

08-22-2023

10-year Transportation Capital Improvement Program (TCIP) and Transportation Capital Projects Prioritization Study (TCPPS)

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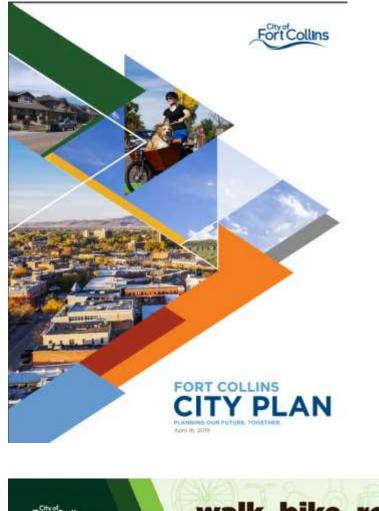




What feedback do Councilmembers have on the 10-year TCIP and TCPPS?



Strategic Alignment With Our Plans

















- Increased Safety alignment with Vision Zero zero deaths or serious injuries while traveling on Fort Collins streets by 2032
- Supports mode shift goals to support Active Modes Plan 50% active modes share of all trips by 2032
- Better environmental outcomes with decreased congestion, mode shift to active modes, and sustainable design – supports Our Climate Future
- Transportation infrastructure needs incorporated into community, equity and environment – alignment with City Plan and Strategic Plan
- 10-year TCIP supports future BRT planning and aligns with Transit Master Plan



332 crashes in 2021 resulted in a serious injury or fatality

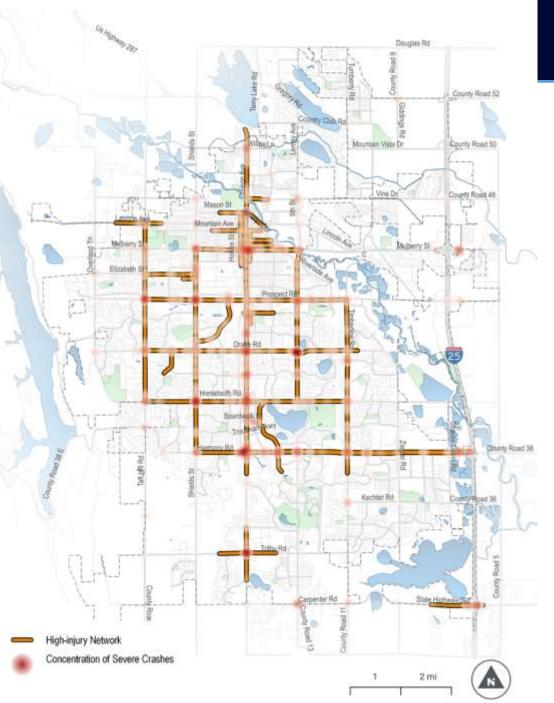
By 2032, no one dies or has a serious injury while traveling on Fort Collins' streets

11 people lost their lives in 2021 traveling on streets in Fort Collins



8% of the roads have 63% of all fatal and serious injury crashes

70% of severe crashes occurred at an intersection



High-Injury Network

6

The HIN is 91% arterials 6% collectors 3% local



Project Description	Property Damage Only (PDO) before	Fatal / Injury (FI) before	PDO after	FI after
College and Horsetooth Intersection Improvements (2018)	42.3	17.7	20.6	5.0
College and Trilby Protected Lefts (2020)	23	9.7	6.3	4
College and Monroe Intersection Improvements (2018)	26	6.7	10	2.7
Snow Mesa and Harmony Protected Lefts (2019)	14	7	9	3
Shields and Mulberry red light cameras (2020)	12	5	6	3
Boardwalk and Harmony protected lefts (2019)	28.7	8	7	7
Shields and Prospect red light cameras (2020)	16.3	8.3	15	6.5
City Park and Mulberry Road Diet (2018)	4	0.33	0.3	0

Total reduction in cost per year: \$6.8M

Total PDO reduction/yr: 92.1

Total FI reduction/yr: 31.5



Envisioning the Future – Active Modes Plan⁸

Vision

Active transportation is an integral part of daily life and the local cultural experience. Fort Collins is a place where walking, bicycling, and using other active modes are safe, accessible, convenient, joyful, and desired by people of all ages and abilities.

