

# Safe Routes to School PLAN UPDATE

Cheyenne Metropolitan Planning Organization Laramie County School District 1



This study is an update to the Cheyenne Metropolitan Area Safe Routes to School Plan, first assembled in 2010. It presents recommendations for each school in the metro area, including some schools constructed in the years since 2010. Safe Routes improvements are organized first through a 'Strategy Toolbox', which are followed by specific recommendations for each school. Supporting information to this study has been provided within the appendix of this report.

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Information pertinent to the development of above recommendations.

- Existing Conditions
- Community Engagement Summaries
- Safe Routes to School (2010)
- Concurrent Projects

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Figure 1: Crossing guard and children entering crosswalk, Yellowstone Rd.

## Introduction

Safe Routes to School (SRTS) is a plan to make it safer to get to-andfrom Cheyenne schools and to encourage more students and staff to walk, roll, and bike to get there.

Safe Routes to School is developed as part of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users Act and provides funding for infrastructure and non-infrastructure projects to encourage and enable children of all ability levels to walk, roll, and bicycle to school safely, thereby improving healthy lifestyles from an early age and reducing traffic, fuel consumption, and air pollution.

This is an update to existing Cheyenne Metropolitan Area Safe Routes to School Plan adopted in 2010. This update comes at an important time as traffic death and serious injuries remain high and while students' safety and well-being continue to be at stake while getting to and from school. Recent deaths of children on Cheynne streets underscore the importance of evaluating and identifying areas adjacent to schools to help improve safety of students walking, biking, and using other forms of active transportation to commute from and to school.





Figure 2: Crossing guard and children near center of crosswalk, Yellowstone Rd.

#### **PROGRAM HISTORY**

Safe Routes to School has now been underway to improve safe and accessible multi-modal connections to local schools at a national level for almost 20 years and locally for 15 years.

Throughout that time, the practice of Safe Routes to School planning has expanded from initially focusing on the "5 E's" to now including a sixth E – Equity. This additional analysis ensures that as barriers are identified and improvements planned, there is consideration for the additional burdens and barriers to walking, rolling, and biking to school faced by students and families in different socio-economic positions. Families who have faced higher barriers to accessing safe routes to school will need to be considered for additional improvements to access a similar level of accessibility.

Achieving equitable results in transportation to school may require different mixes of strategies for different communities in Cheyenne, and this plan will capture some of those additional considerations.

This Safe Routes to School plan update is intended to be comprehensive and follow the "6 E's" developed as part of Safe Routes to School plans nationwide:

**Engagement** Listening to students, families, teachers, school leaders, and community organizations and building ongoing relationships.

Equity Ensuring benefits to all demographic groups with special attention to low-income students, students of color, students of all genders, students with disabilities, and other groups historically underrepresented.

**Encouragement** Generating enthusiasm through events, activities, and programs.

**Education** Providing students and the community with skills to walk, roll, and bike safely, educating about benefits, and teaching about the broad range of transportation choices.

**Evaluation** Assessing which approaches are more successful, identifying unintended consequences, and ensuring programs and initiatives support equitable outcomes.

**Engineering** Creating physical improvements that make walking, rolling, and biking safer, more comfortable, and more convenient.



#### REGIONAL TRENDS

While more than half of the counties in Wyoming have experienced population decreases, Laramie County –including the Cheyenne metro area— saw growth close to 10 percent since the last census in 2010; the Cheyenne metro area also has the highest population density among any metro areas since the completion of the last plan. within the state of Wyoming by more than two-fold. This change in population subsequently resulted in student enrollment increases within the area schools, which has created a large demand for new schools and expansions since the completion of the last Safe Routes to School Plan. Evidence of this is that Laramie County School District 1 (LCSD1) has added 11 additional schools since 2010.

LCSD1 served 14,010 students during the 2021-2022 school year and more than 60 percent of the students relied on bus transportation while the remainder of the students use other modes of transportation including walking, bicycling, driving, parental/guardian drop-offs, etc., to commute between home and school. It has been a priority of not only LCSD1 but the Chevenne MPO, the City, Laramie County, and the community to ensure student safety through traditional commuting and also to encourage active and healthy lifestyles through alternative modes of transportation such as walking and biking at many of the existing facilities within the Cheyenne MPO boundaries. Often times, the lack of dedicated pedestrian and bicycle facilities such as sidewalks, bicycle trails or lanes, prevent students from walking or bicycling to school via their preferred route but, other factors such as high-speed traffic, surrounding land uses, non-ADA compliant infrastructure, among others serve as barriers and challenges.

Population growth and the addition of new LCSD1 schools are not the only reasons that prompt a Safe Routes to School Plan update. Since the adoption of the last Safe Routes to School Plan, new means of alternative transportation such as electric scooters and hoverboards have been introduced to our communities. Although Safe Routes to School Plans have traditionally focused on non-motorized transportation modes, our team believes it is important to address the use of these alternative modes of transportation and new safety concerns that have arisen with them.

#### CITY OF CHEYENNE

Chevenne continues to prioritize active transportation modes of walking, rolling, and biking for the health, safety, and happiness of the community. One of these priorities is promoting active transportation for children on their routes to school. Similar to many cities across the nation, Cheyenne has experienced a significant decrease in the number of children walking, rolling, or biking to school in recent decades, a trend that coincides with overall lower activity levels and higher rates of obesity. Physical activity for children is crucial and has numerous benefits, including improved attention spans in academic settings, decreased risk of depression, as well as overall health benefits for the body, including the heart, lungs, and bones (Credit: Making Strides, Safe Routes Partnership, 2022). Walking and biking to school is an effective way to incorporate daily physical activity to improve health, increase independence, and encourages children to continue using active transportation later in life.

#### PHYSICAL ACTIVITY

Physical activity levels among young people remains a persistent challenge. Children between the ages of 6 and 17 are not getting the activity they need to maintain good physical and mental health at a key stage in their development, with only 24% getting the recommended 60 minutes of physical activity per day according to a CDC survey in 2020. Activity levels analyzed among high school students also vary by gender, with girls getting less physical activity than boys, and by race, with white children getting more physical activity than African American and Hispanic children. While all demographic groups saw ongoing decline in activity levels, there was greater decline among boys and Hispanic students (Credit: Youth Risk Behavior Survey, Center for Disease Control and Prevention, 2019).

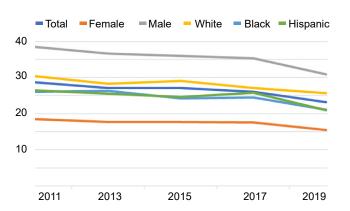


Figure 3: Percent of high school students who were physicaly active for at least 60 minutes per day (Credit: Youth Risk Behavior Survey, Center for Disease Control and Prevention, 2019)



This plan identifies ways Cheyenne can build on these successes in Safe Routes to School Action to have an even greater impact on community outcomes.

As a state, Wyoming has had success in receiving federal Transportation Alternatives Program (TAP) funds to support multi-modal improvements that help reach Safe Routes to School goals. Additional policy improvements and state funding could help municipalities like Cheyenne with high-need communities access more funds to advance Safe Routes to School projects.

#### SCHOOL ENROLLMENT

It is important to recognize the indelible impact of the COVID-19 pandemic on schools and families since 2020. While many schools in Cheyenne were able to stay open for the majority of the year during 2020 and 2021, absenteeism has increased by 40% in 2022 across the LCSD1 (Credit: Chronic Absenteeism Tracker, Return To Learn, 2024).

While detailed data and trends are still emerging, Safe Routes to School planning can help address ways transportation contributes to families' ability to get their student to school on a consistent basis. Anecdotally, it is easy to see how a transportation system with fewer options to walk or bike may increase risk of missing school when a parent's car breaks down and no alternatives to walk or bike are available.

## BARRIERS TO ACTIVE TRANSPORTATION IN CHEYENNE

Identification of transportation barriers is essential to the Safe Routes to School planning process as it helps understand the narrative of people's mode choice when it comes to active transportation. Barriers to active transportation come in various forms and often subjective as everyone has a different level of comfort with their built-environment. Therefore, barriers to active transportation could be infrastructural (i.e., the lack of sidewalks, separated bike facilities, traveling along high-speed vehicular traffic, etc.) or experience-based (i.e., a parent/ quardian feeling unsafe letting their young children walking, rolling, and biking alone). For example, a city that wishes to increase foot traffic but with no sidewalks may be able to achieve that goal by implementing a complete street policy that would help build a sidewalk network.

#### **Non-infrastructure Barriers**

While the built environment is often the primary reason why students may not choose active transportation as a mode to get to and from school, many non-infrastructure characteristics act as barriers to active transportation. For example, a school may have a complete sidewalk network with thorough pedestrian safety engineering efforts, but if an important education, enforcement, encouragement, or policy component is missing, the numbers of students walking or biking will be lower than if a comprehensive effort to encourage active transportation was enacted. The non-infrastructure barriers discussed in this memorandum include:

- Parental perceptions about walking and biking
- Enforcement of traffic violations in the school zone
- Time limitations of school administration, teachers, and parents
- In-school programs that encourage walking and biking
- City and District policies related to pedestrian and bicycle safety
- District programs that manage student arrival/ dismissal
- District programs that educate and encourage walking and bicycling

Especially among the younger students, parents and guardians may influence how their children get to and from school. Each parent or guardian has personal criteria they consider when determining whether or not an environment is considered safe or at what age their student is capable of walking and biking to school. The following reasons may influence parents' and guardians' decision to allow their children to walk, bike, or roll to school:

**Weather** – Parents may feel as though the weather is too extreme for their student to walk or bike, especially during Cheyenne's very cold and windy winters. In addition, students may not have adequate cold weather or rain gear for their trip to school.

Age – Children are smaller in stature than adults and therefore their visibility to motorists is reduced and their ability to see over obstacles in inhibited. Also, until the age of ten, children have a limited concept of road rules and why they need to exhibit safe behavior. Further, children have both limited cognitive ability and peripheral vision. These limitations increase the difficulty of accurately judging the speed of cars. Because of these and other limitations, parents are protective of their children and can be hesitant to allow them to walk or bike to school.



Convenience/Quality Time – Many parents drop their children off at school on their way to work. Because parents and guardians are busy, they cite the convenience of being able to do "double duty" and take their students to school on the way to work. Further, parents often report feeling that the time in the car on the way to school is quality time with their children.

**Traffic** – If the route to school is high-speed, high-volume, or without proper facilities, parents can be reluctant to allow students to walk or bike to school. Parents are often concerned that their student does not have a safe route that is separated from motor vehicle traffic.

**Distance** – Even though physical activity is an important component of a healthy lifestyle, parents may feel as though the trip to school is too far. Alternately, parents may choose to place their students in a non-neighborhood school and the distance to the school is beyond a walkable or bikeable distance.

**Fear of Strangers/Abduction** – Parents express fear of strangers and abduction as a reason why they do not allow their children to walk or bike to school.

#### **EXISTING CONDITIONS**

The existing conditions includes analysis of the existing and planned surface transportation network, posted speed limit, traffic volume, and crash data, providing a snapshot of the present-day mobility landscape within the city. A baseline understanding of the network connectivity, efficiency, safety, and capacity enables identification of network gaps and improvements, and serves as a critical reference point for proposed recommendations.

Below is a description of what was mapped and how it informs the analysis:

- Existing and Planned Surface Transportation: Bike lanes, trails, greenways, and sidewalks are mapped to identify gaps in the existing and planned network.
- Posted Speed Limit: Speed limits across the networks are evaluated to understand their impact on traffic flow and safety, and to identify transportation barriers that discourage active transportation.
- Traffic Volume: Average annual daily traffic (AADT) is a key indicator of congestion levels and transportation demand, in order to identify transportation barriers that discourage active

- transportation due to the built environment catering more towards motorists.
- Crash data: This analysis includes patterns in accidents, such as high-risk locations, common causes, and the times at which they are most likely to occur to understand the underlying issues contributing to incidents, to reduce the frequency and severity of accidents, and increase safer travel for all network users.

The project team also completed safety audits at select schools —schools that were identified by the technical committee for this project— to collect data to observe existing travel patterns of students, traffic flow of drop-offs/pick-ups and school buses, driver and student behaviors on the roadways, existing infrastructure conditions for non-motorists, etc. These existing condition observations at the select school sites are detailed in the Appendix.

#### **Infrastructure Barriers**

Physical infrastructure barriers observed in LCSD1 may be overcome or reduced through modifications to the physical environment (e.g., additions of signage, channelization of pedestrian traffic to midblock crossings, or modification of pick-up and dropoff zones). This section defines the specific types of barriers and then presents an analysis of barriers affecting each of the 37 schools under focus. The physical barriers include:

- Traffic Crashes within Two Miles of the School Over the Last Three Years
- Missing or Substandard Walkways (Sidewalks and Paths)
- Lack of Safe Bike Routes to School
- Unsafe Street Crossings and Intersections
- A Major Roadway or Expressway Divides the School from Residential Areas
- Lack of Accessibility
  - Distance to School is Too Far
  - Bike Parking at School is Missing, Insufficient or Non-Secure
- Dangerous Driving and Speeding on Streets
- Drop-off and Pick-up Process Creates Congestion and Unsafe Behaviors

Because barriers to active transportation are often user-experience based, feedback and comments received during open houses and stakeholder engagements were valuable input incorporated

- O Desired improvement

Other comment

**APPENDIX** 



into this update. Below is a summary received from stakeholders and the public that were considered barriers to active transportation specifically to Chevenne:

- Lack of dedicated (buffered) bicycle facilities
- Gaps within existing sidewalk and bicycle network (More continuity of facilities that would provide better connectivity)
- Roadway designs that accommodate vehicular traffic rather than non-motorists (wide lanes greater crossing distances for non-motorists, increased in number of lanes - increasing conflict points, lack of median refuge for wider crossing distance)
- Distrust of drivers to abide by traffic laws, specifically posted speed
- Motorists driving well-above the posted speed
- High-speed roadway
- Roadways with high average daily traffic volumes
- Lack of crossing locations over physical barrier such as but not limited to, railroads, natural resources (i.e., rivers, lakes), major roadways (i.e., interstates) for non-motorists
- Walking distance to school not appropriate (i.e., too far from home)
- Insufficient crossing opportunities
- Lack of educational opportunities related to roadway safety

Barriers to active transportation received as part of the study's engagement process were comprised of infrastructural and non-infrastructural barriers. Figure 4 maps safety concerns and issues that were identified by the public and study stakeholders.

#### SAFE ROUTES TO SCHOOL TEAM

The Team convened to plan, coordinate, and implement the recommendations set forth in this document. To ensure that the updated Cheyenne Safe Routes to School Plan encompasses the various aspects of surface transportation that impacts the safety of students, a technical advisory that comprised of the following stakeholders was established:

- Cheyenne Metropolitan Planning Organization
- Laramie County School District (LCSD) #1 **District Office**
- Stantec Consulting
- City of Cheyenne
- Laramie County
- Wyoming Department of Transportation
- City of Chevenne Police/Sheriff Department
- School staff
- Parents and students
- Other stakeholders, such as health organizations, bicycle/pedestrian advocates, or neighbors

The Team comprised of planners, engineers, law enforcement officers, local officials, school district staff and administrators, school faculty and staff, and/or stakeholders provide a balanced opportunity to identify safety concerns and issues where data is unavailable or unable to identify an issue. For example, "near-misses" do not get recorded yet valuable information that may help proactively address safety concerns.

This update will take into account any information that are still relevant today from the 2010, evaluating transportation safety needs on and around 37 elementary, junior high, high school, and charter school campuses within LCSD1 in Cheyenne, WY. The previous Safe Routes to School Plan vision, goals, and policies were reviewed and built upon them where items were still applicable. Below is a list of all the 37 schools identified as part of this Safe Routes to School Plan update:

#### **Elementary Schools:**

- Afflerbach
- Alta Vista
- Anderson
- Arp
- Baggs
- Bain
- Buffalo Ridge
- Cole
- Coyote Ridge
- Davis
- Deming
- Dildine
- Eastridge
- Fairview
- Freedom

#### Hobbs

- Henderson

• Goins

Hebard

- Jessup
- Lebhart
- Meadowlark
- Miller
- Pioneer Park
- PODER Academy
- Prairie Wind
- Rossman
- Saddle Ridge
- Sunrise

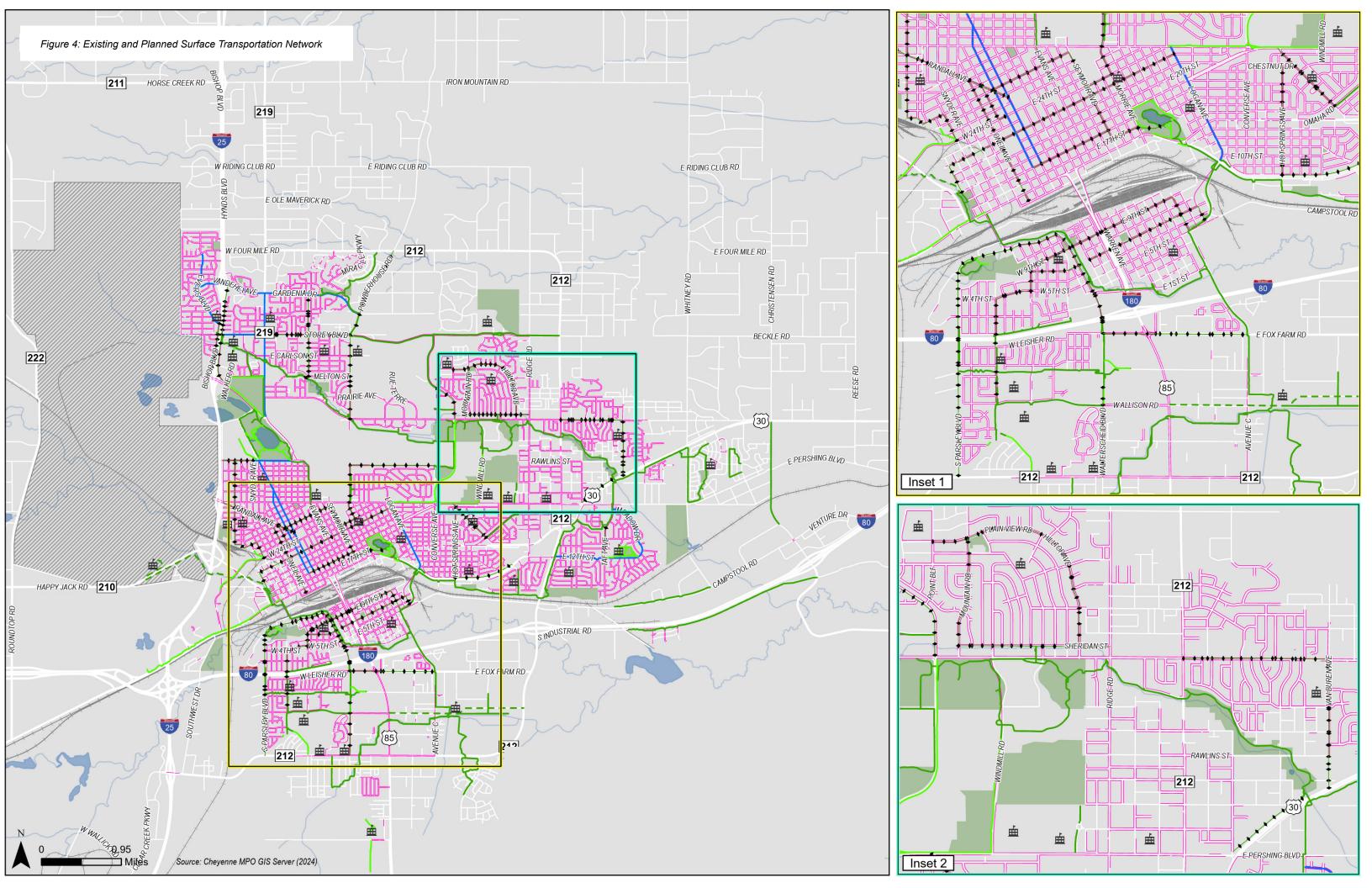
#### Junior High Schools:

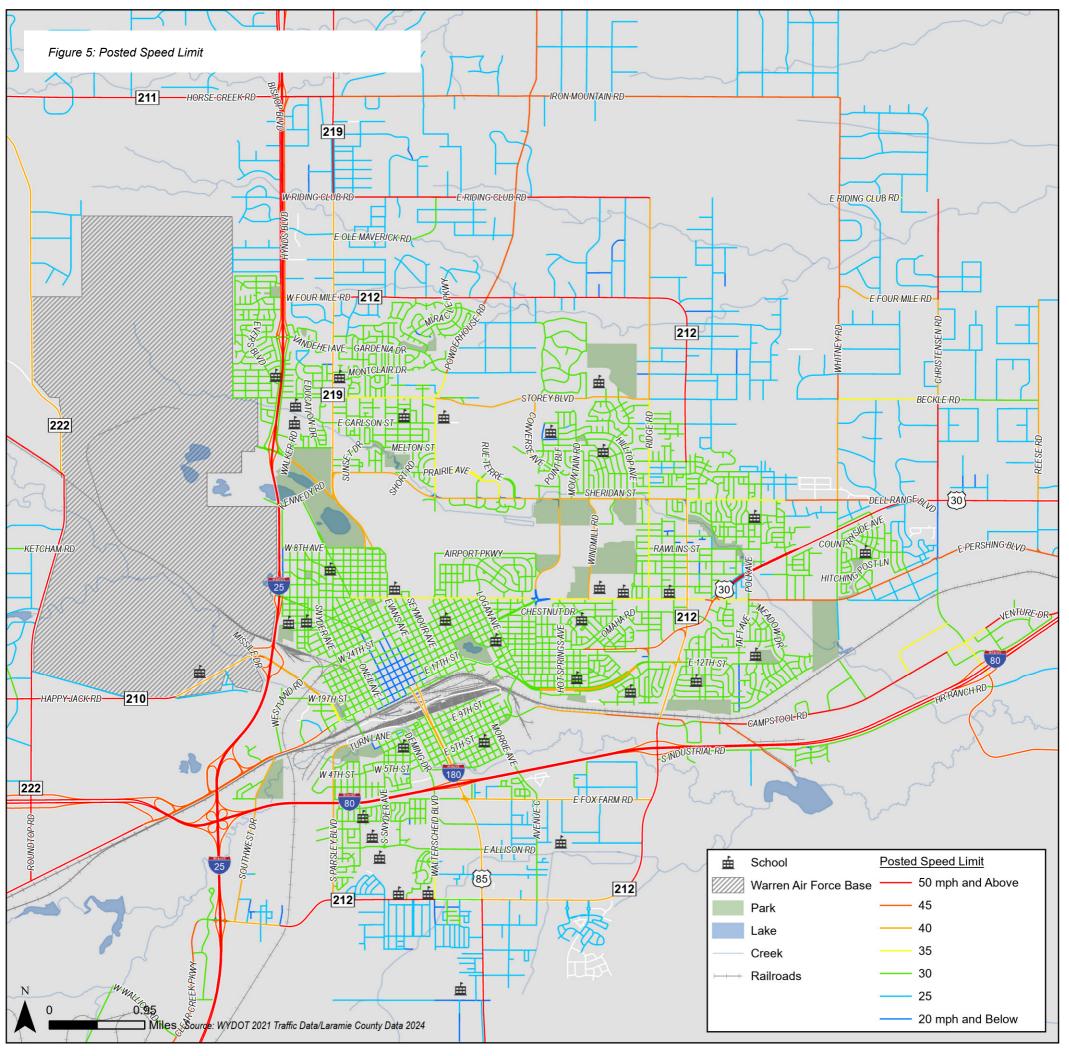
- Carey
- Johnson
- McCormick
- PODER Academy Secondary School (PASS)

