



DILLON

ACTIVE CORRIDORS PLAN

DECEMBER 2018



DILLON
South Carolina



dhec

Healthy People. Healthy Communities.



PLANNING + DESIGN

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THANK YOU Dillon

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Thank you to the engaged leaders of the Dillon community for their continued participation throughout the planning process and for their commitment to furthering the efforts of this Plan.

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Thank you to the residents of Dillon for their participation in this planning process and their passion for improving the place they call home.

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DHEC

Thank you to the South Carolina Department of Health and Environmental Control (DHEC) for support and involvement in the planning process, as well as other local, regional, and state stakeholders including the South Carolina Department of Transportation (SCDOT).

EXECUTIVE SUMMARY

The recommendations of the Dillon Active Corridors Plan, as well as the planning process behind the Plan, are guided by three key tenets intended to ***promote healthy eating and active living, particularly for the community's most vulnerable populations***. The three tenets are equity-based planning, access to healthy foods, and inclusive community engagement.

1

DEVELOPMENT OF PEDESTRIAN NETWORK RECOMMENDATIONS

The pedestrian network analysis, which incorporates traditional and new treatments from the FHWA's *Small Town and Rural Multimodal Networks Guide*, takes a practical and innovative approach to network development. Priority recommendations are mapped in Part 2. A proposed shared use path with landscaping is proposed as a catalyst project to connect the Dillon Wellness Center and three nearby schools. Design guidance and implementation details are included in the plan appendix.

2

PROPOSED NETWORK

The Plan focuses on seven key corridors identified early in the process and shown in the map.

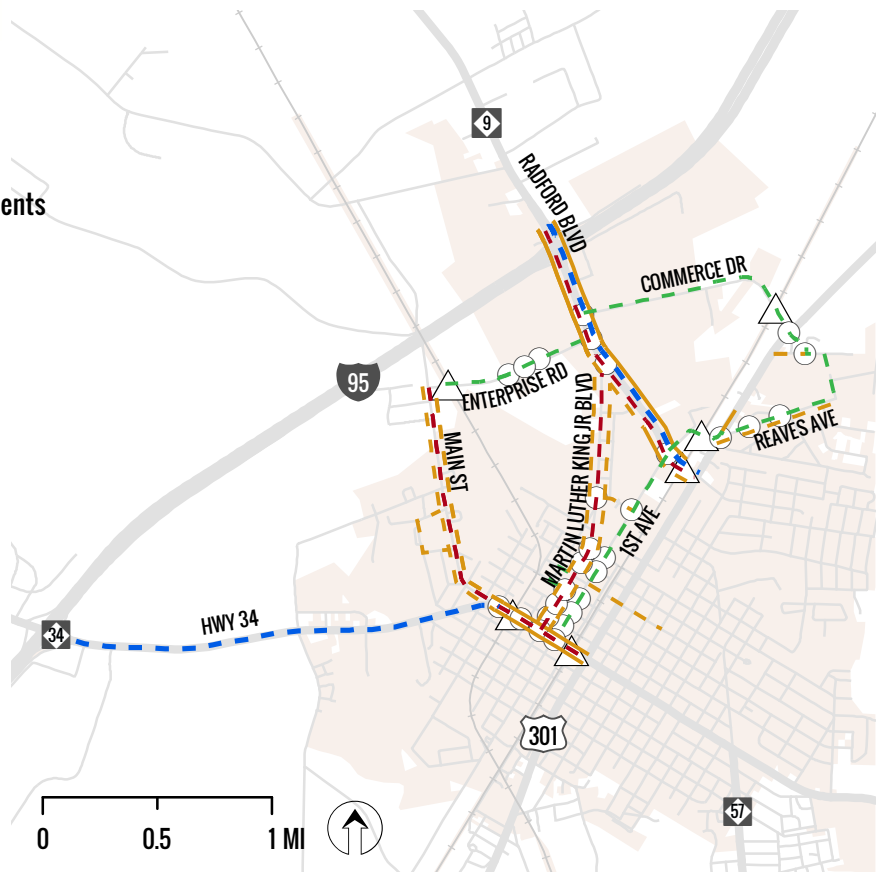
- ★ Downtown
 - 🎓 Public Schools
 - 🌳 Park
 - ⊕ Wellness Center
- Intersection Improvements
 - △ Railroad crossing
 - Road crossing
 - City of Dillon

RECOMMENDED FACILITIES

Bike Lane	4.0 mi
Shared Use Path	4.1 mi
Sidewalk	9.8 mi
Streetscape Improvement	3.3 mi
Intersection Improvements	28

TOTAL STUDY CORRIDORS MILEAGE: **6.15**

FISCAL YEARS: **2019 - 2023**



Proposed Improvements- Commerce Drive near Wellness Center



Proposed Pedestrian Facility Types



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THREE KEY TENETS

The recommendations of the Dillon Active Corridors Plan, as well as the planning process behind the Plan, are guided by three key tenets intended to promote healthy eating and active living, particularly for the community's most vulnerable populations.



EQUITY-BASED PLANNING

Equity-based planning involves trying to understand and give people what they need to enjoy full healthy lives. Safe, healthy, affordable and convenient transportation options are not always available to the vulnerable populations that need them the most. This document defines **vulnerable populations as seniors, children, non-white populations, low-income households, households without vehicle access, non-English speaking populations, and SNAP recipients**. Engaging these residents and understanding their needs is a starting point for pedestrian planning.



ACCESS TO HEALTHY FOODS

Improving walking access to healthy foods makes it easier for people, especially those in low-income communities and communities of color, to reduce their risk of health disparities and diet-related chronic diseases like obesity and diabetes. By understanding the local food access situation, we can see where walking infrastructure and programs will have the largest effect on accessibility to healthy food outlets.



INCLUSIVE COMMUNITY ENGAGEMENT

Engagement opportunities should take place in safe, central locations accessible by foot, bike, and transit. They should occur at convenient times or be tacked onto other local events to encourage community participation. Provide a variety of outreach opportunities to give space for all community members to be heard, to mold the outcomes of the plan, and to champion those recommendations.

VISION



Dillon will be a place where a **connected network** of comfortable pedestrian facilities are provided to **people of all abilities**; where residents can easily access Dillon destinations; where **pedestrian-friendly design** is prioritized in all future roadway projects; and where all residents can **easily access healthy food and recreational areas** on foot.

ABOUT THE PROJECT

At the plan's start, City and DHEC staff and the consultant team discussed already identified infrastructure needs that could serve as catalyst projects for walkability across the City of Dillon. This included a high-level evaluation of hot spots for walking activity, feasibility of improvements, local support, safety needs, and access to key destinations. Based on that assessment, this Plan focuses on the following seven corridors: Hwy 34, Main St, Reaves Ave, Radford Blvd, Commerce Dr, Enterprise Blvd, and Martin Luther King Jr Blvd.

The project goals and vision listed here are based on public input, feedback from the Steering Committee, and the Dillon Visioning Event. The vision helps to ground the plan with an overarching statement, and the goals represent specific strategies to help achieve this vision.

GOALS

- Improve pedestrian connectivity to local destinations, grocery stores, and downtown.
- Connect neighborhoods and their residents to parks, schools, and one another.
- Identify near-term, capital improvement projects that will positively impact the walking and biking environment.
- Develop high-quality ped/bike infrastructure that is context-appropriate, inviting, accessible, and safe for all users.
- Leverage past pedestrian planning efforts, and upcoming capital improvement projects of SCDOT and others.
- Engage a network of community partners working to advance walkability in Dillon County.
- Strengthen partnerships with the School District to support and grow Safe Routes to School activities and local participation.
- Elevate family-friendliness, walkability, and healthy lifestyles as cornerstones of the Dillon community image.
- Identify funding + partnerships for implementation.

COMMUNITY PROFILE

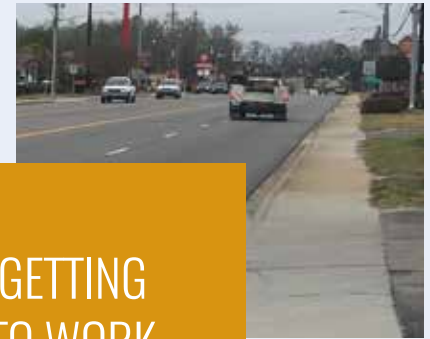
Dillon is home to approximately 6,675 residents. It is located in Dillon County, which is part of the Pee Dee region of South Carolina. The population of Dillon has remained stable since 2010.¹

DEMOGRAPHICS

The majority of Dillon's residents identify as Black or African American (56%). The remaining residents identify as white (35%), American Indian and Alaskan Native (2%), or two or more races (6%).²

The median age of Dillon residents is approximately 37 years old. Approximately **24% of residents are under the age of 15**, and therefore may be more dependent on walking or biking infrastructure to access schools or other destinations on their own. **Sixteen percent of residents are over 65 years old.**³

The median household income is approximately \$37,000, which is about \$10,000 less than the statewide median. The poverty rate is more than double the statewide rate, with **36% of Dillon residents living below the poverty line.** More than one in four households received financial assistance through food stamps/ SNAP benefits in 2016.⁴



GETTING TO WORK

Approximately **4% of Dillon workers commute by walking**, which is almost double the figure for the state of South Carolina (2.1%). The proportion of African-Americans in Dillon who walk to work is even higher, at 7.2%. The majority of workers (69%) commute by single-occupancy vehicle.¹

For the most part, Dillon residents have a relatively short commute. Two-thirds of residents have a commute that's less than 20 minutes.²

1 U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

2 Ibid.

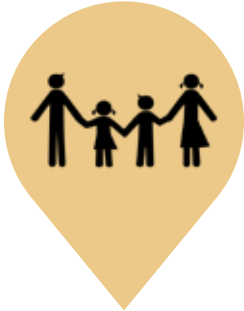
3 Ibid.

4 Ibid.

1 U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

2 Ibid.

BENEFITS OF WALKABILITY



IMPROVES SAFETY FOR ALL ROAD USERS

Streets that are designed for pedestrians create safety benefits for all users of the road.



INCREASES HOUSING VALUES

Walkable communities have higher housing values and greater stability than auto-dependent communities during an economic downturn.



PRESERVES OPEN SPACE AND GREENSPACE

Compact, walkable places allow for more green space, water sources, and wildlife habitats.



IMPROVES MENTAL HEALTH

Walking reduces symptoms of depression and anxiety, and prevents the onset of cognitive decline while improving mental function.



PUBLIC INFRASTRUCTURE SAVINGS

Compact, walkable places save construction and maintenance costs on roadway and other public infrastructure investments.



ATTRACTS BUSINESSES

Walkable downtowns have lower vacancy rates and offer convenient commutes for residents and visitors.



IMPROVES ECONOMIC MOBILITY

Concentrated jobs that are easily accessible on foot provide residents with more opportunities.



ATTRACTS VISITORS

Walkable communities with lively streets and storefronts, short lengths between attractions, and a unique sense of place attract tourist dollars.



ATTRACTS RECREATION SPENDING

Outdoor recreation culture loves walkable places. Trails and safe streets attract events and people who pump money into the local economy.



IMPROVES AIR QUALITY

Replacing short vehicle trips with walking reduces emissions and our reliance on fossil fuels.



REDUCES INDIVIDUAL TRANSPORTATION COSTS

Residents save money on costs associated with transportation, including vehicle ownership and operating costs, and parking costs.



IMPROVES PHYSICAL HEALTH

Residents of walkable places have lower rates of chronic disease related to physical inactivity, and are two times more likely to get enough physical exercise.



MAGNET FOR MILLENNIALS AND BABY BOOMERS

Demand for walkable places is growing, especially among millennials and boomers who wish to drive less and easily reach destinations on foot.

DATA COLLECTION & ANALYSIS

The Dillon Pedestrian Plan is shaped by data collected from previous plans and the feedback received during public input. The public input process was crucial for understanding Dillon's primary needs and identifying specific programs, projects, and policies that address those needs.

This section provides an overview of the major data collection and public input components that shaped the recommendations of this Plan. This includes:

- Plan Review
- Safety Analysis
- Equity Analysis
- Access Analysis
- Public Input Overview

PLAN REVIEW

It is important that the recommendations in the Dillon Active Corridors plan are sensitive to other previously proposed transportation or health projects. The Long-Range Rural Transportation Plan for the Pee Dee Region of South Carolina was reviewed as part of this analysis to gauge where walking and biking infrastructure had been previously proposed, or where other plan recommendations could be improved or reinforced through this plan.

SAFETY ANALYSIS

Pedestrian safety is a primary concern in South Carolina. South Carolina ranks 45th in the nation for levels of walking mode share, and ranks 7th in the nation on the Pedestrian Danger Index, which measures the rate of pedestrian fatalities relative to the number of people by commute on foot. Additionally, pedestrian fatalities in South Carolina have

increased 19% between 2010 and 2014.