Goals

- 50% active modes share of all trips by 2032
- Eliminate active modes fatalities and serious injuries by 2032, in support of Vision Zero





Transportation Capital Projects Prioritization Study (TCPPS)



- Goals
 - Proactively identify next round of projects to improve arterial streets (corridors and intersections)
 - Align with Vision Zero Plan and Active Modes Plan
 - Provide foundation to the 10-year TCIP
- Deliverables
 - Prioritize list of projects
 - Conceptual design/cost estimates
 - Study Report
 - GIS Management Tool

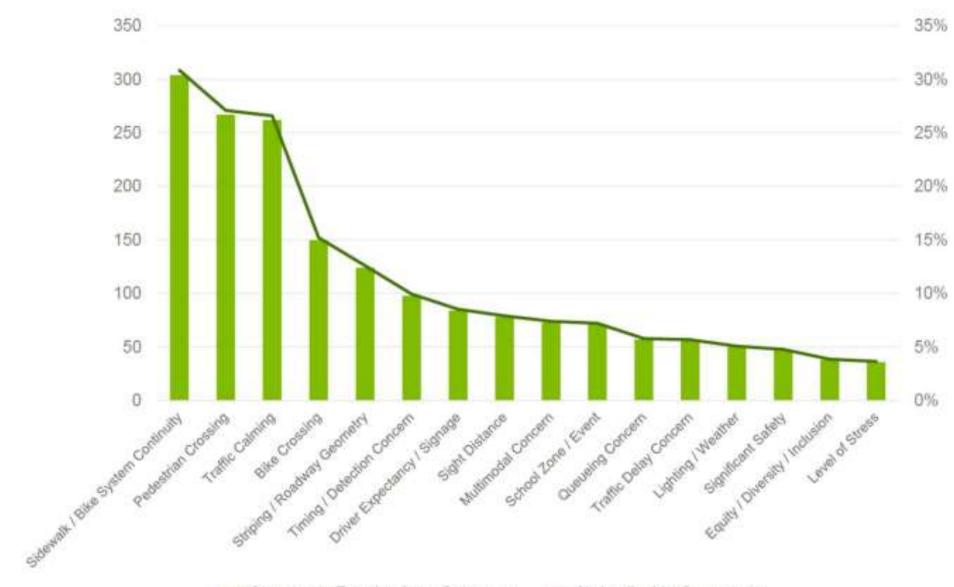




- Phase 1 Analysis Data Collection and Initial Screening (COMPLETE)
 - Develop Prioritization Criteria Data Driven Decisions!
 - Conduct initial evaluation of identified intersections and corridors
 - Develop list of intersections and corridors for Phase 2 Analysis
 - Conduct public outreach and collect public survey results
- Phase 2 Analysis Project Selection (COMPLETE)
 - Identify highest priority locations
 - Evaluate probable treatments and feasibility for top tier locations
 - Coordinate with Active Modes Plan and Vision Zero Plan
 - Develop list of potential projects (arterial intersections and corridors)
- Phase 3 Concept Development
 - Conceptual designs and estimates April 2023 (COMPLETE)
 - Final Report July 2023 (COMPLETE)
 - Council Work Session August 2023







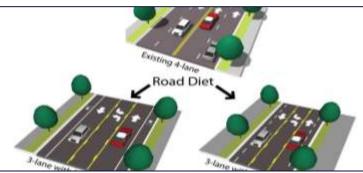
Comments Received per Category ----- % Applicable Comments



- Quantitative I.D. Top-Tier Projects
 - Crash Reduction
 - Peak Hour Delay
 - Equity
 - Growth
- Qualitative Final Ranking
 - Cost
 - Readiness
 - Multimodal Benefit
 - Synergy
 - Community



Road Diets



- E. Troutman & JFK Pkwy
- Drake Rd (west side)
- Shields St

Intersections



- Shields & Prospect
- Shields & Horsetooth
- Lemay & Drake
- Heatheridge & Prospect
- Harmony & Boardwalk
- Harmony & JFK
- Harmony & Timberline

New Construction/Corridors



- E. Prospect Rd (Sharp Pointe to I-25)
- Suniga Road (Lemay to Timberline)
- N. Timberline (Segment 1)
- N. Timberline (Segment 2)
- Vine/Timberline Overpass