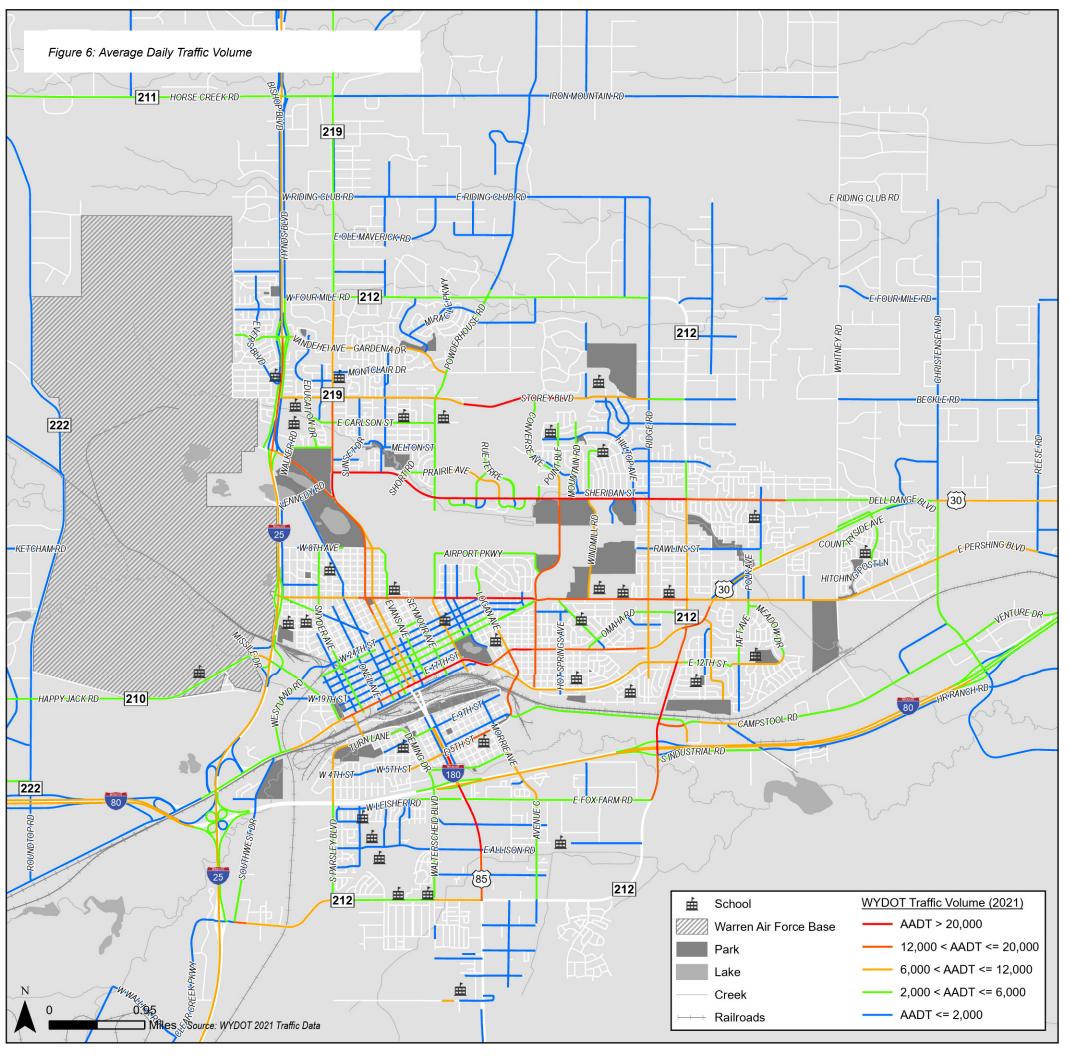
#### High Schools:

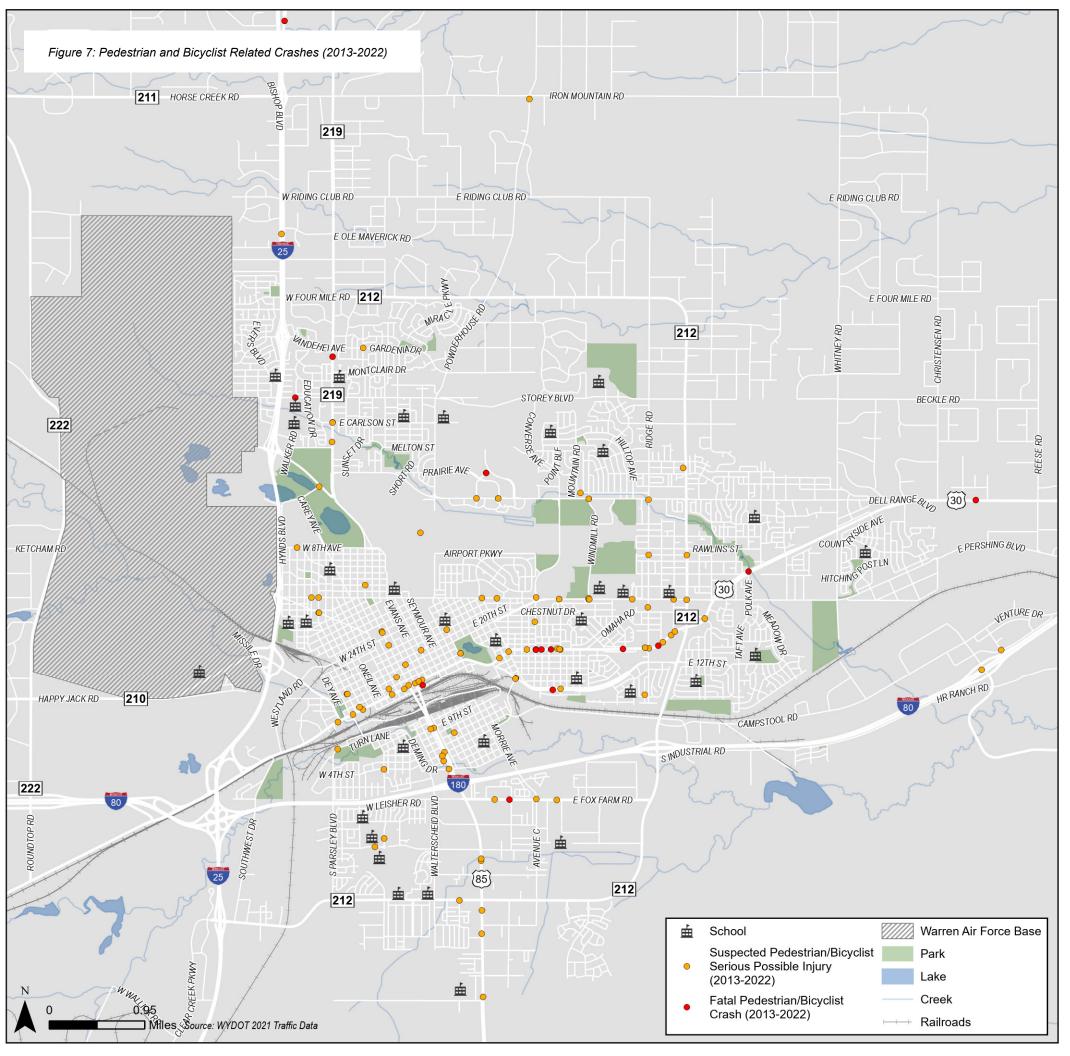
- Central
- East
- South
- Triumph

For further background information, see the Appendix.









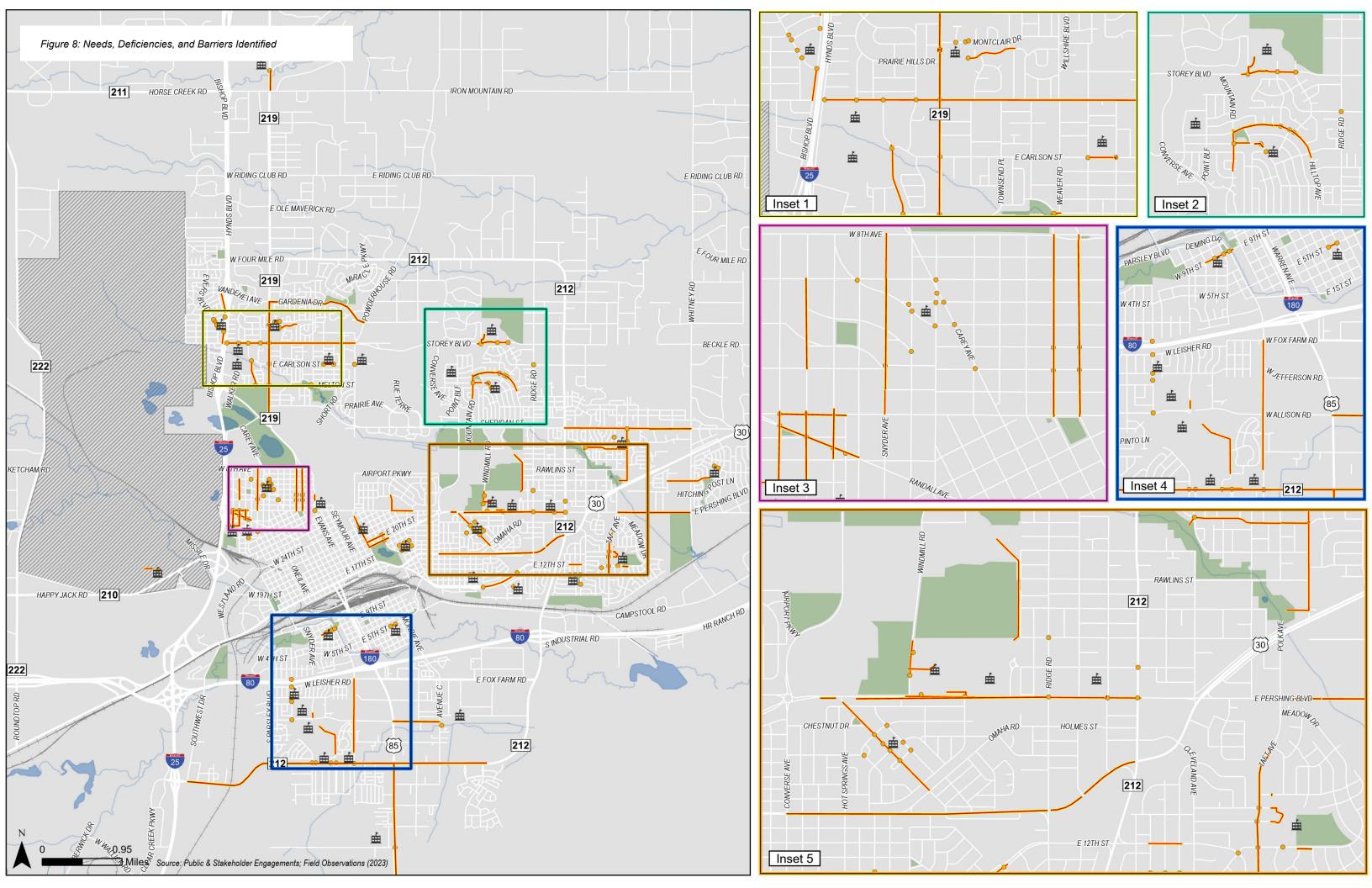




Figure 9: Asphalt Art Safety Study (See page 9; Credit: Sam Schwartz)

## **Strategy Toolbox**

The Strategy Toolbox outlines a set of methods that have been successful in improving safe routes to school for children across the United States of America. Strategies are organized into six categories. Strategies are organized into categories: Engagement, Equity, Encouragement, Education, Evaluation, and Engineering.



A strategy toolbox is an essential component in enhancing the safety of routes to school for students. This toolbox comprises a collection of best practices, guidelines, and resources that can be utilized by school administrators, local governments, and community organizations to create and maintain safe pathways for children. The importance of such a toolbox cannot be overstated, as it provides a structured approach to addressing the multifaceted challenges associated with ensuring students' safety when commuting to and from school.

The six E's of Safe Routes to School are a comprehensive framework designed to create safer and more accessible pathways for students. These six components are:

**Engagement** Actively listening to and involving students, families, teachers, and community organizations in the planning and implementation of Safe Routes to School initiatives. Engagement ensures that the needs and concerns of the community are addressed through clear lines of communication where information is easily accessible by all audiences.

**Equity** Ensuring that Safe Routes to School programs benefit all demographic and interest groups, with particular attention to frequently underserved students and families (i.e., low-income students, students of color, students of all genders, and students with disabilities). Equity aims to create fair and inclusive outcomes for everyone.

**Encouragement** Generating enthusiasm and increasing the number of students walking and bicycling to school through events, activities, and programs. Encouragement can include walk-to-school days, bike rodeos, and other fun initiatives that would also serve as an educational opportunity to roadway safety. This E often compliments "Education" and is a great way to encourage students to healthy and active lifestyles that can be lifelong benefits.

**Education** Providing students and the community with the skills and knowledge to walk and bicycle safely. Education efforts might include safety workshops, informational campaigns, and teaching about the benefits of active transportation.

**Evaluation** Assessing the effectiveness of Safe Routes to School programs and identifying areas for improvement. Evaluation helps ensure that the initiatives are achieving their goals and allows for adjustments based on data and feedback. Evaluation of programs should be completed regularly for effective implementation.

Engineering Focusing on making physical improvements to streets and neighborhoods to enhance safety and convenience active transportation for people of all abilities and ages. Engineering solutions might include better crosswalks, bike lanes, traffic calming measures, etc.

There are specific processes before engineering solutions can be implemented (i.e., studies, feasibility reports, etc.) to ensure that the improvement will meet existing and future transportation needs and local, regional, and state design standards. Therefore, please note that engineering strategies recommended in this section will need further investigation before formally adopted for implementation.

## **ENGAGEMENT STRATEGIES**

Listening to students, families, teachers, school leaders, residents, community organizations and other stakeholders and building ongoing relationships.

- Asphalt Art
- **Pilot Programs**
- Back-to-School Blitz
- Safe Routes to School Task Force
- Tabling at Conferences and School Sports Events



Could you champion for any of these strategies? Add your name to a list of volunteers!

Note: Where stars appear on the following pages indicate strategies that may be accomplished with lower financial or time investment relative to others.



## **Asphalt Art**



Figure 10: Asphalt Art Safety Study (Credit: Sam Schwartz)

Asphalt Art uses paintings or murals on asphalt to decrease turning radii, narrow turn lanes, shorten crossing distances and increase visibility of crosswalks. It is a low-cost alternative to capital improvements such as curb extensions and results in slower speeds of turning vehicles to create a safer, more walkable environment.

This strategy addresses Speed Reduction, Pedestrian Crossing Distance Reduction, Enhanced Pedestrian Visibility, and Community Beautification

**Timeline:** Minimum of three months from kickoff to installation

**Lead/Support:** Street right of way owner (City of Cheyenne, Laramie County, WYDOT) lead with support from nearby schools as engagement partners

Audience: Students, families, community members

**Inclusion:** Consider opportunities for pilots to take place in schools with highest existing safety risks and highest existing walking, rolling, and biking to school participation rates. Translate the engagement materials and feedback surveys into languages most relevant to the adjacent school's communities.

**Implementation Considerations:** Involve the community in the process and the painting

**General Cost:** \$-\$\$ - Relatively low cost to install, must consider artist compensation for design, installation labor, and ongoing maintenance costs if intended as more than a temporary treatment

**Typical Funding Sources:** Capital improvement funds, municipal art funds, grants or funds from local/state/federal/private sources, sponsorships

#### **Additional Resources:**

- New Study Shows Streets Are Safer with Asphalt Art | Bloomberg Philanthropies
- Asphalt Art | Bloomberg Philanthropies
- asphalt-art-guide.pdf (bbhub.io)

Relevant E's: \_Equity\_ \_Encouragement\_ \_Education\_ \_Engineering\_



## **Pilot Programs**

Right of way owners can test or pilot safety and traffic calming improvements on streets for a limited or temporary basis to evaluate potential designs prior to full installation. Pilot improvements could include temporary curb extensions (bump outs), lane narrowing, or implementing dedicated bike facilities. Typical materials for installation include traffic grade paint, bollards, planters, temporary curb, and other low cost or donated options.

This provides opportunities for student and community participation in both installation and design improvements to ensure a high-level of impact from capital investments.

**Timeline:** Minimum of six months from kickoff to installation. Ensure data is gathered before, during and after installation.

**Lead/Support:** Street right of way owner (City of Cheyenne, Laramie County, WYDOT) lead with support from nearby schools as engagement partners

**Inclusion:** Consider opportunities for pilots to take place in schools with highest existing safety risks and highest existing walking, rolling, and biking to school participation rates. Translate the engagement materials and feedback surveys into languages most relevant to the adjacent school's communities.

Implementation Considerations: Consider best practices for maintenance of the pilot features, who will be responsible if something needs replacing during the pilot period, and how community members will provide feedback on the installation to inform a potential permanent design and implementation.

General Cost: \$\$-\$\$\$

**Typical Funding Sources:** Safe Routes to School grants, public health grants, State DOT Active Transportation Funding, general fund

#### **Additional Resources:**

 https://edocs-public.dot.state.mn.us/edocs\_ public/DMResultSet/download?docId=27025334

Relevant E's: \_Engagement\_ \_Equity\_ Engineering





Figure 11: Pilot Program (Credit: Marco Te Brömmelstroet)





### **Back-to-School Blitz**



Figure 12: Walk and Bike to School Month (Credit: Seattle Public Schools)

Back-to-School Blitz is a fun and engaging event held at the beginning of the school year to educate, encourage, and excite students and families to use active transportation to get to school.

At the event and as part of promotion, help families set new routines by providing information about transportation options, why they should consider limiting driving alone to school, and other programming the school participates in to support walking, rolling, biking and bussing options.

This activity helps establish new habits around biking, walking and rolling to school. The beginning of the school year is when people establish their habits and routines. Some people are not aware of the variety of transportation methods available to them and habitually drive to school from the start. In general, it is much easier to establish a new routine that includes walking, rolling, or biking at the beginning of the school year than to convince people to change their routines mid school year.

**Timeline:** Beginning of the school year

**Lead/Support:** School staff, community volunteers, parents/guardians

Audience: Students, families, community members

**Inclusion:** Make sure materials and discussions are offered in languages relevant to the community, that active transportation ideas for all ages and abilities are encouraged. This event is a great opportunity to provide free helmets or locks to families throughout the school to lower barriers to using bicycles safely and securely.

#### Implementation Considerations:

- Letter signed by the principal encouraging active transportation habits
- School transportation maps, suggested routes to school maps with walking, rolling, and biking routes, transit and bus stops, drop-off and parking areas, bike parking locations
- Safety tip sheets
- Sign pledges to commit to active transportation and not driving alone, use as raffle entries for relevant prizes
- Engagement tables to talk through concerns and questions
- Highlight in school newsletter
- Community walk, roll, and bike to school before school starts so students and families can get used to their route without the pressure of school start time

General Cost: \$ - Cost of engagement materials

Typical Funding Sources: PTA/PTO, Safe Routes to School/Safe Streets for All Implementation grant

#### **Additional Resources:**

- https://www.walkbiketoschool.org/plan/how-toplan/
- https://capcity.news/community/2023/05/15/kids-bike-safety-rodeo-to-take-place-june-4/

Relevant E's: \_Engagement\_ Equity\_ \_Encouragement\_ \_Education\_

### Safe Routes to School Task Force













Figure 13: Task Force Membership

The Safe Routes to School Task Force advances initiatives set forth in this plan and the previous Safe Routes to School plan (2010). The group includes representatives from government agencies, school staff, parent organizations, and other partners. Members meet on a regular basis, plan activities and evaluate programs.

This strategy establishes ownership and advocacy for resident-led implementation of SRTS recommendations. A consistent group to support implementation ensures that initiatives move forward even amidst the busy schedules of school staff and local government leaders. This Task Force is also a great ongoing touch point for engagement with families and community members.

Task Force Members (as of September 2024)

- Todd Deporter School District (LCSD1)
- Michael Larson School District (LCSD1)
- Taylor McCort WYDOT
- Molly Bennett Laramie County
- Robert Peete Cheyenne Police Department
- Shannon Fertig LCSD1
- Christopher Yaney Cheyenne MPO
- Matthew Colson Cheyenne Police Department
- Adam Greenwood LCSD1
- Dawson Smith Laramie County

Timeline: Ongoing

Lead/Support: Cheyenne MPO

Inclusion: Work to have demographically similar task force to the school communities at large. Have structures for evaluating the initiatives that are advanced each year in comparison to equity goals it is important that no one school or passionate individual steers work toward benefitting a single school.

Implementation Considerations: Select a meeting space that is centrally located and accessible. Virtual options are great to include after the group has established relationships and meeting norms.

#### **Additional Resources:**

https://www.saferoutespartnership.org/ resources/toolkit/let%E2%80%99s-get-together

General Cost: \$ - Member's time, administration

Typical Funding Sources: See other actions

Relevant E's: Engagement Encouragement



## **Tabling at Conferences and School Sports Events**



Figure 14: Student tabling (Credit: American University)

Face time at existing school events are great opportunities to promote alternatives to driving. Set up Safe Routes to School resource and promotional tables at Parent-Teacher Conference nights or near concession stands at well attended school sports events.

These settings help reach families when they're already at schools and overcome communication barriers that happen when only using email or newsletter communication. The Cheyenne Regional Medical Center has led a Safe Kids Day that could provide opportunity and inspiration for further events.

Timeline: Under one month needed to organize

**Lead/Support:** Staffing of tables can be provided by volunteers, MPO staff, and SRTS Task Force members

Audience: All ages, students and families

**Inclusion:** Ensure materials are available in multiple languages as appropriate and is formatted specifically for each target audience

Implementation Considerations: Have a mix of informational material and helpful tools available to distribute. An activity or free promotional item can be a helpful "hook" to draw in students to the table so that you can talk to parents about their barriers to trying new modes to get to school. Have open conversations about constraints like distance, weather, familiarity, safety and other common reasons parents may be hesitant to try new things. Use talking points and print materials on hand to be able to support overcoming these barriers.

**General Cost:** \$ - Printing may be done within the school for a small material cost

Typical Funding Sources: N/A

#### **Additional Resources:**

- www.saferoutespartnership.org/resources/toolkit/ srtsctrl-5
- www.safekids.org/coalition/safe-kids-laramiecounty

Relevant E's: \_Engagement\_ Equity\_
Education

## **EQUITY STRATEGIES**

Ensuring benefits to all demographic groups with special attention to low-income students, students of color, students of all genders, students with disabilities, and others group historically underrepresented.

- **Cold Weather Clothing Drive**
- Free Bike Loans, Low Cost Rentals
- Free Helmets and Bike Locks
- Prioritization of Capital Projects Through Equity Lens
- Neighborhood Match Program
- **Engaging Students with Disabilities**



Could you champion for any of these strategies? Add your name to a list of volunteers!