Dillon County has a pedestrian fatality rate of 4.4 deaths per 100,000 people, nearly double the state rate of 2.3 deaths per 100,000 people.¹

EQUITY ANALYSIS

An equity analysis provides insight about the areas of Dillon that have higher concentrations of seven vulnerable populations (and therefore have a high need for access and infrastructure improvements):

- Seniors
- Children
- Non-white populations
- Low-income households
- Vehicle access
- Linguistic isolation
- SNAP recipients

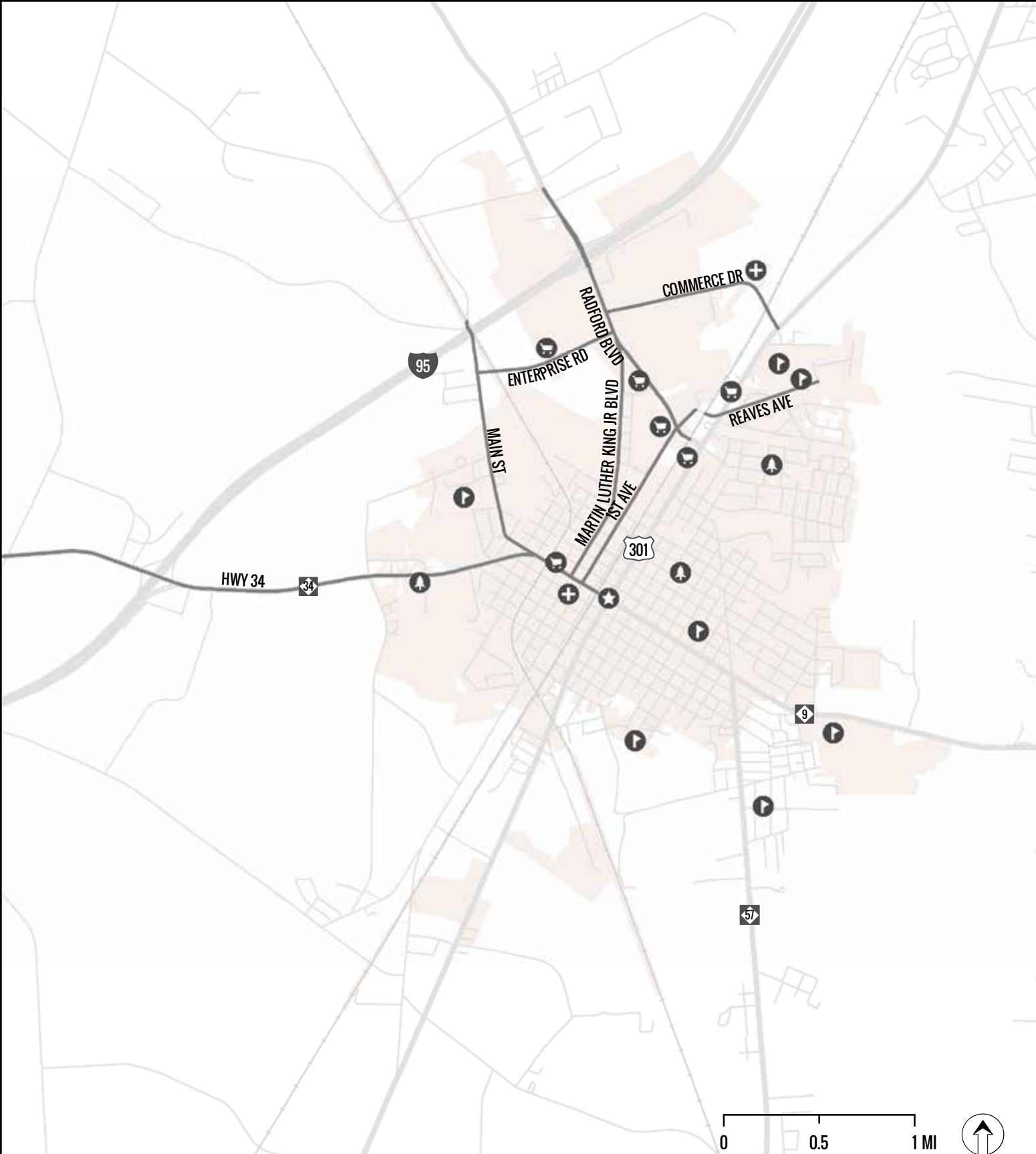
ACCESS ANALYSIS

The access analysis combines the equity analysis with two primary factors impacting health and well-being in Dillon: access to healthy food and access to active spaces. Providing quality pedestrian infrastructure to healthy food and active spaces boosts not only the city's physical activity level, but also increases mobility, accessibility, and quality of life for all citizens.

PUBLIC INPUT OVERVIEW

The public input analysis synthesizes feedback collected from the steering committee, focus groups, online and hard-copy surveys, and public meetings.

1 Smart Growth America, "Dangerous by Design." (2014) <https://smartgrowthamerica.org/app/uploads/2016/08/dangerous-by-design-2014-southcarolina.pdf>



Destinations Map

- | | |
|-----------------------|-------------------|
| ★ Downtown | 🌲 Parks |
| 🚶 Public Schools | — Study Corridors |
| ⊕ Health Institutions | 🏠 City of Dillon |
| 🛒 Grocery Stores | |

SAFETY ANALYSIS

PEDESTRIAN FATALITIES ARE RISING IN THE U.S.

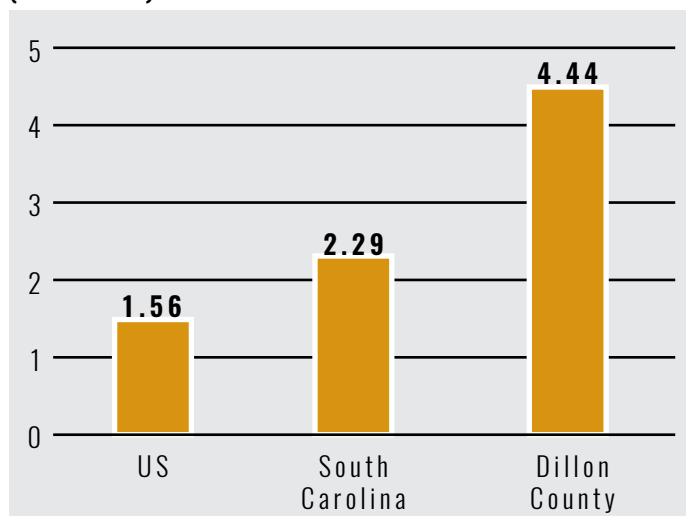
Between 2005 and 2014, 46,149 pedestrians were killed walking on streets in the U.S. In 2014 alone, 4,884 pedestrians died, the most in more than 10 years. Meanwhile, the number of vehicle drivers and passengers who died in traffic crashes declined by a third during this period. The rise in pedestrian fatalities while overall traffic fatalities declined means pedestrians now account for more than 15% of all traffic fatalities.

A number of factors impact pedestrian safety. Visibility, driver behavior, time of day/year, access to safe crossings, and traffic volume all play a role. However, key factors such as speed, the number of traffic lanes, and roadway design disproportionately affect safety for vulnerable roadway users.

SOUTH CAROLINA IS THE 7TH MOST DANGEROUS STATE FOR WALKING

Pedestrian safety is a primary concern in South Carolina. South Carolina ranks 45th in the nation for levels of walking mode share, and ranks 7th in the nation on the Pedestrian Danger Index, which

Pedestrian fatality rate per 100,000 residents (2003-2012)¹



measures the rate of pedestrian fatalities relative to the number of people by commute on foot. Additionally, pedestrian fatalities in South Carolina have increased 19% between 2010 and 2014.

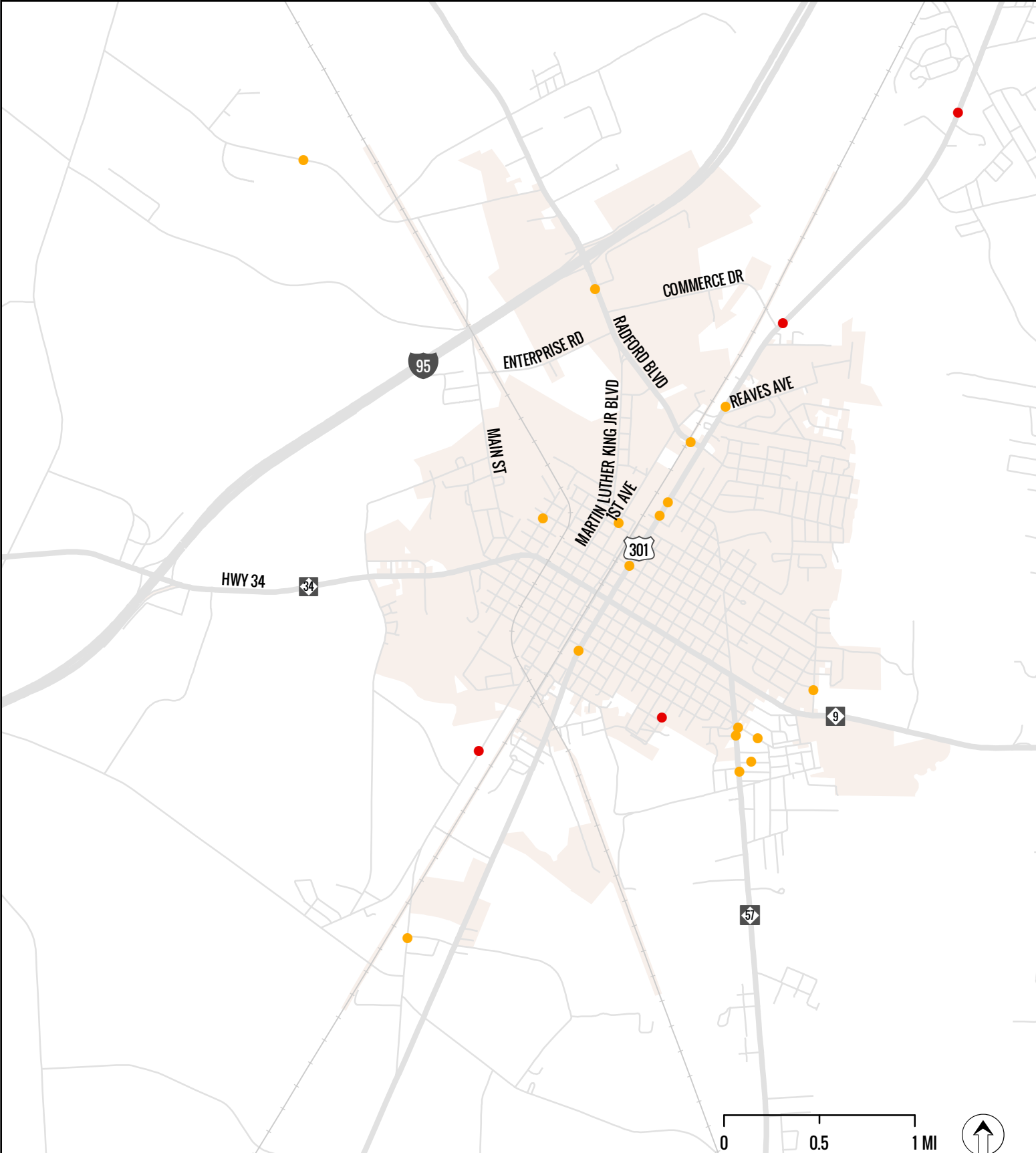
According to Fatality Analysis Reporting System data, 58.8% of all pedestrian deaths in South Carolina were on arterials — wide, high speed roads rarely built with pedestrian safety in mind. Similarly, 78.8% of South Carolina's pedestrian fatalities occurred on roads with a speed limit of 40 mph or higher.

THE PEDESTRIAN CRASH RATE IN DILLON COUNTY IS NEARLY 2X THE SOUTH CAROLINA RATE

Dillon County has a pedestrian fatality rate of 4.4 deaths per 100,000 people, double the state rate of 2.3 deaths per 100,000 people.¹

In Dillon County there were **47 total pedestrian crashes between 2012 and 2017, resulting in 11 fatalities and 36 injuries.** The map at right reveals Hwy 301 as a high crash corridor, with seven total pedestrian crashes. Lockemy Hwy/SR 57 also has a high concentration of crashes between E Dargan St/SR 9 and McNeil St.

¹ Smart Growth America, "Dangerous by Design." (2014) <https://smartgrowthamerica.org/app/uploads/2016/08/dangerous-by-design-2014-southcarolina.pdf>



Pedestrian Safety Analysis Map

Pedestrian Crashes (2012 - 2017)

- Pedestrian Injury
- Pedestrian Fatality

City of Dillon

EQUITY ANALYSIS

OVERVIEW

An equity analysis provides insight about the areas of Dillon that have higher concentrations of vulnerable populations. This information, coupled with an overlay of healthy food outlet locations and active space locations, can also distinguish which neighborhoods may need improvements the most.

This quantitative analysis provides the project team a starting point for identified priority areas. Ultimately, recommendations are based on a synthesis of factors, including the equity analysis results, current best practices, public input, existing conditions analysis, and the pedestrian collision analysis.

METHODOLOGY

The equity analysis incorporates the following seven socioeconomic criteria:

Seniors

Metric: senior citizens are defined as those who are 65 years old and older. This follows the 2010 Census Brief - The Older Population.

Children

Metric: children are defined as individuals 14 years old and younger.

Non-White Populations

Metric: non-white is measured as the percentage of all races, excluding those that identified as white.

Low-Income Households

Metric: low-income is measured as the percent of the population living below two times the federal poverty level.

Vehicle Access

Metric: Vehicle access is measured from a question on the American Community Survey about whether a household has access to a car, truck, or van of 1-ton capacity or less.

Linguistic Isolation

Metric: Linguistic isolation is measured as percentage of households in which those over the age of 5 speak English “not well” or “not at all.”