PROJECT D | Drake Road Corridor Improvement

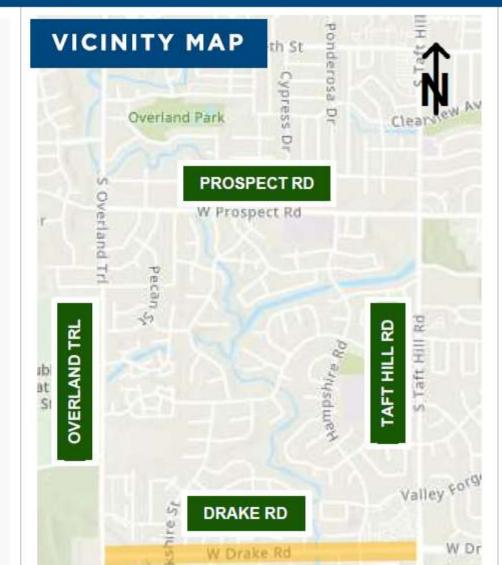
Location: Drake Rd from Overland Trl to Taft Hill Rd

Project Type: Road Diet

Project Description: Restripe Drake Road to add separated bike lanes and remove one travel lane in each direction. Signal modifications concurrent to lane realignment at Yorkshire.

Goals: Improve safety by adding dedicated/protected bicycle facilities. Reduce speeds through geometric improvements. Temporary, short-term improvements to provide low-cost solutions.

Cost estimate of project: \$2.1M





PROJECT B | S Shields Street & W Prospect Road Intersection Improvements

Location: Shields St from W Stuart St to W Prospect Rd

Project Type: Intersection Improvements

Project Description: Protected intersection at Shields St and Prospect Rd with added WB right turn lane. Evaluate need for dual left turns on Prospect Rd. Consider signal rebuild and FYA implementation. Protected intersection at Stuart St and Shields St. Shields St from Stuart St to Prospect Rd add separated bike lanes by lane diet.

Goals: Improve safety along arterials and at intersections for multimodal users.

Cost estimate of project: \$8.7M





PROJECT F | N Timberline Road - Segment 1 - Roadway Improvements

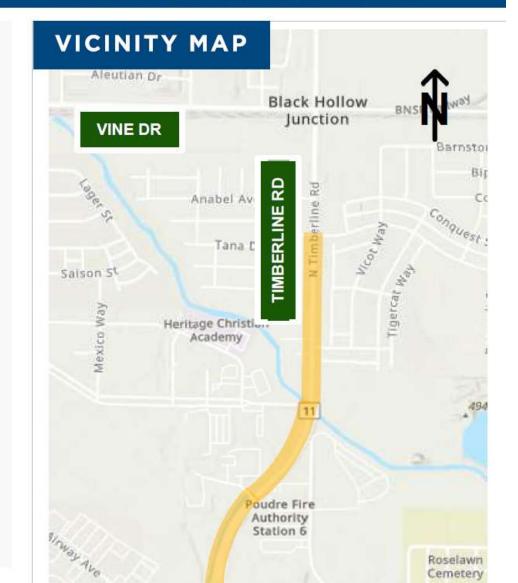
Location: Timberline Rd from E Lincoln Ave to Sykes Dr

Project Type: New Construction

Project Description: Widen Timberline Rd from Lincoln Ave to Sykes Dr to a 4 lane divided facility with separated bike lanes.

Goals: Widen roadway to accommodate future development. Improve multimodal connectivity.