Note: Where stars appear on the following pages indicate strategies that may be accomplished with lower financial or time investment relative to others.





## **Cold Weather Clothing Drive**

Cold weather gear, including coats, hats, gloves, and boots are necessary for walking, rolling, or biking to school during much of the school year. Hosting or supporting an existing cold weather clothing drive helps low-income students and families access essential gear which they might otherwise lack due to financial constraints. Providing these items makes it safer and more comfortable for students to get to school, promoting attendance and punctuality, and overall well-being of walking, rolling, or biking to school.

**Timeline:** Fall semester (August organization, September-October for drive and collection, November distribution)

**Lead/Support:** Local organization(s), school district, local businesses

Audience: Students from low-income households

**Inclusion:** Target low-income neighborhoods

**Implementation Considerations:** Timing before winter, collecting durable and weather-appropriate items, distribution logistics, engaging local partners, ensuring inclusivity for all age groups and sizes

General Cost: \$ - administration, promotion

Typical Funding Sources: Donation-based

#### **Additional Resources:**

 www.createthegood.aarp.org/volunteerguides/coat-drive.html

Relevant E's: Equity Encouragement



Figure 15: Winter Wear for Walking to School (Credit: Safe Routes Utah)



## Free Bike Loans, Low Cost Rentals

Work with local bike shops, thrift stores, and police departments to provide low-cost or free children's bicycles to families who may want to participate but don't have bikes of their own. Additionally, the school could purchase bikes to be loaned out to families at low or no cost for the school year to facilitate trips to school.

While bicycles are undoubtedly cheaper than private cars to own, they are still an additional cost that can be a barrier for families with many children. As children grow, they also might need to size up their bicycles faster than their families can find a new bike in their price range.

Timeline: Varies

**Lead/Support:** School based program or district wide. A Safe Routes to School Task Force could initiate as well.

Audience: All ages

**Inclusion:** This strategy is focused on low income families. Reach out to local service providers for low income families to help promote the program. Don't brand bikes with school logos so that students using them aren't identifiable from those whose families bought their own. Procure a variety of sizes and styles so that families have flexibility.

**Implementation Considerations:** Schools might want to purchase bike locks to be loaned to students for use during the school year.

**General Cost:** \$-\$\$ – Some bikes can be donated, but other bikes to be loaned or rented come at a variety of costs.

**Typical Funding Sources:** SRTS Grant Funding, Public Health Funding, Active Transportation Grants, local business sponsorships, special event donations

#### **Additional Resources:**

<a href="https://www.saferoutespartnership.org/resources/toolkit/bsi">https://www.saferoutespartnership.org/resources/toolkit/bsi</a>

Relevant E's: Equity Encouragement



Figure 16: Bike rental (Credit: Amber Faust)





### Free Helmets and Bike Locks



Figure 17: Helment exchange (Credit: Ivana Cajina)

Schools can help lower barriers to biking to school by providing free or reduced cost helmets and bike locks to families in their schools. This distribution can take place at events like Back to School Blitz or at tabling events like Parent-Teacher Conferences or sports events.

Cost can be a significant barrier for low income families to feel confident that their students are safe biking to school. High quality locks are also often over \$50 and can lead to new bikes for students being stolen.

**Timeline:** Approximately 1 year (planning and research, secure partners and funding, program development, implementation and launch)

**Lead/Support:** SRTS Task Force or School/District Lead

Audience: All ages

**Inclusion:** Work with other organizations that serve low income families to promote the program. Don't brand these helmets or locks with school logos so that students using them aren't identifiable from those whose families bought their own.

**Implementation Considerations:** Ensure helmets are available at a range of sizes for different age groups

#### Additional Resources:

<a href="https://www.saferoutespartnership.org/">https://www.saferoutespartnership.org/</a>
 resources/toolkit/bh

General Cost: \$\$

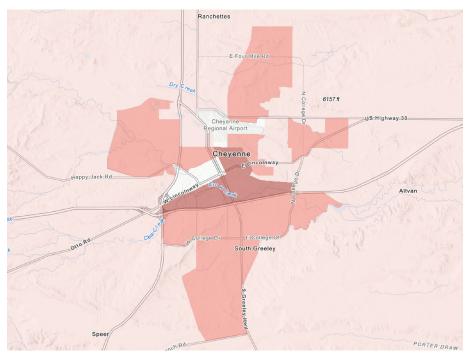
Typical Funding Sources: SRTS Grant Funding, Public Health Funding, Active Transportation Grants, local business sponsorships, police or other agency funding sources

Relevant E's: Equity Encouragement



## Prioritization of Capital Projects Through Equity Lens





Median Household Income in past 12 months (inflationadjusted dollars to last year of 5-year range)

> 75,000 50,000 - 75,000 0 - 50,000

Figure 18: Household income (Credit: American Community Survey, U.S. Census Bureau)

When prioritizing capital projects to advance for safety improvements, use an equity lens to ensure distribution of project funding aligns with planned objectives. One way to do this is to identify equity priority areas within the school district or metropolitan area based on multiple criteria like demographics, socioeconomic data, and transportation options available. Bicycle and pedestrian priority networks also can be reviewed against the equity priority areas to ensure that routes equitably serve them.

Historically lower income and more diverse neighborhoods have received less investment in infrastructure leading to worse outcomes for access to destinations and safety while walking, rolling, and biking. It is important to prioritize investments that can get improvements to underserved neighborhoods first to ensure all residents have access to quality transportation options.

Timeline: Annual review

Lead/Support: MPO, City, County and State

partners

**Audience:** Government agencies, and elected officials

**Inclusion:** Prioritizes both socioeconomic inclusion and racial equity

Implementation Considerations: Identifying equity priority areas can be a complex data question to answer. Start the process of evaluating which data points to include with stakeholders at multiple agencies to ensure there is understanding of how these areas will be defined for planning.

**General Cost:** \$ – Low cost if planning work is undertaken internally, could include some consulting support cost if capacity is needed

Typical Funding Sources: N/A

#### Additional Resources:

 https://drive.google.com/file/ d/10DQ5utfQpPMmW-5hscDMNyWpFrF-dmn8/ view

Relevant E's: Equity





## **Neighborhood Match Program**



Figure 19: Basics of Safe Routes to School (Credit: Safe Routes Partnership)

When families who are interested in their student walking, rolling, or biking to school aren't able to accompany them, a school-wide matching program can help connect them with other companions.

Whether older students or other parents, this matching program can help remove barriers for parents whose work schedules or household responsibilities keep them from being able to support their student walking, rolling, or biking.

Administration of a Match Program could include school wide opportunities to opt in – such as during enrollment or first day of school activities as parents are notifying the school about whether they want to be on bus routes. Families that opt in to be matched with other students in their neighborhood can indicate the neighborhood they live in and the typical route their student would take to school, as well as contact information and consent for that contact to be shared with another family should there be a match. Matched families/students would make their own arrangements on timing and meeting location.

**Timeline:** Annual review, beginning and end of year contact with families

**Lead/Support:** School based program or district wide. A Safe Routes to School Task Force could initiate as well.

Audience: Parents, students

**Inclusion:** Prioritizes both socioeconomic inclusion and racial equity, work with other organizations that serve low-income families to promote the program.

**Implementation Considerations:** Some manual input required to match families annually. Consider collecting feedback on the experience at least once per school year, or potentially several times to support matched families throughout the year.

**Additional Resources:** Use simple form collection programs such as Microsoft Forms or Google Forms.

General Cost: \$ - Some administration

**Typical Funding Sources:** 

Relevant E's: <u>Engagement</u> <u>Equity</u> <u>Encouragement</u>



## **Engaging Students with Disabilities**



Figure 20: Teaching Empathy (Credit: Council on Development Disabilities)

Bringing students with a variety of disabilities and their families into the Safe Routes to School Conversation can take many forms. Taking the time to reach out to students, families and educators who work with students with disabilities about how you can provide accommodations is a big first step. Have ongoing conversations about accessibility of Safe Routes to School events and how programs could be improved.

Students with disabilities can be left out of walking, rolling, and biking conversations, but disability is a broad identity group and many students can participate when adequate accessibility planning is done. The social relationships and physical activity of walking, rolling, and biking to school should be accessible to all students, not just those who are physically able.

Timeline: Ongoing

Lead/Support: SRTS Task Force, School-led

outreach

Audience: All ages

Inclusion: Focuses on reaching students with disabilities and creating accessible SRTS

programming

Implementation Considerations: Consider the following accessibility areas when planning SRTS programs:

- Physical Access can the school help identify adaptive bicycles or help a student in an electric wheelchair get connected to a bike train?
- Communicating Access Needs clearly state in event invitations what accessibility options will be provided and who to contact to request additional accommodations
- Access for Students with Visual & Hearing Impairments - Consider having additional volunteers to support students with these disabilities at SRTS events and ask what accommodations would be most helpful.
- Support for Traffic Safety students with intellectual disabilities may desire support in navigating complex traffic on the route to school. For walk, roll, or bike to School Day events, connect with families in advance to see if there is a need for volunteer support for their student to participate.

General Cost: N/A

Typical Funding Sources: N/A

#### Additional Resources:

https://www.saferoutespartnership.org/sites/ default/files/resource files/engaging students with disabilities in srts final.pdf

Relevant E's: Equity \_Encouragement\_

Education

## **ENCOURAGEMENT STRATEGIES**

Generating enthusiasm through events, activities, and programs.

- Walking School Bus
- Bike Bus
- Suggested Routes (Maps & Wayfinding)
- Walk and Roll to School Day
- Incentive or Competition Programs



Could you champion for any of these strategies? Add your name to a list of volunteers!

Note: Where stars appear on the following pages indicate strategies that may be accomplished with lower financial or time investment relative to others.





## Start small

## **Walking School Bus**

Parents and guardians often cite distrust of strangers and the dangers of traffic as reasons why they do not allow their children to walk or roll to school. Walking School Buses are a way to make sure that children have adult supervision as they walk or roll to school. Walking School Buses are formed when a group of children walk or roll together to school and are accompanied by one or two adults (usually parents or guardians of the children on the "bus"). As the Walking School Bus continues on the route to school, it picks students at designated meeting locations.

A walking school bus is an organized group of students and one or more adult volunteers that safely walk or roll to school as a group, picking up students along the way at various "bus" stops. They can be as informal as an arrangement between neighbors for one parent to walk or roll with a group of children to school, or as formal as a district-wide plan with school "bus" routes, designated stops planned for each neighborhood, and a rotation of volunteers.

Walking School Buses provide a safe way for students to walk or roll to school, increases children's daily physical activity, improves focus at school, educates children on how to walk or roll safely around traffic, promotes active transportation habits at a young age, creates connections within the community, reduces traffic congestion, and reduces vehicle miles travelled.

**Timeline:** Can start at any time, easiest to start at the beginning of the school year (promote at Back to School Blitz), frequency can start at monthly or weekly with an ultimate goal for daily

**Lead/Support:** School volunteers, parents, guardians / Community partners

**Audience:** Elementary school students, community members

**Inclusion:** Promote in relevant languages for the community, include extra volunteers to allow students with a disability to join, encourage grandparents or older neighbors to join, establish "joining" points along the route so that students with a longer commute can meet up with those living closer to the school.



Figure 21: Walking school bus (Credit: C.P. Smith Elementary School, Burlington, VT)

Implementation Considerations: Larger implementation will require volunteers and organization, create route maps, select safe routes, create parent volunteer sign-up sheets, create excitement around it at Back to School Blitz or using yard signs along the route, shirts, etc., track achievements, having "special guests" join the walk and roll (e.g. Santa Claus around the holiday season)

**General Cost:** \$ – Low cost for encouragement materials!

#### Additional Resources:

- Walking School Bus
- SRTS Guide: The Walking School Bus:
   Combining Safety, Fun and the Walk to School (saferoutesinfo.org)

Relevant E's: <u>Equity</u> <u>Encouragement</u>



## Start small

### **Bike Bus**



Figure 22: Bike Bus (Credit: Coach Balto, @coachbalto)

Bike Busses provide a safe way for students to bike to school, increase their daily physical activity, improve focus at school, educate students on how to bike safely around traffic, promote active transportation habits at a young age, create connections within the community, reduce traffic congestion, and reduce vehicle miles travelled.

A Bike Bus is an organized group of students and one or more adult volunteers that safely bike to school as a group, picking up students along the way at various stops. They can be as informal as an arrangement between neighbors for one adult to bike with a group of students to school, or as formal as a district-wide plan with school "bus" routes, designated stops planned for each neighborhood, and a rotation of volunteers.

A bicycle train is very similar to a Walking School Bus. Groups of students accompanied by adults can bicycle together on a pre-planned route to school. Routes can originate from a particular neighborhood or, in order to include children who live too far to bicycle, begin from a park, parking lot, or other meeting place. They may operate daily, weekly or monthly. Bike trains help address parents' concerns about traffic and personal safety while providing a chance for parents and children to socialize and be active.

**Timeline:** Can start at any time but preferably at the beginning of the school year (promote at Back to School Blitz), frequency can start at monthly or weekly with an ultimate goal for daily

**Lead/Support:** School volunteers, parents, guardians / Community partners

**Audience:** Middle and high schoolers, community members

**Inclusion:** Promote in relevant languages for the community, provide equipment for students with disabilities to be able to join, provide bikes/helmets/ etc. for students who do not have a bike, coordinate routes for students with a longer commute.

Implementation Considerations: Larger implementation will require volunteers and organization, create route maps, select safe routes, create parent volunteer sign-up sheets, create excitement around it at Back to School Blitz or using yard signs along the route, shirts, etc., track achievements, prizes

#### **Additional Resources:**

- https://bikebus.world/how-to-start-a-bike-bus
- <u>031918-srs-biketrain-toolkit-final.pdf</u> (saferoutespartnership.org)

**General Cost:** \$ – Low cost for encouragement materials!

Typical Funding Sources: N/A

Relevant E's: \_Equity\_ \_Encouragement\_

\_Education\_

## û

## **Suggested Route (Maps & Wayfinding)**



Figure 23: Suggested route map (Credit: City of Minneapolis)

Suggested route to school maps are printouts provided to students with recommended walking, rolling, and biking routes from neighborhoods to the school. They can also include additional features such as showing stop signs, signals, crosswalks, sidewalks, pedestrian bridges, transit and school bus stops, parking zones, and bike parking zones, to help students and families plan their routes. Consider color-coded temporary signs along key routes for the first month of a new school year to increase visibility of key routes & wayfinding.

Having a recommended route makes it easier for families to transition to active transportation, saves them time of figuring out the safest route on their own, encourages walking, rolling, and biking knowing that the school supports it, and can be used as a resource for walking school buses or bike trains.

**Timeline:** These can be created at any time, but preferably handed out before the school year begins so families have time to plan or test routes. These could also be used as a handout in the Back to School Blitz event.

**Lead/Support:** Volunteers from school staff and community

Audience: Students and families

**Inclusion:** Ensure routes selected are accessible, include route maps for all areas that students commute from. Provide maps with text in multiple languages and graphical communication that reduces reliance on parent literacy.

Implementation Considerations: LCSD #1 currently produces "Traffic Safety Suggestions for Elementary Schools Cheyenne, Wyoming (2015)" maps for elementary schools. These maps should continue to be produced and distributed with regular updates. LCSD #1 and the Cheyenne MPO should also seek feedback on the routes from parents at the school. When selecting recommended routes, consider ped/bike facilities, driver habits, street crossings, speed limits, and other barriers to safety.

Include students in creating route maps and use as an educational opportunity to teach about the safety of different intersection types, sidewalks, etc.

Continuously update the maps and request feedback from map users.

**General Cost:** \$ – Cost for the price of materials for printout.

Typical Funding Sources: N/A

#### **Additional Resources:**

- https://www.saferoutespartnership.org/ resources/toolkit/creating-walking-route-mapssrts
- Traffic Safety Suggestions for Elementary Schools, Cheyenne, Wyoming (2015)

Relevant E's: Encouragement Education

## Walk and Roll to School Day

Walk and Roll to School Day is a special event to invite everyone to use active transportation on a specific day. The most well-known of these is International Walk to School Day, a major annual event in October that attracts millions of participants in over 30 countries.

LCSD #1 has participated in these activities, but there remains room for expansion of the events and exposure for students.

Walk, Roll, and Bike to School Days can be held yearly, monthly, or even weekly, depending on the level of support and participation from students, parents, and school and local officials. Some schools organize more frequent days – such as weekly Walking/Wheeling Wednesdays or Walk and Roll Fridays – to give people an opportunity to enjoy the event on a regular basis.

This builds positive energy around using active transportation to school and can remove the barrier of the uncertainty of walking, rolling, or biking to school.

**Timeline:** Can be hosted on National/International Bike/Walk to School Days or choose school's own day. Could increase frequency to monthly or weekly.

**Lead/Support:** Volunteers from school and community

**Inclusion:** Provide resources for students with disabilities to participate, provide resources such as Stop and Walk for students with a longer commute to participate

Implementation Considerations: Parents and other volunteers accompany the students, and staging areas can be designated along the route to school where groups can gather and walk, roll, or bike together. These events can be promoted through press releases, articles in school newsletters, and posters and flyers for students to take home and circulate around the community.

General Cost: \$ - Low to no cost to participate

Typical Funding Sources: N/A

#### **Additional Resources:**

<a href="https://www.walkbiketoschool.org/plan/how-to-plan/">https://www.walkbiketoschool.org/plan/how-to-plan/</a>

Relevant E's: \_Equity\_ \_Encouragement\_ Education\_



Figure 24: Walk and Roll to School Day (Credit: City of Philadelphia)

### **Incentive or Competition Programs**

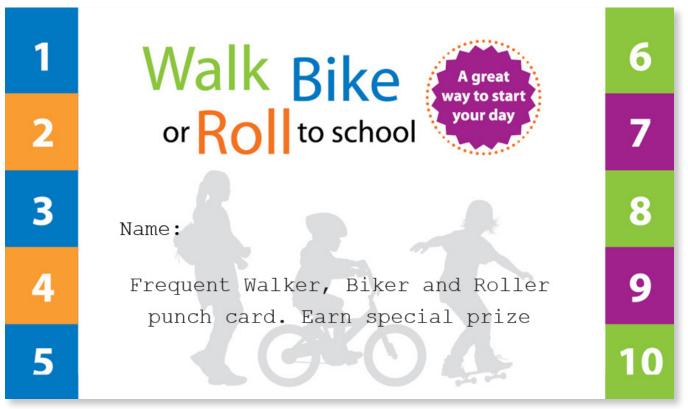


Figure 25: Example resources (Credit: Active Transportation Resource Center)

Incentive programs and friendly competitions encourage students to use active transportation to get to school by tracking how many times students walk, roll, bike, or carpool to school and reward them with various prizes, such as stickers, water bottles, or bike helmets.

Contests and incentive programs reward students by tracking the number of times they walk, roll, bike, carpool, or take transit to school. Contests can be individual, classroom competition, or interschool competitions. Local businesses may be willing to provide incentive prizes for these activities. Students and classrooms with the highest percentage of students walking, rolling, biking, or carpooling compete for prizes and "bragging rights." Small incentives such as shoelaces, stickers, and bike helmets can be used to increase participation. It can also be effective to allow different grades and schools (high school vs. grade school vs. junior high school) to compete against each other in a mobility challenge.

Examples of Walking and Biking Competitions include: On-campus walking clubs (mileage clubs) - Children are issued tally cards () to keep track of "points" for each time they walk, roll, bike, bus or carpool to or from school. When they accrue a specified number of points, they earn a small prize and are entered in a raffle for a larger prize. At the end of the school year, there is a drawing for major prizes.

Pollution Punchcard - This year-round program is designed to encourage school children and their families to consider other options for getting to school such as walking, rolling, biking, carpooling, and public transportation. Every time a student walks, bikes, or carpools to school, a parent volunteer or school representative stamps the card. Students then receive a reward when the punch card is complete.



Walk and Bike Challenge Week/Month - This month-long encouragement event is generally held in conjunction with National Bike Month in May or with the state's annual bike celebration, such as Wyoming's Bike to Work Week in June. Students are asked to record the number of times they walk and bike during the program. The results are tallied and competing schools or classrooms compare results. Students who are unable to walk or bike to school can participate by either walking during a lunch or gym period, or by getting dropped off further away from the school and walking with their parents the last several blocks.

Golden Sneaker Award - Each class keeps track of the number of times the students walk, bike, carpool or take the bus to school and compiles these figures monthly. The class that has the most participation gets the Golden Sneaker Award. (The award can be created by taking a sneaker, mounting it to a board like a trophy, and spray painting it gold.)

Walk Across America/Wyoming - This is a year-round program designed to encourage school children to track the number of miles they walk throughout the year. Students will be taught how to track their own mileage and will also learn about places in the United States on their way. Teacher or volunteer support is necessary.

Each of these programs can use incentives to increase participation and reward the students for their efforts. Examples of incentives include:

- Shoelaces
- Pedometers
- Reflective zipper pulls
- Bicycle helmets
- Raffle tickets for a bicycle from a local bike shop
- Early dismissal
- Extra recess time

Implementing incentive programs encourage students to get into the habit of walking or biking to school. The programs themselves create positive energy and awareness about active transportation, and lead students to take after each other's examples and compete with each other in a friendly manner.



Figure 26: Example educational program - suggested route map (Credit: City of Palo Alto)

**Timeline:** Can be implemented at any time, probably most beneficial after successful walk/bike to school days and preparing suggested route maps

Lead/Support: School staff, volunteers

Audience: All students

Inclusion: Avoid using food as an incentive or

reward.

**Implementation Considerations:** Consider applicable prizes for different age groups, provide scorecards in relevant languages to the community,

#### **Additional Resources:**

 <a href="https://www.healthydearborn.org/">https://www.healthydearborn.org/</a> walknrollirchallenge

**General Cost:** \$ – Low cost for prizes/materials

Typical Funding Sources: N/A

Relevant E's: \_Equity\_ \_Encouragement\_

Education

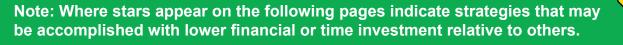
### **STRATEGIES**

Providing students and the community with skills to walk and bike safely, educating about benefits, and teaching about the broad range of transportation choices.

- **Crossing Guard Resources**
- Bicycle Rodeo & Traffic Garden
- School Zone Traffic Safety Campaign
- Classroom Safety Education
- Storytelling Campaign
- Student Led Education Campaign



Could you champion for any of these strategies? Add your name to a list of volunteers!







### **Crossing Guard Resources**





Figure 27: Crossing guards on Cheyenne roads (Credit: Stantec)

Crossing guards are essential for ensuring children's safety on their way to and from school. They manage and control traffic, allowing children to cross streets safely, even during busy hours. By increasing the visibility of school zones, they remind drivers to slow down and exercise caution. Crossing guards also educate children on safe crossing practices, fostering good walking habits. Their presence provides peace of mind for parents, knowing there is an adult to help navigate busy streets. In emergencies can respond quickly, enhancing student safety.

Consistent resources are needed to enable crossing guards to keep kids safe. Better equipment, clear communication tools, and enhanced training help ensure they can effectively manage traffic and assist children. Student crossing guards must be trained and usually supervised by adult school staff but can be valuable leadership development experiences for older students. Adult crossing guards may be easier to train but may be more difficult to find, whether volunteer or employed by the school. When crossing guards are well-supported and safe, they can focus on protecting students and families.