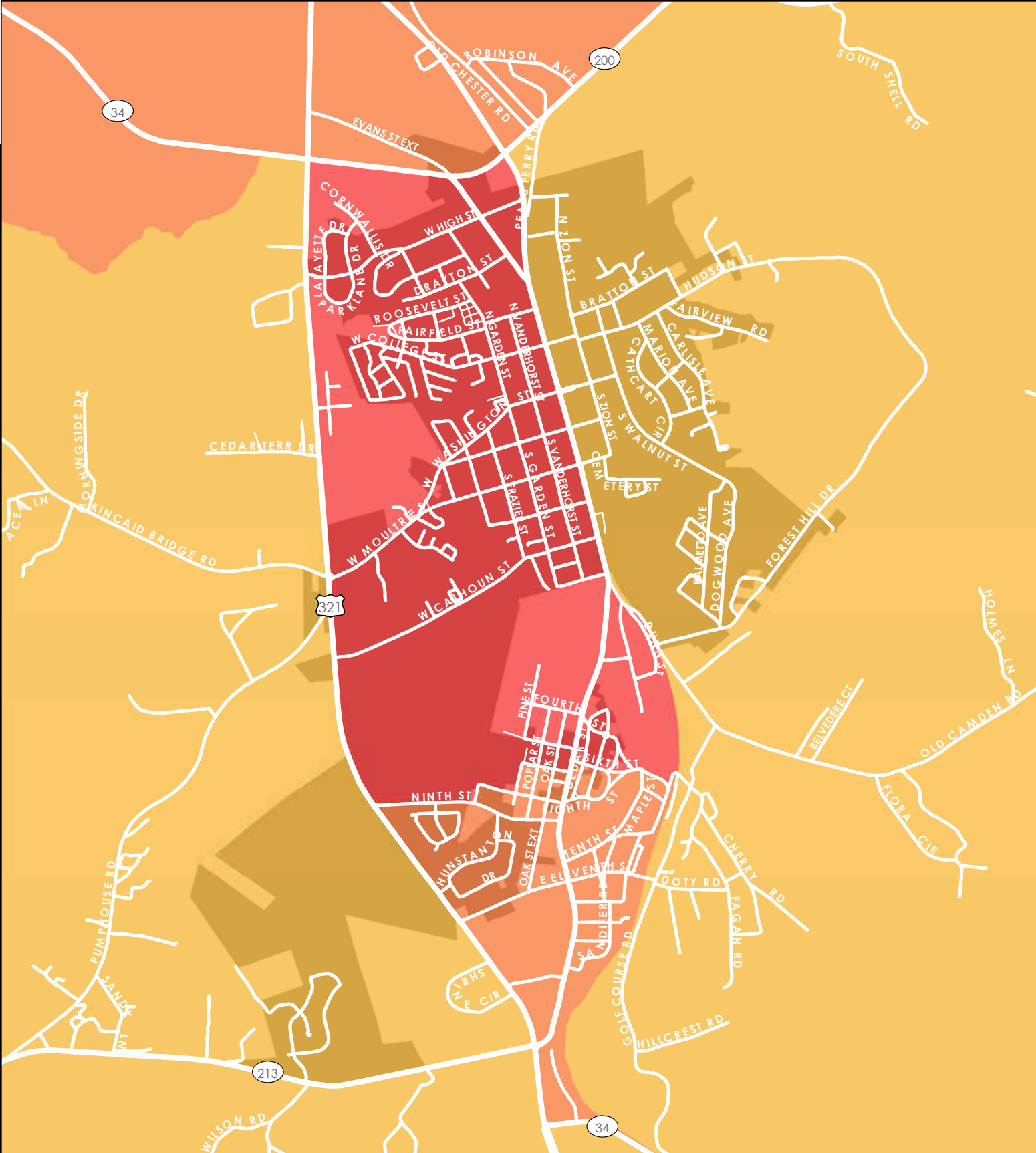
SNAP Recipient

Metric: SNAP (Supplemental Nutrition Assistance Program) recipients measures the percentage of households who have received SNAP assistance in the past 12 months.

SUMMARY

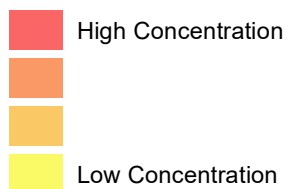
The adjacent map reflects the relative concentration of the seven categories of vulnerable populations in Dillon. The darker red equity tier represents areas with the highest concentration of vulnerable populations. These areas have the highest need and are priorities for infrastructure improvements.

This analysis reveals that **the greatest equity need runs link a band from the north end of the city, through the center between Radford Blvd and Hwy 301, and then extends east on the south side of Main St, and continuing to the east side** of the city limits.



Equity Analysis Map

Concentration of Vulnerable Populations



FOOD ACCESS ANALYSIS

HEALTHY FOOD OPTIONS ARE LIMITED IN DILLON

The results of the Composite Equity Analysis are combined with a mapping study of the locations and walkability of healthy food outlets. Healthy food outlets are defined to include all grocery stores, farmers markets, and community gardens.

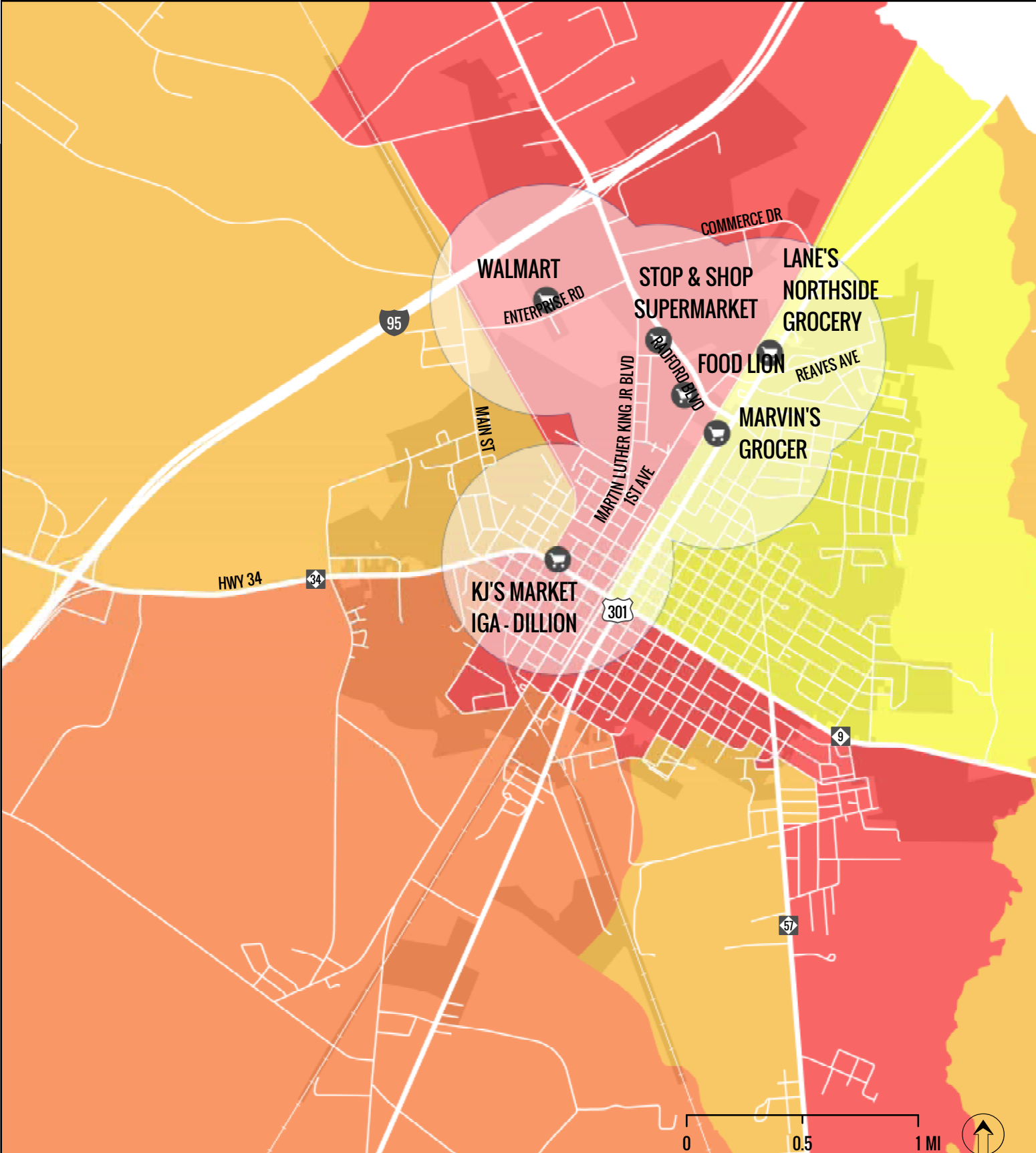
A half-mile walkshed is a widely accepted catchment area for pedestrian analyses. A half-mile is about a ten minute walk for most pedestrians. This distance also serves as the Federal Transit Authority’s (FTA’s) designated catchment area for pedestrian improvements that are eligible for transit enhancement funds. This diameter presumes that, barring barriers to mobility and accessibility, individuals within the catchment area would be willing to walk to these activities and destinations. Walksheds, in combination with equity data, assess the connectivity and reveal opportunities where infrastructure improvements may have the greatest impact.

There are six grocery stores in Dillon: Marvin’s Grocer, Food Lion, Stop & Shop Market, Lane’s Northeast Grocery, and KJ’s Market. Most of these are concentrated along Radford Blvd in the northwest portion of the study area.

The half-mile/10-minute walk radius from the grocery stores indicates that there is relatively good walking access for neighborhoods around Radford Blvd and Hwy 301. The KJ’s has the best connectivity to the higher density neighborhoods around Hwy 34. The cluster of grocery stores near the intersection of Radford Blvd and Hwy 301 is in a lower density area, Four of the five total grocery stores are located in areas with higher concentrations of vulnerable populations.

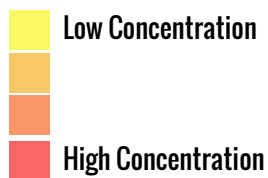
Dillon’s Food Retail Environment

Number of grocery stores	5
Community population/number of grocery stores	1.125 residents
Community square miles/ number of grocery stores	.09 sq mi



Food Access Analysis Map

Concentration of Vulnerable Populations



 Grocery Stores

 City of Dillon

 1/2-mi from Grocery Stores

ACTIVE SPACES ACCESS ANALYSIS

ACTIVE SPACES ACCESS ANALYSIS METHODOLOGY

The results of the Composite Equity Analysis were also combined with a mapping study of the locations and walkability of active spaces. Active spaces are defined to include all existing parks and greenspace. In communities where more resources exist, trails, YMCA's, or community recreation centers are typically included. This analysis again uses a half-mile walkshed or 10 minute walk for most pedestrians. The resulting map is a starting point for understanding how to link areas in need to active space destinations through pedestrian infrastructure improvements.

ACTIVE SPACES ARE LIMITED IN DILLON

Walking can be a critical form of transportation, particularly for older adults who no longer drive, young people who cannot yet drive, and for people who do not have access to a vehicle. Apart from walking as a means for transportation, however, walking serves a vital role in maintaining and improving one's health.

The CDC recommends 60 minutes of physical activity for children per day, 150 minutes of physical activity for adults per week, and 150 minutes of aerobic and muscle-strengthening activity per week. Access to exercise opportunities in Dillon County are limited. **County-level physical activity data show that:**

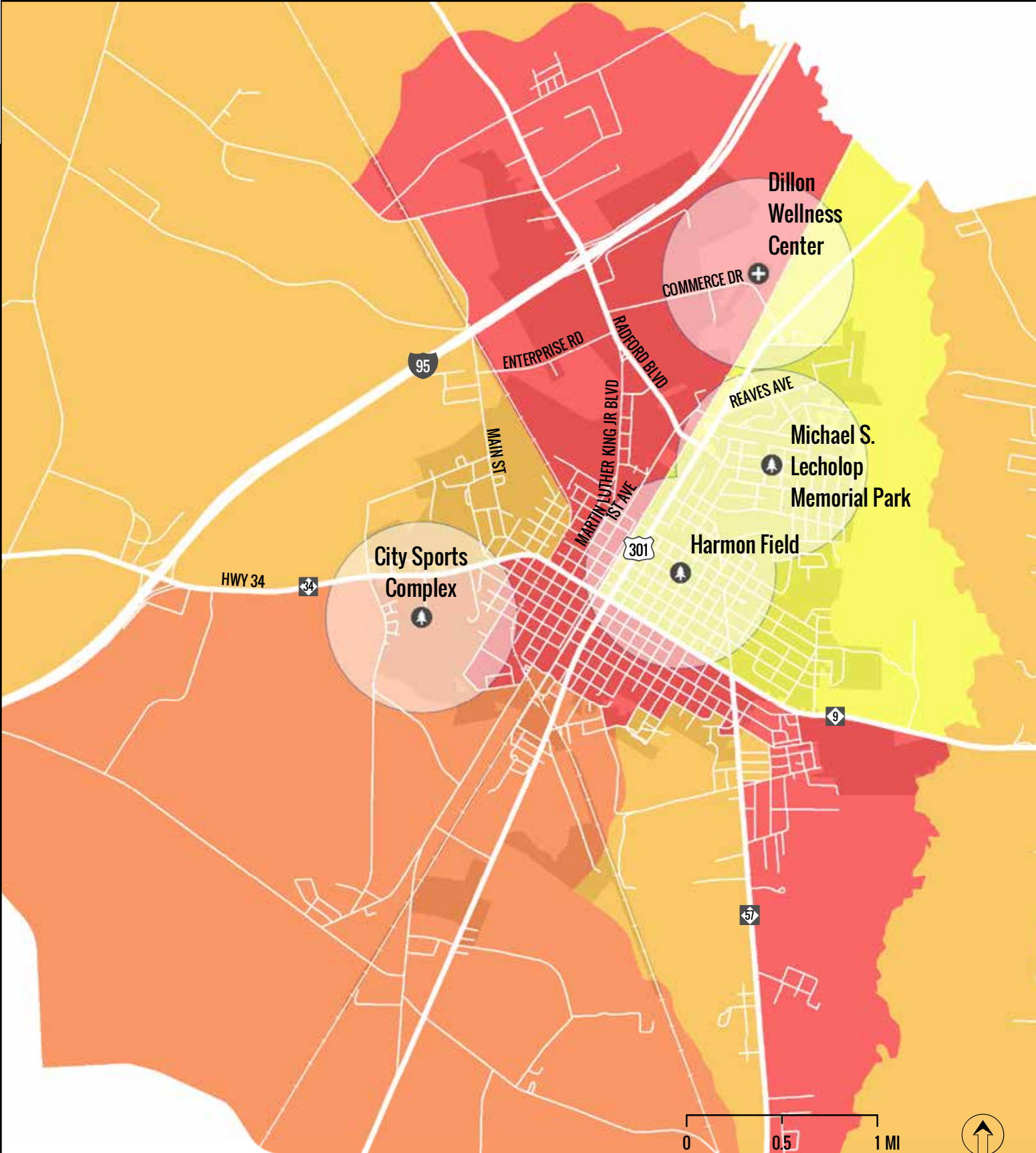
- Fewer women report being physically active compared to men.
- 35.6% of all Dillon County residents do not engage in regular exercise. This is 8 percent higher than the state rate of 26%.