Cost estimate of project: \$12.2M





Project ID	Project Name	Project Limits	Project Type	Cost	Score	Rank
в	S Shields Street & W Prospect Road Intersection Improvements	W Stuart St to W Prospect Rd	Intersection Improvements	\$8,680,000	84	1
A	E Troutman Parkway & JFK Parkway Corridor Improvements	S College Ave to Boardwalk Dr & Harmony Rd to E Horsetooth Rd	Road Diet	\$2,518,000	81	2
E	Lemay Avenue & Drake Road Intersection Improvements	-	Intersection Improvements	\$4,850,000	77	3
J	N Timberline Road Overpass at E Vine Drive	Sykes Dr to E Suniga Rd	New Construction	\$55,927,000	76	4
D	Drake Road Corridor Improvement	Overland Trl to Taft Hill Rd	Road Diet	\$2,115,000	72	5
F	N Timberline Road - Segment 1 - Roadway Improvements	E Lincoln Ave to Sykes Dr	New Construction	\$12,264,000	70	6
G	N Timberline Road - Segment 2 Roadway Improvements	Suniga Dr to Mountain Vista	New Construction	\$12,452,000	69	7
н	Heatheridge Road & W Prospect Road Intersection Improvements	-	Intersection Improvements	\$1,519,000	69	7
N	E Prospect Rd Corridor Improvements	Sharp Pointe to I- 25	Corridor Improvements	\$17,009,000	68	8
с	S Shields Street & W Horsetooth Road Intersection Improvements	-	Intersection Improvements	\$3,746,000	64	9
к	Boardwalk Drive & Harmony Road Signal Improvements	-	Intersection Improvements	\$616,000	62	10
0	S Timberline Road & E Harmony Road Intersection Improvements	-	Intersection Improvements	\$8,163,000	55	11
L	E Harmony Road & JFK Parkway/Hogan Drive Intersection Improvements	-	Intersection Improvements	\$670,000	47	12
I	Shields Street Corridor Improvements	Mulberry St to Mountain Ave	Road Diet	\$460,000	46	13
м	Suniga Road Roadway Improvements	Lemay Rd to Timberline Rd	New Construction	\$31,341,000	46	13



- Field survey conducted on all TCPPS project areas
- Sensitive environmental features evaluated: natural habitats and features, water impacts, potential wildlife habitat, raptor nest boundary, FEMA floodplain, protected areas (non-historic), and historic structures
- Next phase: evaluate and mitigate environmental concerns
 - Sustainability Rating
 - Reduce footprint
 - Modify design features



Current Projects & 10 Year TCIP



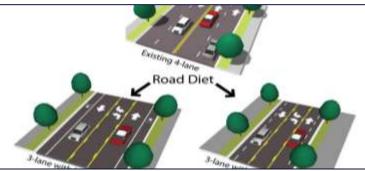
Capital Project Funding for 2023 / 2024 Program ²¹

Capital Project	Cost	Funding Need / Potential Source	Approx Construction Start (Year/Quarter)
South Timberline Corridor Improvements	\$10.9M	Funded (in construction)	2022/Q4
Laporte Bridges	\$5.6M	Funded (in construction)	2022/Q4
City Park / Mulberry Intersection Improvements	\$700K	Funded (in construction)	2023/Q2
Vine / Timberline Intersection Improvements	\$1.6M	Funded (out for bid)	2023/Q3
College/Trilby Intersection Improvements	\$16.6M	\$1.8M/STBG	2023/Q3
College Avenue Signal Improvements at Columbian, Pitkin, and Harvard	\$1.1M	Funded	2024/Q1
Siphon Bike/Ped Overpass	\$5.7M	Funded	2024/Q2
College/Triangle Signal Improvements	\$1.0M	\$1.0M/FASTER	2024/Q3
Pedestrian Crossing Improvements	\$1.3M	Funded	2024/Q3
Taft Hill Corridor Improvements	\$8.7M	\$3.3M/STBG	2024/Q3
Laporte Corridor Improvements	\$6.25M	Funded	2024/Q4
Power Trail Under Harmony	\$10.7M	\$3.4M/CMAQ	2025/Q2

Total cost of the 12 projects: \$70M Grant funding: \$30M (43% of total, and 50% of current funding)



Road Diets & Transit



- E. Troutman & JFK Pkwy
- Drake Rd (west side)
- Shields St
- West Elizabeth BRT
- North College Max Plan
- US287 (frequency)
- Route to Wellington
- Passenger Rail

Intersections



- College and Trilby
- College and Triangle
- College and Drake
- Shields & Prospect
- Shields & Horsetooth
- Lemay & Drake
- Heatheridge & Prospect
- Harmony & Boardwalk
- Harmony & JFK
- Harmony & Timberline

New Construction/Corridors/ Pedestrian GS Crossings



- Taft Hill Corridor
- Siphon Overpass
- Power Trail Under Harmony
- E. Prospect Rd (Sharp Pointe to I-25)
- Suniga Road (Lemay to Timberline)
- N. Timberline (Segment 1)
- N. Timberline (Segment 2)
- Vine/Timberline Overpass
- Mulberry Interchange
- Midtown Projects



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What feedback do Councilmembers have on the 10-year TCIP and TCPPS?

THANK YOU!

