Southern Growth Area Western Growth Area Eastern Growth Area

> Northern Growth Area-MPO Area north I-90

The MPO Area was segmented into

four growth areas.

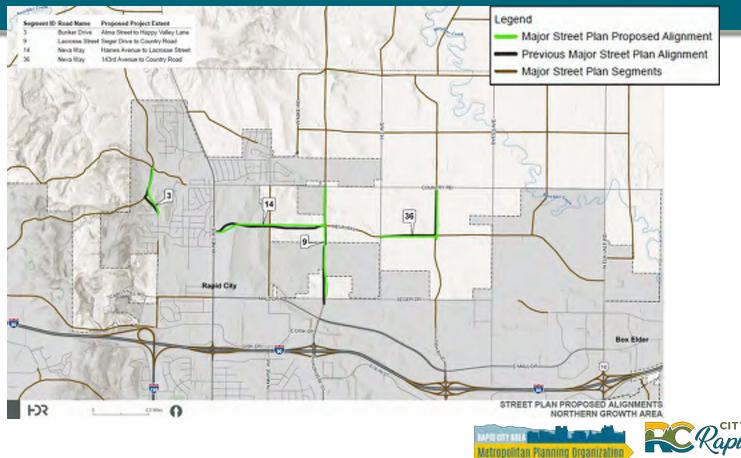
Western Growth Area-MPO Area south of I-90 and west of Mount Rushmore Road Southe south o betwee

Eastern Growth Area-

MPO Area north of Highway 44, east of Cambell Street

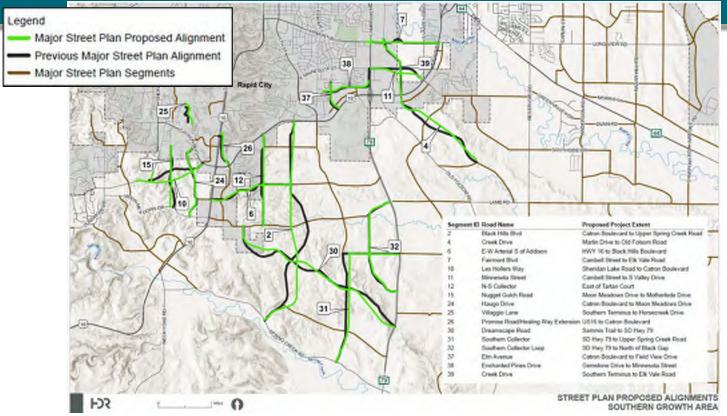
Southern Growth Area- MPO Area south of E Fairmont Boulevard, between Sheridan Lake Road and Highway 44

Major Streets – Northern Growth Area



LIVE. WORK. GROW.

Major Streets – Southern Growth Area



Netropelitan Fishning Diganization



Major Streets – Western Growth Area



LIVE. WORK. GROW.

Metropolitan Flanning Organization

Major Streets – Eastern Growth Area

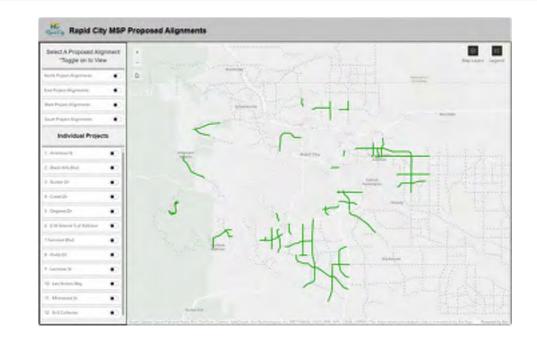


Rapid City

Metropolitan Flanning Organization

Conceptual Segment Viewing

- At the conclusion of the presentation please feel free to enter the City Council Chambers to view the conceptual roadway plan and profiles.
 - The segments are organized by growth areas in which they are located.
- You can also view the interactive map at the computer station for an aerial view of the proposed roadway alignment.





The Role of the Public

- Provide your thoughts on the conceptual plan and profiles which have been developed.
- Your input will be used in final refinements and completion of the study report.
- Provide your comments by using the provided comment forms, through the project website, or by emailing the project team.







Schedule/Next Steps



Receive comments on preliminary alignments through June 14, 2024.

Incorporate comments and complete DRAFT Study Report.

Present Draft Report/Recommendations to MPO Committees in June 2024.

Address MPO comments and finalize report and recommendations in July 2024.

Study is anticipated to be complete in August 2024.



Continue to Stay Involved!

Project Website:

www.RCmajorstreets.com.

- Online Comment Form
- MPO Social Media (Facebook)

Project Contact:

Dustin Hamilton – HDR (605) 791-6103 Dustin.Hamilton@hdrinc.com





Appendix D – Meeting Displays

RCAMPO Major Street Plan Update

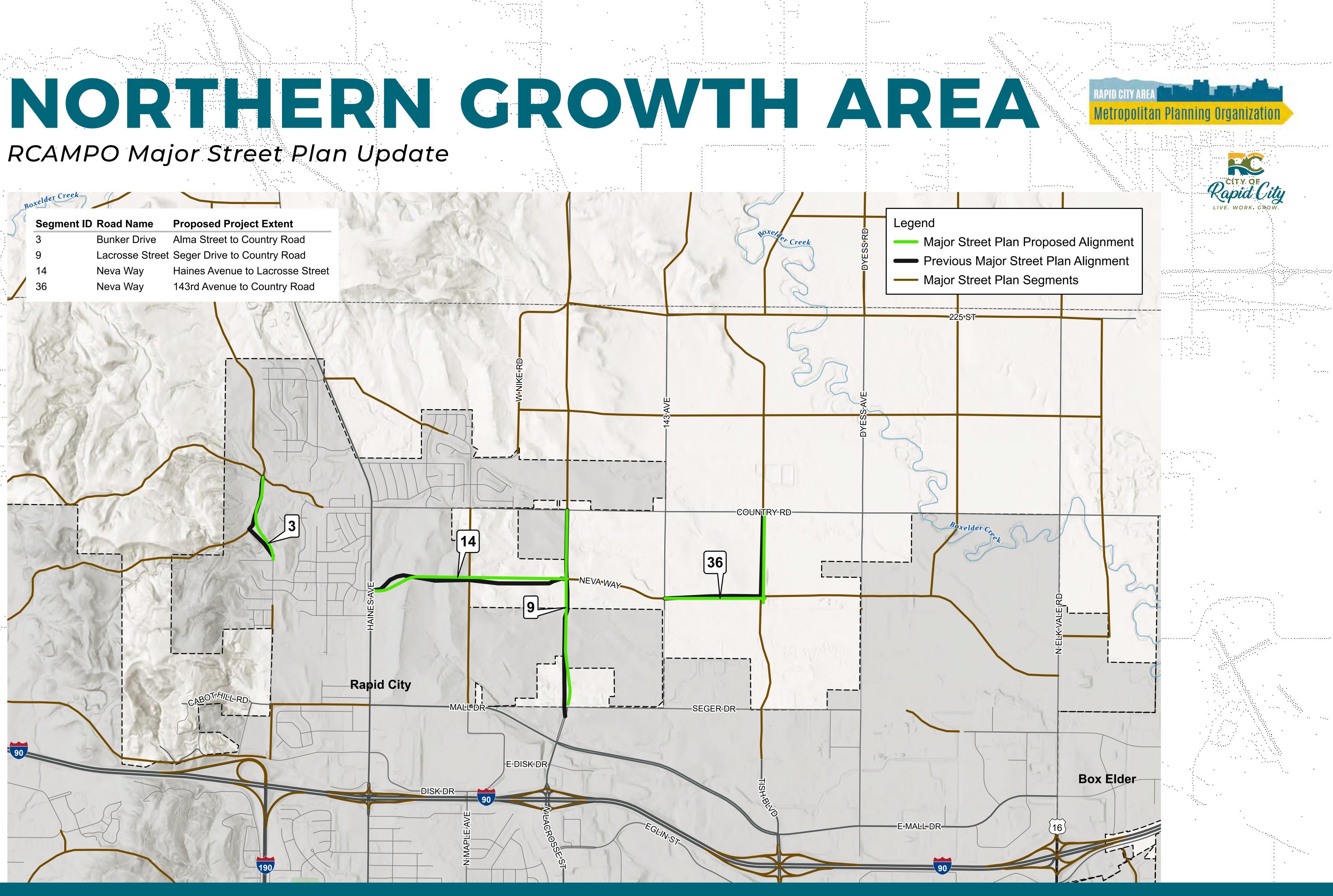
Segment ID	Road Name	Proposed Project Extent
3	Bunker Drive	Alma Street to Country Road
9	Lacrosse Street	Seger Drive to Country Road
14	Neva Way	Haines Avenue to Lacrosse Street
36	Neva Way	143rd Avenue to Country Road

