



RAPID TRIP 2050
METROPOLITAN TRANSPORTATION PLAN



The Metropolitan Transportation Plan

The MTP, referred to as Rapid Trip 2050 (the Plan), acts as RCAMPO's roadmap for funding, operating, maintaining, and improving the region's multi-modal transportation system. Federal requirements set forth in 23 CFR § 450.324 require that the MTP:

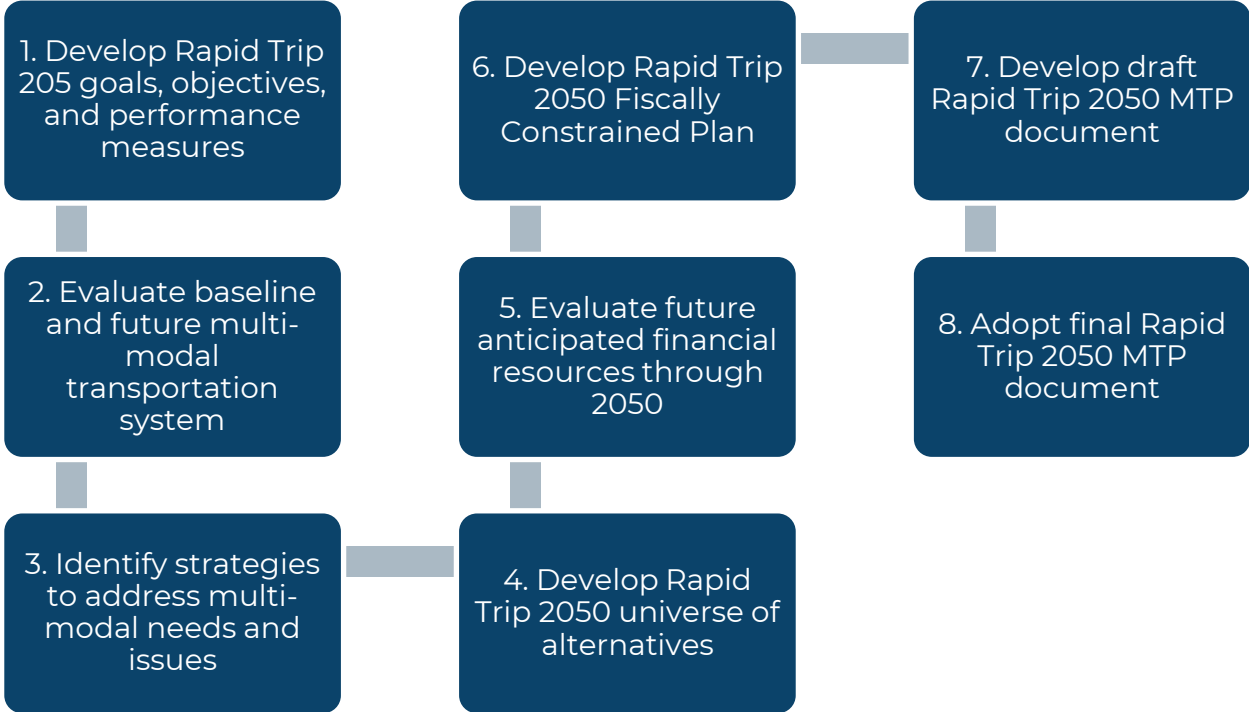
- Uses a planning horizon of no less than 20 years;
- Includes long- and short-range strategies/actions that support developing an integrated multi-modal transportation system;
- Is updated every 5 years in air quality attainment areas; non-attainment areas must update their MTP every 4 years;
- Consults state and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation;
- Is fiscally constrained;
- Provides a performance-based plan that promotes and supports the region, including the South Dakota Department of Transportation's (SDDOT) performance measures and targets.

Rapid Trip 2050 serves as an update to RCAMPO's 2045 MTP, Rapid Trip 2045, and looks to plan for the region's multi-modal transportation system through the year 2050. The Plan builds off Rapid Trip 2045 while integrating the findings of plans and studies completed by RCAMPO and its member agencies since adopting Rapid Trip 2045.

The Metropolitan Transportation Planning Process

RCAMPO, in its role as the region's MPO, is required to publish and maintain a series of transportation planning documents per the current federal Metropolitan Planning Program to ensure transportation planning in the region is performance based, multi-modal, continuous, cooperative, and comprehensive.