- The percent of households living below the poverty line is 36% in Dillon County, compared to 18% for the state as a whole. This is significant because children living below the poverty line are 159% more likely to be deprived of recess.

Providing the freedom to walk to places in Dillon through safe and comfortable pedestrian facilities supports a healthy lifestyle. In turn, this boosts not only the city's physical activity level, but also increases mobility, accessibility, and quality of life for all citizens.

There are three publicly accessible parks located in Dillon: Michael S. Lecholop Memorial Park, Harmon Field, and the City Sports Complex. Lecholop Memorial Park and Harmon Field are located in the neighborhood with the lowest relative concentration of vulnerable populations. Harmon Field features a quarter-mile walking loop. The surrounding neighborhoods have relatively high sidewalk coverage so residents can easily access Harmon Field on foot. Lecholop Memorial Park does not currently have a formal walking loop, but provides passive recreation space to the surrounding neighbors. The City Sports Complex provides athletic fields and a half-mile walking loop open to the public. Highway 34, which offers the only access point to the Sports Complex, lacks pedestrian facilities which makes it difficult for people to access the park on foot.

The City of Dillon Wellness Center is a popular resource for safe active spaces. It has a walking loop that surrounds the building as well as a playground and an indoor fitness center. The Wellness Center is close to several schools, but it is located on Commerce Drive, which does not have sidewalks so there is currently no safe way to walk there.






Active Spaces Access Analysis Map

Active Spaces

-  Park
-  Wellness Center

Concentration of Vulnerable Populations

-  Low Concentration
- 
-  High Concentration

 1/2-mi from Parks

 City of Dillon

PUBLIC INPUT

PUBLIC INPUT PROCESS

The Dillon Active Corridors Plan gathered feedback through the project Steering Committee, a neighborhood focus group, a community charrette held April 3 - 4, and a final presentation on May 30.

MAIN TAKEAWAYS

The Steering Committee, focus groups, and charrette participants indicated that the community has strong momentum and a passion for wanting improvements. This is particularly true within residential neighborhoods around Dillon. The need for enjoyable places to walk, traffic calming, and sidewalk improvements arose as priorities in each discussion, and provided clear guidance for turning feedback into recommendations.

STEERING COMMITTEE

Two steering committee events were held during the plan process. The kickoff meeting on March 27 gathered feedback on broad community needs and specific issues impacting walkability in Dillon. This input informed the draft infrastructure, program, and policy recommendations. On April 28, during the “Celebrate Main Street” Event, the steering committee members were invited to drop in to review and respond to the draft recommendations. Overall, responses from the public, city staff, and committee members were positive and supportive of the direction of the recommendations. All comments were taken into account and are reflected in this report.

FOCUS GROUP

Over the course of two days in late March 2018, a diverse group of stakeholders consisting of City employees, Dillon residents, and local organizations provided information on challenges and opportunities facing the community. Questions and answers for the focus group members included:

- What motivates you to walk in Dillon?
Exercise, Morning walkers/joggers in downtown, shops in town
- What are the biggest barriers to walking?
Lack of sidewalks, few vibrant storefronts, few safe crossings, weather, lack of desire to walk
- What are the key destinations?
Downtown, Grocery Stores, Restaurants, and existing parks.

At the end of the discussion, participants were asked to share one word to describe walkability in Dillon. The most common answer: NON-EXISTENT.

COMMUNITY CHARRETTE

Based on the feedback received from the Steering Committee and focus group members, the consultant team produced a set of draft infrastructure, policy, and program recommendations. More than 30 people attended the charrette, which was held at the Dillon Wellness Center. A lively discussion ensued with a few key thoughts in the Q&A:

- Recommendations should include specific sidewalk treatments on MLK Jr Blvd.
- Some Dillon residents would like to see recommendations for improvements outside of the identified study corridors, which led to recommendations along W Main Street, and Highway 34.
- There is interest in redeveloping vacant buildings on Main Street, as well as utilizing unused spaces for new park space.

Lastly, the charrette team traveled to Dillon High School to meet with students. This input session allowed local youth to have a voice in the planning process.

Some of the responses and comments that were voiced included greater access to outdoor recreation, improved crossings on busy corridors, and economic development that would lend itself to a younger age group.

A, B: During the April 28th “Celebrate Main Street” event, the project team set up a pop up station to display the draft recommendations for the Dillon Active Corridors Plan. This event is Dillon’s largest public event, and see’s thousands of residents from Dillon and surrounding communities over the course of the day. Input and responses to the recommendations were largely positive, and revolved around interest in getting implementation started, methodology for recommendations, and the Charrette process and results. Steering committee members were invited back during this event to review recommendations and provide input for the final report.

C: The charrette process, held on March 26th + 27th, saw dozens of Dillon residents, City Staff, local advocacy groups, and local business owners. A series of focus group meetings and public drop in sessions yielded very clear input about the future of Dillon’s Bike/Ped infrastructure, and outlined many of the issues that resident’s experience every day on the study corridors. This input, as well as on-site observations and analysis help shape the direction and recommendations of this study.

A



B



C



REVIEW OF PREVIOUS PLANS

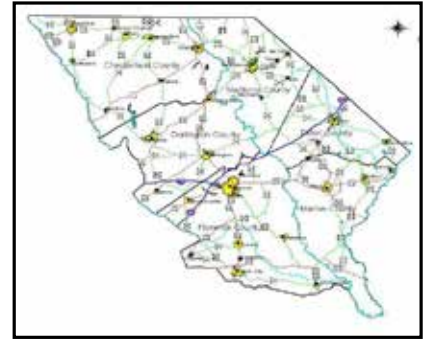
LONG-RANGE RURAL TRANSPORTATION PLAN FOR THE PEE DEE REGION OF SOUTH CAROLINA

The Long-Range Rural Transportation Plan is a comprehensive review of the major means of transportation for the Pee Dee COG. The document outlines broad goals and performance measures for the region, development conditions, existing infrastructure, and needs.

The bicycle and pedestrian element of the plan includes a set of guiding principles, a summary of current and past planning, and recommendations for pedestrian and bicycle facilities.

Key goals in the plan related to bike and pedestrian improvements include:

- Improving transportation alternatives
- Safe and interconnected facilities and routes
- Encourage routes within communities
- Public education and awareness of routes
- Increased sidewalk requirements
- Conversion of rail corridors into regional trail connections



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02

RECOMMENDATIONS

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RECOMMENDATIONS OVERVIEW

The following sections detail priority recommendations for the selected Dillon study corridors. The intent of these recommendations is to present a vision of walkability priorities, ensuring accessibility and mobility for pedestrians of all ages and abilities. Improvements focus on making walking safer and a more enjoyable experience for residents of and visitors. To achieve such a vision, the recommendations are organized as follows:

INFRASTRUCTURE RECOMMENDATIONS

Corridor Treatments

A general explanation of linear walking and biking facilities corresponding to a map showing where those treatments can be applied along the Dillon study corridors.

Spot Treatments

A general explanation of spot improvements showing where those treatments should be applied on a corresponding network map.

Project Cutsheets

Project cutsheets convey what each study corridor can look like to residents and stakeholders once recommendations are implemented, and provide information necessary in applying for implementation funds. The project cutsheets identify walking and biking investments that will make these corridors safer, and make it more convenient to access healthy food and active spaces on foot or bike.

PROGRAMMATIC RECOMMENDATIONS

Program Cutsheets

Program cutsheets detail program ideas that can be championed and implemented by the Steering Committee and citizens of Dillon. Program cutsheets list examples, specific applications, and cost estimates.

BE OPPORTUNISTIC

While the recommendations herein are considered community priorities, this should not preclude the City of Dillon from remaining opportunistic and flexible.

New developments, roadway reconstruction projects, and regularly programmed maintenance are perfect opportunities to implement walkability improvements.

The recommended facility types described herein are based on national best practices for pedestrian and bicycle design and are compliant with state and national design guidelines.

INFRASTRUCTURE RECOMMENDATIONS

CORRIDOR TREATMENTS

The corridor recommendations highlight the improvements necessary to transform the study corridors into safe, comfortable places to walk and bike. The recommended facilities include sidewalks, bike lanes, and shared use paths. In addition, this section includes recommendations about where streetscape improvements should be made to improve corridor aesthetics, add amenities, and make walking more comfortable.

Facility Types

The recommended facility types are based on the roadway characteristics, primarily traffic volumes and speeds. With higher volumes and speeds, walking and biking infrastructure should be wider and further separated from vehicle traffic. The recommendations are also sensitive to environmental and right-of-way constraints.

Sidewalks are the basic corridor treatment to facilitate walking trips along the study corridors. Sidewalks should be continuous, ADA compliant, and available on both sides of the street.

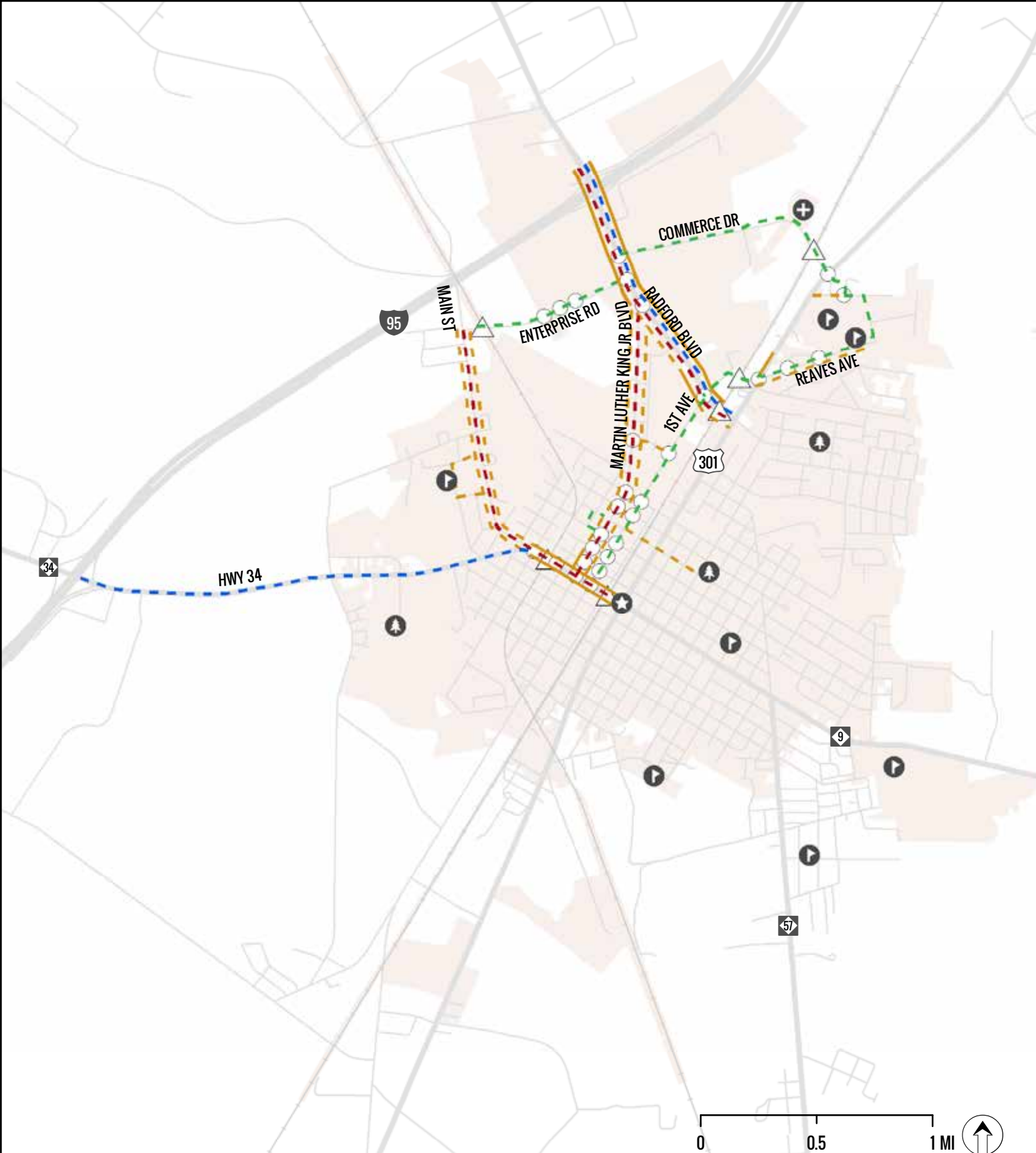
Where there is ample right-of-way and fewer environmental constraints, shared use paths are recommended instead to accommodate both people walking and biking. Bike lanes are recommended for places where a shared walking and biking path is not feasible, but it is still desirable for bicyclists to have their own right-of-way. Bike lanes also enhance the adjacent sidewalks by adding buffer space between

the sidewalks and the travel lanes. Streetscape improvements may look different for each corridor where they are proposed, but generally will include street trees, pedestrian-scale lighting, wayfinding, public art, and seating. Design guidance for these facility types is included in the appendix.