For Questions or Comments, Please Contact:

Marc Virata

mvirata@fcgov.com or (970) 221-6567





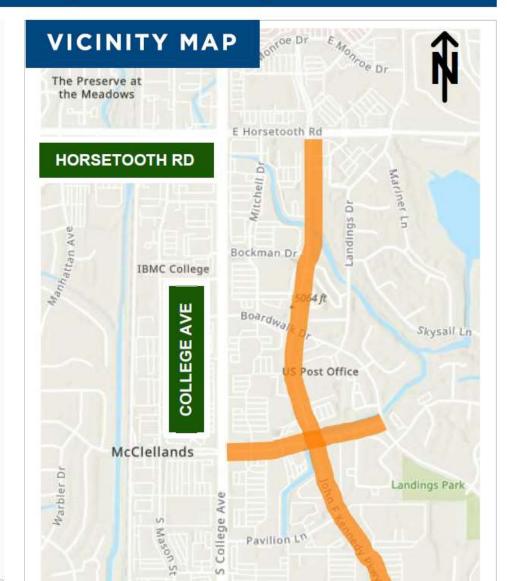
PROJECT A | E Troutman Parkway & JFK Parkway Corridor Improvements

Location: Troutman Pkwy from S College Ave to Boardwalk Dr & JFK Pkwy from Harmony Rd to E Horsetooth Rd

Project Type: Road Diet

Project Description: Restripe Troutman Pkwy. and JFK Pkwy. to add separated bike lanes and remove one travel lane in each direction. Potential access restrictions near College Ave. Consider RRFB on north side at Pavilion Ln. and JFK Pkwy. Signal modifications concurrent to lane realignment at JFK Parkway at Troutman Pkwy, Boardwalk Dr, and Horsetooth Rd Intersections.

Goals: Improve safety and provide a parallel route to College Ave. by adding dedicated/protected bicycle facilities. Reduce speeds through geometric improvements. Temporary, shortterm improvements to provide low-cost solutions.





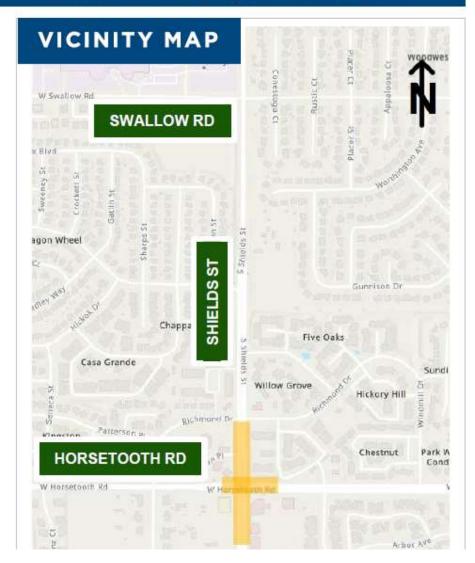
PROJECT C | S Shields St & W Horsetooth Rd Intersection Improvements

Location: Shields St and Horsetooth Rd Intersection

Project Type: Intersection Improvement

Project Description: Protected intersection at Shields St and Horsetooth Rd with accommodation for future protected bike lanes on Shields St. Add protected-only SB left phase. Extend SB left turn lane storage. Access control at Richmond Dr. Add separate bike lanes on Shields St from Horsetooth Rd to Richmond Dr.

Goals: Improve safety along arterials and at intersections for multimodal users.





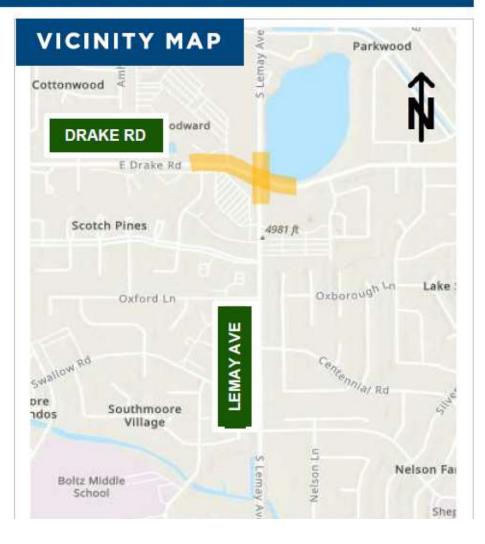
PROJECT E | Lemay Avenue & Drake Road Intersection Improvements

Location: Lemay Ave and Drake Rd Intersection

Project Type: Intersection Improvement

Project Description: Narrow existing lanes on Drake Rd to incorporate sidepaths and increase EB and WB intersection sight distance. Add SB right turn lane with overlap phase; add WB right turn lane overlap phase. Evaluate access control on Drake Road. Redesign existing right turn channelized lanes to improve bike ped safety.