Timeline: Semester review

Lead/Support: District, schools

Audience: Crossing guards

**Inclusion:** Pilot additional resources in neighborhoods with lower average household

incomes.

**Implementation Considerations:** Consistent resources, regular meetings to establish and maintain training, schedule and funding, coordinator role to schedule and supervise guards

#### **Additional Resources:**

- http://guide.saferoutesinfo.org/crossing\_guard/
- https://www.dot.state.wy.us/files/live/sites/wydot/ files/shared/Traffic%20data/Ped\_Manual\_ Final\_1-14-14.pdf (section 3.13)

**General Cost:** \$ – initial investment of equipment and training may be higher than ongoing maintenance costs and overall modest compared to significant benefits to safety.

#### **Typical Funding Sources:**

www.dot.state.wy.us/home/dot\_safety/ behavioral-grants.html

Relevant E's: \_Engagement\_ \_Equity\_ \_Encouragement\_ \_Education\_ \_Evaluation\_ Engineering

### **Bicycle Rodeo & Traffic Garden**



Figure 28: Traffic Garden (Credit: Medium)

Bicycle Rodeos are family-friendly events that incorporate a bicycle safety check, helmet fitting, instruction about the rules of the road, and an obstacle course. Rodeos also provide an opportunity to check children's bikes and instruct them on proper helmet use. Adult volunteers can administer rodeos, or they may be offered through the local Police or Fire Department. In order to increase participation, bicycles rodeos can be incorporated into health fairs, back to school events, and Walk and Bike to School days.

Bicycle rodeos and traffic gardens give kids a low stress way to learn the rules of the road and safe riding habits. This gives them positive associations with riding their bikes, as well as an age-appropriate way to build self-confidence and independence.

**Timeline:** One Month or more from kickoff to implementation

**Lead/Support:** SRTS Task Force or District Level event

**Audience:** 3-6th Grade is often a prime age for building independent understanding of traffic safety

**Inclusion:** Allow additional time for students with disabilities to complete the course. Promote the event through multiple languages and across varied communication channels.

Implementation Considerations: Choose a location that has space for multiple types of layout. Spray chalk can be a great tool for creating temporary ground markings that are washed away with water. Your school's physical education department can likely loan cones and other obstacles needed.

General Cost: \$ - Low cost

**Typical Funding Sources:** PTO/PTA discretionary budget

#### Additional Resources:

 https://www.saferoutespartnership.org/ resources/toolkit/tptrl-1

Relevant E's: \_Encouragement\_ \_Education\_





### **School Zone Traffic Safety Campaign**

A School Zone Traffic Safety Campaign creates awareness of students walking and bicycling to school. A safety campaign is an effective way to reach the general public and encourage drivers to slow down and look for students walking and biking to school.

A School Zone Traffic Safety Campaign uses signs and banners located near schools (for example, in windows of businesses, yards of people's homes, and print publications) to remind drivers to slow down and be careful in school zones. This campaign can be kicked off at the start of each school year or in conjunction with special events such as Walk and Bike to School Month (October).

Increasing driver awareness of school zone safety can increase adherence to existing traffic rules in the school zone. It builds community buy in for future changes that would make streets safer.

**Timeline:** Three months to plan and implement

Lead/Support: LCSD #1 or City of Cheyenne

Audience: Drivers in School Zones

**Inclusion:** Target investments in underserved areas, partner with local organizations, tailor education and programs, retroactively evaluate impacts on various demographic groups.

**Implementation Considerations:** Banners and signs can be effective tools to remind motorists about traffic safety in school zones.

Large banners can be hung over or along roadways near schools with readable letters cautioning traffic to slow down, stop at stop signs, or watch for students in crosswalks with catch phrases such as:

- '20 is plenty'
- 'Drive 25, Keep Kids Alive'
- 'Give Our Kids a Brake'

#### **Additional Resources:**

Example materials <a href="https://www.">https://www.</a>
 oregonsaferoutes.org/resources/campaigns/

**General Cost:** \$ – Primarily banner and print production







Figure 29: Safety campaign (Credit: City of Minneapolis, Minnesota Daily)

**Typical Funding Sources:** Look for donations or sponsors from local community

Relevant E's: Engagement Education

### **Classroom Safety Education**



Figure 30: Safety education (Credit: Lynhaven Elementary School, Campbell Union School District)

Pedestrian and bicycle safety education teaches children to understand traffic safety behaviors, laws and rules. Pedestrian safety education teaches children basic traffic safety rules, sign identification, and crossing decision-making tools. Pedestrian training is typically recommended for first- and second-graders, and teaches basic lessons such as "look left, right, and left again," "walk with your approved walking buddy," "stop, look, and listen," and "lean and peek around obstacles before crossing the street."

Students who receive classroom education on safe walking and biking habits are both going to be safer on their own journeys, and may become better drivers when they're learning to drive with heightened awareness of walkers and bikers.

Timeline: Annual cycle

**Lead/Support:** School-led implementation

**Audience:** Curriculum has age ranges associated with it – typically starts at 3-4th grade

**Inclusion:** Ensure materials show students of multiple races and ethnicities, and if it doesn't intentionally supplement the imagery in the presentations.

**Implementation Considerations:** Trained safety professionals can administer pedestrian safety in the classroom or gym class. Classroom teachers may use established pedestrian and bicycle safety curriculum.

Bicycle safety training is normally appropriate beginning in or after the third grade and helps children understand that they have the same responsibilities as motorists to obey traffic laws. The League of American Bicyclists offers an extensive bicycle safety curriculum called Kids II. This seven-hour class is aimed at 5th and 6th grade students and teaches necessary bicycle riding skills and how to pick safe bicycling routes. The curriculum is designed to have a League Certified Instructor (LCI) teach the class.

General Cost: \$ - No cost

Typical Funding Sources: N/A

#### **Additional Resources:**

- <a href="https://www.saferoutespartnership.org/">https://www.saferoutespartnership.org/</a>
   resources/toolkit/bsj
- https://www.shapeamerica.org/MemberPortal/ publications/resources/teachingtools/qualitype/ bicycle\_curriculum.aspx
- https://iwalksafe.org/

Relevant E's: \_Encouragement\_ \_Education\_



### **Storytelling Campaign**

Capture personal narratives from students and families who are trying out walking and biking for the first time or who have started a new routine. Get photos from Bike Bus or Walking School Bus groups to share and promote the activities year round. Graphics

Seeing success stories and personal narratives help increase awareness of Safe Routes to School programming and strategies. It may encourage new families to try it out or join existing groups.

Timeline: Year Round

Lead/Support: SRTS Task Force, MPO

Coordinators

Audience: Community-wide

**Inclusion:** Ensure the stories being shared are a representative picture of the community as a whole. Reach out to people within the school who may be able to help connect you to stories that should be shared more broadly.

Implementation Considerations: Stories can be shared through school newsletters, email communications, social media or local newspaper. Ensure that people in the stories are aware and consent to the way their story will be shared.

General Cost: N/A

Typical Funding Sources: N/A

#### **Additional Resources:**

 https://www.saferoutespartnership.org/ resources/toolkit/storytelling-toolkit

Relevant E's: \_Equity\_ \_Encouragement\_ Education





Figure 31: Storytelling campaigns (Credit: Stantec)



### **Student Led Education Campaign**



Figure 32: Students kick off safety campaign (Credit: Keep Kids Alive Drive 25)

Students have great ideas for how to reach their own community. Work with individual classes or after school programs to support students creating their own Safe Routes to School educational campaign, either for their fellow students or for their community.

Students learn best when they have to teach their peers, so this strategy not only helps spread the word, but is a highly effective teaching method for the learning of the student who gets to contribute to the campaign.

Timeline: Varies

Lead/Support: School-based or after-school

program

Audience: 5th Grade and above

**Inclusion:** Encourage students to create a campaign to reach their specific communities.

Implementation Considerations: If their goal is to reach other students, they may need help finding the right way to share their campaign work or permission to use certain school resources. If the goal is to work within the community, encourage them to narrow their focus to a particular group they have a special relationship with, such as people within a sports league, in their neighborhood, or within their church/synagogue/mosque.

**General Cost:** \$ – Low-no cost

Typical Funding Sources: N/A

#### Additional Resources:

 https://www.saferoutespartnership.org/ resources/toolkit/guide-engaging-middle-schoolyouth

Relevant E's: Encouragement Education

## **EVALUATION STRATEGIES**

Assessing which approaches are more successful, identifying unintended consequences, and ensuring programs and initiates support equitable outcomes.

- Bicycle & Pedestrian Count Program
- Hand Tallies & Parent Surveys
- School Site Audit
- Program Evaluation
- Evaluate the Built Environment Beyond the School Campus



Could you champion for any of these strategies? Add your name to a list of volunteers!

Note: Where stars appear on the following pages indicate strategies that may be accomplished with lower financial or time investment relative to others.





### **Bicycle & Pedestrian Count Program**

Take annual counts of the number of people biking and walking at multiple locations around the city. Ensure count locations are near schools to provide data for future Safe Routes to School planning. This data is an important component of future evaluation and planning.

Counting numbers of people biking and walking in the school area can help build momentum for safety improvements. It can also help capture before and after data for Safe Routes to School program impact records.

**Timeline:** Annual count – approximately one month

from planning to implementation

Lead/Support: City or County lead

Audience: Agencies

Inclusion: N/A

**Implementation Considerations:** Use a standard count methodology every year and work to provide volunteers consistent instructions on how to count people.

#### **Additional Resources:**

- <a href="https://dot.state.mn.us/bike/documents/planning-research/count-manager-training.pdf">https://dot.state.mn.us/bike/documents/planning-research/count-manager-training.pdf</a>
- https://www2.minneapolismn.gov/media/ content-assets/www2-documents/government/ Pedestrian-and-Bicyclist-Count-Methodology.pdf

General Cost: \$ - Low

Typical Funding Sources: N/A

Relevant E's: Evaluation





Figure 33: Manual and automated count programs (Credit: Minnesota Department of Transportation, University of Minnesota Center for Transportation Studies)

## Hand Tallies & Parent Surveys









Figure 34: Survey methods (Credit: Stantec)

Since 2005, the federal Safe Routes to School program has set aside federal funding to help states, cities, towns, and schools increase the number of students walking and biking to school. One requirement of receiving this money is that all schools must perform hand tallies and parent surveys to track the effectiveness of the various programs across the country.

The Wyoming Department of Transportation (WYDOT) currently requires Safe Routes to School grantees to submit program evaluations semi-annually. The WYDOT requires data to be gathered using the National Center for Safe Routes to School Student In-Class Travel Tally and Parent Survey.

Timeline: Annual

Lead/Support: Schools

Audience: All ages

Inclusion: N/A

**Implementation Considerations:** Communicate effectively within the school to make sure that all teachers and parents understand the importance of accurate counts.

#### Additional Resources:

<a href="https://edu.wyoming.gov/downloads/superintendent/Appendix-B.pdf">https://edu.wyoming.gov/downloads/superintendent/Appendix-B.pdf</a>

General Cost: N/A

Typical Funding Sources: N/A

Relevant E's: Evaluation



### **School Site Audit**

A School Site Audit, sometimes called a walking audit or walkabout, is an evaluation of pedestrian and bicycling conditions around the school. Typically school site audits are conducted by the local school group or task force on foot and should be conducted during regular school session and times of travel by walking the routes that students use to get to school. A site audit may also be conducted on bicycle in order to better evaluate bicycling conditions.

The audit should involve an assessment of the built environment around a school (e.g., streets, sidewalks, pathways, crosswalks and intersections, bike routes, traffic controls), drop-off and pick-up operations (e.g., presence of designated loading areas), as well as behaviors of students, parents, and motorists that could contribute to unsafe conditions for bicyclists or pedestrians (e.g., speeding, jaywalking, failure to yield to pedestrians).

A School Site Audit checklist form sample asks for detailed information including:

- Student Drop-Off and Pick-Up Areas;
- Bus Loading Zones;
- Sidewalks and Bicycle Routes;
- · Intersections Near the School Property;
- · Sight Distance; and
- Traffic Signs, Speed Controls and Pavement Markings

The goal of a site audit is to document conditions that may discourage walking and bicycling to school and to identify solutions to improve those conditions.

Implementation Considerations: The local school task force can use the School Site Audit checklist as a basis for conducting their walkabout. Along with the checklist, an aerial map of the school area is helpful for the site audit. Aerial photos can be marked up with identified issues and suggested improvements.

Existing conditions maps can be extracted from this report to serve as a starting point for each school site audit.

General Cost: N/A

Typical Funding Sources: N/A





Figure 35: Site audits (Credit: Stantec)

Timeline: Bi-annual for each school on a rotating

basis

Lead/Support: School

Audience: Adults with student input

Inclusion: Ensure ADA checklists are used during

Site Audits.

#### Additional Resources:

 https://www.saferoutespartnership.org/ resources/toolkit/lets-go-walk

Relevant E's: \_Evaluation\_





### **Program Evaluation**



Figure 36: Evaluation resources (Credit: National Center for Safe Routes to School)

There are many different education, encouragement, and enforcement programs that can be implemented to help increase the number of students walking and biking to school. Not every program is the correct fit for every school. It is important to evaluate programs in the context of the school environment prior to deciding what would be a good choice for a school. Once programs have been implemented, it is necessary determine whether or not it was a good choice for the school and what about the program worked and what did not work quite as well.

Quality feedback on program impact can help determine how to focus future programming for maximum effectiveness.

Timeline: Annual

Lead/Support: SRTS Task Force and MPO

partnership

Audience: SRTS Leaders in the community

**Inclusion:** Ensure to include community engagement and feedback beyond the most active volunteers to find out how those outside of the program feel about it as well.

**Implementation Considerations:** Program evaluation can be administered by following these steps:

- Survey local traffic conditions and issues (much of this information can be found from the School Site Audit)
- Identify methods to implement programs
- Determine success benchmarks to evaluate the effectiveness of the program efforts
- Interview program administrators (teachers, volunteers) and participants (students) to discuss what worked and what did not

#### **Additional Resources:**

 http://guide.saferoutesinfo.org/evaluation/index. cfm

General Cost: N/A

Typical Funding Sources: N/A

Relevant E's:



### **Evaluate the Built Environment Beyond the School Campus**



Figure 37: UNICEF Child Friendly Cities Initiative (Credit: City of Boulder)

Building for active lifestyles is more than just a school related concern. The whole community benefits when we design for healthy places where kids feel safe walking, biking, and engaging in active play. The construction and improvement of greenways across Chevenne have established a critical network of paths for walking, rolling, and biking. Use tools to evaluate opportunities to make the broader neighborhood and community more walking, rolling, and biking friendly.

Health impacts of a low-activity lifestyle are well documented and our built environment plays a large role in how much activity we get in a day.

Timeline: One to three months from planning to evaluation completion

Lead/Support: Community partners and/or SRTS Task Force

Audience: Adults with student input

Inclusion: Be sure to ask questions about culturally relevant ways to encourage healthy living in the built environment. Not every community values the same features in their neighborhood or on their block.

Implementation Considerations: Some additional community awareness building may be needed to find good partners for bigger picture evaluations. Consider engaging local community improvement organizations (block groups, Kiwanis/Lions Club/ VFW groups, faith based organizations) to expand the reach of input.

General Cost: N/A

Typical Funding Sources: N/A

#### Additional Resources:

https://uli.org/wp-content/uploads/ULI-Documents/Building-Healthy-Places-Toolkit.pdf

Relevant E's: Education Evaluation

### **ENGINEERING SOLUTIONS**

Creating physical improvements that make walking, rolling, and biking safer, more comfortable, and more convenient.

- Narrow width of drive lanes to minimum standard
- Reduce the number of parallel lanes
- Install vertical streetscape elements
- Conduct a pilot program to test an improved crossing
- Mark crossing with high visibility paint markings
- Install signage
- Install bollards and/or in-street signing
- Install crossing signal
- Create pedestrian refuge
- Construct curb extensions
- · Construct raised crossing
- Require as development exaction
- · Install bike parking
- Pilot an on-street protected multimodal path
- Install bicycle boulevard elements
- Install a new sidewalk
- Delineate a bike lane
- · Construct off-road multimodal path
- Install human-scale lighting and/or wayfinding
- · Implement shared street concepts

Note: Where stars appear on the following pages indicate strategies that may be accomplished with lower financial or time investment relative to others.





### Narrow width of drive lanes to minimum standard

Narrower lanes naturally reduce the speed of motorists. In areas where traffic calming is desired, using the state's minimum lane widths may help create safer spaces for pedestrians and bicyclists.

#### **Best Practices and Further Considerations:**

Narrowing lanes can provide additional space for pedestrian refuge islands or medians, protected bicycle lanes, or wider sidewalks. For simple and more low-cost improvements, can pair with updated high visibility paint markings for updated lane lines. Depending on the amount of space remaining after lanes are reduced, features such as protected bike lanes can be added to the remaining pavement section. More costly improvements include reconstructing the roadway section to add pedestrian refuge islands or medians. Improvements that can be made outside of the pavement section would include constructing sidewalks or making the existing sidewalks and boulevards wider to enhance the pedestrian and bicyclist environment.

**Timeline:** This would most likely take place during the summer. Engineering design and restriping lanes would be quicker than a full reconstruction of the corridor, which may take up to a few months from kickoff to construction.

Additional Resources: <u>SRTS Guide: Narrow Lanes</u> (<u>saferoutesinfo.org</u>)

**Cost:** \$ - \$\$\$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

Relevant E's: Engineering



Figure 38: Lane width (Credit: National Association of City Transportation Officials)

#### **Typical Funding Sources:**

- Active Transportation Infrastructure Investment Program
- Congressionally Directed Spending (Senate)
   / Community Project Funding (House)
- Highway Safety Program
- Infrastructure for Rebuilding America (INFRA)
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Recreational Trails Program
- Safe Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Transportation Alternatives Program (TAP)
- Transportation Infrastructure Finance & Innovation Act (TIFIA)



### Reduce the number of parallel lanes



Figure 39: Road Diet (Credit: Richard Drdul)

#### **Typical Funding Sources:**

- Active Transportation Infrastructure Investment Program
- Congressionally Directed Spending (Senate)
   / Community Project Funding (House)
- Expedited Project Delivery Program
- Grants for Buses and Bus Facilities Competitive Program
- Highway Safety Program
- Integrated Mobility Innovation
- Pilot Program for Transit-Oriented Development (TOD) Planning
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Recreational Trails Program
- Safe Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Transportation Alternatives Program (TAP)
- Transportation Infrastructure Finance & Innovation Act (TIFIA)

Reducing the number of parallel lanes means taking away 1 or more of the driving lanes that are currently in place. Similar to narrowing the width of the lanes, this can mean redoing the pavement striping in the area to accommodate the change or fully reconstructing the roadway section to meet the needs of the corridor. For example, 4-lane roadways can be reduced to 3 or 2 lanes, typically only if traffic data and analyses are completed to determine the functionality and efficiency of the proposed driving lanes allow. However, depending on the roadway type and its main purpose, reducing the number of driving lanes can reallocate roadway space to other modes of transportation, allowing for pedestrian and bicyclist activity and safety to increase while still maintaining the expected travel time for motorists.

#### **Best Practices and Further Considerations:**

Removing an existing lane or two can reduce the awkwardness that open, multi-lane roads create and can provide additional space for pedestrian refuge islands or medians, protected bicycle lanes, or wider sidewalks, benefiting all roadway users. Paint would be a low-cost option, while a full reconstruction of the corridor would be more expensive.

**Timeline:** This would most likely take place during the summer. Engineering design and restriping lanes would be quicker than a full reconstruction of the corridor, which may take up to a few months.

Additional Resources: <u>SRTS Guide: Tools</u> to Reduce Crossing Distances for Pedestrians (<u>saferoutesinfo.org</u>)

**Cost:** \$ - \$\$\$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)



### Install vertical streetscape elements



Figure 40: Street Trees help make our roads safer (Credit: Trees for Streets)

Vertical streetscape elements typically include light fixtures, and trees. These are used as calming measures to reduce traffic speeds. For example, streets that are lined with tall trees or fixtures alter drivers' perception of lane width, therefore reducing speeds. This "edge effect" cues motorists to drive more slowly. Traffic calming is important as it supports the livability and vitality of residential and commercial areas to improve non-motorist safety, mobility, and comfort. These vertical streetscape elements can help transform streets and aid in creating a sense of community, changing the corridor from purely motorist focused to a multi-modal feel.

All recommendations are subjected to meeting local, regional, and state design standards.



Figure 41: Street trees, lamp posts, and bollards (Credit: Annie Lux, Federal Highway Administration)

#### **Best Practices and Further Considerations:**

Vertical streetscape elements are often implemented with shared street concepts and seen as an integral part of other bicyclist and pedestrian-related projects.

**Timeline:** The lighting can be installed most times of the year. However, trees need to be planted in the Spring or Fall. Planning, design and installation will take a few months.

Additional Resources: streetscape elements san francisco.pdf (nacto.org)

Cost: \$\$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

#### **Typical Funding Sources:**

- Accelerated Innovation Deployment (AID)
- Active Transportation Infrastructure **Investment Program**
- Highway Safety Program
- Mobility for All Pilot Program Grants
- **Private Activities Bonds**
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Safe Streets and Roads for All (SS4A)
- Transportation Alternatives Program (TAP)



# Conduct a pilot program to test an improved crossing



At select intersections, pedestrians and bicyclists may have difficulty crossing the street due to lack of driver awareness or lack of visibility due to physical features of the roadway. The pilot project evaluates whether pedestrians take advantage of the enhanced crossing, its effectiveness, and the level of maintenance needed. This program allows the city to gather data and insights before making significant investments.

Communities have partnered with the Wyoming Department of Transportation to test improved pedestrian crossings. In Cody, the partner agencies installed temporary flashing beacons and other crosswalk improvements as part of a pilot program that resulted from a corridor study and its community input.

#### **Best Practices and Further Considerations:**

Some areas warrant more expensive traffic control devices like Rectangular Rapid Flashing Beacons (RRFB) at a marked crosswalk which means traffic is alerted with flashing lights that someone is crossing at the uncontrolled intersection. Variations of this warning device can be piloted first. In addition, engineering techniques such as marking crossings with high visibility paint markings, installing more signage, and creating pedestrian refuges can be implemented at one intersection and piloted before doing multiple locations.

**Timeline:** This would require the planning, implementation and data collection of the program. The complexity determines the timeline, but a minimum of six months is needed.