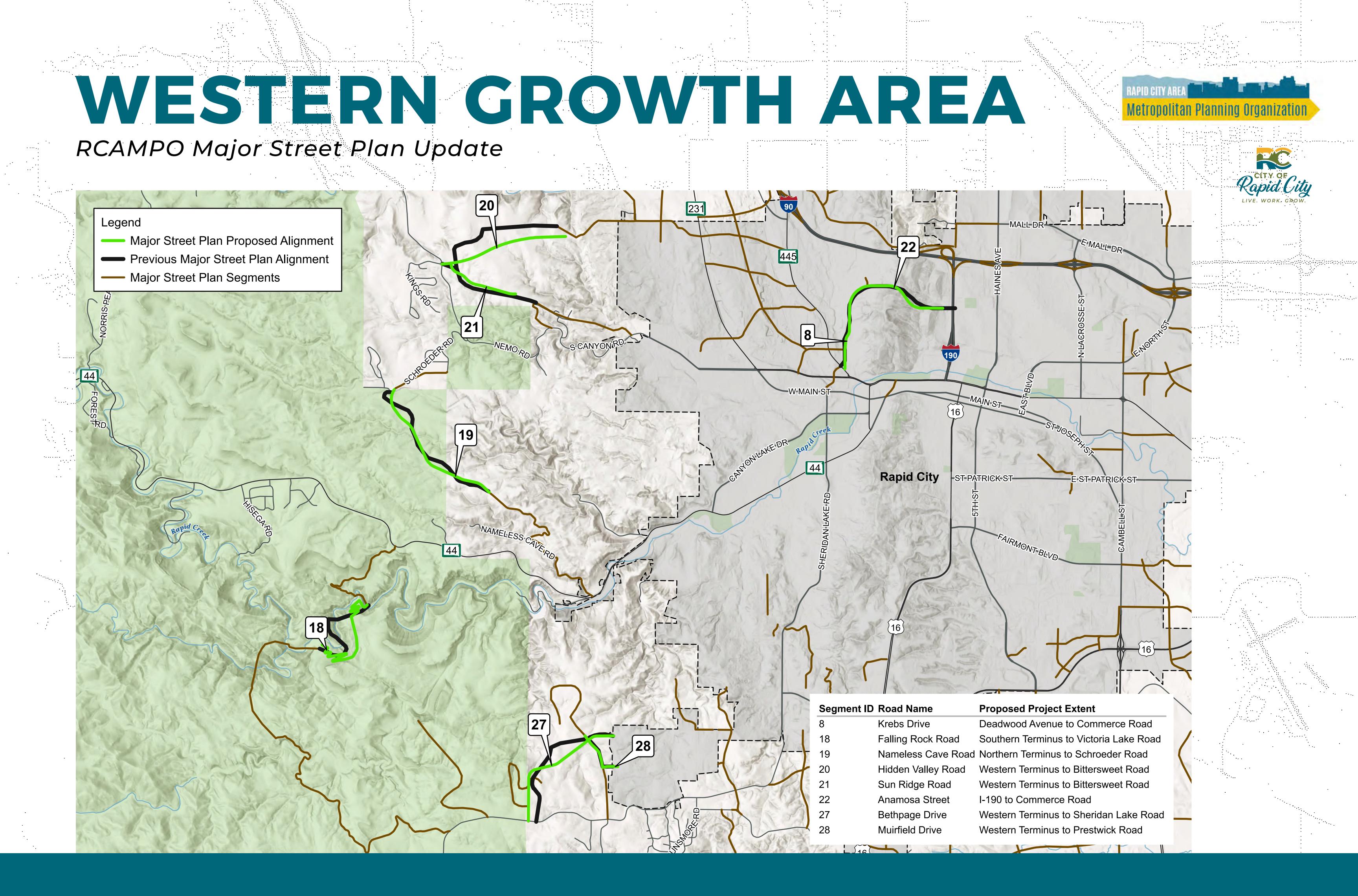
3

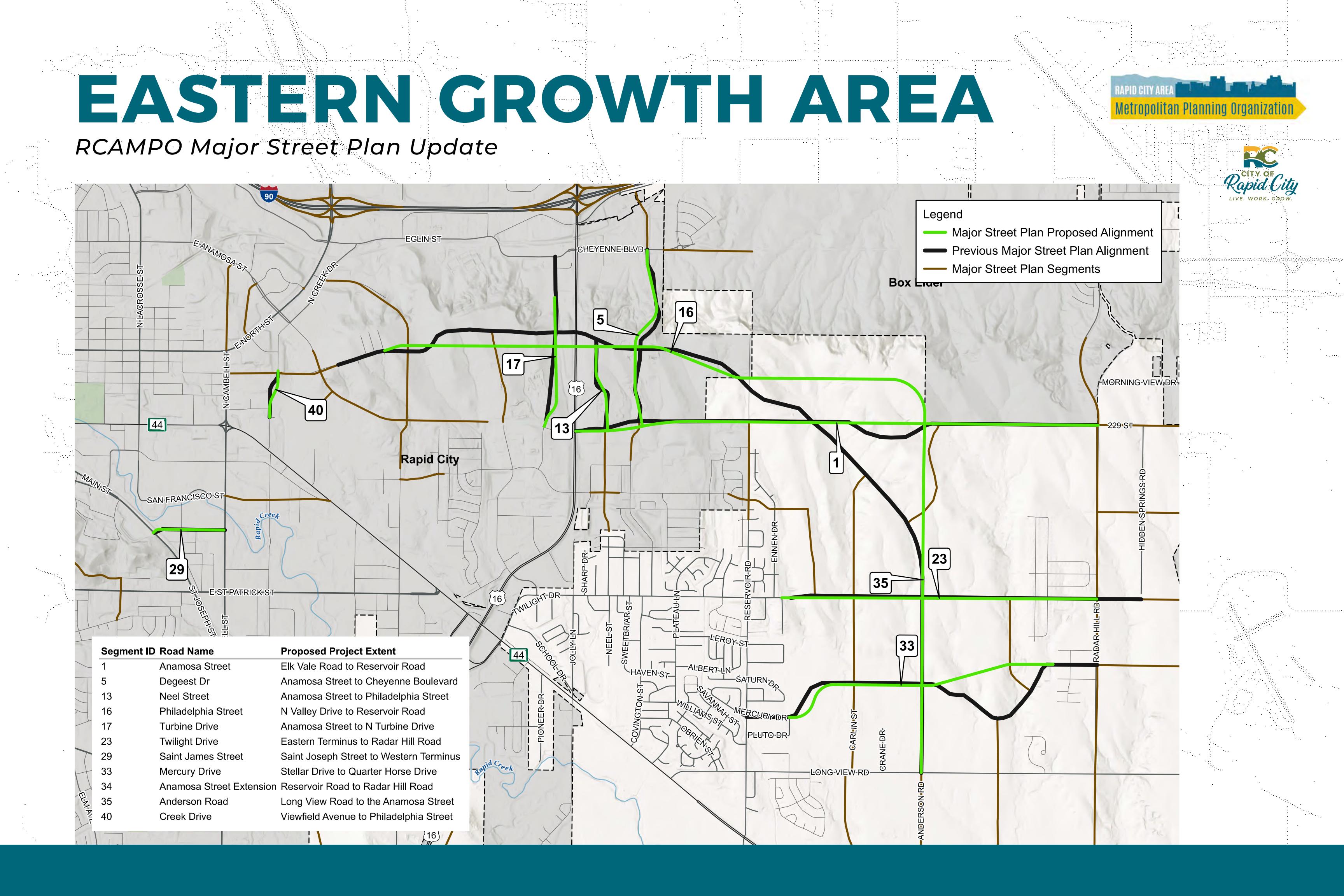
ABOT HILL-RD

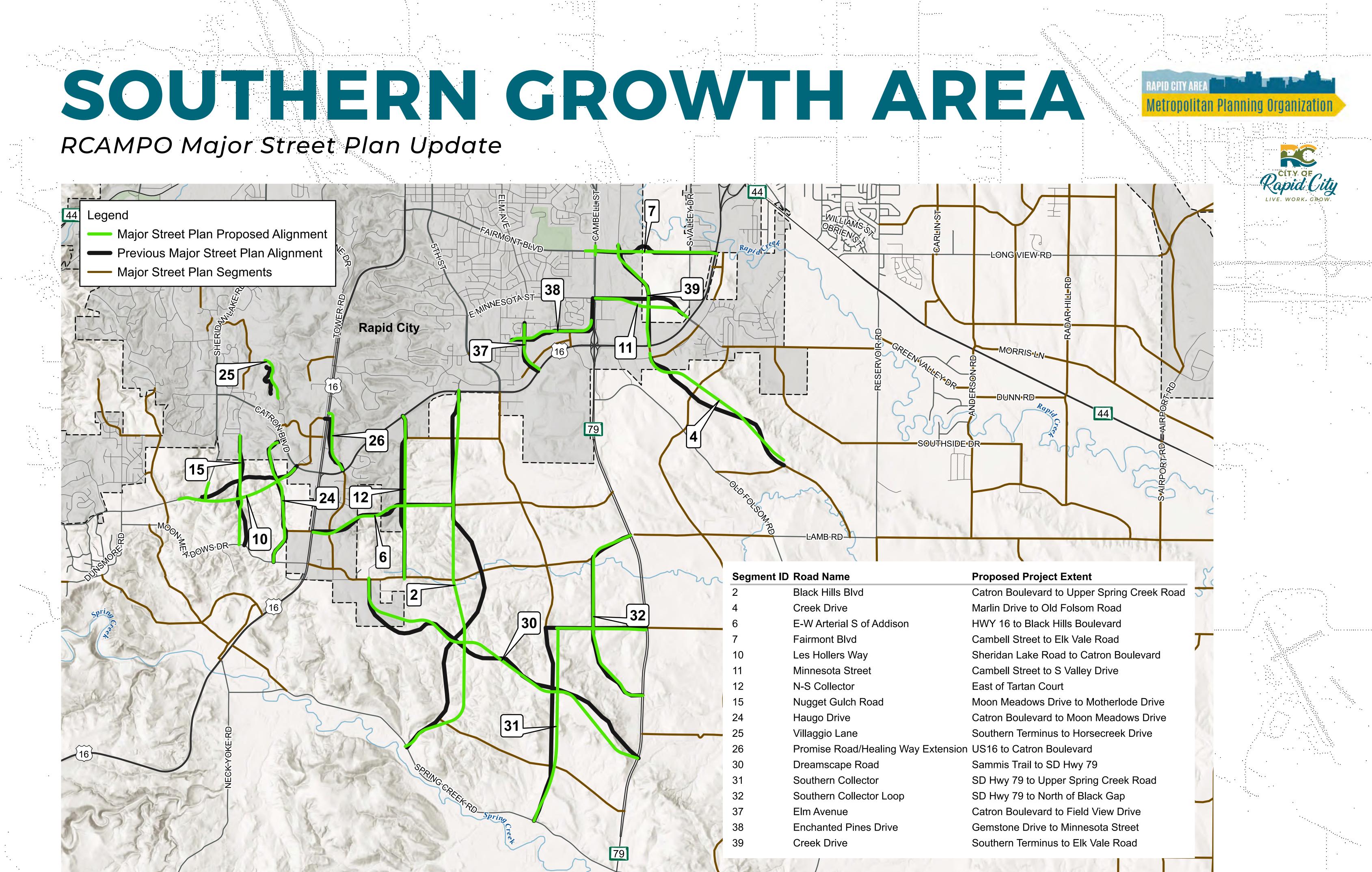
Rapid City

Roxelder Creek

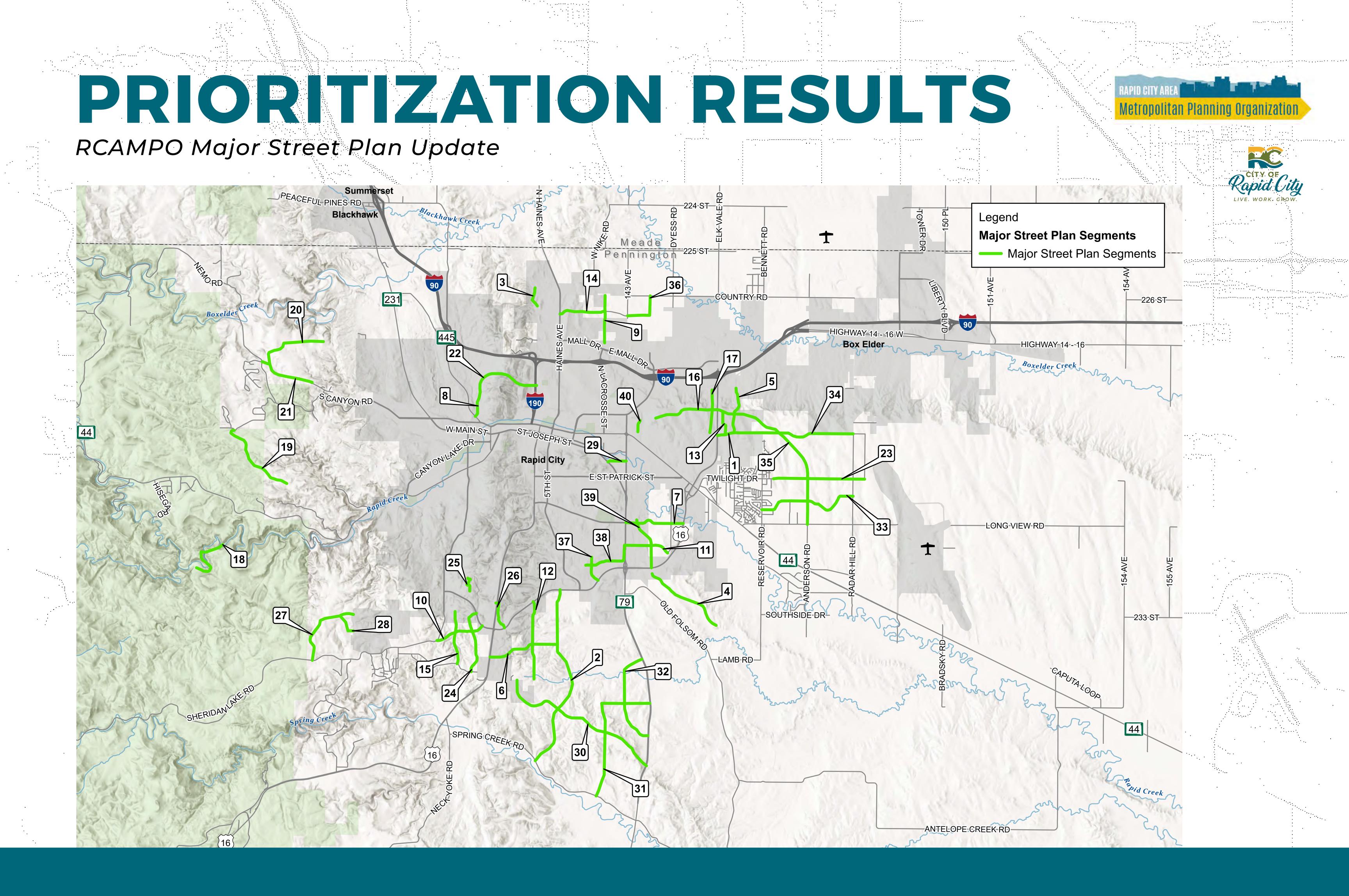


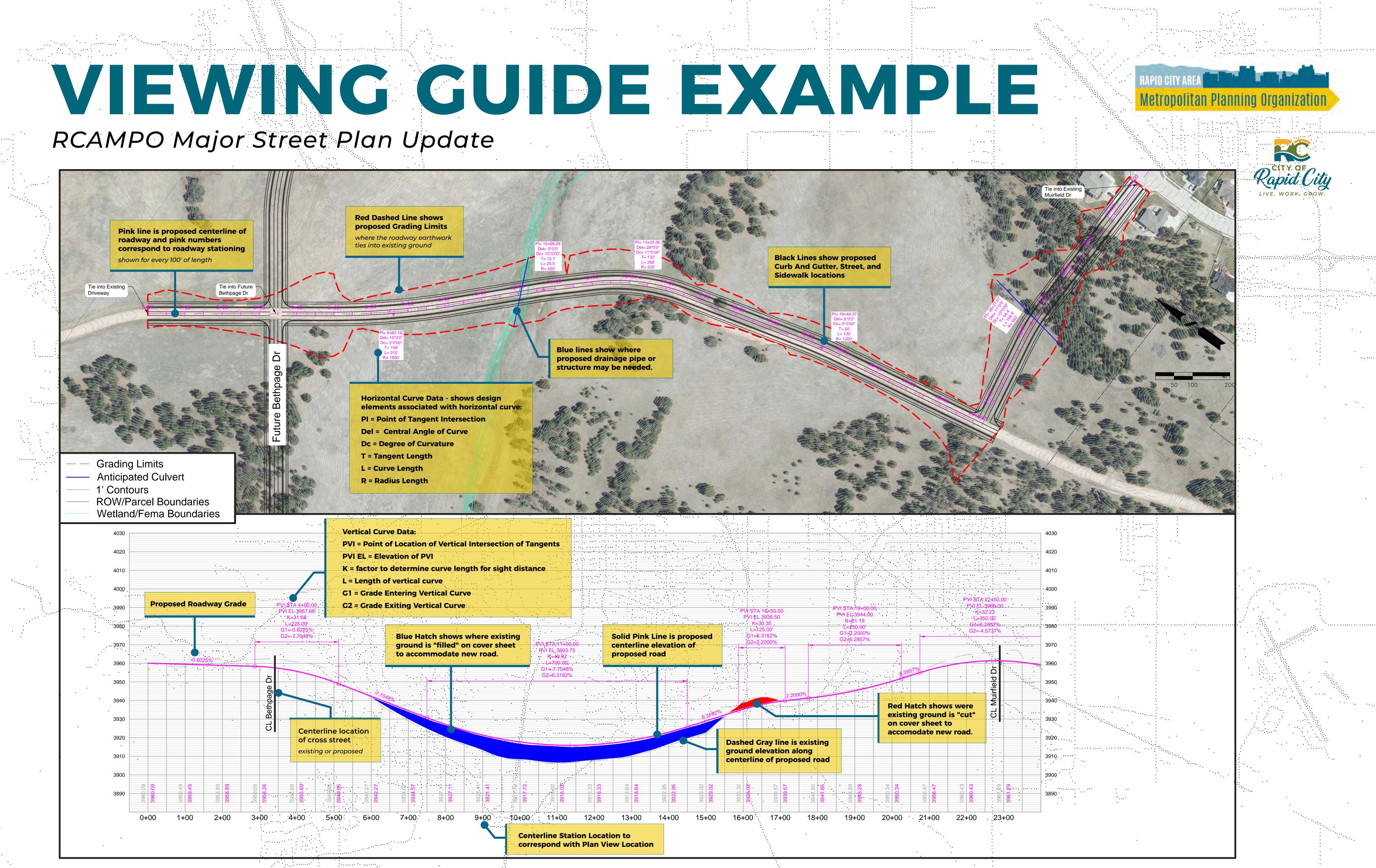






Segment ID	Road Name
2	Black Hills Blvd
4	Creek Drive
6	E-W Arterial S of Addison
7	Fairmont Blvd
10	Les Hollers Way
11	Minnesota Street
12	N-S Collector
15	Nugget Gulch Road
24	Haugo Drive
25	Villaggio Lane
26	Promise Road/Healing Way Extensio
30	Dreamscape Road
31	Southern Collector
32	Southern Collector Loop
37	Elm Avenue
38	Enchanted Pines Drive
39	Creek Drive



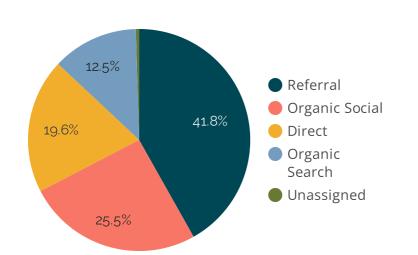




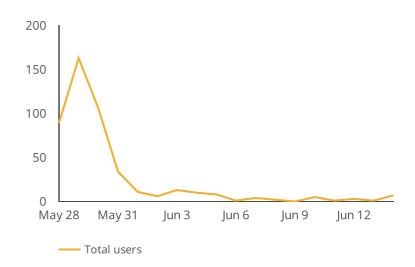
Appendix E – Website Analytics

	Streets Websi			V	lay 28, 2024 - Jun 14, 2024 🔹
Total users 415	New users 406	Engaged sessions 328	Views 546	Event count No data	Average Session Duration 00:00:58

Users by Acquisition Type



Users per Day



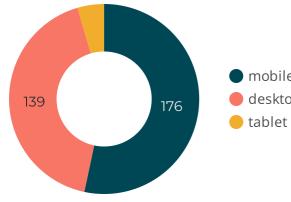
Referrals & Social Media Sources

	Session source	Engaged sessions 🔹
1.	kotatv.com	76
2.	blackhillsfox.com	49
3.	lm.facebook.com	28
4.	m.facebook.com	26
5.	www-kotatv-com.cdn	13
6.	l.facebook.com	10