SPOT TREATMENTS

Walking trips are only as comfortable as the least comfortable point encountered along the entire route. Therefore, Dillon should work to maintain high levels of comfort and safety at major intersections and other crossings. The map at right shows priority road and rail crossings,

There are also opportunities to create new destinations to enable more walking-distance trips. The planning process considered a range of locations that could be targets for developing new walkable destinations. The City of Dillon can pursue further study of the economic development opportunities that may dovetail with investing in walkability.



Infrastructure Recommendations Map

Walking and Biking Network

- Shared Use Path (Proposed)
- Bike Lane (Proposed)
- Sidewalk (Existing)
- Sidewalk (Proposed)
- Streetscape Improvements (Proposed)

- ★ Downtown
- 🎓 Public Schools
- 🌳 Park
- + Wellness Center

Intersection Improvements

- △ Railroad crossing
- Road crossing
- City of Dillon



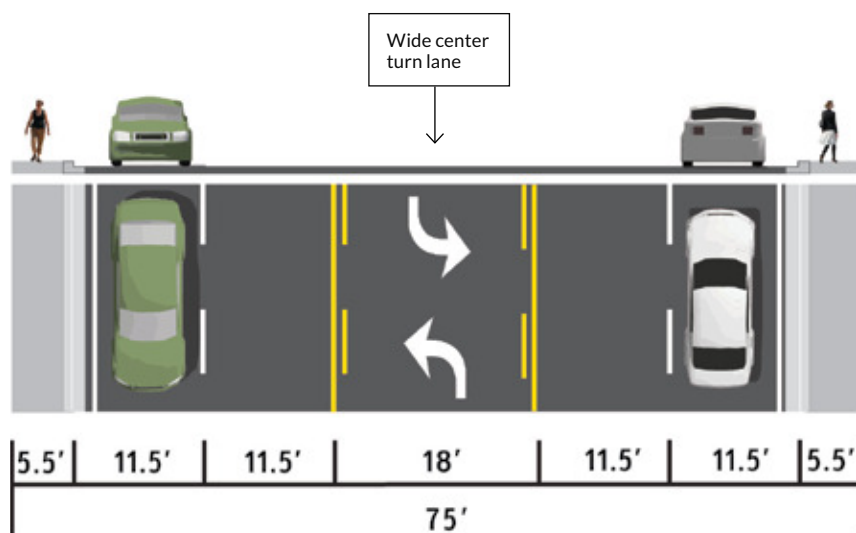
Complete Streets

Reconfigure existing roadway width with buffered bike lanes and raised landscaped median. Buffered bike lanes provide additional separation of pedestrians from motor vehicle traffic and can reduce crossing distances for pedestrians.

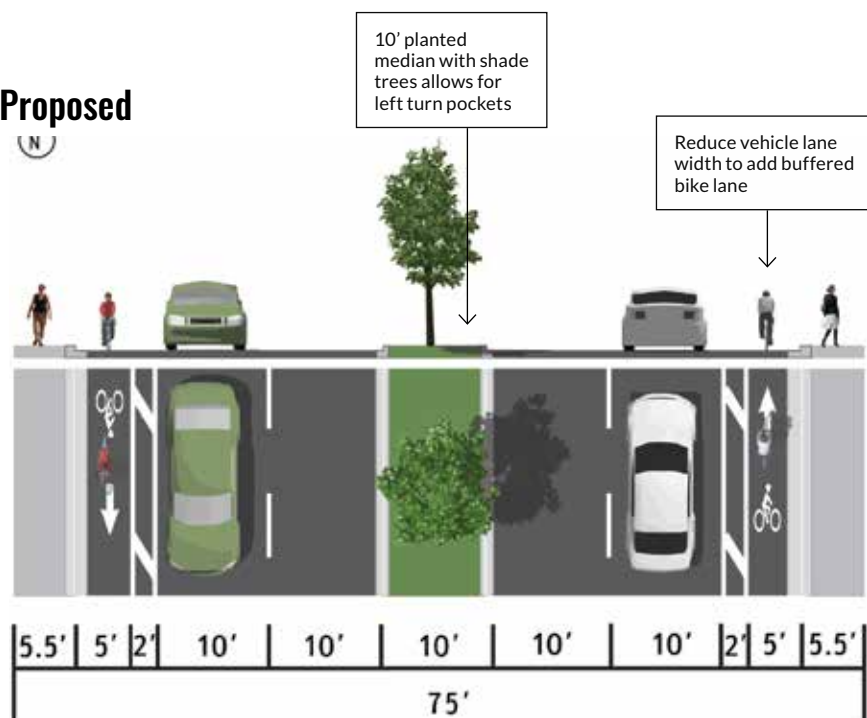
About this Project

- Project extends from I-95 to Hwy 301
- 5 ft bike lane with 2 ft striped buffer
- 10' raised median with left-turn pockets at intersections and high-volume driveways
- Pedestrian crossing treatments at intersections and select midblock locations.
- Project length: 1.3 mi

Existing Conditions



Proposed



Enterprise Blvd

Shared Use Trail

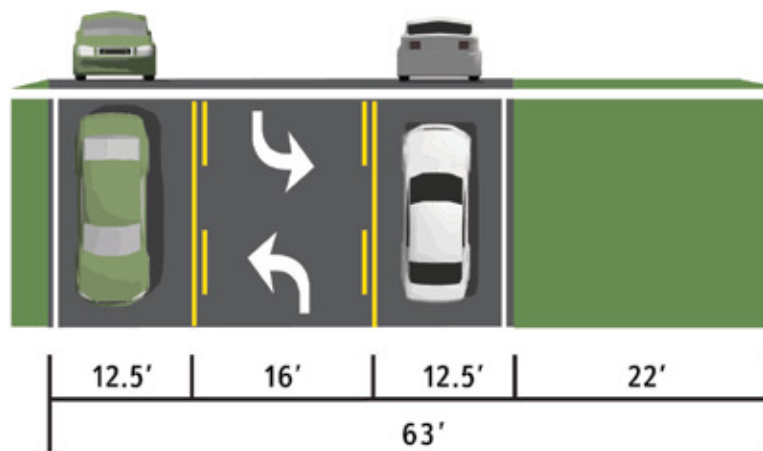


New separated facility along Enterprise Blvd for people walking and biking

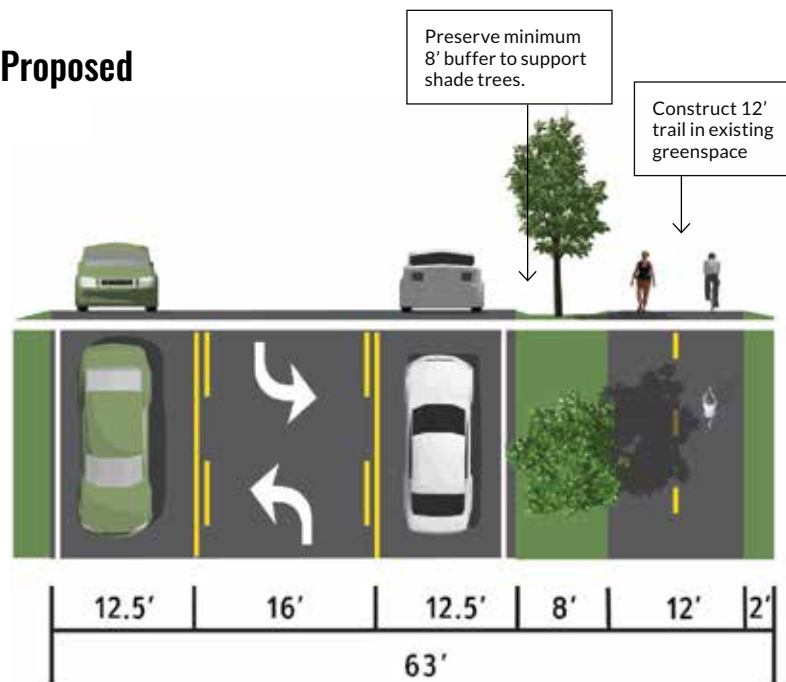
About this Project

- Construct 12' asphalt trail in existing greenspace from W Main St to Radford Blvd
- Center turn lane can also allow for pedestrian refuge islands at crossings.
- No change to roadway configuration
- Project length: 0.7 mi

Existing Conditions



Proposed





Complete Street Redesign

Transform Martin Luther King Jr. Blvd into a complete street with sidewalks and bike lanes

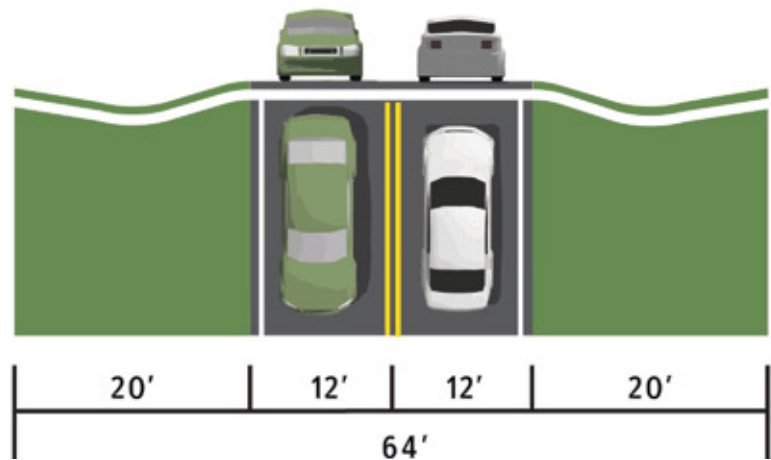
About this Project

- Project extends from Main St to Radford Blvd
- Requires roadway reconstruction
- Add 6' bike lanes
- Fill sidewalk gaps
- Project length: 1.1 mi

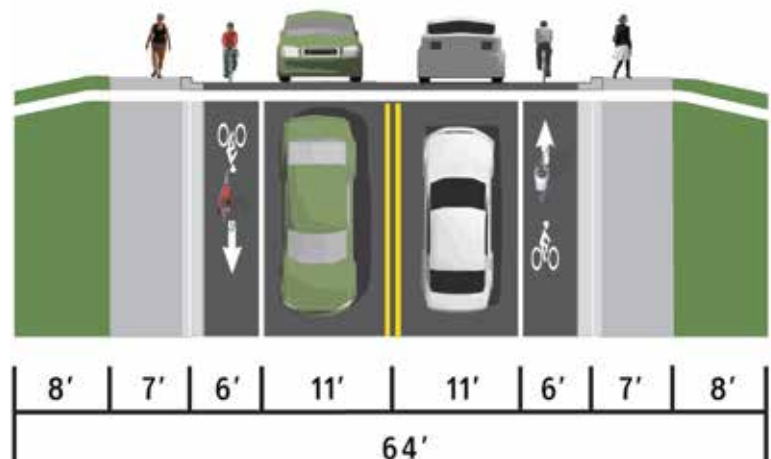
Park & Co-op Opportunity



Existing Conditions



Proposed



Martin Luther King Jr. Blvd- Existing



Martin Luther King Jr. Blvd- Proposed



Where right of way width allows, use extra space to buffer the sidewalk from the roadway. A buffer of 6' or more allows for shade trees.

First Ave / Reaves Ave

Shared Use Trail

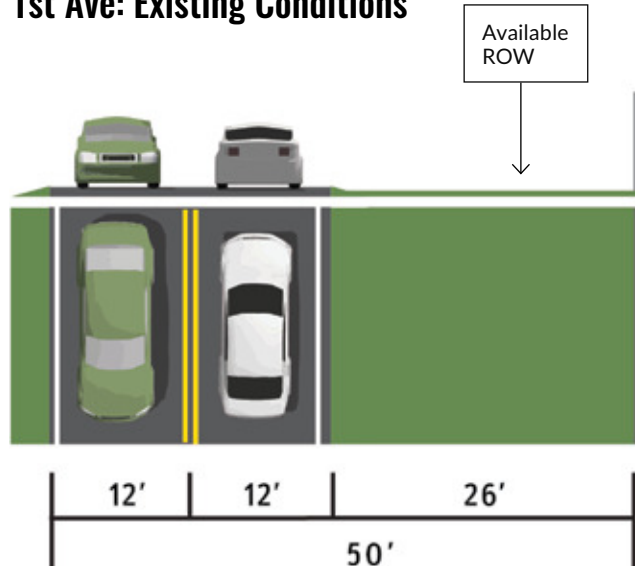


A wide off-street trail with a landscaped buffer that provides a direct link between Dillon Middle School and downtown

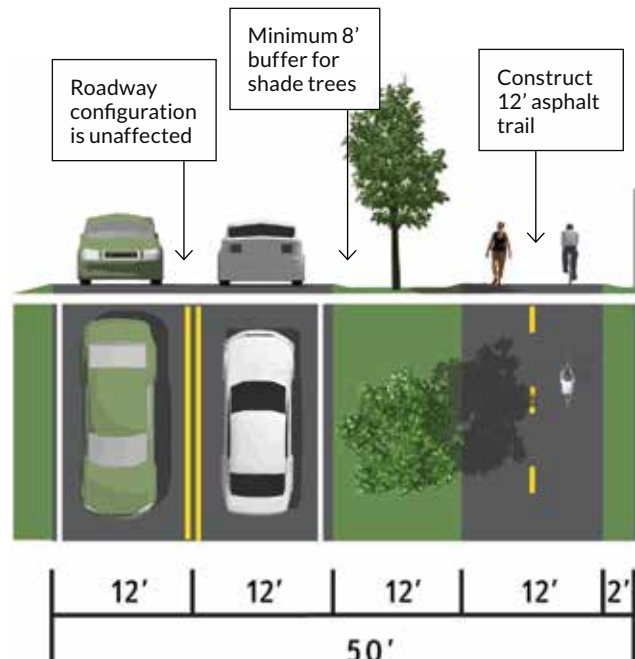
About this Project

- 1st Ave segment: Main St to Hwy 301
- Reaves Ave segment: Hwy 301 to Dillon Middle School
- 12' trail width
- Maintain minimum 8' buffer from roadway to support substantial shade trees
- Provides access to Food Lion at intersection of Radford
- Project length: 2.0 mi