Goals: Improve safety by adding geometric intersection improvements and sidepaths.





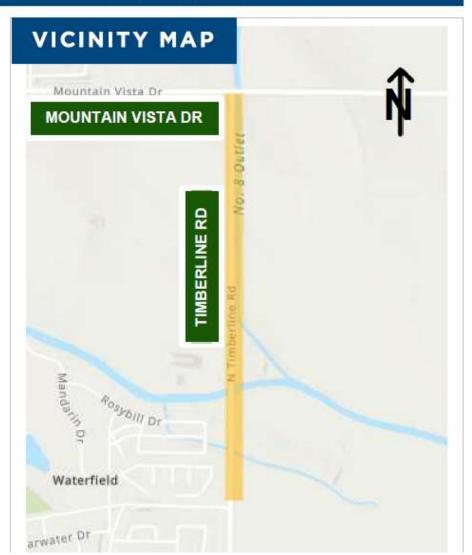
PROJECT G | N Timberline Road - Segment 2 Roadway Improvements

Location: Timberline Rd from Suniga Rd to Mountain Vista Dr

Project Type: New Construction/Widening

Project Description: Widen Timberline Rd from Suniga Rd to Mountain Vista Dr to a 4 lane divided facility with separated bike lanes.

Goals: Widen roadway to accommodate future development. Improve multimodal connectivity.





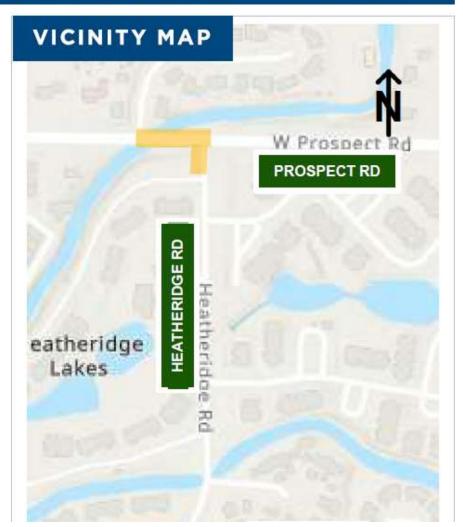
PROJECT H | Heatheridge Rd & W Prospect Rd Intersection Improvements

Location: Heatheridge Rd and Prospect Rd Intersection

Project Type: Intersection Improvements

Project Description: Replace existing HAWK with full three-leg traffic signal. Add advance crossing signs, raised median/pedestrian refuge on west leg for speed mitigation and added protection for pedestrians.

Goals: Improve intersection safety for pedestrians and cyclists, specifically for children crossing in platoons to school.





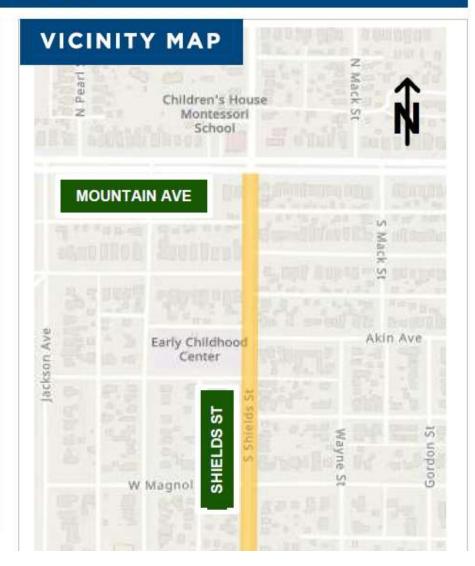
PROJECT I | Shields Street Corridor Improvements

Location: Shields St from Mulberry St to Mountain Ave

Project Type: Road Diet

Project Description: Restripe Shields St to add separated bike lanes with reduced lane configuration. Modify operations to increase separation for pedestrians; consider phase separation or exclusive pedestrian phase at Mulberry St.

Goals: Improve safety by adding dedicated/protected bicycle facilities. Reduce speeds through geometric improvements. Temporary, short-term improvements to provide low-cost solutions.