7.	www-blackhillsfox-co	7
		1-9/9

Users & Sessions by Regional Cities (SD)

	City	Engaged sessi	Total u
1.	Rapid City	172	209
2.	Sioux Falls	8	9
3.	Sturgis	3	2
4.	Box Elder	2	2
5.	Keystone	2	2
		1 - 5 / 15	

Users by Device Type



mobile

🛑 desktop

For a comprehensive glossary on Google Analytics definitions, refer to this guide.



Major Street Plan Analysis and Update



Appendix D

Methods and Assumptions Document







METHODS & ASSUMPTIONS

FOR THE RAPID CITY AREA MPO MAJOR STREET PLAN ANALYSIS & UPDATE

PREPARED BY HDR ENGINEERING

FOR THE

RAPID CITY AREA METROPOLITAN PLANNING ORGANIZATION

AND

THE SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

IN CONJUNCTION WITH

THE FEDERAL HIGHWAY ADMINISTRATION

April 28, 2023



This Methods and Assumptions Document was developed in preparation for the Methods and Assumptions Meeting held as part of the project kick-off meeting with representatives from the Rapid City Area Metropolitan Planning Organization (MPO), the South Dakota Department of Transportation (SDDOT), and the Federal Highway Administration (FHWA). This document is intended to serve as a historical record of the study process and methodologies, dates, and decisions made by the study team representatives for the Rapid City Area MPO Major Street Plan Analysis and Update.