1st Ave: Existing Conditions



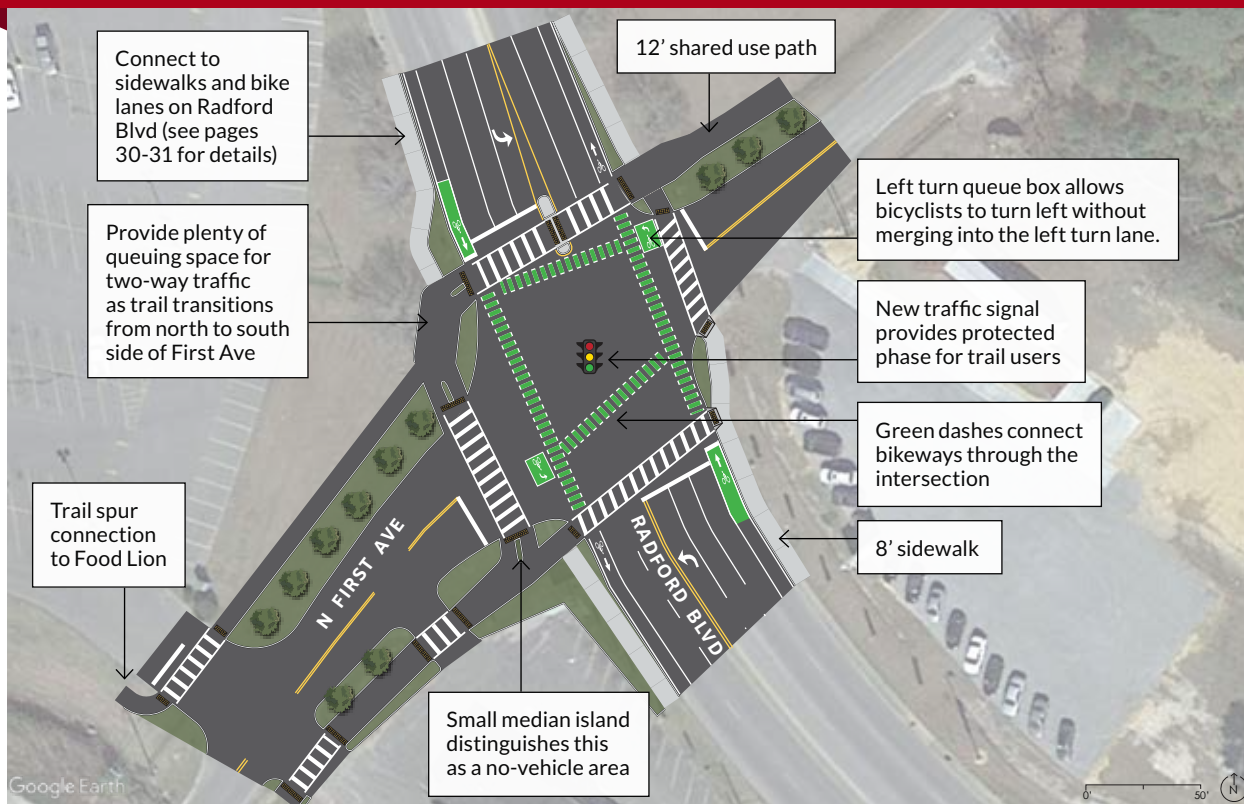
1st Ave: Proposed



Proposed Reaves Ave @ Dillon Middle School



Proposed First Ave @ Radford Blvd



Commerce Dr

Shared Use Trail



A wide off-street trail with a landscaped buffer along Commerce Drive and connecting to Dillon Middle School

About this Project

- Sidepath along Commerce Dr from Radford Blvd to Hwy 301, and then continues to Dillon Middle School and connects to Reaves Ave sidepath
- 12' wide shared use path
- Includes new traffic signal to facilitate Hwy 301 crossing
- Project length: 1.2 mi

Existing Conditions



Proposed



Existing Commerce Dr @ Hwy 301



Proposed Commerce Dr @ Hwy 301



Additional Connections & Opportunities



Economic development, expanded network, and streetscaping to create a more connected and vibrant walking environment

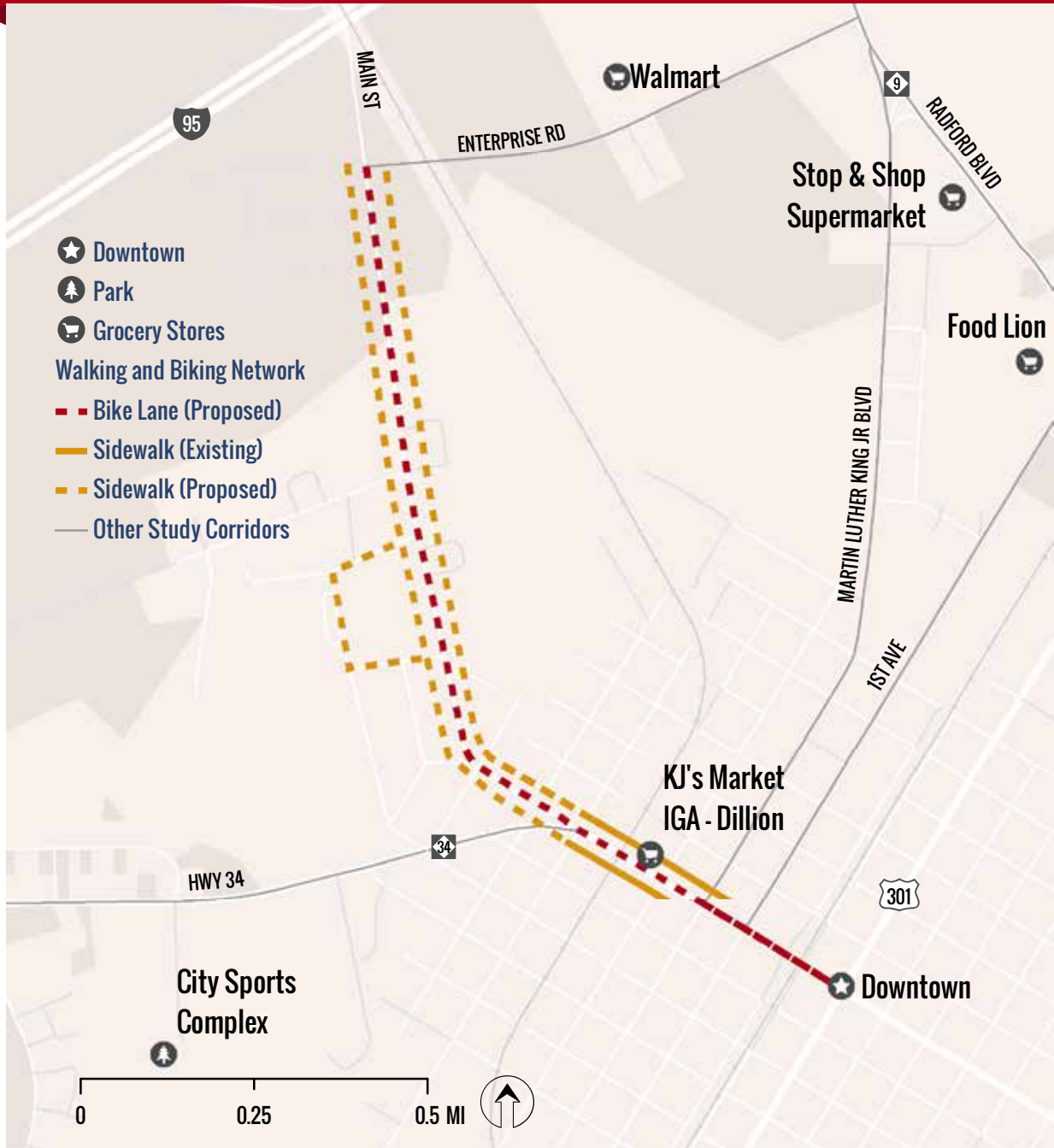
Enhanced Pedestrian Crossing and Adaptive Reuse Development Opportunity



About the Project

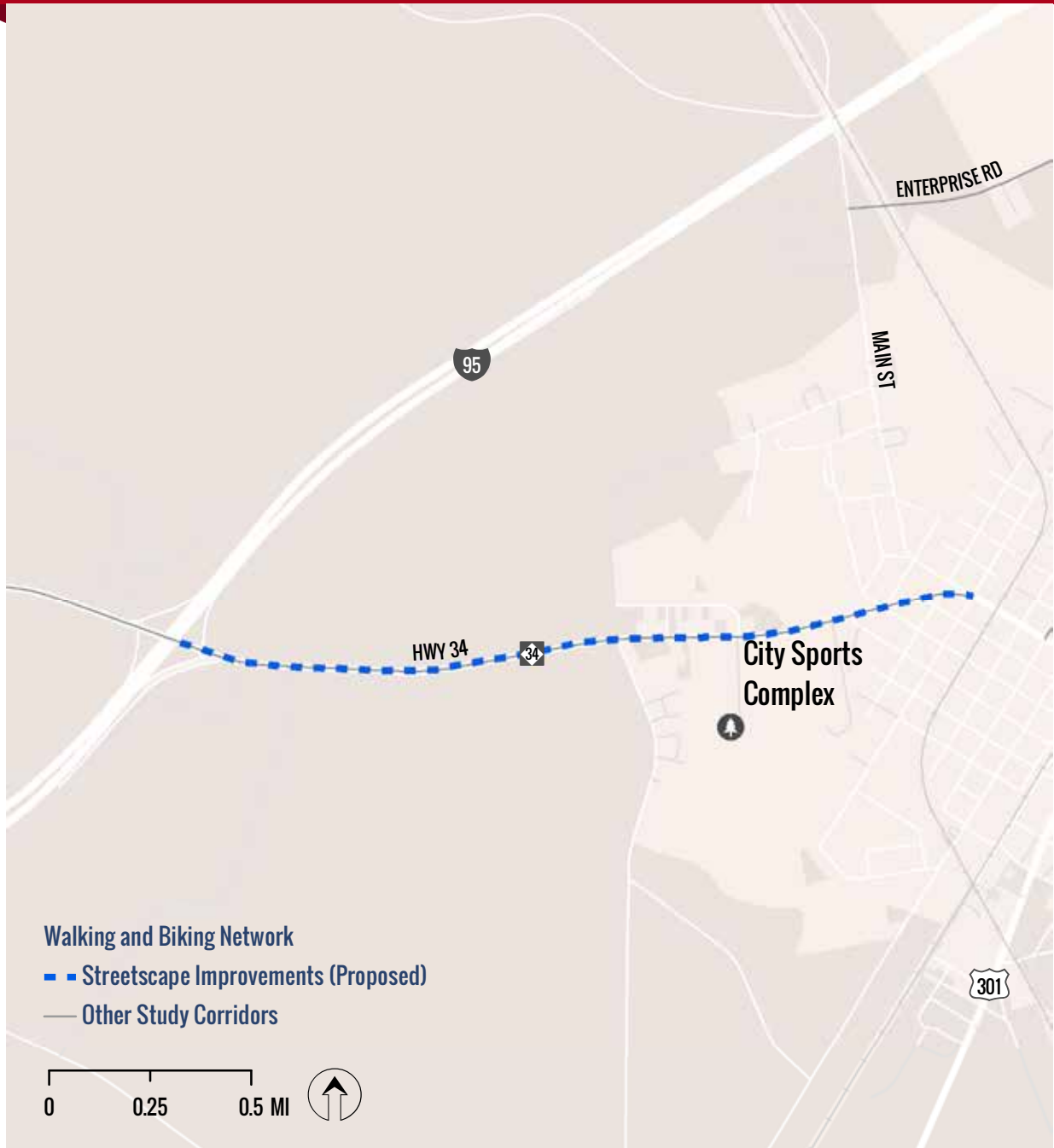
- Economic development opportunity in abandoned or underutilized buildings in Downtown Dillon.
- Visualization of potential of existing structures with facade treatments, and implementation of new community gathering spaces.
- Enhancement of downtown walkability and character with use of high vis crosswalks, push button signalization, and ROW vegetation.

Extend Sidewalk along W Main Street



Community input led to expanding the study area beyond the original project scope. This is important to provide safe connectivity between Dillon's downtown, access to healthy food outlets, and to help create a total loop system that will serve not only local residents, but the adjacent sports complex. These improvements extend 1.5 mi from Enterprise Blvd to Hwy 301.

Hwy 34 Streetscaping



Although outside of the official study area, connections down Highway 34 were deemed an important aspect of this study. This two mile streetscape project will welcome residents and visitors as they enter Dillon from I-95, extend the pedestrian network from Main Street, and provide better access to the City Sports Complex.

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PROGRAM RECOMMENDATIONS

OVERVIEW

Research has shown that a comprehensive approach to walk- and bicycle-friendliness is more effective than a singular approach that would address infrastructure issues only. Programs can leverage Dillon’s creativity, existing resources, leadership, and community spirit to build interest in walking. These ideas can be implemented quickly and with minimal investment, while providing a clear direction for the Dillon Steering Committee to generate immediate progress and short-term goals.

While the City and its agency and jurisdictional partners (namely SCDOT, the County, and the Pee Dee COG) are responsible for infrastructure projects and policy development, community programs can and should be supported and championed by outside partners such as nonprofits, advocacy groups, foundations, private sector businesses, and interested citizens.