The Rapid Trip 2050 Process




Rapid Trip 2050 Goal Areas

| Goal Areas | |
|--|---|
| <p>Safety</p>  | <p>System Preservation</p>  |
| <p>Multi-Modal Mobility and Accessibility</p>  | <p>System Efficiency and Reliability</p>  |
| <p>Economic Prosperity</p>  | <p>Environmental Sustainability and Resiliency</p>  |

Rapid Trip 2050 Public Engagement

Public engagement was a key component of Rapid Trip 2050, with goals centered on educating the public on the metropolitan transportation planning process and receiving input on the Plan’s issues, needs, and recommendations. Throughout the development of Rapid Trip 2050, public engagement on the Plan was sought through a range of activities, including:

| | |
|--|---|
| <p>Rapid Trip 2050 Website</p>  | <p>Public Open Houses</p>  |
| <p>Rapid Trip 2050 Steering Committee</p>  | <p>MPO Committee Presentations</p>  |

Public Open House #1
October 2024

- Overview of the MTP
- Gather public feedback on multi-modal needs and issues







Public Open House #2
March 2025

- Present key findings of Baseline Conditions analysis
- Gather public feedback on Rapid Trip 2050 strategies

Public Open House #3
June 2025

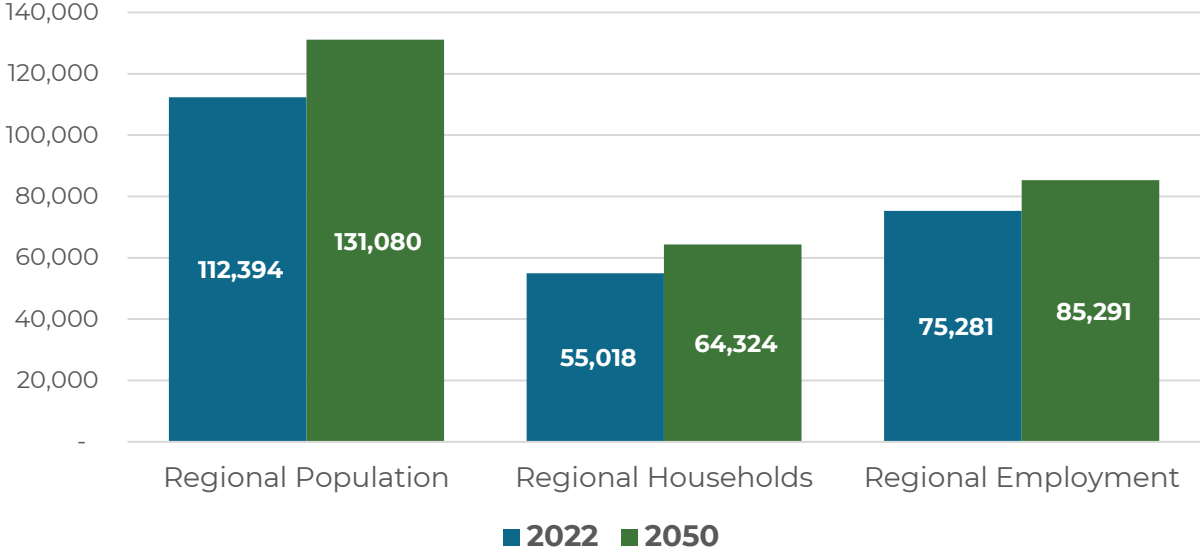
- Provide draft MTP for public feedback on Plan






Baseline Conditions Summary

| | |
|---|---|
| <p>Safety</p>  | <p>Fatal and serious injury crashes within the region saw annual increases each year between 2019 and 2021, with the number of annual fatal crashes peaking in 2022. Since 2022, annual crashes resulting in severe injuries have seen a decline.</p> |
| <p>Traffic Operations</p>  | <p>Several higher-volume corridors that directly serve the region’s arterial streets and highway network are experiencing peak hour recurring congestion and future growth is expected to exacerbate congestion conditions along these routes.</p> |
| <p>Pavement Conditions</p>  | <p>Pavement on the region’s Interstate and non-Interstate National Highway System are currently in Fair or Good condition. Continued management and investment in preserving these facilities can maintain these pavements in a state of good repair.</p> |
| <p>Bridge Conditions</p>  | <p>Nearly 6 percent of structures analyzed within the region are in Poor Condition. Several of these structures have been or are programmed for rehabilitation which will improve their condition and increase the number of the region’s bridges in Fair and Good condition.</p> |
| <p>Freight System</p>  | <p>Land uses in central and northern Rapid City generate a high degree of freight activity. This highlights the need for the MPO and its member agencies to maintain connectivity between these land uses and the region’s arterial streets and roads network.</p> |
| <p>Bicycle and Pedestrian System</p>  | <p>RCAMPO and its member agencies have established a strong regional network of bicycle and pedestrian facilities that are guided by the 2020 Bicycle and Pedestrian Master Plan. Opportunities exist to expand this network while addressing current gaps in connectivity.</p> |
| <p>Transit System</p>  | <p>Fixed-route and Dial-a-Ride ridership saw overall decreases between 2018 and 2021 before increasing in 2022. Identifying and implementing transit-supportive infrastructure could encourage increased future ridership.</p> |