#### **Additional Resources:**

- www.issuu.com/barrfdn/docs/ measuring\_quick\_and\_creative\_street\_ projects?fr=sNDI0ODU4MjkwODI
- www.dot.state.wy.us/news/big-horn-avenuepedestrian-crosswalk-test-will-be-in-effect-forstart

**Cost:** \$ - \$\$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

Relevant E's: \_Education\_ Evaluation\_ Engineering



Figure 42: Pop-up Crosswalk for Safety and Neighborhood Connection (Credit: Active Wisconsin)



Figure 43: Painted curb bumpouts (Credit: City of Somerville)

#### **Typical Funding Sources:**

- Active Transportation Investment Program
- Highway Safety Program
- Mobility for All Pilot Program Grants
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Safe Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Transportation Alternatives Program (TAP)

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### Mark crossing with high visibility paint markings

Pavement markings are stripes, symbols, or words painted on roads to warn, guide, or direct traffic. Pavement markings can be used on their own or in conjunction with signage. Below is a list of some pavement markings that can be considered to enhance pedestrian safety:

**School Zone:** Increasing awareness of the school zone to drivers can be done by painting the word "SCHOOL" on the pavement near school crossing zones. Typical Application: In advance of signed crosswalk near a school crossing

Stop Lines and Yield Lines: Stop lines are solid white painted lines several feet in advance of a crosswalk that provide motorists with a visual cue, indicating that they should stop behind the line. Yield lines have the same function but are typically a series of triangles instead of a solid white line. Typical Application: These could be used at "Yield When Occupied" crosswalks and should be added at locations where extra visibility is needed or at locations where motorists frequently fail to stop for pedestrians.

High Visibility Crosswalk: This pavement marking enhances the visibility of a basic crosswalk. This is often done by using more bars than the standard striping pattern and changing the angle of the bars. Typical application: These should be implemented in areas with low visibility at crosswalks, multi-lane street crossings, and at crossings on streets with vehicle volumes greater than 10,000 AADT.

**Curb Markings:** Striping or painting on the curb can help clarify zones for parking, drop-off, and pickup. Typical application: In areas used for parking, drop-off-, and pick-up (typically front of the school building) Colors to use:

- White or No Color: parking allowed
- Blue: Parking for disabled only
- Green: Parking allowed for a short time or for loading zones
- Yellow: Stop only for loading/unloading
- Red: No parking

**Best Practices and Further Considerations:** Pair pavement markings with appropriate signage for increased visibility and clarity.

**Timeline:** The best time of year is during the warmer summer months to place paint markings.



Figure 44: Crosswalk (Credit: Richard Baker, Getty Images)

Additional Resources: Crosswalk Visibility Enhancements | FHWA (dot.gov)

**Cost:** \$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

#### **Typical Funding Sources:**

- Active Transportation Investment Program
- Highway Safety Program
- Mobility for All Pilot Program Grants
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Safe Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Transportation Alternatives Program (TAP)



### Install signage



Figure 45: Crosswalk improvement (Credit: Institute of Transportation Engineers)

Signage installations and pavement markings warn and direct all modes of traffic. Some signage forms to consider installing include "No Turn on Red" signs at traffic signals, wayfinding signage for students who walk and bike to school, school area signage, and various forms of pavement markings.

"No Turn on Red" signs increase pedestrian and bicyclist safety by removing the hazards of high speed right turns without looking for pedestrians. The traffic and throughput of the intersection should be considered before implementation to minimize negative traffic flow impacts.

Wayfinding signage can help create the feeling of a "safe travel district" and create a unique identity around each school. These signs can help guide students and visitors along the preferred travel routes and provide additional reminders to motorists that they are near a school. Wayfinding signs posted along greenways will also help users determine the direction to each school connected to the system.

School area signage includes the School Crosswalk Warning, School Speed Limit, and School Advance Warning Assembly as high visibility signs. School area signage can also be combined with pavements markings such as "SCHOOL" in advance of uncontrolled crosswalks.

#### **Best Practices and Further Considerations:**

Signage is important as a traffic control device at the right place and under the right conditions. It is critical to study what is reasonable for signage, but with unreasonable restrictions, or high frequency of signs, drivers may disregard the sign all together. **Timeline:** Once the location, post spacing and size requirements have been determined, installing the sign can be done in a day.

Additional Resources: <u>SRTS Guide: School</u>
Advance Warning Signs and School Crosswalk
Signs (saferoutesinfo.org)

**Cost:** \$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

#### **Typical Funding Sources:**

- Active Transportation Investment Program
- Highway Safety Program
- Mobility for All Pilot Program Grants
- Private Activities Bonds
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Safe Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Transportation Alternatives Program (TAP)



### Install bollards and/or in-street signing



Figure 46: Delineator curb extensions (Credit: City of Minneapolis)

Bollards and in-street signs are used in crosswalks at uncontrolled intersections. These brightly colored signs are placed at the crosswalk in the street but do not obstruct the pedestrian path of travel. They are used to make the crosswalk more visible to drivers, so they have time to yield to those crossing the street.

#### **Best Practices and Further Considerations:**

Generally, the bollards and in-street signs are more effective on two-lane, low speed streets and very common near schools. However, they are easily damaged, and therefore need to be replaced often.

#### **Typical Funding Sources:**

- Active Transportation Investment Program
- Highway Safety Program
- Mobility for All Pilot Program Grants
- Private Activities Bonds
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Safe Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Transportation Alternatives Program (TAP)

Relevant E's: Engineering

**Timeline:** Many in-street signs can be installed in a day with minor impacts to through traffic.

Additional Resources: <u>SRTS Guide: Marking and Signing Crosswalks (saferoutesinfo.org)</u>

**Cost:** \$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)



Figure 47: In-street pedestrian crossing sign (Credit: Arizona Department of Transportation, Peter Speer)



### Install crossing signal



Figure 48: Crossing signal (Credit: Michigan Complete Streets Coalition)

One type of pedestrian-only signal is called a Pedestrian Hybrid Beacons. It can be used at midblock crossings with high pedestrian volumes or at intersections that do not already have a traffic signal. Pedestrians use a push button to activate the warning signal, and motorists receive a flashing red light followed by a solid red light. When motorists have a solid red light, pedestrians see a white "walk" indication, letting them know they are allowed to cross the street. After pedestrians have crossed the street, motorists receive a flashing red light indicating that they can proceed when it is safe to do so.

#### **Best Practices and Further Considerations:**

Systems like the Pedestrian Hybrid Beacons (PHB) or Rectangular Rapid Flashing Beacons (RRFB) support vehicles, pedestrians, and bicyclists as they travel, and they are typically seen paired with painted cross walks and ped refuges.

Timeline: Approvals process, design, and potential right-of-way acquisition (including environmental assessment if applicable) each impact timeline. Typically, the most variation in timeline will be due to the delivery time once the order has been sent to the manufacturer. Depending on if the system is overhead or not, the time needed for installation varies. Electrical systems will also need to be installed if the proposed area does not already have existing connections to power.

#### **Additional Resources:**

www.fhwa.dot.gov/publications/research/ safety/10045/

**Cost:** \$\$\$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

#### **Typical Funding Sources:**

- Active Transportation Infrastructure Investment Program
- Highway Safety Program
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Reconnecting Communities Pilot Program Safe
- Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Transportation Alternatives Program (TAP)



### Create pedestrian refuge



Figure 49: Pedestrian refuge (Credit: AARP)

Medians and pedestrian refuge islands are curbed areas in the center of the roadway located at an intersection or in the middle of a block. By reducing the road width, they reduce pedestrian crossing distance and the speed of cars. Another benefit is that pedestrians must only cross one direction of traffic at a time. Medians and pedestrian refuge islands are best used on higher volume streets in conjunction with high visibility crosswalks and signage. In Cheyenne, they are allowed on local, collector, and arterial roadways.

#### **Best Practices and Further Considerations:**

These islands should be at least four feet wide and are best paired with a marked crosswalk. Ideally, the crosswalk cuts through the island at the same grade as the road, but if the median is wider than 17-feet, then curb ramps should be used. They should include a "nose" that sticks out into traffic so that the pedestrian area is protected on both sides of the crosswalk. The nose and the rest of the island should have curb, bollards, or some other form of obstruction to protect pedestrians. Vegetation and landscaping can be considered island enhancements if visibility is maintained. Temporary refuge islands can be piloted using plastic delineators or other low-cost, removable features.

**Timeline:** Most cases require partial reconstruction of the existing street. This means the time to construct a pedestrian refuge takes longer than other engineering options. Construction time may vary. If multiple medians are proposed along a corridor, this construction may take months to rebuild.

Additional Resources: <u>Safety Benefits of Raised Medians and Pedestrian Refuge Areas - Safety | Federal Highway Administration (dot.gov)</u>

**Cost:** \$ - \$\$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

#### **Typical Funding Sources:**

- Active Transportation Infrastructure Investment Program
- Highway Safety Program
- Private Activities Bonds
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Safe Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Transportation Alternatives Program (TAP)



### **Construct curb extensions**



Figure 50: Traffic-Calming Bump Outs (Credit: Urban Milwaukee)

Curb extensions, also known as 'bump outs' and 'bulb outs', are treatments at intersections that extend curb into the roadway. This extension of curb increases pedestrian visibility, expands the pedestrian realm, slows vehicles down by narrowing the road and decreasing turn radii, and decreases pedestrian crossing distance. Generally seen at minor intersections and streets with on-street parking.

#### **Best Practices and Further Considerations:**

In areas of on-street parking, the curb extensions should extend to the edge of parking lanes to increase pedestrian visibility. Parking needs to be restricted at least 18' from a stop sign in areas with 6' curb extensions. The smaller turning radii encourages slower turning speeds so minimizing the radii to the extent possible is best while still accommodating the design and control vehicles. In addition, curb extensions can be piloted using low-cost, temporary devices such as delineating posts, temporary curbs, bollards, planters, or striping. However, careful consideration of drainage, stormwater infrastructure, and hydrants during planning is needed as these can significantly

increase costs if any shifting is required. In areas of drainage difficulties, curb extensions can be designed as "edge islands", leaving a one- or two-foot gap from the original curb to the island to maintain existing drainage patterns. Curb extensions can also be used as areas for green infrastructure to improve stormwater drainage. Consider implementing landscaping or street furniture to create a more pleasant environment for the community.

Timeline: Similar to the pedestrian refuge medians, construction may vary from days to weeks to months. Prior to construction, design and engineering tasks of these curb extensions also need to occur, as pavement removal and placement, drainage design, and ADA compliance need to be designed to Wyoming standards.

Additional Resources: Curb Extensions | National Association of City Transportation Officials (nacto. org)

Cost: \$\$ - \$\$\$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

#### **Typical Funding Sources:**

- Active Transportation Infrastructure **Investment Program**
- Highway Safety Program
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Safe Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Transportation Alternatives Program (TAP)



### **Construct raised crossing**



Figure 51: Raised pedestrian and bicycle crossing (Credit: City of Minneapolis)

Raised pedestrian crossings are a combination of a speed table and a crosswalk. Raised crossings force cars to slow down on their approach as they drive over the vertical deflection. Raised crossings also make pedestrians more visible to oncoming traffic. These are usually used in combination with crosswalk striping and signage. Usually applied to local streets that experience high volumes of pedestrian crossings.

#### **Best Practices and Further Considerations:**

It is important to note that drainage can create challenges and should be considered early in the process. For the design, depending on local factors, raised crossings should be between 3" and 6" tall to create enough vertical differences for drivers to notice and to minimize vertical difference for pedestrians and bicyclists. The top of the raised crossing should be as wide as the sidewalk plus a foot on each side where possible. Consider adding pavement markings or signage, using colored concrete that matches the bikeway or sidewalk, and adding bikeway zone markings in addition to crosswalk striping. Coordinate with public works, maintenance staff, and emergency vehicles to ensure appropriate access is maintained.

**Timeline:** Minimum of a few months from planning to construction, like curb extensions and pedestrian refuge medians.

Additional Resources: Raised Intersections |
National Association of City Transportation Officials
(nacto.org)

**Cost:** \$\$ - \$\$\$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

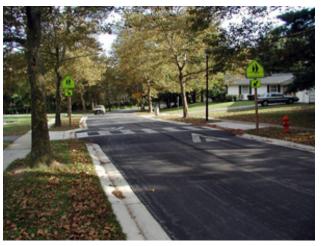


Figure 52: Raised crosswalk (Credit: Pedestrian and Bicycle Information Center)

#### **Typical Funding Sources:**

- Active Transportation Infrastructure Investment Program
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Safe Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Transportation Alternatives Program (TAP)



### Require as development exaction



Figure 53: Development site (Credit: LoopNet)

Roadway upgrades needed for Safe Routes to School plans can be required through a development exaction. Development exactions refer to a range of requirements that make a developer contribute to the cost of providing public facilities required by a new development, particularly in urban settings. This is important because the exaction offsets the costs of the development to the municipality.

The City of Cheyenne includes development exactions in the Unified Development Code (UDC) which should continue to be reviewed to ensure their compliance with federal standards and alignment with strategies, recommendations, and intent of this plan.

#### **Best Practices and Further Considerations:**

Local government may impose exactions on new developments. Especially in areas close to schools, it is good to understand the types of public infrastructure that private developers may be required to build or fund to improve safe routes to school needs. Timeline: Ongoing

**Cost:** \$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

Typical Funding Sources: N/A

Relevant E's: Equity Engineering



### Install bike parking



Figure 54: Bike parking (Credit: Seattle Department of Transportation)

Bicycle parking facilities are various kinds of racks on which bicycles can be locked. Short-term bicycle facilities ensure the bike frame, and one wheel can be locked onto the rack in a safe and stable position without causing any damage to the bike. Providing secure bicycle parking in convenient locations, like near the front door of the school, makes it simpler and quicker for students to park their bikes at school and reduces fear and chance of vandalism, theft, and damage from weather.

**Best Practices and Further Considerations:** Place racks in a convenient and accessible location. Avoid grid racks as they don't stabilize bikes well and can cause damage to bikes.

**Timeline:** Many versions are quick to install, best time to install would be prior to the beginning of the school year

Additional Resources: <a href="https://saferoutespartnership.org/sites/default/files/pdf/">https://saferoutespartnership.org/sites/default/files/pdf/</a>
<a href="mailto:BikeParkingTipSheet-web.pdf">BikeParkingTipSheet-web.pdf</a>

**Cost:** \$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

#### **Typical Funding Sources:**

- Safe Routes to School/Safe Streets for All Implementation grant ,Transportation Enhancements or other federal funding grants or mini-grants.
- Foundations whose goals include addressing childhood obesity, active lifestyles, environment, etc.
- Parent-led fundraising efforts such as a bicycle ride event
- The school district or transportation departments
- Student built racks: high school art or welding classes, local community education classes, etc.
- Active Transportation Infrastructure Investment Program
- Private Activities Bonds
- Safe Streets and Roads for All (SS4A)
- Transportation Alternatives Program (TAP)



### Pilot an on-street protected multimodal path



Figure 55: Pilot program in Austin, TX (Credit: Salud America)

On-street multimodal paths allow the street's capacity to be increased by a more balanced allocation of space between the modes. So, a pilot program for an on-street multimodal path can improve the street temporarily to evaluate designs before going to a full installation option. It is also a good opportunity for the community to get engaged and educated about the importance of serving different modes and mobility options.

#### **Best Practices and Further Considerations:**

Multimodal streets move more people, are accessible, support local businesses, and are more environmentally friendly. Typically, multi-modal paths are paired with vertical streetscape elements, improved signage, lighting and wayfinding. This piloted program can also be done in conjunction with a pilot program that looks at improved crossings.

**Timeline:** Minimum of six months from kickoff to installation. This process required data collection during and after installation.

Additional Resources: Measuring Quick and Creative Street Projects

**Cost:** \$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

#### **Typical Funding Sources:**

- Active Transportation Infrastructure Investment Program
- Highway Safety Program
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Safe Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Transportation Alternatives Program (TAP)

Relevant E's: \_Engagement\_ \_Equity\_ \_Encouragement\_ \_Education\_ \_Evaluation\_ Engineering



### Install bicycle boulevard elements



Figure 56: Bicycle Boulevard (Credit: City of Tucson)

Many bicycle boulevard areas tend to be local streets that have low existing speeds and volumes that create a safe bicycling environment. There are a range of design treatments, like traffic circles, that are used to slow motor vehicle volumes, minimize bicyclist delay, and enhance the surrounding environment. Traffic circles are circular islands in the center of an intersection that slow traffic by creating a "pinch point" for vehicles and sharp turns for turning vehicles. The speed reduction increases pedestrian safety while also often improving the flow of traffic compared to a four-way stop. They can also be used for community beautification by landscaping the central island or showcasing public art on it. Traffic circles are allowed on local and collector streets and are recommended for minor intersections and uncontrolled intersections, especially those with documented speeding or crash challenges.

Best Practices and Further Considerations: Best practices include pavement markings and signage that can help guide vehicles through the intersection and increase pedestrian visibility. Consider using the central island for landscaping, showcasing public art, or other types of community beautification while maintaining good visibility. In addition, consider mountable curbs to handle larger vehicles while supporting low speeds. A low-cost, temporary alternative to a traffic circle can be implemented with plastic delineators.

**Timeline:** Varies on treatment chosen and complexity of design treatment.

Additional Resources: Bicycle Boulevards |
National Association of City Transportation Officials
(nacto.org)

**Cost:** \$\$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

#### **Typical Funding Sources:**

- Active Transportation Infrastructure Investment Program
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Safe Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Transportation Alternatives Program (TAP)

Relevant E's: \_Engagement\_\_Engineering\_



### Install a new sidewalk



Figure 57: Sidewalk construction (Credit: City of Des Moines)

New sidewalks will enable safe use and support mobility for more than just motorists. Typically, sidewalks parallel the existing roadway, and either are directly behind the curb or can be placed a few feet away from the roadway section providing room for a boulevard. Where the new sidewalk goes is dependent on how much existing right of way exists. Pouring a new sidewalk is one step closer to making the corridor a Complete Streets approach. Roadways designed to include people of all ages, abilities and all traveling modes often will have elements such as sidewalks, bicycle lanes, bus lanes, etc. which promote safer places for transportation.

#### **Best Practices and Further Considerations:**

Sidewalks are constructed using concrete. The Wyoming Department of Transportation has standard plans for how these are to be constructed. ADA requirements need to be followed as well.

**Timeline:** A few months or more from project initiation to completion. Constructing a new sidewalk takes planning, design, and construction efforts.

Additional Resources: Make Complete Streets the Default Approach | FHWA (dot.gov)

**Cost:** \$\$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

#### **Typical Funding Sources:**

- Active Transportation Infrastructure Investment Program
  - Highway Safety Program
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Recreational Trails Program
- Safe Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Transportation Alternatives Program (TAP)



### Delineate a bike lane



Figure 58: Bike lane (Credit: Solano Transportation Authority)

Bike lines are a striped portion of the road that forms an area specifically for bicyclists. Bike lanes increase the visibility of bicycles to motorists by giving them a designated space on the road. They are more suited for older and more experienced children who have learned the skills needed for bicycle handling, avoiding road hazards, and following the rules of the road.

Best Practices and Further Considerations: Bike lanes are often paired with narrowing the width of drive lanes or reducing parallel motorist lanes as the remaining pavement space is reallocated from the vehicles to the bicyclists. Depending on the space allotted, there are different types of bike lanes that can be installed, from conventional bike lanes to buffered bike lanes.

**Timeline:** Striping the existing pavement does not A few months or more from project initiation to completion. Constructing a new sidewalk takes planning, design, and construction efforts.

Additional Resources: Chapter 9C - MUTCD 2009 Edition - FHWA (dot.gov) **Cost:** \$-\$\$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

#### **Typical Funding Sources:**

- Active Transportation Infrastructure Investment Program
- Highway Safety Program
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Safe Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Transportation Alternatives Program (TAP)

## Construct off-road multimodal path



Figure 59: Off-road multimodal path (Credit: Stantec)

Sidewalks, trails, and greenways are designated paths for pedestrians and bicyclists that students can use to safely walk or bike to school. A complete network of these paths is vital for students to be able to have a safe route to school. Incomplete networks force pedestrians to walk on the street or in other unsafe conditions. While Cheyenne has developed their sidewalk network for decades, many were built prior to the current ADA standards, and they should be widened to meet current standards. This is already a part of the City's plans and will help create a safe and enjoyable walking environment for students. The Greater Cheyenne Greenway is often recognized for its recreational benefits, but it also serves as walking and bicycling corridors to school and other destinations. Multi-use paths and greenways are wider than a standard sidewalk and may be constructed adjacent to roads, through parks or open space areas, along creeks and linear corridors, such as abandoned railroad lines, and on routes to school.

#### **Best Practices and Further Considerations:**

Sidewalks, trails, or greenways constructed adjacent to streets should have some type of buffer to separate the path area from the adjacent travel lane. Consider using buffer area for landscaping, native plantings, or green stormwater infrastructure. Consider using concrete instead of asphalt for shared used paths and greenways to minimize negative impact on bikes from summer heat and reduce the urban heat island effect. Using colored concrete can help visually differentiate the path from the road or sidewalk. Pair with signage and wayfinding signage to schools.

**Timeline:** Six months or more from project initiation to completion. Constructing a new path takes planning, design, and construction efforts, like sidewalks.

#### **Additional Resources:**

<a href="https://www.plancheyenne.org/wp-content/uploads/2022/10/2022-Greenway.pdf">https://www.plancheyenne.org/wp-content/uploads/2022/10/2022-Greenway.pdf</a>

**Cost:** \$-\$\$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

#### **Typical Funding Sources:**

- Active Transportation Infrastructure Investment Program
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- · Recreational Trails Program
- Safe Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Transportation Alternatives Program (TAP)
- Transportation Infrastructure Finance & Innovation Act (TIFIA)

### Install human-scale lighting and/or wayfinding



Figure 60: Pedestrian lamps (Credit: Washington University in St. Louis)

Safe sidewalks are essential components of good pedestrian environments, and well-lit environments convey a feeling of comfort and safety, particularly at night. Lighting should illuminate the sidewalk and roadway crossings to increase pedestrian visibility. Lighting is also an important element for multi-use pathways, at underpasses and at other isolated locations. Lights should be low enough to the street to increase pedestrian visibility to road users and light their walking path. In addition, wayfinding in urban environments can include traditional signage with digital solutions, such as mobile apps and interactive kiosks. Lighting in combination with wayfinding

#### **Best Practices and Further Considerations:**

It is important to design the roadway lighting so that it not only improves motorist visual quality, providing increased contrast for seeing hazards, but it illuminates conflict areas while minimizing environmental impacts of light at night. Employing lighting systems that are easily maintainable and minimize energy use should be considered.

Timeline: Wayfinding can be created at any time. Installing lighting takes more time as engineering design is needed. A few months at most for design, however, ordering, acquiring and installing lights may take longer.

Additional Resources: SRTS Guide: Street Lighting (saferoutesinfo.org)

**Cost:** \$\$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

#### **Typical Funding Sources:**

- Active Transportation Infrastructure **Investment Program** 
  - Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Recreational Trails Program
- Safe Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Transportation Alternatives Program (TAP)

Relevant E's: Engagement Education Engineering



### Implement shared street concepts



Figure 61: Residential shared street (Credit: National Association of City Transportation Officials)

Shared street concepts can help address multiple conflict points and provide safer roads for all users – pedestrians, bikers, transit users, and drivers, prioritizing public spaces while accommodating all transportation modes at low speeds. Shared streets may include sidewalks, shared use paths, separated bike lanes, sheltered transit stops, and other features to encourage multi-modal transportation along the corridor. This solution can be coordinated with Cheyenne's capital improvement plan. Shared street concepts should be considered when a road is being reconstructed in the future and can be improved to increase safety for all modes of transportation. An example of a shared street concept is a roadway that includes a chicane.

Chicanes are curb extensions or islands staggered on either side of the road, creating a serpentine path for vehicles. Drivers are forced to slow down in order to effectively maneuver through the obstacles. The best areas for this application are local streets, especially near school sites. Cheyenne allows chicanes on both local and collector roads.