The national the Walk Friendly Community program, administered by the National Center for Walking and Bicycling, recommends a multi-faceted approach to programs based on the following five ‘E’s: Engineering, Education, Encouragement, Enforcement, and Evaluation. Equity is often included as a sixth ‘E’ to ensure equal consideration for those whom pedestrian improvements may benefit the most.

The programmatic recommendations outlined here incorporate the education, encouragement, enforcement, and equity components of this multi-faceted approach. Infrastructure recommendations, described in the previous section, represent the “engineering” element.



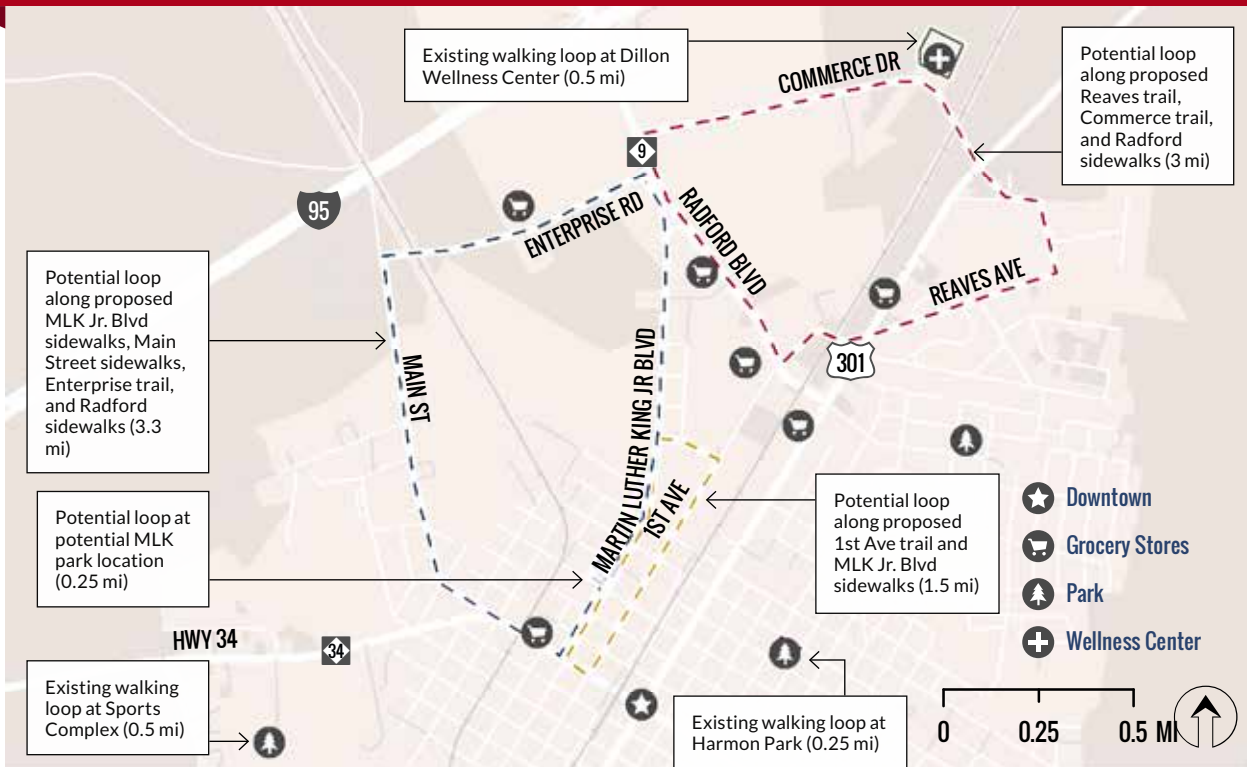
Walking Loops

Establish walking loops of varying lengths across the city to encourage use of safe walking routes

About this Project

- Walking routes can circle a public facility such as a park or school, or they can utilize regular sidewalks and use wayfinding to guide people through the loop.
- There is currently a popular walking loop at the wellness center, but it is not easy to access without a car.
- Dillon has a grid system to a loop of 4x4 blocks with sidewalks could be used to create a roughly 1-mi walking loop
- Loops can be branded individually and marked with signage or pavement markings
- Determining a route could be led by volunteers within individual neighborhoods
- Walking routes will ideally connect to schools, grocery stores, parks, and major retail centers

Proposed Improvements· Alumni Dr near Turkey Foot Rd



Establish Downtown as a Walking Hub



Sidewalks and other pedestrian infrastructure are a big factor in encouraging people to walk but Dillon must also establish a culture of walking. Downtowns are a logical place to establish as walking destinations because people are already getting out of their cars to use transit, so it is convenient to remove the car from the trip entirely.

Two ways to adjust the culture from driving to walking are: 1) Add information and programming to the Amtrak station to encourage people to get to and from the station on foot, and 2) Undertake a parking study to understand parking utilization, and where parking is a concern, and where parking could be scaled back to improve the pedestrian realm. This program could partner with and complement the downtown pop-up project program (see page 37-38).

Benefits

- Create a walking culture in Dillon
- A clear understanding on parking concerns in downtown
- Makes Dillon an attractive place for tourists to stop
- Reduce the amount of vehicle traffic in downtown
- Increase the number of people walking by local businesses

How To

Implementation Strategy

- Develop a pedestrian signage program with interpretive and wayfinding signage at the station and in the surrounding area
- Identify local businesses that could advertise or sponsor certain elements
- Enhance pocket park to the north of the station with seating and shade structures, and look for public activities that could be held there

Potential Partners

- Dillon County Department of Recreation
- Dillon County Planning/Zoning Department
- Dillon County Chamber of Commerce
- Local Businesses
- Amtrak

Potential Partners

- [International Downtown Association](#)

Add Pedestrian Amenities at Amtrak Station

Dillon's Amtrak station is located centrally downtown and adding pedestrian amenities would not only encourage people to access the train on foot, but also encourage people to disembark the train in Dillon and walk through the historic downtown.

Dillon should establish a program for adding pedestrian amenities to the station area, such as wayfinding, pocket parks, and economic incentive programs.

Estimated Cost: \$\$



Downtown Parking Study

Convenient parking is important for local business, but it should not come at the sacrifice of a good pedestrian realm. Large surface parking lots and cars parked on the sidewalk present a challenge to the pedestrian environment. A detailed parking study with inventory and utilization analysis will help Dillon understand where there is extra parking capacity, and what policies will have the best outcomes.

Estimated Cost: \$\$



Downtown Pop Up Project



Targeted beautification projects can activate the public realm and convey Dillon's unique character

About this Project

- Take an opportunistic, incremental approach to creating a visually stimulating public environment.
- Heavy reliance on volunteers, and low budget
- Pop-up projects are also known as "tactical urbanism"

Pop-Up Beautification Project Types



How to

Implementation Strategy

- Identify the types of projects that are appropriate for and desired by the Dillon community.
- Create a permitting process & guidelines for necessary public awareness
- Identify some potential locations for each intervention, based on where there is need or where there is a stakeholder that is motivated and willing to lead the effort
- Invite community groups and individuals to contribute and work together.

Potential Partners

- Dillon County Department of Recreation
- Dillon County Planning/Zoning Department
- Dillon County Chamber of Commerce
- Local schools
- Local volunteer organizations and businesses
- SCDOT

Resources

[Tactical Urbanist's Guide](#)

Wayfinding

Wayfinding signs help people navigate confidently, and improve awareness of surrounding destinations. Signs may mark specific destinations or branded walking routes. Signs should be placed at key decision points, such as intersections.



Open Street Events

Open Streets events involve closing the street to vehicle traffic for a short period of time to highlight the street as a plaza for people on foot or bike. Open Streets event can be enhanced with music, food vendors, art, and other contributions from local organizations or businesses. This will require SCDOT coordination is done on state roadways.

Pop-Up Beautification Project Types (cont)



Murals

Transform blank walls and facades into canvases to highlight artistic talent and Dillon's culture. Murals fill in empty or unattractive spaces between destinations that can make walking trips feel longer than they actually are. They also convey that community capital through care for the public space.



Artistic Crosswalks

Federal guidelines on crosswalk pavement markings provide flexibility to create unique markings between the continental lines that outline a crosswalk. This can be done with paint for a six-month demonstration project, or with thermoplastic for a longer term project. Often implemented during resurfacing and restriping.



Parklets

A parklet is an outdoor space typically the size of an on-street parking space. These mini-parks are often designed for passive recreation and may include planters, benches, café tables and chairs. Additionally, parklets can be designed to include bike corrals, fitness equipment, chess boards and other activities. Parklet projects should engage adjacent community members and business owners as partners.



Pilot Projects

Where there are concerns about feasibility or outcomes of a particular project, a temporary pilot project can be implemented to make improvements in the near term and test results. These projects are generally utilize inexpensive resources such as paint, planters, and bollards.

Public Safety Programs



Public safety events that unite residents and law enforcement can foster an environment where people feel safe walking during the day and at night in Dillon. The purpose of public safety events is not only to reduce crime, but to improve perceptions of public safety, to increase enforcement, particularly of right-of-way laws, and to create an ongoing dialogue between law enforcement and community members.

Specific event ideas include walk vigils that recognize and show support for crime victims, and festivals that involve police officers and community members in fun activities. At these events, police can share information about local crimes and inform residents on how to be vigilant. Residents can also share their concerns and identify where more police presence is needed.

Benefits

- Increases public safety through trust and information sharing
- Improves the perception of public safety by increasing police visibility
- Offers opportunities to build relationship between the police and citizens
- Provides direction on when and where safety resources should be focused

How To

Implementation Strategy

- Work with the Dillon Police department and neighborhoods to coordinate National Night Out activities
- Contact community partners, businesses, or interested citizens to sponsor activities
- Promote the event through social media, websites, and campus communications

Potential Partners

- Neighborhood Associations
- Dillon Police Department

Resources

- [National Night Out](#)
- [Safe Routes to School Resource Center](#)

National Night Out

Annual community-building campaign that promotes police-community partnerships and neighborhood camaraderie to make neighborhoods safer, better places to live



Estimated Cost:

\$\$

Safe Zone

Holistic public safety strategy that prevents drug-related violence, restores community stability, and promotes police-community relations in targeted distressed neighborhoods through police and neighborhood partnerships



Estimated Cost:

\$\$

03

STEPS FOR MOVING FORWARD

42 NEXT STEPS

45 FUNDING SOURCES

WHAT NEXT?

The implementation of the Dillon Active Corridors Plan recommendations will require a comprehensive approach that includes multiple sources of funding, partnerships, design, construction, and management. It will also require the dedication of City staff and a commitment to the vision established by the steering committee and this plan.

Communities across the country that have successfully implemented pedestrian programs have relied on multiple funding sources to achieve their goals. No single source of funding will meet the recommendations identified in this plan.

Stakeholders will need to work cooperatively across a range of private sector, municipality, state, and federal partners to generate funds sufficient to implement this network. A descriptive list of potential funding sources can be found in this section.

The resources provided herein — the pedestrian safety analysis, the access to healthy foods assessment, program and infrastructure recommendations, coupled with the following appendices resources — can serve as a daily reference material for Dillon and its implementing partners.

Dillon should strive to follow the priority recommendations, as each program, project, and policy was selected based on public input, need, and potential impact. However, the City should also look for opportunities to coordinate pedestrian enhancements with regularly-programmed maintenance activities, new developments, and large roadway construction projects, regardless of whether enhancements occur on priority corridors or intersections.



NEXT STEPS

1. **Continue the Steering Committee**
2. **Prioritized funding for infrastructure**
3. **Develop and implement one program at a time**
4. **Build on existing events**
5. **Share the plan**
6. **Keep collaborating**

STEPS FOR MOVING FORWARD

1

CONTINUE THE STAKEHOLDER COMMITTEE

A team effort is required to move the plan forward. The stakeholder committee process includes citizens and community leaders that can partner to make programs and projects a reality. Capitalize on this momentum, and formalize the committee as a Dillon Walkability Commission that meets quarterly, at a minimum.

2

PRIORITIZE FUNDING FOR INFRASTRUCTURE

To kickstart the funding conversation, partner with the Pee Dee Council of Governments to identify eligible TAP projects and matching funds. Continue the Plan's momentum by sharing project priorities directly with the region's funding partners. This includes PDCOG, SCDOT, City and County Councils, and private sector partners. The funding analysis included in this section provides a resource for matching grants with programs and projects.

3

DEVELOP AND IMPLEMENT ONE PROGRAM AT A TIME

Programs have a big impact on walkability and are easy to accomplish without a major investment. A variety of community partners can assist by funding efforts or volunteering their time. Convene "Program Champions" as part a steering committee meeting to develop a list of communications strategies to promote each program and attract volunteers. Make a goal to implement each program within six months of announcing the program.

STEPS FOR MOVING FORWARD

4

BUILD ON EXISTING EVENTS

Events like Rock Around the Clock present excellent opportunities to build community interest and showcase plan and demonstration projects. This is also a great time to gather public feedback and register volunteers due to the large and diverse audience at community events.

5

SHARE THE PLAN

Continue to share the Plan with Dillon residents and affiliated groups and organizations. Spread the word about proposed improvements and program opportunities that directly respond to residents' concerns and ideas for improving their community.

6

KEEP COLLABORATING

A multi-jurisdictional effort will ensure projects are implemented. The City, County, local schools, and PDCOG have forged a strong working relationship through this project and other cross-jurisdictional efforts. Continue this collaboration and information-sharing to ensure an efficient use of time and resources for both entities.