PROJECT J | N Timberline Road Overpass at E Vine Drive

Location: Timberline Rd at Vine Dr

Project Type: New Construction – Grade Separation

Project Description: Grade separate Timberline Rd over Vine St. Provide bicycle and pedestrian accommodations from Timberline Rd to Vine Dr.

Goals: Eliminate at grade rail crossing. Improve safety, and traffic operations on Timberline Rd. Improve multimodal connectivity.





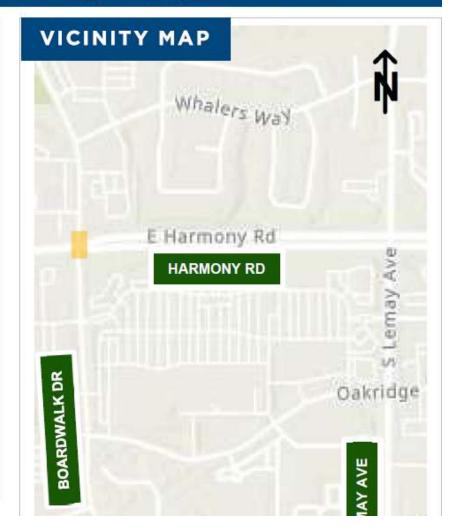
PROJECT K | Boardwalk Drive & Harmony Road Signal Improvements

Location: Boardwalk Dr & Harmony Rd Intersection

Project Type: Intersection Improvements

Project Description: Add longer NB mast arm to improve NB signal head alignment. Add left side of pole heads and upgrade all LT to FYA; Ped Button Accessibility; Retiming. Add leading pedestrian interval and lagging right turns. Upgrade existing cabinet. Add additional paint bicycle marking and consider restripe EB approach to have a buffered bike lane.

Goals: Improve safety at intersection by upgrades to existing signal infrastructure. Improve safety for bicycles and pedestrians.





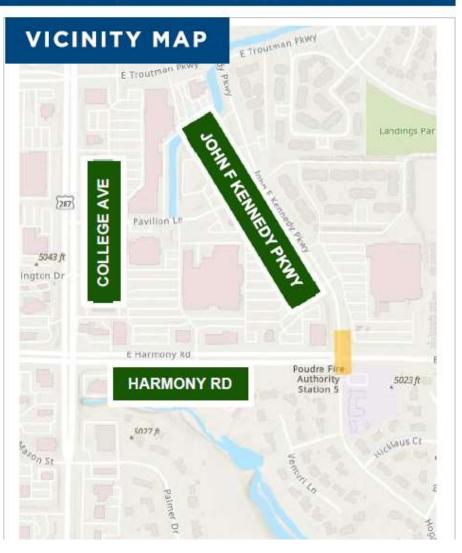
PROJECT L | E Harmony Rd & JFK Pkwy/Hogan Dr Intersection Improvements

Location: Harmony Rd and JFK Pkwy Intersection

Project Type: Intersection Improvements

Project Description: Remove NB/SB split phase by shifting SB dual LT east (1 NB departure lane). Add WB RT overlap. Align lanes on the south leg by widening to the east. Add separated bike lanes on the north leg.

Goals: Improve safety at intersection by upgrades to existing signal infrastructure. Improve safety for bicycles and pedestrians.





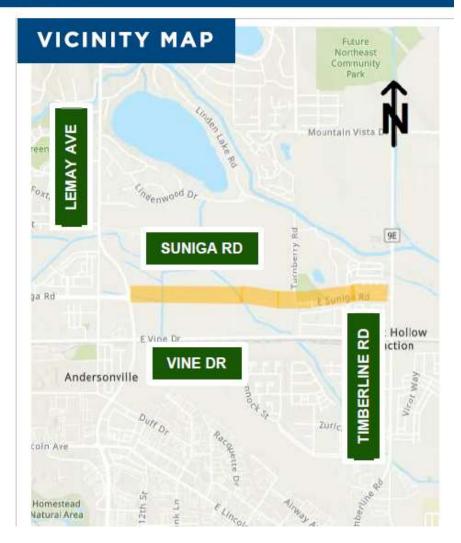
PROJECT M | Suniga Road Roadway Improvements

Location: Suniga Rd from Lemay Ave to Timberline Rd

Project Type: New Construction

Project Description: Extend Suniga Rd from Lemay Ave to Timberline Rd with a 4-lane median divided section

Goals: Extend roadway to accommodate future development and improve multimodal connectivity.