Regional Growth and Performance of the Future Transportation System

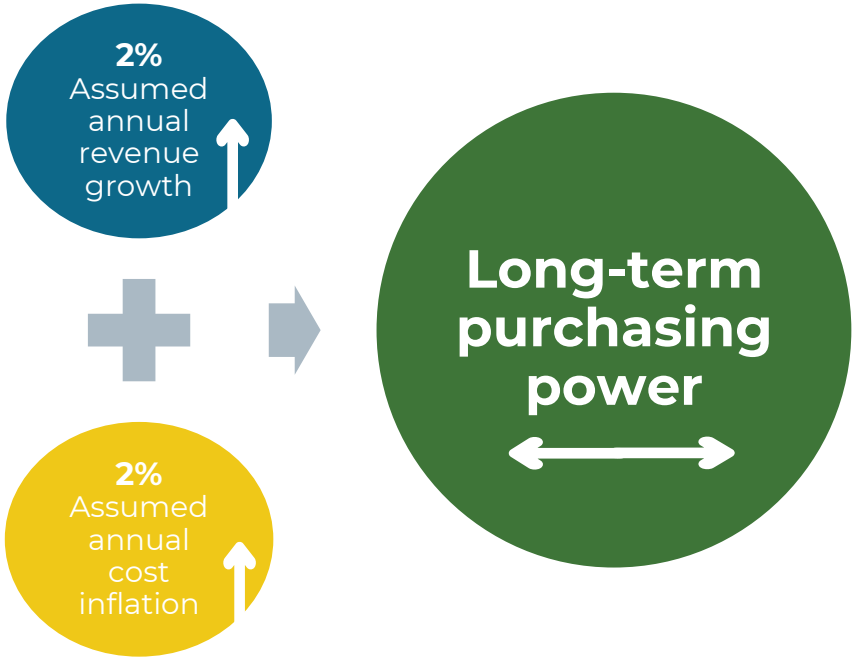
Forecasted Growth in Regional Population, Households, and Employment, 2022-2050



| Performance Metric | 2022 | 2050 | Change (2022-2050) |
|---|-----------|-----------|--------------------|
| System Trips  | 585,816 | 707,843 | +21% |
| VMT  | 2,962,827 | 3,975,245 | +34% |
| VHT  | 75,646 | 98,508 | +30% |
| Average Trip Length (miles)  | 5.1 | 5.6 | +11% |
| Average System Speed (MPH)  | 39.2 | 40.4 | +3% |

Rapid Trip 2050 Funding Plan

| Time Band | STBG Budget Expansion | STBG Expenditures (Local) | STBG Balance Preservation Budget |
|------------------------|-----------------------|---------------------------|----------------------------------|
| Short-Term (2025-2030) | \$44,787,659 | \$0 | \$44,787,659 |
| Mid-Term (2031-2040) | \$77,995,601 | \$81,272,000 | \$41,511,260 |
| Long-Term (2041-2050) | \$116,280,170 | \$82,072,000 | \$75,719,431 |