#### **Best Practices and Further Considerations:**

Shared Street concepts can include anything from street furniture which can help define a shared space to staggering blocks of landscaping to create a chicane effect. With chicanes, make sure to design and mark well for easy recognition by snow plowing



personnel as they can pose challenges for winter maintenance. To minimize drainage impacts, these can be installed as edge islands with a 1–2-foot gap where necessary. However, if it is practical to extend the curb, this can maximize pedestrian space and can be enhanced with other amenities such as benches, bicycle parking, and landscaping. Consider including signing and striping to warn drivers about the bend in the road.

**Timeline:** Can be implemented at any time. Chicane construction will most likely happen during the construction season.

Additional Resources: Residential Shared Street | National Association of City Transportation Officials (nacto.org)

**Cost:** \$-\$\$\$ (\$ = physical enhancements that can be added to existing corridor for low cost, \$\$ = partial reconstruction or enhancements that are more costly, \$\$\$ = full reconstruction)

Relevant E's: \_Education\_ \_Evaluation\_ Engineering

#### **Typical Funding Sources:**

- Accelerated Innovation Deployment (AID)
- Active Transportation Infrastructure Investment Program
- Congestion Mitigation and Air Quality Program
- Congressionally Directed Spending (Senate)
   / Community Project Funding (House)
- Highway Safety Program
- Mobility for All Pilot Program Grants
- Public Works & Economic Adjustment Assistance (EAA) Programs
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Recreational Trails Program
- Safe Streets and Roads for All (SS4A)
- Surface Transportation Program Block Grant Program (STBGP)
- Thriving Communities Program
- Transportation Alternatives Program (TAP)
- Transportation Infrastructure Finance & Innovation Act (TIFIA)



Figure 62: Shared street (Credit: DNAinfo Chicago)



Figure 63: Aerial view of pedestian crossing to McCormick Elementary School (Credit: Cheyenne Police Department)

## **Recommendations by School**

The surrounding context of every school is different so the barriers to accessing school safety and recommendations for improvements are vary too. There are also many similar conditions across sites that can be improved as a group.



The Safe Routes to School program aims to create a safer, healthier, and more accessible environment for students traveling to and from school. The following recommendations are designed to build on the successes of the initial implementation and address any existing and anticipated safety concerns adjacent to each of the 37 schools. These recommendations are informed by comprehensive evaluations, community feedback, and best practices from successful SRTS programs nationwide. By adopting these strategies, LCSD1, City of Chevenne, Laramie County, Chevenne MPO, WYDOT, and other stakeholders can enhance the safety, convenience, and appeal of active transportation as a preferred mode choice to school, ensuring that all students have the opportunity to benefit from healthy and active lifestyle.

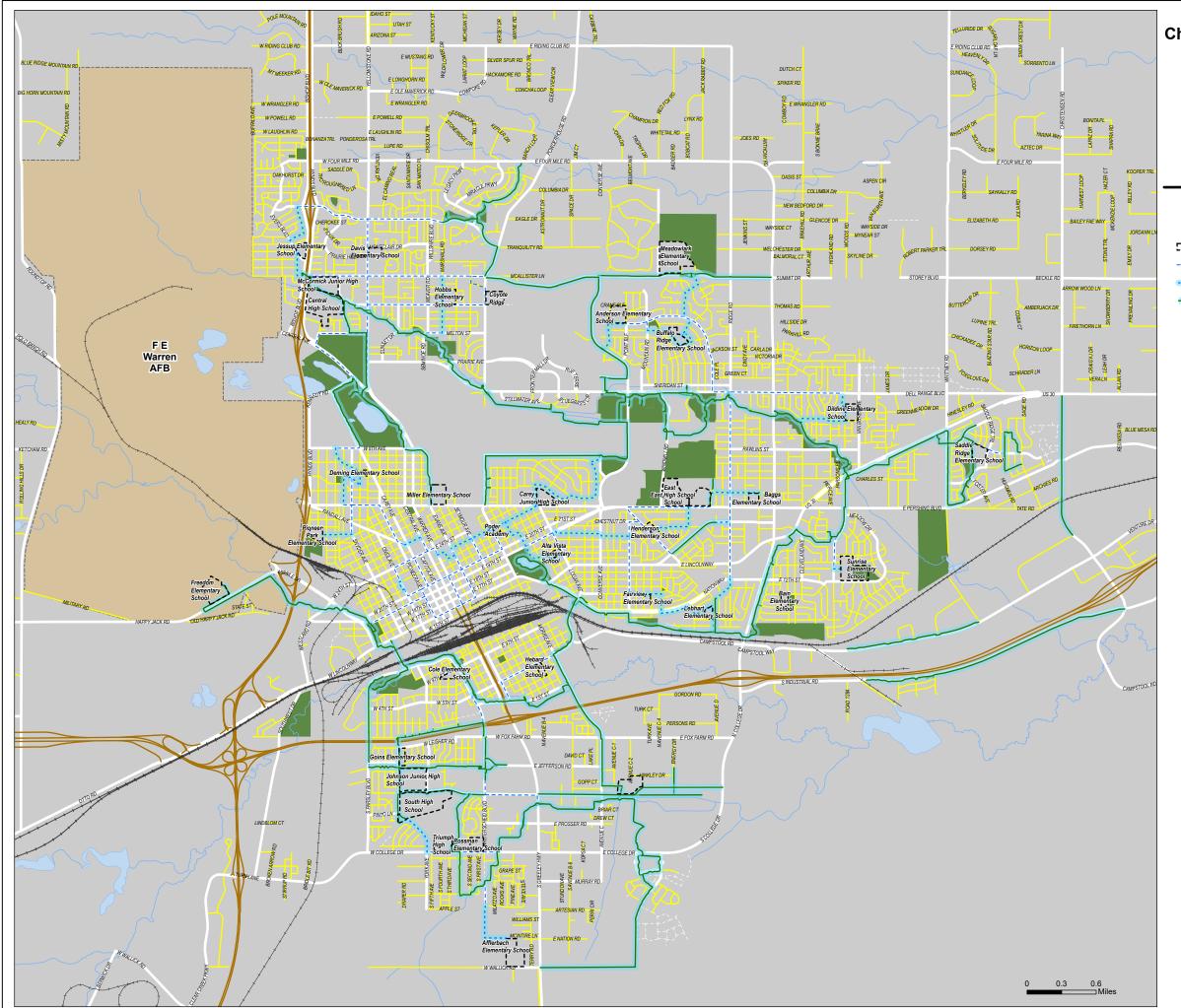
Recommendations will be based on the six E's introduced in the "Strategy Toolbox" section and focus on areas specific to each of the 37 schools. Recommendations at each school are tailored to address specific needs and opportunities identified during the planning and implementation phases, with the ultimate goal of fostering a sustainable and effective SRTS program. Individual maps of each school site will highlight improvements that were based on needs identified through data, site visits, and input solicited through the study's engagement process.

Additionally, an overall route recommendation map (Figure 64) has been developed to provide the safest access to schools based on existing conditions (i.e., historical crash data, traffic volumes, posted-speed, presence or lack of sidewalks/trails, type of intersection controls, crossing opportunities, etc.). The routes are categorized into two categories:

Busy streets - These are roadways that have high traffic volumes. Busy streets are typically major roadways that have higher posted-speed and are designed to help funnel vehicular traffic. Busy streets are less favorable routes for active transportation, especially for children. However, sidewalks, shared-used path, and/or buffered bicycle lanes are more likely to be present on major Cheyenne roadways. Therefore, route recommendations along busy streets were only recommended if there were dedicated pedestrian/bicyclist facilities along the roadway. Additionally, not all intersections in Chevenne are controlled -signalized or signed. To enhance safety of children crossing roadways, route recommendations were directed towards major roadway intersections that are signalized where pedestrian crossing opportunities are incorporated with the traffic light phasing

 Neighborhood streets – These are roadways with fewer vehicular traffic and lower postedspeed. Neighborhood streets are the preferred routes. However, sidewalks/shared-use path, and/or buffered bicycle lanes are less likely to be present on these minor roadways; sometimes, sidewalks are only present on one side of the roadway. Additionally, intersections of these local/neighborhood streets are not always controlled by yield/stop signs or traffic lights

Figure 64 should be updated as roadway improvements are addressed within the Cheyenne MPO boundaries. These improvements may be specific to the recommendations identified in this SRTS Plan or capital improvements programmed at the city, county, and state level. The recommended routes are subjected to change with planned and proposed improvements. Therefore, it is important to update the map to reflect the safest routes for students to use when walking, biking, and/or rolling. which could make it difficult and confusing for young children on when to cross, increasing safety risks. Neighborhood streets are more favorable given that they are less busy and carry fewer vehicular traffic. Therefore, more likely for children to travel along close to the curb even if there are no dedicated facilities for walking, biking, and/or rolling. Neighborhood streets without dedicated sidewalks/ shared-use paths/trails selected as part of the overall recommended routes should be prioritized by the respective roadway jurisdiction to improve nonmotorist experience and safety.



# Cheyenne Metropolitan Planning Organization (MPO) Laramie County School District 1 Safe Routes to School Plan









Figure 64: Recommended Routes to Walking, Rolling, and Biking

- School [2]
- --- Busy Walking Route
- ··· Neighborhood Walking Route
- Greenway/Trail Walking Route



### Proposed improvements:

- / pedestrian connection
- -- / multimodal connection
- -- / traffic calming
- -- / further study encouraged

See following page for information.

### Existing infrastructure:

- sidewalk
- trail
- planned project (see <u>Appendix D</u>)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles





### **Afflerbach** Elementary

### Recommendation 1: Calm traffic and reduce travel speeds.

Barrier: Greeley Hwy is high speed, crossing dangerous, few alternative routes

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page
- Reduce the number of parallel lanes (See page 53)
- <u>Install vertical streetscape elements</u> (See page 54)

### **Recommendation 2: Create new multimodal** crossing.

Barrier: Lack of crossing at Wallick Rd

Potential strategies (click for more information):

- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)



Figure 66: Afflerbach Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

### See Strategy Toolbox:

## Alta Vista Elementary

### Proposed improvements:

- pedestrian connection
- multimodal connection
- -- / traffic calming
- -- / further study encouraged

See following page for information.

### Existing infrastructure:

- sidewalk
- trail
- planned project (see Appendix D)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles



North



### Alta Vista Elementary

## Recommendation 1: Enhance existing pedestrian crossings.

Barrier: Crossings surrounding school and crossing 19<sup>th</sup> St, 20<sup>th</sup> St feel dangerous, drivers fail to yield

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page 56)
- <u>Install bollards and/or in-street signing</u> (See page 58)
- <u>Install crossing signal</u> (See page 59)
- Construct curb extensions (See page 61)



Figure 68: Alta Vista Street View

### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

### See Strategy Toolbox:

### **Anderson** Elementary

## Proposed improvements:

- pedestrian connection
- multimodal connection
- traffic calming
- -- / further study encouraged

### See following page for information.

### Existing infrastructure:

- sidewalk
- trail
- planned project (see Appendix D)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles



North

### **Anderson** Elementary

### Recommendation 1: Create new multimodal connection.

Barrier: Lack of connection west to greenway and planned residential development.

Potential strategies (click for more information):

- Pilot an on-street protected multimodal path (See page 65)
- Construct off-road multimodal path (See page 69)

### Recommendation 2: Create new multimodal crossing.

Barrier: Lack of connection west to greenway and planned residential development.

Potential strategies (click for more information):

- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)

### Recommendation 3: Calm traffic and reduce travel speeds.

Barrier: Mountain Rd wide and lacks controls, drivers fail to yield.

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page 52)
- Install vertical streetscape elements (See page 54)



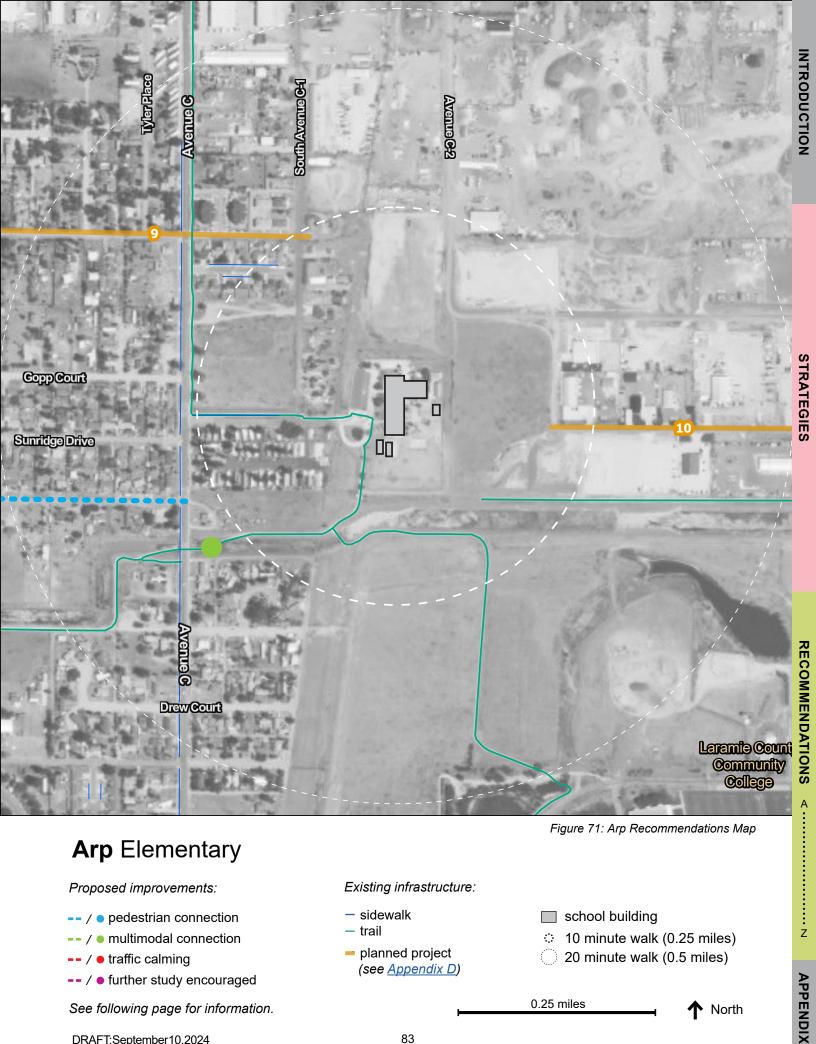
Figure 70: Anderson Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans. Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

### See Strategy Toolbox:





### **Arp** Elementary

## Recommendation 1: Create new multimodal connection.

Barrier: Lack of sidewalks on Allison Rd.

Potential strategies (click for more information):

- Pilot an on-street protected multimodal path (See page 65)
- Implement shared street concepts (See page 71)

## Recommendation 2: Enhance existing multimodal connection.

Barrier: The nearby greenway floods.

Potential strategies (click for more information):

•



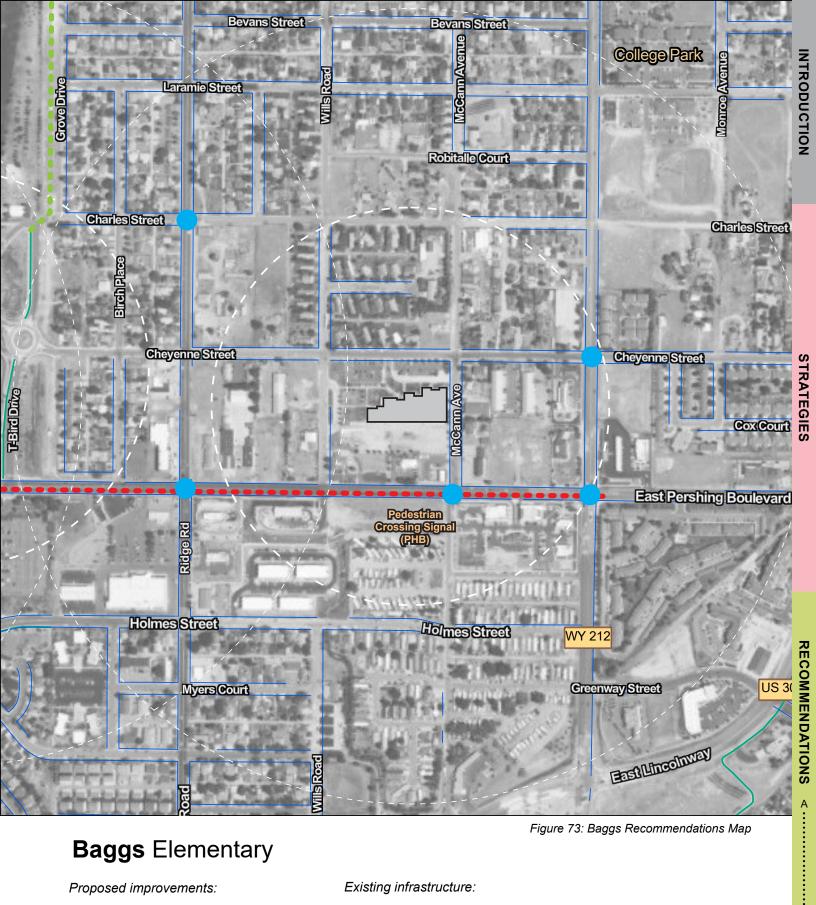
Figure 72: Arp Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

### See Strategy Toolbox:



- -- / pedestrian connection
- -- / multimodal connection
- -- / traffic calming
- -- / further study encouraged

### See following page for information.

- sidewalk
- trail
- planned project (see <u>Appendix D</u>)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles





### **Baggs** Elementary

### Recommendation 1: Calm traffic and reduce travel speeds.

Barrier: Pershing Blvd is high speed, lack of controls, drivers fail to yield.

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (see page
- Reduce the number of parallel lanes (See page 53)
- Install vertical streetscape elements (See page 54)

### Recommendation 2: Enhance existing pedestrian crossings.

Barrier: Crossings of Pershing Blvd are wide, obstructed, angled, deteriorated, driver fail to yield.

Potential strategies (click for more information):

- Mark crossing with high visibility paint markings (See page 56)
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)

### Recommendation 3: Create new pedestrian crossings.

Barrier: Lacking crossings of College Dr, Ridge Rd.

Potential strategies (click for more information):

- Mark crossing with high visibility paint markings (See page
- Install crossing signal (See page 59)



Figure 74: Baggs Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans. Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

#### See Strategy Toolbox:



## **Bain** Elementary

### Proposed improvements:

- pedestrian connection
- multimodal connection
- -- / traffic calming
- -- / further study encouraged

### See following page for information.

### Existing infrastructure:

- sidewalk
- trail
- planned project (see Appendix D)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles



North



### **Bain** Elementary

### Recommendation 1: Enhance existing pedestrian crossings.

Barrier: Crossings surrounding school, at greenway, and crossing E 12th St feel dangerous, have visibility constraints, lack controls.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)
- Construct raised crossing (See page 62)

### Recommendation 2: Calm traffic and reduce travel speeds.

Barrier: 12th Street high speed, lacks controls, drivers fail to yield.

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page 52)
- Install vertical streetscape elements (See page 54)



Figure 76: Bain Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

### See Strategy Toolbox:

**APPENDIX** 

Figure 77: Buffalo Ridge Recommendations Map

Basin Street

### **Buffalo Ridge** Elementary

Proposed improvements:

- -- / pedestrian connection
- -- / multimodal connection
- -- / traffic calming
- -- / further study encouraged

Existing infrastructure:

- sidewalk
- trail
- planned project (see <u>Appendix D</u>)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles



See following page for information.



### **Buffalo Ridge** Elementary

### Recommendation 1: Create new multimodal crossing.

Barrier: Lacking crossings of Plain View Rd, Pineridge Ave, Mountain Rd, Ridge Rd.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Construct curb extensions (See page 61)
- Construct raised crossing (See page 62)

### Recommendation 2: Calm traffic and reduce travel speeds.

Barrier: Plain View Rd and Mountain Rd are visibility constrained, lack controls, wide, dangerous to cross.

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page
- Install vertical streetscape elements (See page 54)

### Recommendation 3: Create new multimodal connection.

Barrier: Lack of connection west to greenway and planned residential development.

Potential strategies (click for more information):

- Pilot an on-street protected multimodal path (See page 65)
- Include as development exaction (See page 63)
- Construct off-road multimodal path (See page 69)



Figure 78: Buffalo Ridge Street View

### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

### See Strategy Toolbox:

Figure 79: Carey Recommendations Map

### Carey Junior High

Proposed improvements:

- -- / pedestrian connection
- -- / multimodal connection
- -- / traffic calming
- -- / further study encouraged

See following page for information.

### Existing infrastructure:

- sidewalk
- trail
- planned project (see <u>Appendix D</u>)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles





### Recommendation 1: Calm traffic and reduce travel speeds.

Barrier: Pershing Blvd is high-speed, lack of controls, drivers fail to yield; Windmill Rd widens, high speeds from north, no dedicated turn lanes to lots

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page
- Reduce the number of parallel lanes (See page 53)
- Install vertical streetscape elements (See page 56)



Barrier: Crossings of Pershing Blvd are wide, obstructed, angled, deteriorated, driver fail to yield.

Potential strategies (click for more information):

- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)

### Recommendation 3: Create new multimodal connection.

Barrier: Lack of connection north to greenway.

Potential strategies (click for more information):

- Pilot an on-street protected multimodal path (See page 65)
- Construct off-road multimodal path (See page 69)



Figure 80: Carey Street View

#### E's

Junior High Schools should also pursue Safe Routes to School strategies for Education, Equity, Encouragement, Engagement and Evaluation. A few high impact options to consider are:

- Asphalt Art Programs
- Free Helmets and Bike Locks
- Walk and Roll to School Day
- Suggested Routes (Maps & Wayfinding)
- Student Led Education Campaigns

See Strategy Toolbox:

### **Central** High

### Proposed improvements:

- pedestrian connection
- multimodal connection
- traffic calming
- -- / further study encouraged

See following page for information.

### Existing infrastructure:

- sidewalk
- trail
- planned project (see Appendix D)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles



**APPENDIX** 

DRAFT:September10,2024

A ..... Z



### **Central** High

### Recommendation 1: Enhance existing pedestrian crossings.

Barrier: Crossings of Education Dr, Manewal Dr, Western Hills Blvd, Yellowstone Dr feel dangerous, drivers fail to yield.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)

### Recommendation 2: Calm traffic and reduce travel speeds.

Barrier: Education Rd, Western Hills Rd, lack controls, feel dangerous to cross, drivers fail to yield: Yellowstone Rd is highspeed, lack of controls, drivers fail to yield for crossing guard.

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page
- Reduce number of parallel lanes (See page 53)
- <u>Install vertical streetscape elements</u> (See page 54)



Figure 82: Central Street View

#### E's

High Schools should also pursue Safe Routes to School strategies for Education, Equity, Encouragement, Engagement and Evaluation. A few high impact options to consider are:

- Safe Routes to School Task Force
- Asphalt Art
- **Engaging Students with** Disabilities
- Incentive or Competition **Programs**
- Storytelling Campaigns

See Strategy Toolbox: Engagement, Equity, Encouragement, Education, and Evaluation.

### Proposed improvements:

- pedestrian connection
- multimodal connection
- -- / traffic calming
- -- / further study encouraged

See following page for information.