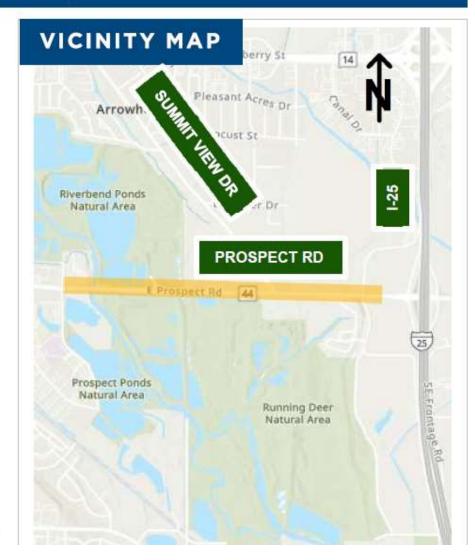
PROJECT N | E Prospect Rd Corridor Improvements

Location: Prospect Rd from Sharp Pointe to I-25

Project Type: Corridor Improvements

Project Description: Widen Prospect Rd to a 4-lane median divided facility with active modes/transit elements. Provide sidepaths for active modes.

Goals: Expand vehicular capacity and improve multimodal connectivity.





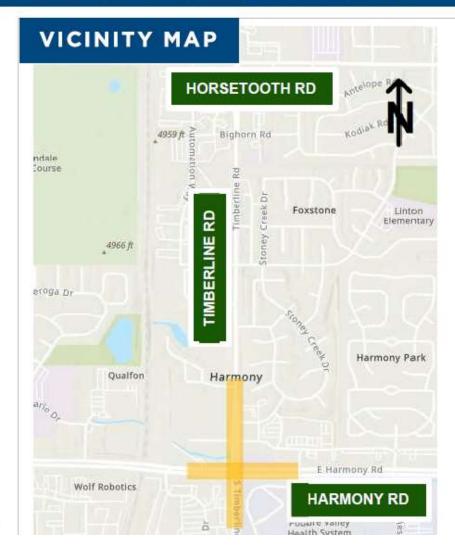
PROJECT O S Timberline Rd & E Harmony Rd Intersection Improvements

Location: Timberline Rd and Harmony Rd Intersection

Project Type: Intersection Improvements

Project Description: Add 3rd NB & SB through lanes and separated bike lanes on Timberline Road with reduced lane widths. Protected Intersection at Timberline Road and Harmony Road. Prohibit right turn on red and show flashing arrow for right turns.

Goals: Improve safety along arterials and at intersections for multimodal users.

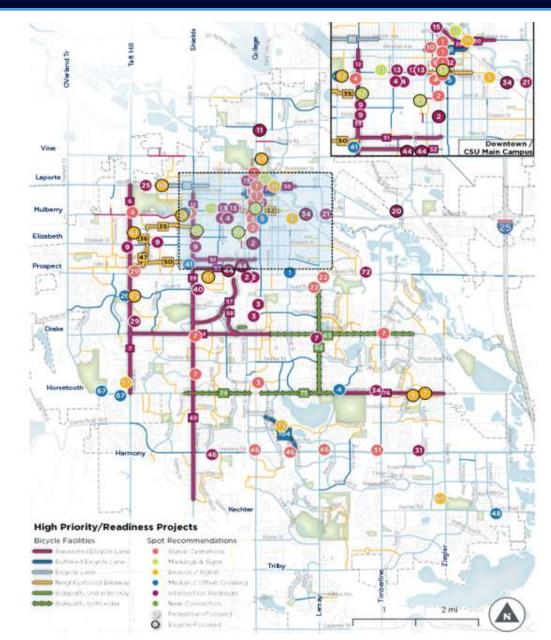




Phase 1: High Priority/Readiness

- Focused on strengthening the core network
- Includes strategic crossing improvements citywide
 - Cost estimate: \$30.4 million

Active Modes Plan – next 5 years focus ³⁸





Active Modes Plan – 6-10 years ³⁹

Phase 2: Medium Priority/Readiness

- Focused on expanding the core network to a larger geography of the city
- Includes more complex projects
 - Cost estimate: \$57.1 million