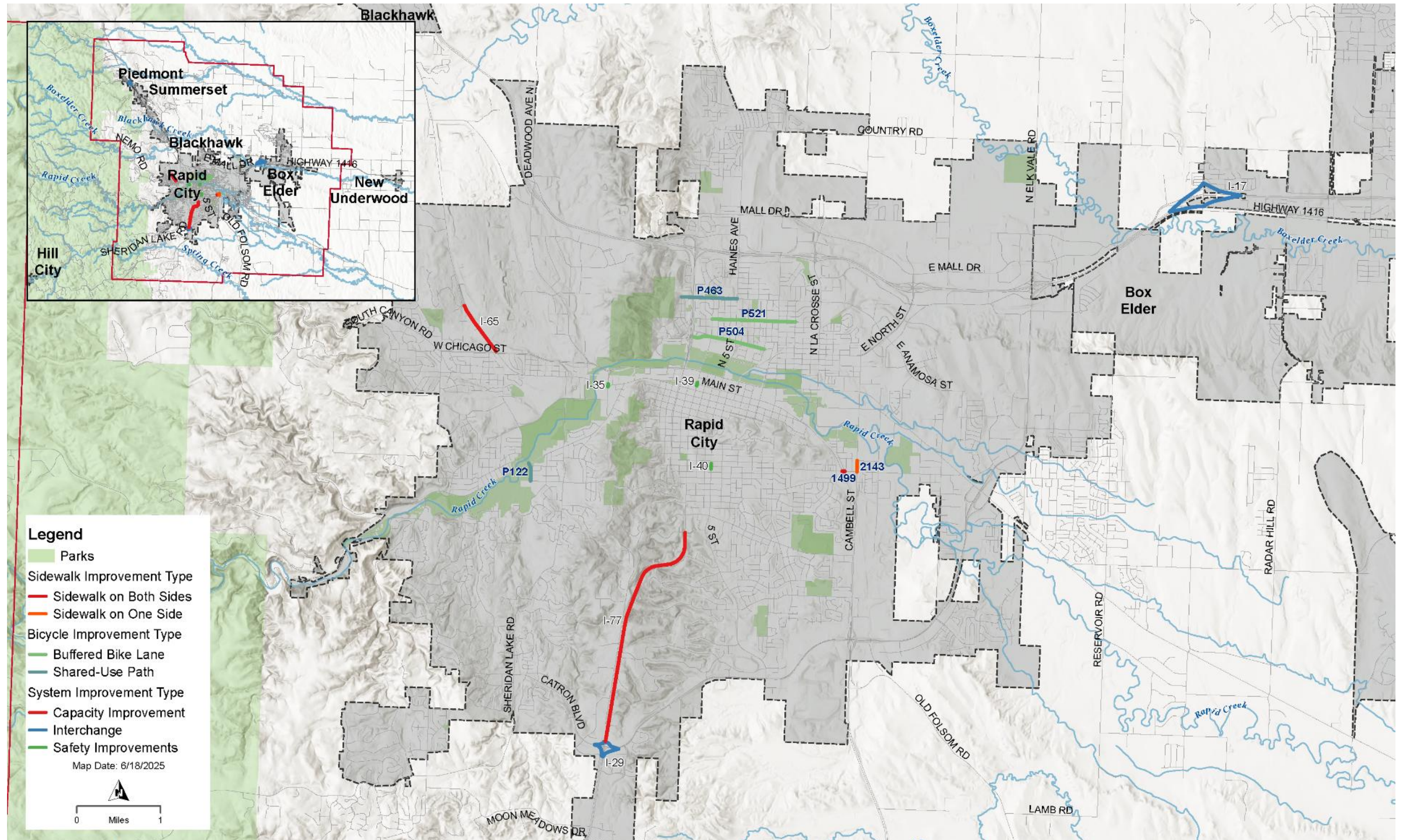


Fiscally Constrained Plan

Multi-modal transportation improvements included in Rapid Trip 2050’s fiscally constrained plan represent priority investments for RCAMPO and its member agencies that will leverage anticipated future annual revenues from federal STBG and TAP sources. The fiscally constrained plan provides an implementation schedule built around Rapid Trip 2050’s short-, mid-, and long-term time bands.

Project costs are presented in terms of 2025 dollars and a calculated YOE cost based on the estimated time of implementation.

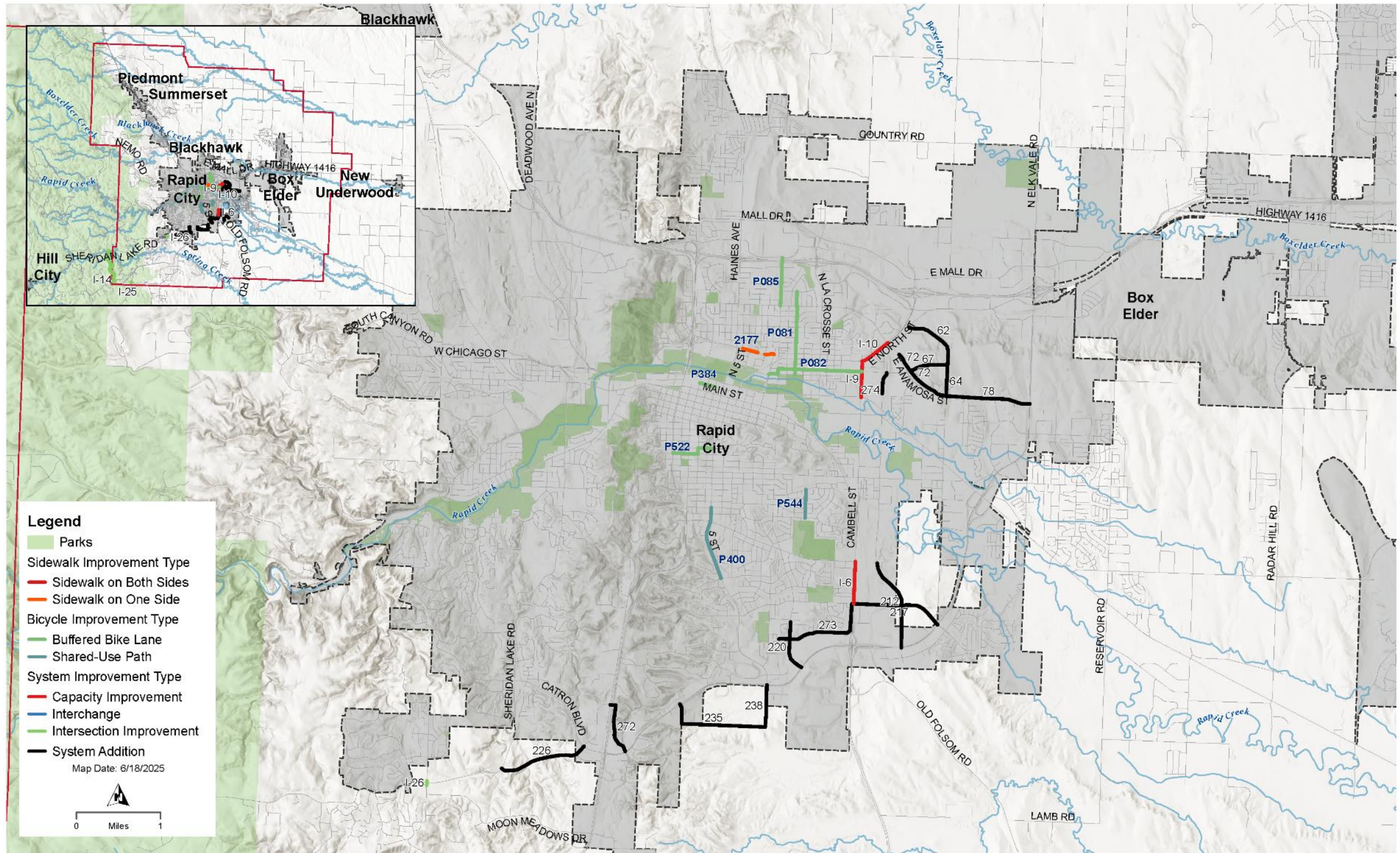
Rapid Trip 2050 Fiscally Constrained Plan – Short-Term (2025-2030) Projects