Repid Day Area MPS (Jimor Direct Pan Andrea & Updae Instructs and Assurations Dialement

Stakeholder Acceptance Page

The undersigned parties concur with the Methods and Assumptions for the Rapid City Area MPO Major Street Plan Analysis and Update as presented in this document.

MPO: Kip Harrington	SDDOT:
Signature Long Range Planning Manager	Signature Seal IV alkingen all Color
Tide: 5/150223	7630
Dete	Dete
FHWA	Contractor office
GREGORY L	Digitally signed by GREGORY L HEITMANN
HEITMANN	Bate: 2023.05.22 15:39:15 05:00
Title	
Date	

Mohile:

 Ramicipation on the Study Advisory Team antifor signing of this document does not compliate approval of the Rapid City Area MPO Major Street Plan Updale and Analysis. Final Report or conclusions.

(2) All members of the Study Advisory Team will accept this document as a guide and reference as the study progresses through the various stages of development. If there are my agreed upon changes to the assumptions in this document a revision will be created, endorsed and signed by all the signatures.

1. Introduction and Project Description

Background Information

Rapid City was the first jurisdiction in the Rapid City Area Metropolitan Planning Organization (RCAMPO) to adopt a Major Street Plan in 1990, and has performed numerous revisions to the Major Street Plan to date. However, many of the proposed future road alignments have not been analyzed since the initial creation of the plan. Many of the proposed segments have become dated due to changes in land use, development, and construction projects through the years. Additionally, most of the other RCAMPO member agencies have adopted Major Street Plans or Transportation Plans, leading to incongruities among road alignments and classifications. As Rapid City and the surrounding communities continue to develop and grow, the need for analyzing and reviewing the current plans has become apparent. Issues with slope, constructability, and alignment have surfaced on numerous proposed roadway segments. A preliminary look at identifying alignment and constructability issues was completed in the RapidTRIP 2045 Metropolitan Transportation Plan. This study is intended to expand on that process and update the Major Street Plan and develop conceptual alignments for selected corridors.