### Existing infrastructure:

- sidewalk
- trail
- planned project (see Appendix D)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles



North

A ..... Z



### **Cole** Elementary

### Recommendation 1: Create new multimodal connection.

Barrier: Lack of connection northeast to greenway.

Potential strategies (click for more information):

- Pilot an on-street protected multimodal path (See page 65)
- Construct off-road multimodal path (See page 69)

### Recommendation 2: Enhance existing pedestrian crossings.

Barrier: Crossings surrounding school and Deming Dr, feel dangerous, drivers fail to yield.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)
- Construct raised crossing (See page 62)



Figure 84: Cole Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

### See Strategy Toolbox:

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### **Coyote Ridge** Elementary

## Recommendation 1: Create new multimodal connection.

Barrier: Lack of connection east to planned residential development.

Potential strategies (click for more information):

- Include as development exaction (See page 63)
- Construct off-road multimodal path (See page 69)

# Recommendation 2: Calm traffic and reduce travel speeds.

Barrier: Powderhouse Rd. is high speed, lacks controls, drivers fail to yield.

Potential strategies (click for more information):

- <u>Install vertical streetscape elements</u> (See page 54)
- Monitor for student volumes for school zone warrent



Figure 86: Coyote Ridge Street View

### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

### See Strategy Toolbox:

- -- / multimodal connection
- -- / traffic calming
- -- / further study encouraged

See following page for information.

#### pedestrian connection

- trail
- planned project (see <u>Appendix D</u>)
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles





### **Davis** Elementary

## Recommendation 1: Calm traffic and reduce travel speeds.

Barrier: Yellowstone Rd is high-speed, lack of controls, drivers fail to yield.

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page 52)
- Reduce the number of parallel lanes (See page 53)
- Install vertical streetscape elements (See page 54)

# Recommendation 2: Enhance existing pedestrian crossings.

Barrier: Crossing of Yellowstone Rd, Montclair Dr lacks controls, drivers fail to yield for crossing guard.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page 56)
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)

## Recommendation 3: Calm traffic and reduce travel speeds.

Barrier: Montclair Dr and Delcour Dr lack controls, have visibility constraints, feel dangerous to cross.

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page 52)
- Install vertical streetscape elements (See page 54)
- Implement shared street concepts (See page 71)



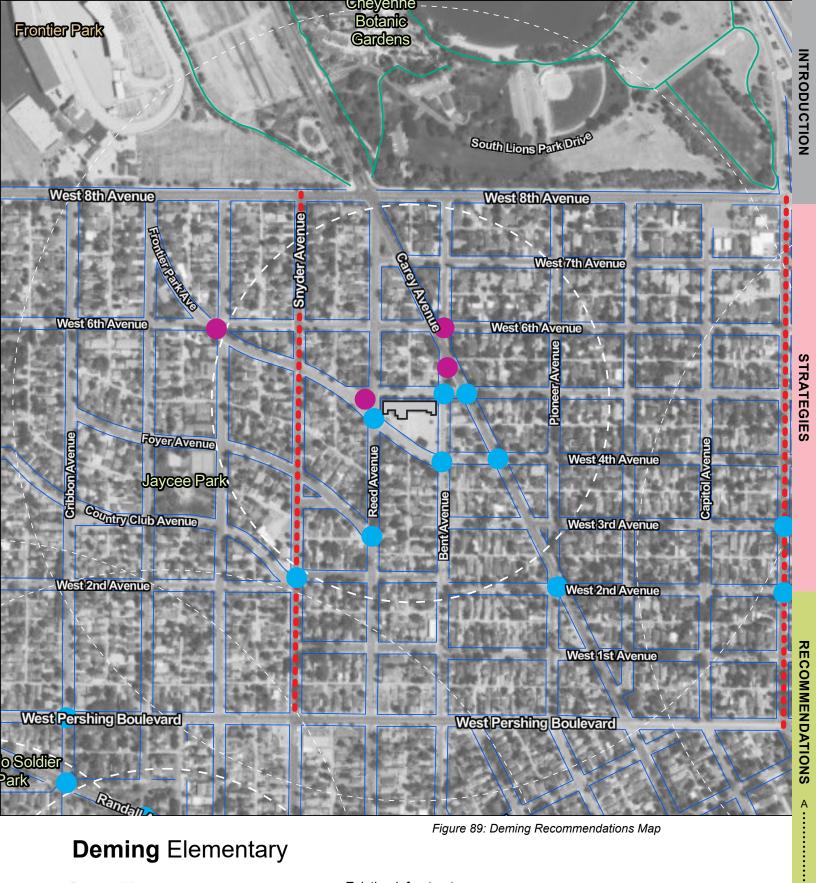
Figure 88: Davis Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

#### See Strategy Toolbox:



### Proposed improvements:

- -- / pedestrian connection
- -- / multimodal connection
- -- / traffic calming
- -- / further study encouraged

### See following page for information.

### Existing infrastructure:

- sidewalk
- trail
- planned project (see <u>Appendix D</u>)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles	



North



### **Deming** Elementary

## Recommendation 1: Enhance existing pedestrian crossings.

Barrier: Crossings surrounding school and crossing Carey Ave and Snyder Ave feel dangerous, drivers fail to yield

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page 56)
- <u>Install bollards and/or in-street signing</u> (See page 58)
- <u>Install crossing signal</u> (See page 59)
- Construct curb extensions (See page 61)

## Recommendation 2: Calm traffic and reduce travel speeds.

Barrier: Snyder Ave wide and lacks controls, drivers fail to yield.

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page 52)
- <u>Install vertical streetscape elements</u> (See page 54)



Figure 90: Deming Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

### See Strategy Toolbox:



### Proposed improvements:

- / pedestrian connection
- / multimodal connection
- -- / traffic calming
- -- / further study encouraged

### See following page for information.

### Existing infrastructure:

- sidewalk
- trail
- planned project (see <u>Appendix D</u>)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles





### **Dildine** Elementary

### Recommendation 1: Calm traffic and reduce travel speeds.

Barrier: Del Range Blvd, Van Buren Ave, Green River St feel dangerous to cross, multiple conflicts, drivers fail to yield.

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page
- Reduce the number of parallel lanes (See page 53)
- Install vertical streetscape elements (See page 54)
- Implement shared street concepts on Green River St. (See page 71)

### Recommendation 2: Create new multimodal connection.

Barrier: Lack of connection south and west to greenway.

Potential strategies (click for more information):

- Pilot an on-street protected multimodal path (See page 65)
- Install bicycle boulevard elements (See page 66)
- Construct off-road multimodal path (See page 69)

### Recommendation 3: Enhance existing pedestrian crossings.

Barrier: Crossings surrounding school and crossing Dell Range Blvd feel dangerous, have visibility constraints, drivers fail to

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)



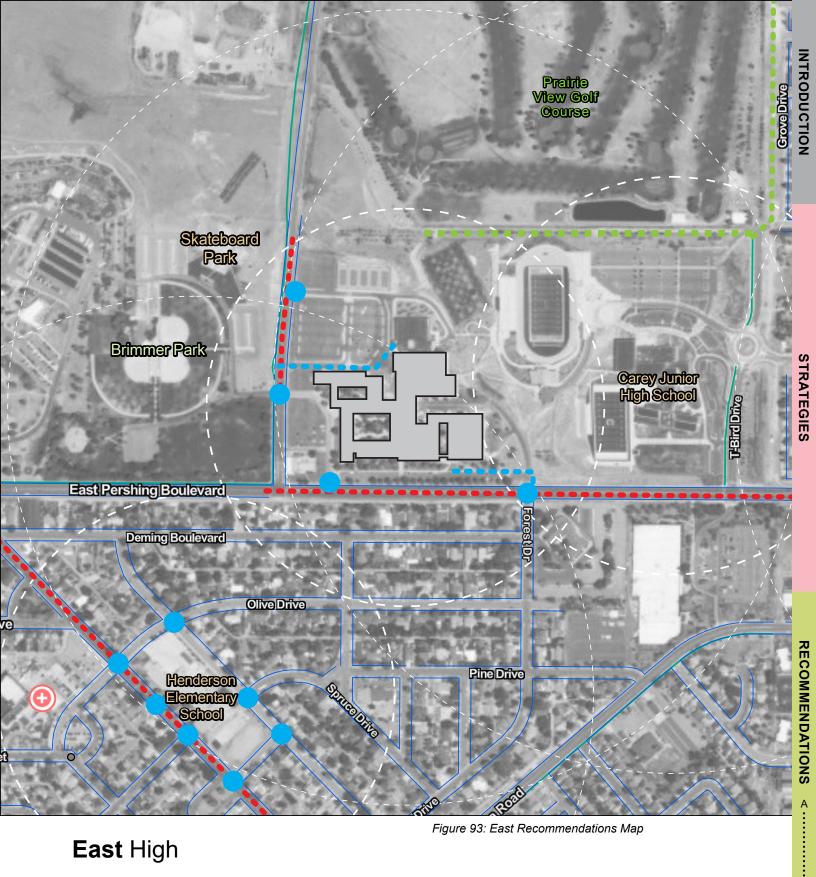
Figure 92: Dildine Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicvcle Rodeo & Traffic Gardens
- Classroom Safety Education

See Strategy Toolbox: Engagement, Equity, Encouragement, Education, and Evaluation.



### Proposed improvements:

- -- / pedestrian connection
- -- / multimodal connection
- -- / traffic calming
- -- / further study encouraged

See following page for information.

### Existing infrastructure:

- sidewalk
- trail
- planned project (see <u>Appendix D</u>)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles





### Recommendation 1: Calm traffic and reduce travel speeds.

Barrier: Pershing Blvd is high-speed, drivers fail to yield; Windmill Rd widens, high speeds from north, no dedicated turn lanes to lots

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page 52)
- Reduce the number of parallel lanes (See page 53)
- Install vertical streetscape elements (See page 54)



Barrier: Crossings of Pershing Blvd and Windmill Rd are wide, obstructed, angled, deteriorated, driver fail to yield.

Potential strategies (click for more information):

- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)

### Recommendation 3: Create new multimodal connection.

Barrier: Lack of connection north to greenway, west to Windmill Rd.

Potential strategies (click for more information):

- Pilot an on-street protected multimodal path (See page 65)
- Construct off-road multimodal path (See page 69)



Figure 94: East Street View

#### E's

High Schools should also pursue Safe Routes to School strategies for Education, Equity, Encouragement, Engagement and Evaluation. A few high impact options to consider are:

- Safe Routes to School Task Force
- Asphalt Art
- **Engaging Students with** Disabilities
- Incentive or Competition **Programs**
- Storytelling Campaigns

See Strategy Toolbox: Engagement, Equity, Encouragement, Education, and Evaluation.

### Proposed improvements:

- pedestrian connection
- multimodal connection
- -- / traffic calming
- -- / further study encouraged

See following page for information.

### Existing infrastructure:

- sidewalk
- trail
- planned project (see Appendix D)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles



### Eastridge Facility

## Recommendation 1: Calm traffic and reduce travel speeds.

Barrier: Pershing Blvd and Concord Rd are high-speed, have visibility constraints, lacks controls, drivers fail to yield

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page 52)
- Reduce the number of parallel lanes (See page 53)
- Install vertical streetscape elements (See page 54)



Figure 96: Eastridge Street View

### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

### See Strategy Toolbox:

- -- / pedestrian connection
- multimodal connection
- -- / traffic calming
- -- / further study encouraged

#### Existing infrastructure:

- sidewalk
- trail
- planned project (see Appendix D)
- school building
- 10 minute walk (0.25 miles)

**APPENDIX** 

20 minute walk (0.5 miles)

0.25 miles North

See following page for information.



## Recommendation 1: Enhance existing pedestrian crossings.

Barrier: Crossing outside school lacks controls.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Construct curb extensions (See page 61)
- Construct raised crossing (See page 62)

## Recommendation 2: Calm traffic and reduce travel speeds.

Barrier: Lincolnway and Nationway feel dangerous, have visibility constraints, lacks controls, drivers fail to yield

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page
- Reduce the number of parallel lanes (See page 53)
- Install vertical streetscape elements (See page 54)



Figure 98: Fairview Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

#### See Strategy Toolbox:

## Proposed improvements:

- pedestrian connection
- multimodal connection
- traffic calming
- -- / further study encouraged

### See following page for information.

- sidewalk trail
- planned project (see Appendix D)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles





# **Freedom** Elementary

## **Recommendation 1: Create new multimodal** connection.

Barrier: Lack of connection west to neighborhood.

Potential strategies (click for more information):

Construct off-road multimodal path (See page 69)



Figure 100: Freedom Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

#### See Strategy Toolbox:

# **Goins** Elementary

## Proposed improvements:

- -- / pedestrian connection
- -- / multimodal connection
- -- / traffic calming
- -- / further study encouraged

#### See following page for information.

#### Existing infrastructure:

- sidewalk
- trail
- planned project (see <u>Appendix D</u>)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles





# **Goins** Elementary

# Recommendation 1: Enhance existing pedestrian crossings.

Barrier: Lacking crossings of Cribbon Ave or crossings deteriorated.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page 56)
- <u>Install bollards and/or in-street signing</u> (See page 58)
- Construct curb extensions (See page 61)



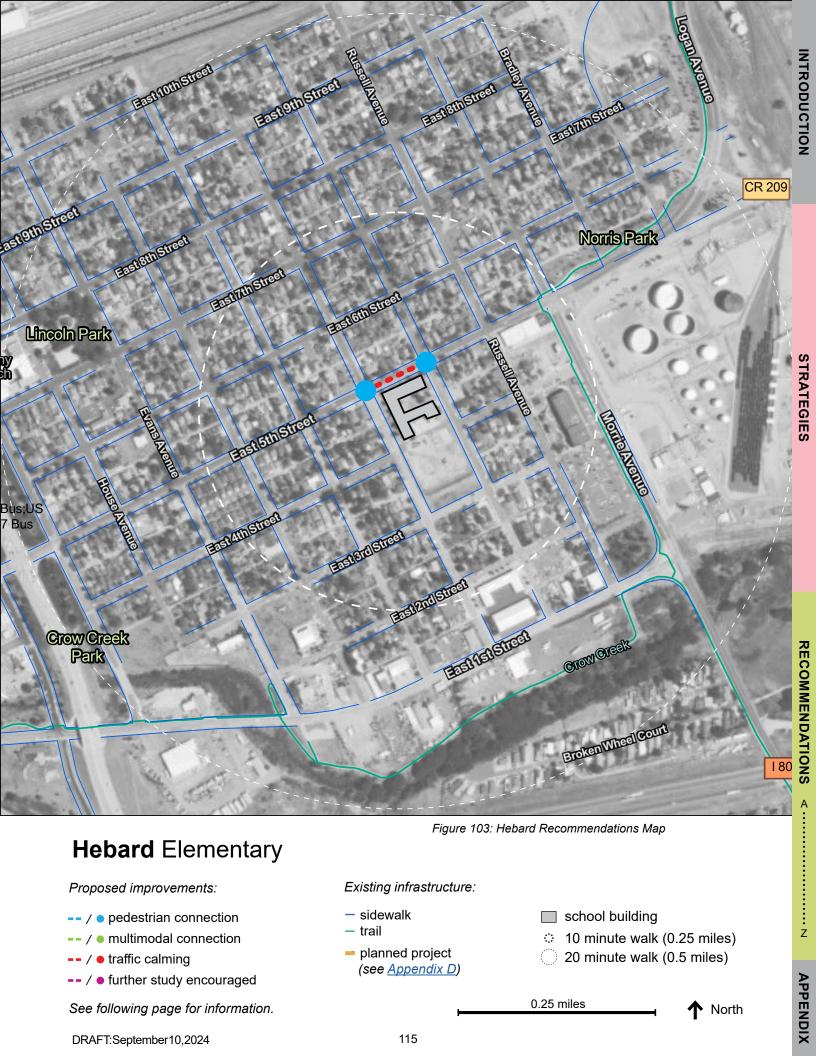
Figure 102: Goins Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

#### See Strategy Toolbox:





## **Hebard** Elementary

## Recommendation 1: Calm traffic and reduce travel speeds.

Barrier: E 5th St lacks controls, drivers fail to yield for crossing guard.

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page
- Reduce the number of parallel lanes (See page 53)
- <u>Install vertical streetscape elements</u> (See page 54)
- Implement shared street concepts (See page 71)

## Recommendation 2: Enhance existing pedestrian crossings.

Barrier: Crossings feel dangerous surrounding school.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)
- Construct raised crossing (See page 56)

## Recommendation 3: Create new multimodal connection.

Barrier: Lack of connection south and east to greenway.

Potential strategies (click for more information):

- Pilot an on-street protected multimodal path (See page 65)
- Install bicycle boulevard elements (See page 66)
- Construct off-road multimodal path (See page 69)



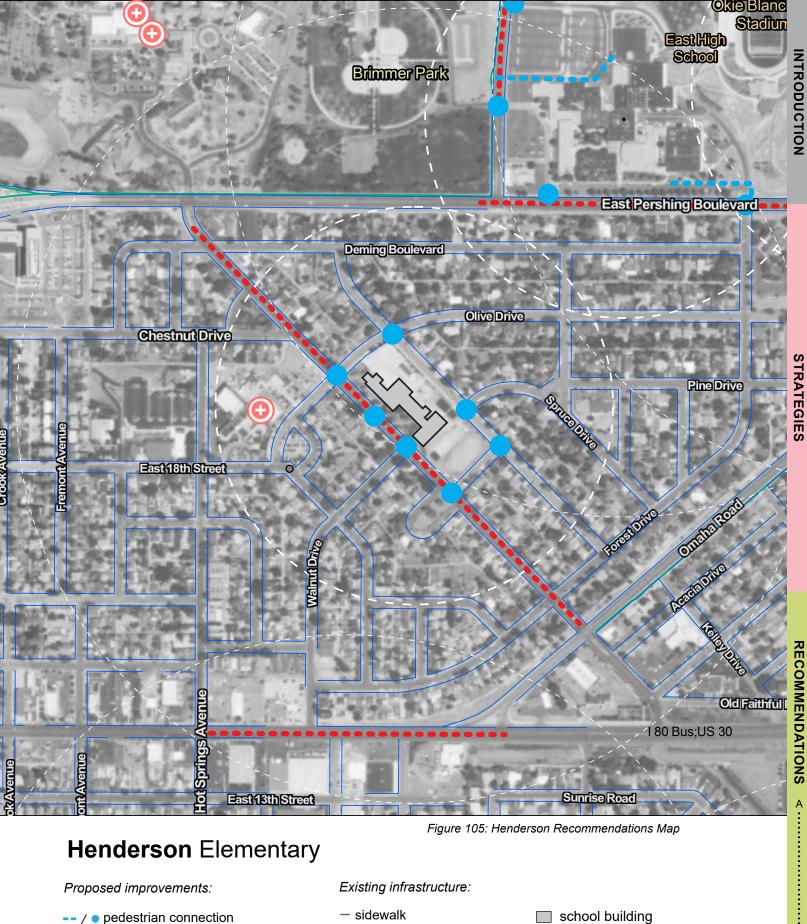
Figure 104: Hebard Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

See Strategy Toolbox: Engagement, Equity, Encouragement, Education, and Evaluation.



- multimodal connection
- / traffic calming
- -- / further study encouraged
- sidewalk
- trail
- planned project (see Appendix D)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

**APPENDIX** 

0.25 miles North

See following page for information.

# **Henderson** Elementary

## Recommendation 1: Calm traffic and reduce travel speeds.

Barrier: Henderson Dr lacks controls, drivers fail to yield

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page
- <u>Install vertical streetscape elements</u> (See page 54)

## Recommendation 2: Enhance existing pedestrian crossings.

Barrier: Crossings surrounding school and crossing of E 18th St / Willow Dr feel dangerous, visibility constraints drivers fail to yield

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)



Figure 106: Henderson Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

#### See Strategy Toolbox:

## Proposed improvements:

- -- / pedestrian connection
- -- / multimodal connection
- -- / traffic calming
- -- / further study encouraged

### See following page for information.

#### Existing infrastructure:

- sidewalk
- trail
- planned project (see <u>Appendix D</u>)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles



North

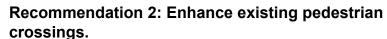
# **Hobbs** Elementary

## Recommendation 1: Calm traffic and reduce travel speeds.

Barrier: Carlson St is high-speed, lacks controls, drivers fail to yield.

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page
- Reduce the number of parallel lanes (See page 53)
- <u>Install vertical streetscape elements</u> (See page 54)
- Implement shared street concepts (See page 71)



Barrier: Crossings feel dangerous surrounding school.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)
- Construct raised crossing (See page 62)

### Recommendation 3: Enhance existing multimodal connection.

Barrier: Greenway connection at Melton St and Seminoe Rd curve has visibility constraints, lacks controls.

Potential strategies (click for more information):

- Pilot an on-street protected multimodal path (See page 65)
- <u>Install bicycle boulevard elements</u> (See page 66)
- Construct off-road multimodal path (See page 69)



Figure 108: Hobbs Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

See Strategy Toolbox: Engagement, Equity, Encouragement, Education, and Evaluation.

# **Jessup** Elementary

## Proposed improvements:

- -- / pedestrian connection
- -- / multimodal connection
- -- / traffic calming
- -- / further study encouraged

#### See following page for information.

#### Existing infrastructure:

- sidewalk
- trail
- planned project (see <u>Appendix D</u>)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles





## **Jessup** Elementary

## Recommendation 1: Create new multimodal connection.

Barrier: Lack of connection to overpass.

Potential strategies (click for more information):

- Pilot an on-street protected multimodal path (See page 65)
- Require as development exaction (See page 63)
- Construct off-road multimodal path (See page 69)

## Recommendation 2: Enhance existing pedestrian crossings.

Barrier: Crossings near school feel dangerous, lack controls.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Install bollards and/or in-street signing (See page 58)



Figure 110: Jessup Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

#### See Strategy Toolbox:

# Johnson Elementary

## Proposed improvements:

- -- / pedestrian connection
- -- / multimodal connection
- -- / traffic calming
- -- / further study encouraged

#### See following page for information.

#### Existing infrastructure:

- sidewalk
- trail
- planned project (see <u>Appendix D</u>)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles





## **Johnson** Elementary

# Recommendation 1: Enhance existing pedestrian crossings.

Barrier: Lacking crossings of S Cribbon Ave or crossings deteriorated.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page 56)
- <u>Install bollards and/or in-street signing</u> (See page 58)
- Construct curb extensions (See page 61)

# Recommendation 2: Create new pedestrian connection.

Barrier: Lack of connection on east side of S Snyder Ave.

Potential strategies (click for more information):

- Pilot an on-street protected multimodal path (See page 65)
- Install a new sidewalk (See page 67)

# Recommendation 3: Create new multimodal connection.

Barrier: Lack of connection to planned residential development and South Greeley neighborhood.