Rapid Trip 2050 Fiscally Constrained Plan – Short-Term (2025-2030) Projects

| ID | Corridor | From | To | Project Type | Cost (2025 \$) | Cost (YOE \$) | Federal Share (YOE \$) | Non-Federal Share (YOE \$) | Funding Source | Potential Sponsor(s) |
|--|------------------------|---------------------------|-------------------------|--------------------------------|----------------------|----------------------|------------------------|----------------------------|----------------|----------------------|
| Roadway Projects | | | | | | | | | | |
| I-29 | US 16 | At Catron Boulevard | | Interchange | \$43,840,000 | \$46,060,000 | \$36,848,000 | \$9,212,000 | STBG/NHPP | SDDOT |
| I-17 | I-90 | At Exit 63/Box Elder | | Interchange | \$27,400,000 | \$28,790,000 | \$23,032,000 | \$5,758,000 | NHPP | SDDOT |
| I-55 | I-90 | At Exit 46/Elk Creek Road | | Interchange | \$27,400,000 | \$28,790,000 | \$23,032,000 | \$5,758,000 | NHPP | SDDOT |
| I-35 | W Main Street | At Mountain View Road | | Safety Improvements | \$70,000 | \$70,000 | \$56,000 | \$14,000 | HSIP | Rapid City |
| I-39 | Main Street | At Mount Rushmore Road | | Safety Improvements | \$480,000 | \$500,000 | \$400,000 | \$100,000 | HSIP | Rapid City |
| I-40 | 5th Street | At E St. Patrick Street | | Safety Improvements | \$480,000 | \$500,000 | \$400,000 | \$100,000 | HSIP | Rapid City |
| I-65 | Sturgis Road | W Chicago Street | Pine Hills Drive | Capacity Improvement | \$4,520,000 | \$4,750,000 | \$3,800,000 | \$950,000 | STBG-State | SDDOT |
| I-77 | US 16 | Catron Boulevard | Tower Road | Capacity Improvement | \$19,660,000 | \$20,660,000 | \$16,528,000 | \$4,132,000 | STBG-State | SDDOT |
| Short-Term Roadway Total | | | | | \$123,850,000 | \$130,120,000 | \$104,096,000 | \$26,024,000 | | |
| Bicycle and Pedestrian Projects | | | | | | | | | | |
| 2143 | Cambell Street | E Street Patrick Street | E Street Charles Street | Sidewalk: Sidewalk, One Side | \$70,000 | \$70,000 | \$56,000 | \$14,000 | TAP | City of Rapid City |
| P504 | North Street | West Boulevard N | N 1st Street | On-Street: Buffered Bike Lane | \$180,000 | \$190,000 | \$152,000 | \$38,000 | TAP | City of Rapid City |
| P521 | Van Buren Street | Allen Avenue | Milwaukee Street | On-Street: Buffered Bike Lane | \$200,000 | \$210,000 | \$168,000 | \$42,000 | TAP | City of Rapid City |
| 1499 | E Saint Patrick Street | E Street Joseph Street | Cherry Avenue | Sidewalk: Sidewalk, Both Sides | \$30,000 | \$30,000 | \$24,000 | \$6,000 | TAP | City of Rapid City |
| P463 | Anamosa Street | Haines Avenue | Silver Street | Off-Street: Shared-Use Path | \$1,090,000 | \$1,150,000 | \$920,000 | \$230,000 | TAP | City of Rapid City |
| P122 | Argyle Street | Jackson Boulevard | W Flormann Street | Off-Street: Shared-Use Path | \$350,000 | \$370,000 | \$296,000 | \$74,000 | TAP | City of Rapid City |
| Short-Term Bicycle and Pedestrian Total | | | | | \$1,920,000 | \$2,020,000 | \$1,616,000 | \$404,000 | | |