Location and Study Area

The Rapid City Area MPO is located in western South Dakota and area of study includes the City of Rapid City, the City of Summerset, the City of Box Elder, the City of Piedmont, unincorporated areas of Black Hawk and Rapid Valley, and the developing portions of Pennington and Meade Counties as depicted in **Figure 1**.

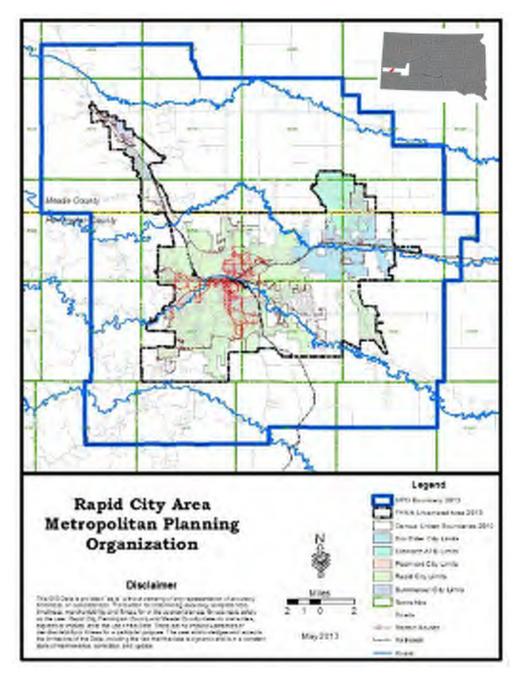


Figure 1: Study Area (Obtained from RFP)

Need for Study

Many of the proposed future road alignments in the Rapid City Major Street Plan have not been analyzed since the initial creation of the plan. A large portion of the proposed segments have become dated due to changes in land use, development, and construction projects through the years. Most of the other RCAMPO member agencies have adopted Major Street Plans or Transportation Plans, leading to incongruities among road alignments and classifications. As Rapid City and the surrounding communities continue to develop and grow, the need for analyzing and reviewing the current plans has become apparent. Issues with slope, constructability, and alignment have surfaced on numerous proposed roadway segments.

This study includes the following tasks to aid in the analysis and updating the Major Street plan:

- Review and Analysis of the existing Major Street Plans for all of the MPO member agencies to identify issues with alignment or classification.
- Review of constructability, slope, and alignment for roads in developing areas and identification of up to 40 corridors to further refine and develop conceptual layouts.
- Updating Major Street Plan and developing alignments and profiles for up to 40 corridors identified in the Major Street Plan analysis.
- Consistency with federal and state guidelines with respect to public participation.

Study Schedule

Date	Task/Event
March 24, 2023	Notice to Proceed
April 2023	Kick Off Meeting (SAT – 1)
May 2023	Pre-Public Meeting No. 1 (SAT – 2)
June 2023	Public Meeting No. 1
December 2023	SAT - 3
March 2024	Pre-Public Meeting No. 2 (SAT – 4)
March 2024	Public Meeting No. 2
April 2024	Report Presentations and Study Completion

Facilities Affected by Study

The facilities affected by this project include the Major Streets identified in the Major Street Plans for the Rapid City Area MPO and its respective member agencies.

Previous Studies

The agency partners for this study have identified a few previous studies that would appear to benefit or provide background for this study:

- Rapid Trip 2045 (existing MTP for MPO)
 - <u>https://rapidcityareampo.org/application/files/5115/9665/7703/20TP028</u> <u>Metropolitan Transportation Plan Final Report.pdf</u>
- Rapid City Major Street Plan

- <u>https://www.rapidcityareampo.org/application/files/9215/3918/8445/Major_Street</u>
 <u>Plan 11X17 signed.pdf</u>
- Plan Rapid City (Rapid City Comprehensive Plan)
 - <u>https://www.rcgov.org/index.php?option=com_docman&view=download&alias=2</u> <u>3936-rapid-city-comprehensive-plan-adopted-april-2014-with-maps-no-</u> <u>appendices&category_slug=transportation-planning&Itemid=149</u>
- Pennington County Master Transportation Plan

 https://dot.sd.gov/media/documents/11-096PennFinalReport.pdf
- Meade County Master Transportation Plan
 - https://dot.sd.gov/media/documents/Meade%20County%20MTP%20Final%20Report2_Final_PDF 20220715.pdf
- Box Elder Strategic Transportation Plan
 - o https://www.boxelder.us/documents/view/box-elder-strategic-transportation-plan-final-12-01-2014
- Summerset Comprehensive Plan
 - https://nebula.wsimg.com/516dd7a82412c6052aed647395ce4ef5?AccessKeyId=1827892A2DC3F 5DD9B4B&disposition=0&alloworigin=1
- Sheridan Lake Corridor Study
 - https://www.rapidcityareampo.org/application/files/2715/9181/7556/PROJECT_2373_Sheridan_Lak
 e_Road_Traffic_Study_FINAL_COMPLETE_REPORT_reduced.pdf
- East Rapid City Corridor Study
 - <u>https://mail.rapidcityareampo.org/application/files/4515/5433/1393/19TP013_-</u> East Rapid City Traffic and Corridor Analysis Study - Draft Report.pdf
- Cambell Street Corridor Study
 - https://mail.rapidcityareampo.org/application/files/8416/6015/7902/22TP018 -Cambell Street Structure Study - Final Report.pdf
- US16 Corridor Study

 https://dot.sd.gov/media/rep_US16_Corridor_Study_2021-0714.pdf
- Additional studies may be added at the discretion of the SAT