Potential strategies (click for more information):

- Include as development exaction (See page 63)
- Construct off-road multimodal path (See page 69)



Figure 112: Johnson Street View

#### E's

Junior High Schools should also pursue Safe Routes to School strategies for Education, Equity, Encouragement, Engagement and Evaluation. A few high impact options to consider are:

- Asphalt Art Programs
- Free Helmets and Bike Locks
- Walk and Roll to School Day
- Suggested Routes (Maps & Wayfinding)
- Student Led Education Campaigns

See Strategy Toolbox:

## Proposed improvements:

- / pedestrian connection
- -- / multimodal connection
- -- / traffic calming
- -- / further study encouraged

### See following page for information.

#### Existing infrastructure:

- sidewalk
- trail
- planned project (see <u>Appendix D</u>)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles





## **Lebhart** Elementary

## Recommendation 1: Enhance existing pedestrian crossings.

Barrier: Crossing outside school lacks controls.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Construct curb extensions (See page 61)
- Construct raised crossing (See page 62)

## Recommendation 2: Calm traffic and reduce travel speeds.

Barrier: Nationway feel dangerous, has visibility constraints, lacks controls, drivers fail to yield

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page
- Reduce the number of parallel lanes (See page 53)
- Install vertical streetscape elements (See page 54)



Figure 114: Lebhart Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

#### See Strategy Toolbox:

## Figure 115: McCormick Recommendation Map

# **McCormick** Elementary

## Proposed improvements:

- -- / pedestrian connection
- -- / multimodal connection
- -- / traffic calming
- -- / further study encouraged

#### Existing infrastructure:

- sidewalk
- trail
- planned project (see <u>Appendix D</u>)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles



**APPENDIX** 

See following page for information.



## **McCormick** Elementary

# Recommendation 1: Enhance existing pedestrian crossings.

Barrier: Crossings of Education Dr, Western Hills Blvd, Yellowstone Dr feel dangerous, drivers fail to yield.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page 56)
- <u>Install bollards and/or in-street signing</u> (See page 58)
- <u>Install crossing signal</u> (See page 59)
- Construct curb extensions (See page 61)

# Recommendation 2: Calm traffic and reduce travel speeds.

Barrier: Education Rd, Western Hills Rd, lack controls, feel dangerous to cross, drivers fail to yield; Yellowstone Rd is high-speed, lack of controls, drivers fail to yield for crossing guard.

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page 52)
- Reduce the number of parallel lanes (See page 53)
- <u>Install vertical streetscape elements</u> (See page 54)



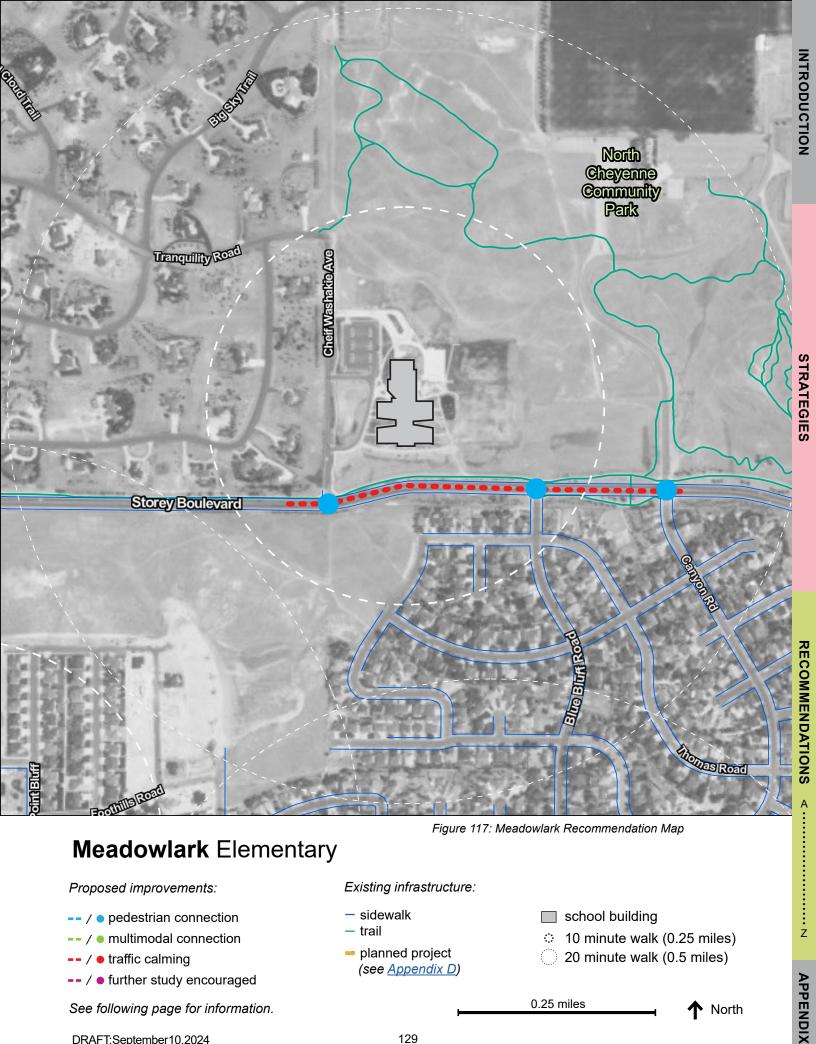
Figure 116: McCormick Street View

#### E's

Junior High Schools should also pursue Safe Routes to School strategies for Education, Equity, Encouragement, Engagement and Evaluation. A few high impact options to consider are:

- Asphalt Art Programs
- Free Helmets and Bike Locks
- Walk and Roll to School Day
- Suggested Routes (Maps & Wayfinding)
- Student Led Education Campaigns

See Strategy Toolbox:





## **Meadowlark** Elementary

## Recommendation 1: Calm traffic and reduce travel speeds.

Barrier: Storey Blvd is high-speed, lack of controls, drivers fail to yield; Chief Washakie Rd has multiple conflicts, lacks controls.

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page
- Install vertical streetscape elements (See page 54)
- Implement shared street concepts on Chief Washakie Rd. (See page 71)

## Recommendation 2: Create new multimodal crossing.

Barrier: Lack of crossings of Storey Blvd.

Potential strategies (click for more information):

- Mark crossing with high visibility paint markings (See page 56)
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)



Figure 118: Meadowlark Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

#### See Strategy Toolbox:

## Proposed improvements:

- pedestrian connection
- multimodal connection
- traffic calming
- -- / further study encouraged

### See following page for information.

#### Existing infrastructure:

- sidewalk
- trail
- planned project (see Appendix D)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles





# **Miller** Elementary

## Recommendation 1: Calm traffic and reduce travel speeds.

Barrier: Evans Ave has multiple conflicts, drivers fail to yield; Central Ave, Warren Ave are high-speed, feel dangerous to cross, drivers fail to yield.

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page
- Install vertical streetscape elements on Evans Ave. (See page 54)
- Implement shared street concepts on Evans Ave. (See page

## Recommendation 2: Enhance existing pedestrian crossings.

Barrier: Crossings surrounding school and crossing 19th St, 20th St feel dangerous, drivers fail to yield

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing on Evans Ave. (See page 55)
- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)



Figure 120: Miller Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans. Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

See Strategy Toolbox: Engagement, Equity, Encouragement, Education, and Evaluation.

# **PASS** Secondary

## Proposed improvements:

- -- / pedestrian connection
- -- / multimodal connection
- -- / traffic calming
- -- / further study encouraged

### See following page for information.

#### Existing infrastructure:

- sidewalk
- trail
- planned project (see <u>Appendix D</u>)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles



North



# **PASS** Secondary

# Recommendation 1: Enhance existing pedestrian crossings.

Barrier: Crossings of Randall Ave, Snyder Ave, and Talbot Ct feel dangerous, drivers fail to yield.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page 56)
- Install bollards and/or in-street signing (See page 58)
- <u>Install crossing signal</u> (See page 59)
- Construct curb extensions (See page 61)

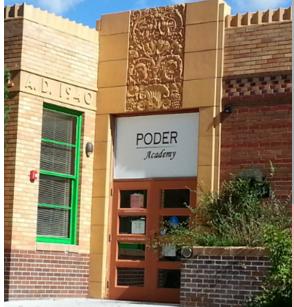


Figure 122: PASS Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

### See Strategy Toolbox:

Figure 123: Pioneer Park Recommendation Map

# **Pioneer Park** Elementary

Proposed improvements:

- pedestrian connection
- multimodal connection
- -- / traffic calming
- -- / further study encouraged

Existing infrastructure:

- sidewalk
- trail
- planned project (see Appendix D)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles



**APPENDIX** 

See following page for information.



# **Pioneer Park** Elementary

## Recommendation 1: Calm traffic and reduce travel speeds.

Barrier: Cosgriff Ct feels congested, multiple conflicts, users fail to yield.

Potential strategies (click for more information):

<u>Implement shared street concepts</u> (See page 71)

## Recommendation 2: Enhance existing pedestrian crossings.

Barrier: Crossings of Randall Ave and W Pershing Blvd feel dangerous, drivers fail to yield.

Potential strategies (click for more information):

- Mark crossing with high visibility paint markings (See page 56)
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)



Figure 124: Pioneer Park Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

See Strategy Toolbox:

## Figure 125: PODER Recommendation Map

# **PODER** Academy

## Proposed improvements:

- pedestrian connection
- multimodal connection
- -- / traffic calming
- -- / further study encouraged

### See following page for information.

#### Existing infrastructure:

- sidewalk
- trail
- planned project (see Appendix D)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles



**APPENDIX** 

DRAFT:September10,2024



# **PODER** Academy

## Recommendation 1: Calm traffic and reduce travel speeds.

Barrier: Morrie Ave has visibility constraints, lacks controls, drivers fail to yield

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page
- <u>Install vertical streetscape elements</u> (See page 54)

## Recommendation 2: Enhance existing pedestrian crossings.

Barrier: Crossings surrounding school and crossing E 19th St and E 20th St feel dangerous, lack controls, drivers fail to yield.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)



Figure 126: PODER Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

#### See Strategy Toolbox:

- multimodal connection
- -- / traffic calming
- -- / further study encouraged
- trail
- planned project (see Appendix D)
- 10 minute walk (0.25 miles)

**APPENDIX** 

20 minute walk (0.5 miles)

0.25 miles North

See following page for information.



# **Prairie Winds** Elementary

# Recommendation 1: Enhance existing pedestrian crossings.

Barrier: Crossings surrounding school lacks controls.

Potential strategies (click for more information):

- Mark crossing with high visibility paint markings (See page 56)
- <u>Install crossing signal</u> (See page 59)
- Construct curb extensions (See page 61)



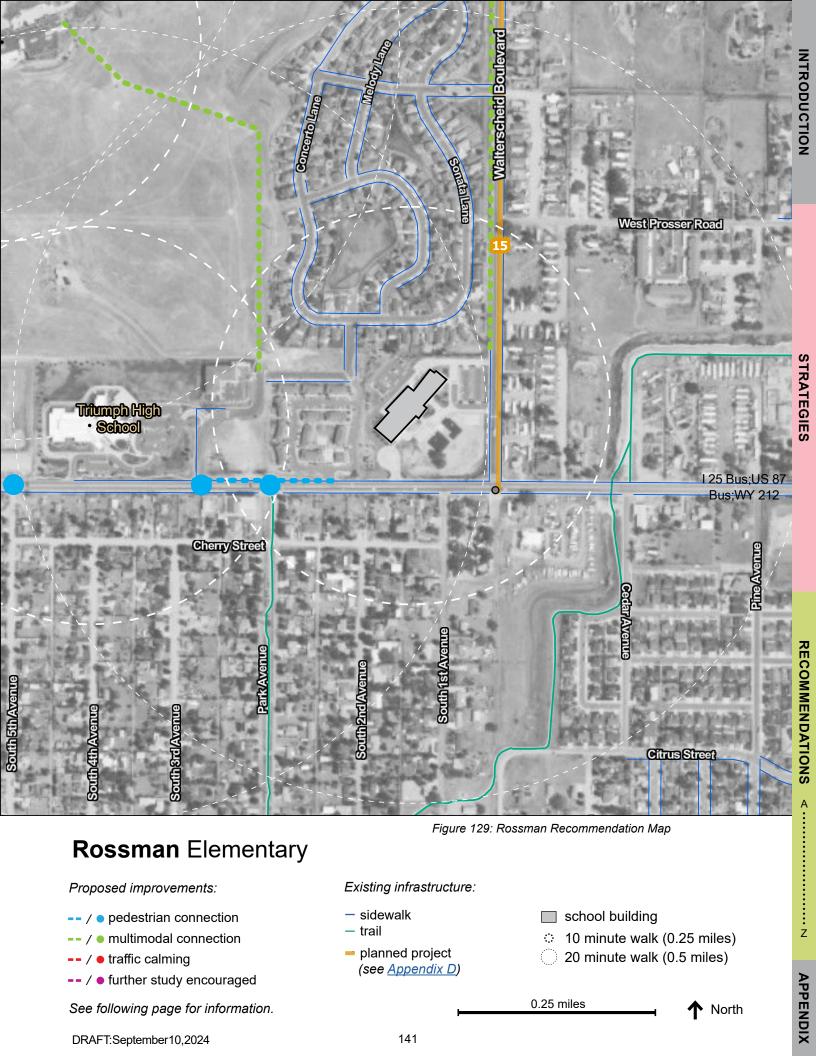
Figure 128: Prairie Winds Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

#### See Strategy Toolbox:





## **Rossman** Elementary

## Recommendation 1: Enhance existing pedestrian crossings.

Barrier: Crossings of W College Dr are wide, feel dangerous to cross, driver fail to yield.

Potential strategies (click for more information):

- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- <u>Install crossing signal</u> (See page 59)
- Construct curb extensions (See page 61)

## Recommendation 2: Calm traffic and reduce travel speeds.

Barrier: W College Dr is high-speed, lacks controls, drivers fail to yield.

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page
- <u>Install vertical streetscape elements</u> (See page 54)

## Recommendation 3: Create new pedestrian connection.

Barrier: Lack of connection on west side of Waltersheid Blvd.

Potential strategies (click for more information):

- Pilot an on-street protected multimodal path (See page 65)
- Install a new sidewalk (See page 67)



Figure 130: Rossman Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans. Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

#### See Strategy Toolbox:

# Saddle Ridge Elementary

## Proposed improvements:

- pedestrian connection
- multimodal connection
- traffic calming
- -- / further study encouraged

#### Existing infrastructure:

- sidewalk
- trail
- planned project (see Appendix D)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles



**APPENDIX** 

See following page for information.



# Saddle Ridge Elementary

# Recommendation 1: Enhance existing pedestrian crossings.

Barrier: Crossings surrounding school lack controls, drivers fail to yield.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page 56)
- <u>Install bollards and/or in-street signing</u> (See page 58)
- Construct curb extensions (See page 61)

# Recommendation 2: Create new multimodal connection.

Barrier: Lack of connection west to greenway and Laramie St.

Potential strategies (click for more information):

- Pilot an on-street protected multimodal path (See page 65)
- Construct off-road multimodal path (See page 69)



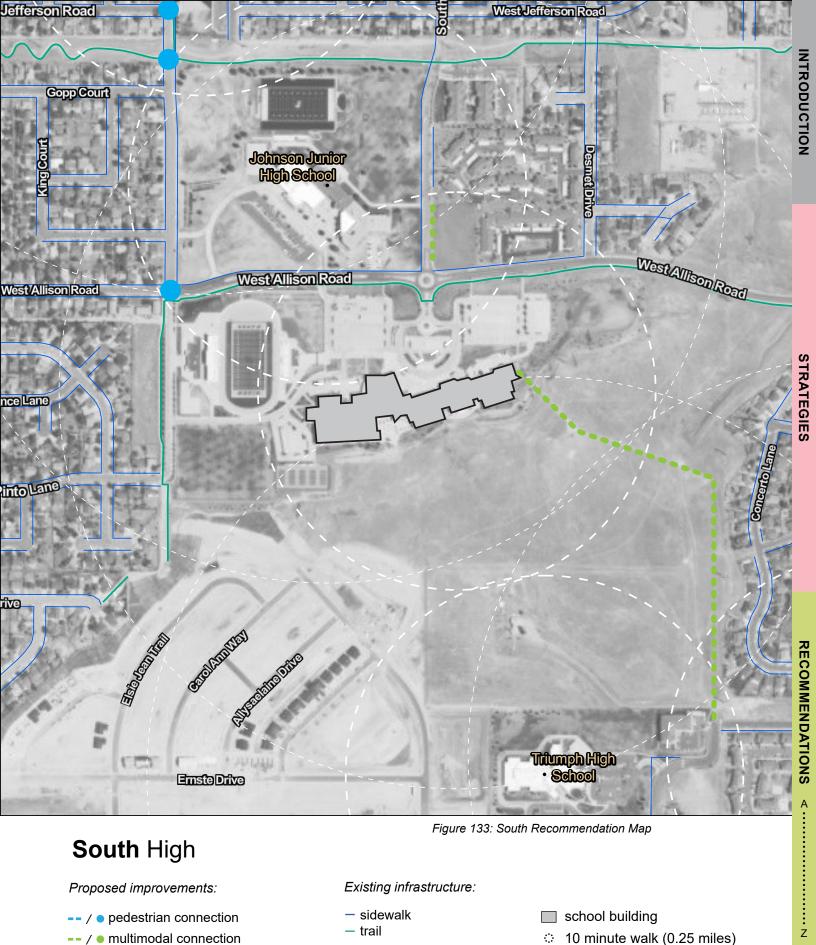
Figure 132: Saddle Ridge Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

#### See Strategy Toolbox:



- traffic calming
- -- / further study encouraged

See following page for information.

- planned project (see Appendix D)
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles





## **South** High

## Recommendation 1: Enhance existing pedestrian crossings.

Barrier: Lacking crossings of S Cribbon Ave or crossings deteriorated.

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page
- Install bollards and/or in-street signing (See page 58)
- Construct curb extensions (See page 61)

## Recommendation 2: Create new pedestrian connection.

Barrier: Lack of connection on east side of S Snyder Ave.

Potential strategies (click for more information):

- Pilot an on-street protected multi-modal path (See page 65)
- Install a new sidewalk (See page 67)

## Recommendation 3: Create new multimodal connection.

Barrier: Lack of connection to planned residential development and South Greeley neighborhood.

Potential strategies (click for more information):

- Include as development exaction (See page 63)
- Construct off-road multimodal path (See page 69)



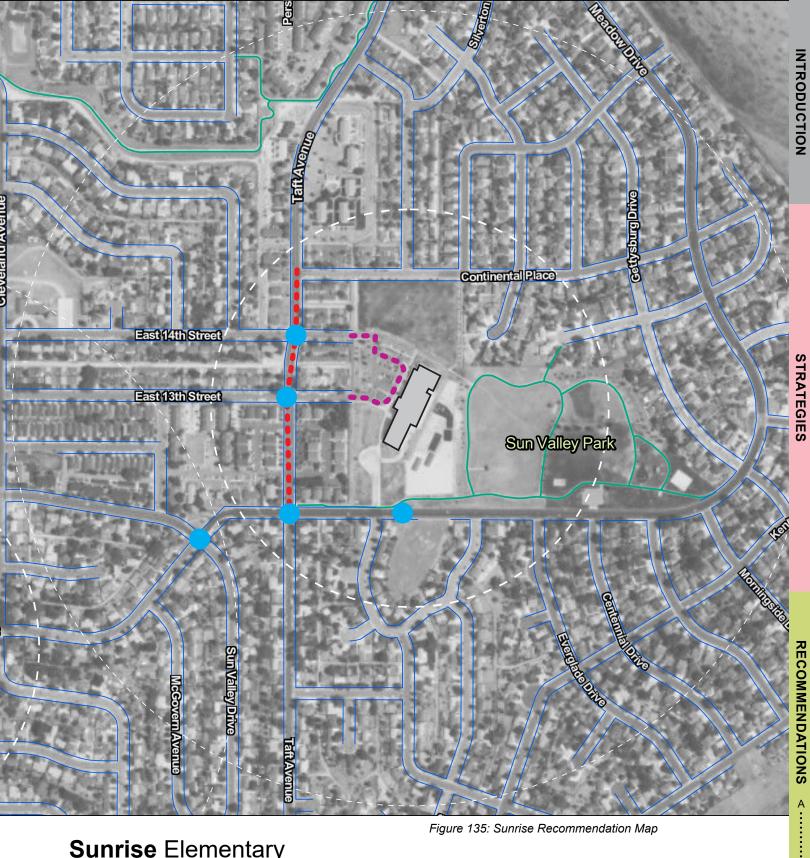
Figure 134: South Street View

#### E's

High Schools should also pursue Safe Routes to School strategies for Education, Equity, Encouragement, Engagement and Evaluation. A few high impact options to consider are:

- Safe Routes to School Task Force
- Asphalt Art
- **Engaging Students with** Disabilities
- Incentive or Competition **Programs**
- Storytelling Campaigns

See Strategy Toolbox:



# **Sunrise** Elementary

## Proposed improvements:

- pedestrian connection
- multimodal connection
- -- / traffic calming
- -- / further study encouraged

### See following page for information.

#### Existing infrastructure:

- sidewalk
- trail
- planned project (see Appendix D)
- school building
- 10 minute walk (0.25 miles)
- 20 minute walk (0.5 miles)

0.25 miles





## **Sunrise** Elementary

## Recommendation 1: Enhance existing pedestrian crossings.

Barrier: Crossings of Taft Ave, E 12th St, and Sun Valley Dr feel dangerous, have visibility constraints, drivers fail to yield

Potential strategies (click for more information):

- Conduct a pilot program to test an improved crossing (See page 55)
- Mark crossing with high visibility paint markings (See page
- Install signage (See page 57)
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)

## Recommendation 2: Calm traffic and reduce travel speeds.

Barrier: Taft Ave has visibility constraints, lacks controls, drivers fail to yield

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page 52)
- <u>Install vertical streetscape elements</u> (See page 54)



Figure 136: Sunrise Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicycle Rodeo & Traffic Gardens
- Classroom Safety Education

## See Strategy Toolbox:





## **Triumph** High

## Recommendation 1: Enhance existing pedestrian crossings.

Barrier: Crossings of W College Dr are wide, feel dangerous to cross, driver fail to yield.

Potential strategies (click for more information):

- Mark crossing with high visibility paint markings and basic signage (See page 56)
- Install bollards and/or in-street signing (See page 58)
- Install crossing signal (See page 59)
- Construct curb extensions (See page 61)

## Recommendation 2: Calm traffic and reduce travel speeds.

Barrier: W College Dr is high-speed, lacks controls, drivers fail to

Potential strategies (click for more information):

- Narrow width of drive lanes to minimum standard (See page
- Install vertical streetscape elements (See page 54)

### Recommendation 3: Create new pedestrian connection.

Barrier: Lack of connection on west side of Waltersheid Blvd.

Potential strategies (click for more information):

- Pilot an on-street protected multi-modal path (See page 65)
- Install a new sidewalk (See page 67)

### Recommendation 4: Create new multimodal connection.

Barrier: Lack of connection to planned residential development.

Potential strategies (click for more information):

- Require as development exaction (See page 63)
- Construct off-road multimodal path (See page 69)



Figure 138: Triumph Street View

#### E's

Elementary Schools should also pursue Safe Routes to School strategies for Engagement Equity, Encouragement, Education, and Evaluation. A few high impact options to consider are:

- Back to School Blitz
- Free Bike Loans, Low Cost Rentals
- Walking School Bus
- Bicvcle Rodeo & Traffic Gardens
- Classroom Safety Education

#### See Strategy Toolbox:



# **Appendix**

- Existing Conditions
- Community Engagement
- Safe Routes to School Plan (2010)
- Concurrent trasnportation projects