Rapid Trip 2050 Fiscally Constrained Plan – Mid-Term (2031-2040) Projects

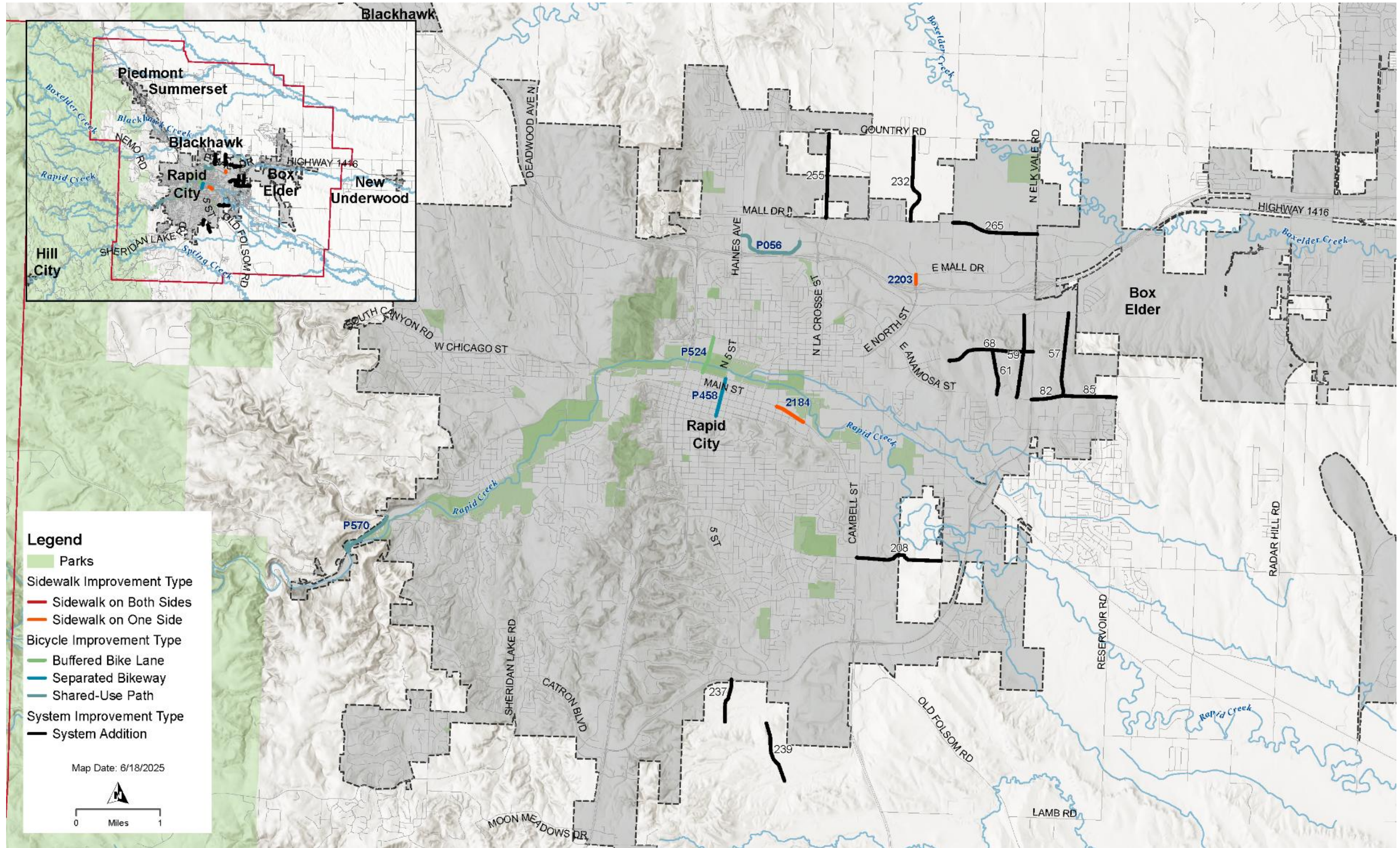


Rapid Trip 2050 Fiscally Constrained Plan – Mid-Term (2031-2040) Projects

| ID | Corridor | From | To | Project Type | Cost (2025 \$) | Cost (YOE \$) | Federal Share (YOE \$) | Non-Federal Share (YOE \$) | Funding Source | Potential Sponsor(s) |
|-------------------------------|--------------------------|-------------------------|------------------------|--------------------------|---------------------|----------------------|------------------------|----------------------------|------------------------|----------------------------------|
| 226 | Les Hollers Road | Catron Boulevard | Sheridan Lake Road | New Corridor | \$7,330,000 | \$9,020,000 | \$7,216,000 | \$1,804,000 | STBG Payout | Rapid City/ Pennington County |
| 235 | South Growth Area Road | Catron Boulevard | 5th Street | New Corridor | \$8,430,000 | \$10,380,000 | \$8,304,000 | \$2,076,000 | STBG Payout/ Developer | Rapid City/ Pennington County |
| 238 | 5th Street Extension | US-16 | South Growth Area Road | New Corridor | \$3,430,000 | \$4,220,000 | \$3,376,000 | \$844,000 | STBG Payout/ Developer | Rapid City/ Pennington County |
| 220 | Elm Avenue | Field View Drive | Elk Vale Road | New Corridor | \$4,110,000 | \$5,060,000 | \$4,048,000 | \$1,012,000 | STBG Payout/ Developer | Rapid City |
| 72 | Anamosa Street | Creek Drive | Valley Drive | New Corridor | \$5,270,000 | \$6,490,000 | \$5,192,000 | \$1,298,000 | STBG Payout/ Developer | Rapid City |
| 67 | Philadelphia Street | Anamosa Street | Valley Drive | New Corridor | \$3,150,000 | \$3,880,000 | \$3,104,000 | \$776,000 | STBG Payout/ Developer | Rapid City |
| I-6 | Cambell Street | Minnesota Street | Fairmont Boulevard | Capacity Improvement | \$1,710,000 | \$2,110,000 | \$1,688,000 | \$422,000 | STBG Payout/ Developer | Rapid City |
| I-25 | S Rockerville Road | At Neck Yoke Road | | Intersection Improvement | \$70,000 | \$90,000 | \$72,000 | \$18,000 | HSIP | Pennington County |
| I-26 | Sheridan Lake Road | At Dunsmore Road | | Intersection Improvement | \$550,000 | \$680,000 | \$544,000 | \$136,000 | HSIP | Pennington County |
| 62 | Valley Drive | Creek Drive | Philadelphia Street | New Corridor | \$5,210,000 | \$6,410,000 | \$5,128,000 | \$1,282,000 | STBG Payout/ Developer | Rapid City |
| 64 | Valley Drive | Philadelphia Street | Anamosa Street | New Corridor | \$2,530,000 | \$3,110,000 | \$2,488,000 | \$622,000 | STBG Payout/Developer | Rapid City |
| 78 | Anamosa Street | Valley Drive | Elk Vale Road | New Corridor | \$6,890,000 | \$8,480,000 | \$6,784,000 | \$1,696,000 | STBG Payout/ Developer | Rapid City |
| 217 | Minnesota Avenue | Cambell Street | Elk Vale Road | New Corridor | \$11,030,000 | \$13,580,000 | \$10,864,000 | \$2,716,000 | STBG Payout/ Developer | Rapid City |