Study Advisory Team Members

Participant	Agency
Kelly Brennan	RCAMPO
Kip Harrington	RCAMPO
Roger Hall	Rapid City Public Works
Todd Peckosh	Rapid City Engineering
Sara Odden	Rapid City Engineering
Greg Heitmann	FHWA
Sarah Gilkerson	SDDOT

2. Data Collection

Data collection needs for the study will be provided by the MPO and / or member jurisdictions, and are identified as follows:

• GIS Data including:

- o major street plan
- o existing functional classifications
- o street inventory including existing lanes and posted speeds
- o existing and future land uses
- o parcel data
- o structure data
- o barriers
 - streams/creeks/ponds
 - railroads
 - parks
 - historical properties
 - flood plains
- Recent and on-going studies at the City/Regional/State Level
- Current Lidar data and Aerial Photography
- Travel Demand Model 2045 traffic volumes

3. Traffic Operations Analysis

There will be no traffic operations analysis associated with the study.

4. Travel Forecasting

There will be no travel forecasting associated with the study. However, 2045 traffic volumes from the RCAMPO Travel Demand model may be used to assist with roadway typical section development.

5. Safety

There will be no safety analysis associated with the study.

6. Multimodal Analysis

There will be no multimodal analysis associated with the study.

7. Major Street Plan Design Criteria

The following standards/criteria will be used to develop roadway typical cross-sections, conceptual geometrics and roadway profiles:

Outline of References:

- Rapid City Infrastructure Design Criteria Manual (IDCM)
 - Section 2 Streets and Right-of-Way
- AASHTO Geometric Design of Highways and Streets
- AASHTO Geometric Design of Low-Speed Urban Streets

- SDDOT Road Design Manual
- AASHTO Roadside Design Guide (RSDG)

Design Criteria:

- Design Speed (IDCM)
 - Principal Arterials 50 MPH
 - Minor Arterials 45 MPH
 - o Collectors 35 MPH
 - *Special Considerations as needed
- Street Grades
 - o Collectors Min. 0.5% and Max. 10% (IDCM)
 - o Arterials AASHTO design criteria
- Roadway Curvature (vertical/horizontal)
 - o AASHTO design criteria
 - o No Superelevation
- Roadway Vertical Clearances
 - SDDOT Bridge Design Manual Section 4
 - Union Pacific Railroad/BNSF Railway Guidelines for Railroad Grade Separation Projects
 - 23' minimum from finished pavement to lowest chord
 - It is assumed all conceptual alignments crossing rail facilities will be grade separated.
- Roadside Design
 - o Clear zone (AASHTO RSDG)
- Roadway Typical Sections and ROW Widths
 - o Collector (IDCM)
 - Three lane 32' pavement width, c/g, 68' ROW
 - o Arterial (IDCM)
 - Three lane 36' pavement width, c/g, 100' ROW (less than 10,000 ADT)
 - Five lane 58' pavement width, c/g, 110' ROW tangent sections (greater than 10,000 ADT)
- Intersection Spacing/Access Criteria
 - o Signalized Intersection Spacing 1200' minimum

8. Deviations/Justifications

There are no known deviations/justifications at this time. Any modifications to study methodologies or assumptions will be addressed through an amendment to this document.

9. Conclusion

All sections contained in this document will guide the development of the Major Street Plan Analysis and Update.

10. Appendices

The appendix includes the following:

A. Methods and Assumptions Meeting Minutes

Meeting Minutes

Project:	RCAMPO – Major Street Plan Analysis and Update		
Subject:	M&A Meeting Minutes		
Date:	Friday, April 28, 2023		
Location:	Rapid City City Hall and Virtual Option		
Attendees:	Kip Harrington – RCAMPO Kelly Brennan – RCAMPO Roger Hall – RC Public Works Todd Peckosh – RC Engineering Sara Odden – RC Engineering Sarah Gilkerson – SDDOT Greg Heitmann - FHWA	Dustin Hamilton – HDR Stacia Slowey – HDR Ally Carson – HDR Gunnar Ensz – HDR Jeremy Williams - HDR	

The Methods and Assumptions Document for the Rapid City Area MPO Major Streets Plan Analysis and Update was held immediately following the project Kick-off Meeting on Friday, April 28, 2023 held at City Hall in Rapid City with a virtual meeting attendance option. The Draft Methods and Assumptions Document was presented by HDR and the following items were specifically discussed with regard to each referenced section:

- 1. Section 1 Previous Studies (Page 7) The SAT noted additional previous studies which may benefit the project included:
 - a. Sheridan Lake Road Corridor Study
 - b. East Rapid City Corridor Study
 - c. Cambell Street Corridor Study
 - d. US16 Corridor Study
- Section 7 Outline of References (Page 8) It was noted the 2023 Rapid City Infrastructure Design Criteria Manual should be used.
- Section 7 Roadway Curvature (Page 9) The City requested adding in that superelevation should not be used in the conceptual designs and typical roadway crown should be used.
- 4. Section 7 Roadway Vertical Clearances (Page 9) It will is assumed that all alignments crossing rail facilities will be grade separated.
- 5. Section 7 Roadway Typical Sections and ROW Widths (Page 9) ROW for Major Arterial tangent sections to be 110'.
- 6. Section 7 Intersection Spacing/Access Criteria (Page 9) Added "Access Criteria" to section heading and noted signalized intersection/access spacing of 1200' minimum.