| I-9 | Cambell Street | E Omaha Street | E North Street | Capacity Improvement | \$10,000,000 | \$12,310,000 | \$9,848,000 | \$2,462,000 | STBG-State | Rapid City |
| I-10 | North Street | Cambell Street | Anamosa Street | Capacity Improvement | \$1,710,000 | \$2,110,000 | \$1,688,000 | \$422,000 | STBG Payout | Rapid City |
| I-14 | Boulder Hill Road | At Silver Mountain Road | | Intersection Improvement | \$270,000 | \$330,000 | \$264,000 | \$66,000 | STBG Payout/ Developer | Pennington County |
| 212 | Creek Drive | Southern Terminus | E Minnesota Street | New Corridor | \$7,600,000 | \$9,360,000 | \$7,488,000 | \$1,872,000 | STBG Payout/ Developer | Rapid City |
| 272 | Promise Road/Healing Way | US-16 | US-16B | New Corridor | \$4,360,000 | \$5,370,000 | \$4,296,000 | \$1,074,000 | STBG Payout/ Developer | Rapid City |
| Mid-Term Roadway Total | | | | | \$93,140,000 | \$114,670,000 | \$91,736,000 | \$22,934,000 | | |

| ID | Corridor | From | To | Project Type | Cost (2025 \$) | Cost (YOE \$) | Federal Share (YOE \$) | Non-Federal Share (YOE \$) | Funding Source | Potential Sponsor(s) |
|--|---|---|-------------------|-------------------------------|--------------------|--------------------|------------------------|----------------------------|----------------|----------------------|
| P085 | N Maple Avenue | Disk Drive | Anamosa Street | On-Street: Buffered Bike Lane | \$120,000 | \$150,000 | \$120,000 | \$30,000 | TAP | City of Rapid City |
| P081 | Milwaukee Street | Crestwood Drive | E New York Street | On-Street: Buffered Bike Lane | \$210,000 | \$260,000 | \$208,000 | \$52,000 | TAP | City of Rapid City |
| P082 | N Maple Avenue/E Philadelphia Street | Leonard "Swanny" Swanson Memorial Pathway | Cambell Street | On-Street: Buffered Bike Lane | \$240,000 | \$300,000 | \$240,000 | \$60,000 | TAP | City of Rapid City |
| P384 | Apolda Street | Mt Rushmore Road | 6th Street | On-Street: Buffered Bike Lane | \$40,000 | \$50,000 | \$40,000 | \$10,000 | TAP | City of Rapid City |
| P522 | Franklin Avenue/Belleview Drive/E St. Andrew Street | West Boulevard | 5th Street | On-Street: Buffered Bike Lane | \$110,000 | \$140,000 | \$112,000 | \$28,000 | TAP | City of Rapid City |
| 2180 | North Street | N 1st Street | East Boulevard N | Sidewalk: Sidewalk, One Side | \$60,000 | \$70,000 | \$56,000 | \$14,000 | TAP | City of Rapid City |
| 2177 | North Street | Wood Avenue | N 2nd Street | Sidewalk: Sidewalk, One Side | \$90,000 | \$110,000 | \$88,000 | \$22,000 | TAP | City of Rapid City |
| P400 | 5th Street | Cleveland Street | Texas Street | Off-Street: Shared-Use Path | \$1,450,000 | \$1,790,000 | \$1,432,000 | \$358,000 | TAP | City of Rapid City |
| P544 | Hawthorne Avenue | Meade Street | E Oakland Street | Off-Street: Shared-Use Path | \$550,000 | \$680,000 | \$544,000 | \$136,000 | TAP | City of Rapid City |
| Mid-Term Bicycle and Pedestrian Total | | | | | \$2,870,000 | \$3,550,000 | \$2,840,000 | \$710,000 | | |

Rapid Trip 2050 Fiscally Constrained Plan – Long-Term (2041-2050) Projects



Rapid Trip 2050 Fiscally Constrained Plan – Long-Term (2041-2050) Projects

| ID | Corridor | From | To | Project Type | Cost (2025 \$) | Cost (YOE \$) | Federal Share (YOE \$) | Non-Federal Share (YOE \$) | Funding Source | Potential Sponsor(s) |
|--------------------------------|------------------------|-------------------------|------------------------|--------------|---------------------|----------------------|------------------------|----------------------------|------------------------|-------------------------------|
| 57 | Degeest Drive | Cheyenne Boulevard | Bernice Street | New Corridor | \$6,780,000 | \$10,170,000 | \$8,136,000 | \$2,034,000 | STBG Payout/ Developer | Rapid City /Box Elder |
| 59 | Turbine Drive | Eglin Street | Anamosa Street | New Corridor | \$6,710,000 | \$10,070,000 | \$8,056,000 | \$2,014,000 | STBG Payout/ Developer | Rapid City |
| 61 | Concourse Drive | Philadelphia Street | Anamosa Street | New Corridor | \$3,700,000 | \$5,550,000 | \$4,440,000 | \$1,110,000 | STBG Payout/ Developer | Rapid City |
| 68 | Philadelphia Street | Valley Drive | Elk Vale Road | New Corridor | \$7,120,000 | \$10,690,000 | \$8,552,000 | \$2,138,000 | STBG Payout/ Developer | Rapid City |
| 82 | Anamosa Street | Elk Vale Road | Degeest Drive | New Corridor | \$2,470,000 | \$3,710,000 | \$2,968,000 | \$742,000 | STBG Payout/ Developer | Rapid City |
| 85 | Anamosa Street | Degeest Drive | E 53rd Street | New Corridor | \$6,850,000 | \$10,280,000 | \$8,224,000 | \$2,056,000 | STBG Payout/ Developer | Rapid City |
| 208 | Fairmont Boulevard | Cambell Street | Elk Vale Road | New Corridor | \$7,120,000 | \$10,690,000 | \$8,552,000 | \$2,138,000 | STBG Payout/ Developer | Rapid City |
| 237 | South Growth Area Road | Elk Vale Road | South Growth Area Road | New Corridor | \$3,560,000 | \$5,340,000 | \$4,272,000 | \$1,068,000 | STBG Payout/ Developer | Rapid City/ Pennington County |
| 239 | 5th Street Extension | South Growth Area Roads | | New Corridor | \$5,000,000 | \$7,500,000 | \$6,000,000 | \$1,500,000 | STBG Payout/ Developer | Rapid City/ Pennington County |
| 265 | Seger Drive | Dyes Avenue | Elk Vale Road | New Corridor | \$6,990,000 | \$10,490,000 | \$8,392,000 | \$2,098,000 | STBG Payout/ Developer | Rapid City/ Pennington County |
| Long-Term Roadway Total | | | | | \$68,360,000 | \$102,590,000 | \$82,072,000 | \$20,518,000 | | |

| ID | Corridor | From | To | Project Type | Cost (2025 \$) | Cost (YOE \$) | Federal Share (YOE \$) | Non-Federal Share (YOE \$) | Funding Source | Potential Sponsor(s) |
|---|-------------------|----------------|-----------------|-------------------------------|--------------------|--------------------|------------------------|----------------------------|----------------|----------------------|
| P458 | 5th Street | Omaha Street | Columbus Street | On -Street: Separated Bikeway | \$630,000 | \$950,000 | \$760,000 | \$190,000 | TAP | City of Rapid City |
| P524 | Mt. Rushmore Road | North Street | Omaha Street | On-Street: Buffered Bike Lane | \$90,000 | \$140,000 | \$112,000 | \$28,000 | TAP | City of Rapid City |
| 2184 | E Main Street | Maple Avenue | Steele Avenue | Sidewalk: Sidewalk, One Side | \$180,000 | \$270,000 | \$216,000 | \$54,000 | TAP | City of Rapid City |
| 2203 | E North Street | I-90 Entrance | E Mall Drive | Sidewalk: Sidewalk, One Side | \$60,000 | \$90,000 | \$72,000 | \$18,000 | TAP | City of Rapid City |
| P570 | Jackson Boulevard | Cliffside Park | Existing Trail | Off-Street: Shared-Use Path | \$1,240,000 | \$1,860,000 | \$1,488,000 | \$372,000 | TAP | City of Rapid City |
| P056 | Maple Avenue | Haines Avenue | Disk Drive | Off-Street: Shared-Use Path | \$1,460,000 | \$2,190,000 | \$1,752,000 | \$438,000 | TAP | City of Rapid City |
| Long-Term Bicycle and Pedestrian Total | | | | | \$3,660,000 | \$5,500,000 | \$4,400,000 | \$1,100,000 | | |