FEDERAL FUNDING SOURCES

SOURCE	SUMMARY	MORE INFORMATION
FAST ACT	<p>In South Carolina, federal monies are administered through the South Carolina Department of Transportation (SCDOT) and Council of Governments (COG's) or Metropolitan Planning Organizations (MPOs). Most, but not all, of these programs are oriented toward transportation versus recreation, with an emphasis on reducing auto trips and providing inter-modal connections. Federal funding is intended for capital improvements and safety and education programs, and projects must relate to the surface transportation system.</p> <p>There are a number of programs identified within the FAST Act that are applicable to pedestrian and bicycle projects. These programs are discussed below.</p>	http://www.fhwa.dot.gov/map21/summary-info.cfm
TRANSPORTATION ALTERNATIVES	<p>Transportation Alternatives as defined by Section 1103 (a)(29). This category includes the construction, planning, and design of a range of pedestrian and bicycle infrastructure including "on-road and off-road trail facilities for pedestrians, bicyclists, and other active forms of transportation, including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act of 1990." Infrastructure projects and systems that provide "Safe Routes for Non-Drivers" is a new eligible activity.</p>	<p>For the complete list of eligible activities, visit: http://www.fhwa.dot.gov/environment/transportation_enhancements/legislation/map21.cfm</p>
RECREATIONAL TRAILS	<p>TA funds may be used to develop and maintain recreational trails and trail-related facilities for both active and motorized recreational trail uses. Examples of trail uses include hiking, bicycling, in-line skating, equestrian use, and other active and motorized uses. These funds are available for both paved and unpaved trails, but may not be used to improve roads for general passenger vehicle use or to provide shoulders or sidewalks along roads.</p> <p>Recreational Trails Program funds may be used for:</p> <ul style="list-style-type: none"> Maintenance and restoration of existing trails Purchase and lease of trail construction and maintenance equipment Construction of new trails, including unpaved trails Acquisition or easements of property for trails State administrative costs related to this program (limited to seven percent of a state's funds) Operation of educational programs to promote safety and environmental protection related to trails (limited to five percent of a state's funds) <p>Grant applications are typically due in April each year.</p>	<p>More info on administration of the Recreational Trails Program in South Carolina can be found through the following site: http://www.scprt.com/our-partners/grants/trails.aspx</p>



FEDERAL FUNDING SOURCES

SOURCE	SUMMARY	MORE INFORMATION
SOUTH CAROLINA C FUNDS	South Carolina has a long-established program that provides funding to counties to administer projects on state and local roads. Funding for this program comes from a portion of state fuel tax revenues. Up to 75% of these funds may be used for projects on local-jurisdiction roadways, with the remainder being utilized on State-jurisdiction roadways. Bikeway and sidewalk improvements as a part of repaving or reconstruction are eligible project types.	More information on the C-fund program can be found at: http://www.scdot.org/doing/cprogram.aspx
HIGHWAY SAFETY IMPROVEMENT PROGRAM	<p>HSIP provides \$2.4 billion nationally for projects and programs that help communities achieve significant reductions in traffic fatalities and serious injuries on all public roads, bikeways, and walkways. Infrastructure and non-infrastructure projects are eligible for HSIP funds. Pedestrian and bicycle safety improvements, enforcement activities, traffic calming projects, and crossing treatments for active transportation users in school zones are examples of eligible projects. All HSIP projects must be consistent with the state's Strategic Highway Safety Plan.</p> <p>Pedestrian and bicycle strategies identified in the 2015 SHSP include engineering bike lanes, sidewalks and shared-use paths, especially where supported by crash data, educational programs and targeted enforcement.</p>	Last updated in 2015, the SCDOT SHSP is located here: http://www.scdps.gov/docs/Target%20Zero_Final_w_Signatures_15APR15.pdf
CMAQ	The Congestion Mitigation/Air Quality Improvement Program (CMAQ) provides funding for projects and programs in air quality nonattainment and maintenance areas for ozone, carbon monoxide, and particulate matter which reduce transportation related emissions. States with no nonattainment areas such as South Carolina may use their CMAQ funds for any CMAQ or STP eligible project. These federal dollars can be used to build pedestrian and bicycle facilities that reduce travel by automobile. Purely recreational facilities generally are not eligible.	More info on administration of the Recreational Trails Program in South Carolina can be found through the following site: http://www.scprt.com/our-partners/grants/trails.aspx
RIVERS, TRAILS, AND CONSERVATION ASSISTANCE PROGRAM	The Rivers, Trails, and Conservation Assistance Program (RTCA) is a National Parks Service (NPS) program providing technical assistance via direct NPS staff involvement to establish and restore greenways, rivers, trails, watersheds and open space. The RTCA program provides only for planning assistance—there are no implementation monies available. Projects are prioritized for assistance based on criteria including conserving significant community resources, fostering cooperation between agencies, serving a large number of users, encouraging public involvement in planning and implementation, and focusing on lasting accomplishments. This program may benefit trail development in the region indirectly through technical assistance, particularly for community organizations, but should not be considered a future capital funding source.	More information: http://www.nps.gov/orgs/rtca/apply.htm



FEDERAL FUNDING SOURCES

SOURCE	SUMMARY	MORE INFORMATION
COMMUNITY DEVELOPMENT BLOCK GRANTS (CDBG)	<p>The Community Development Block Grants (CDBG) program provides money for streetscape revitalization, which may be largely comprised of pedestrian improvements. Federal CDBG grantees may “use Community Development Block Grants funds for activities that include (but are not limited to): acquiring real property; reconstructing or rehabilitating housing and other property; building public facilities and improvements, such as streets, sidewalks, community and senior citizen centers and recreational facilities; paying for planning and administrative expenses, such as costs related to developing a consolidated plan and managing Community Development Block Grants funds; provide public services for youths, seniors, or the disabled; and initiatives such as neighborhood watch programs.”</p> <p>Trails and greenway projects that enhance accessibility are the best fit for this funding source. CDBG funds could also be used to create an ADA Transition Plan. States designate CDBG funds to “entitlement communities” – generally major cities with more than 50,000 people – and “non-entitlement communities”, whereby DHEC communities may be eligible for funding.</p>	<p>More information: https://www.hud.gov/program_offices/comm_planning/community-development/programs</p>
LAND AND WATER CONSERVATION FUND	<p>The Land and Water Conservation Fund (LWCF) provides grants for planning and acquiring outdoor recreation areas and facilities, including trails. Funds can be used for right-of-way acquisition and construction. The program is administered by the South Carolina Department of Parks, Recreation & Tourism as a grant program. Any projects located in future parks could benefit from planning and land acquisition funding through the LWCF. Funding is also available for new parks, and trail corridor acquisition can be funded with LWCF grants as well. This program requires a 50-50 match – applications are due in the spring.</p>	<p>More information: http://www.scprrt.com/our-partners/grants/lwcf.aspx</p>
EPA GREEN INFRASTRUCTURE GRANTS	<p>The EPA offers a number of grant resources that serve to improve clean water in communities such as the EPA Clean Water State Revolving Fund, EPA Clean Water Act Nonpoint Source Grant and EPA Community Action for a Renewed Environment (CARE) Grants.</p>	<p>More information on these, and other funding sources can be found through the EPA's website: https://www.epa.gov/green-infrastructure/green-infrastructure-funding-opportunities</p>



FEDERAL FUNDING SOURCES

SOURCE	SUMMARY	MORE INFORMATION
ENHANCED MOBILITY OF SENIORS & INDIVIDUALS WITH DISABILITIES	Section 5310 of the FAST ACT – Enhanced Mobility of Seniors and Individuals with Disabilities provides capital and operating costs to provide transportation services and facility improvements that exceed those required by the Americans with Disabilities Act. Examples of pedestrian/accessibility projects funded in other rural communities include installing Accessible Pedestrian Signals (APS), enhancing transit stops to improve accessibility, and establishing regional one-click systems.	More information: https://www.transit.dot.gov/funding/grants/enhanced-mobility-seniors-individuals-disabilities-section-5310
ADDITIONAL FTA FUNDING SOURCES FOR BIKE/PED INFRASTRUCTURE	<p>Most FTA funding can be used to fund pedestrian and bicycle projects “that enhance or are related to public transportation facilities.”</p> <p>According to the FTA, an FTA grantee may use any of the following programs under Title 49, Chapter 53, of the United States Code to fund capital projects for pedestrian and bicycle access to a public transportation facility:</p> <ul style="list-style-type: none"> • Section 5307 Urbanized Area Formula Program; • Section 5309 New Starts and Small Starts Major Capital Investment Programs; • Section 5309 Fixed Guideway Modernization Program; • Section 5309 Bus and Bus Facilities Discretionary Program; • Section 5310 Elderly Individuals and Individuals with Disabilities Formula Program; • Section 5311 Non-Urbanized Area Formula Program; • Section 5311 Public Transportation on Indian Reservations; • Section 5316 Job Access and Reverse Commute Formula Program; • Section 5317 New Freedom Program; and, • Section 5320 Paul S. Sarbanes Alternative Transportation in Parks and Public Lands. 	
CDC GRANTS	The CDC provides funding opportunities for several different organization and jurisdiction types that can potentially support pedestrian and bicycle infrastructure, planning or other support programs.	An overview of these different programs and funding cycles can be found here: http://www.cdc.gov/chronicdisease/about/foa.htm ,



FEDERAL FUNDING SOURCES

SOURCE	SUMMARY	MORE INFORMATION
ADDITIONAL FEDERAL FUNDING	The landscape of federal funding opportunities for pedestrian and bicycle programs and projects is always changing. A number of Federal agencies, including the Bureau of Land Management, the Department of Health and Human Services, the Department of Energy, and the Environmental Protection Agency have offered grant programs amenable to pedestrian and bicycle planning and implementation, and may do so again in the future.	For up-to-date information about grant programs through all federal agencies, see: http://www.grants.gov/

STATE FUNDING SOURCES

SOURCE	SUMMARY	MORE INFORMATION
SOUTH CAROLINA MAIN STREET PROGRAM	The South Carolina Main Street program is coordinated through the Municipal Association of South Carolina. The South Carolina branch is accredited by the National Main Street Center, which is affiliated with the National Trust for Historic Preservation. Communities of any size may apply for Main Street funding and assistance. The program follows the National Four Point model; organization, promotion, design, and economic restructuring. Benefits to becoming a Main Street program include developing a work plan, customized workshops, design services, and training for staff committees.	For more information: http://www.masc.sc/programs/main-street-south-carolina
FEDERAL AND STATE HISTORIC PRESERVATION TAX CREDITS	The South Carolina Historic Preservation Office (SHPO) offers a number of tax credits in addition to the standard 20% federal historic preservation tax credit for historic renovations. Tax credits and incentives in South Carolina include the 10% state historic rehabilitation tax credit for income producing historic buildings, a 25% state historic rehab tax credit for owner occupied historic buildings, and local property tax abatements for both.	More information, see the SC tax incentive table: http://shpo.sc.gov/pubs/Documents/htln1112.pdf
SOUTH CAROLINA TRANSPORTATION INFRASTRUCTURE BANK	The South Carolina Transportation Infrastructure Bank (SCTIB) is a statewide revolving loan fund designed in 1997 to assist major transportation projects in excess of \$100 million in value. The SCTIB has since approved more than \$4.5 billion in financial assistance and is arguably the largest and most active State Infrastructure Bank in the country. SCTIB funded development of the Palmetto Parkway in Aiken County, which included development of a roughly five mile multi-use trail within the parkway's right of way.	More information: http://sctib.sc.gov/Pages/default.aspx



STATE FUNDING SOURCES

SOURCE	SUMMARY	MORE INFORMATION
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION - CAPITAL PROJECTS	Municipalities should work closely with SCDOT to include pedestrian and bicycle improvements as part of major projects. The two groups should cooperate on a regular basis to identify opportunities for implementation of the Active Corridors Plan.	
SOUTH CAROLINA PARKS AND RECREATION DEVELOPMENT FUND	<p>The PARD grant program is a state funded non-competitive reimbursable grant program for eligible local governments or special purposes district entities within each county which provide recreational opportunities. The fund requires a 20% cash or in-kind match.</p> <p>The following bullets highlight characteristics of the grant program.</p> <ul style="list-style-type: none"> • Monthly grant cycle. • Non-competitive program available to eligible local governmental entities within each county area for development of new public recreation facilities or enhancement/renovations to existing facilities. • Projects need endorsement of majority weighted vote factor of County Legislative Delegation Members. • This is an 80-20 match program. • Application Deadline is the 10th of each month. • PARD funding is allocated on a county-by-county basis and comes from a portion of the State's bingo revenues. 	More information: https://www.scpd.com/our-partners/grants/pard.aspx
STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM	<p>The Statewide Transportation Improvement Program (STIP) is SCDOT's short-term capital improvement program, providing project funding and scheduling information for the department and South Carolina's metropolitan planning organizations. The program provides guidance for the next six years and is updated every three years. The South Carolina Department of Transportation Commission, as well as the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), approve the STIP.</p> <p>In developing this funding program, SCDOT must verify that the identified projects comply with existing transportation and comprehensive plans. The STIP must fulfill federal planning requirements for a staged, multi-year, statewide, intermodal program of transportation projects. Specific transportation projects are prioritized based on Federal planning requirements and the specific State plans.</p>	More information: http://www.scdot.org/inside/stip.aspx



LOCAL FUNDING SOURCES

SOURCE	SUMMARY
PEE DEE REGIONAL COG	<p>Councils of Governments (COGs) are rural-regional transportation planning organizations that cover the entire State of South Carolina. COGs produce Long-range Transportation Planning documents which allocate funding and program transportation projects throughout the region.</p> <p>COGs are a partnership between local and state government that makes decisions about transportation planning in rural areas and meets planning requirements established by federally authorizing legislation for transportation funding. The regional COG works co-operatively with SCDOT to develop transportation plans, travel models, transit plans, and pedestrian and bicycle plans. They work with the state on funding issues for transportation improvements, project planning issues, and other issues such as environmental and air quality concerns. Finally, they also works with local governments to coordinate land use and transportation planning.</p> <p>COGs maintain a long-range transportation plan (LRTP) and develop a transportation improvement program (TIP) to develop a fiscally constrained program based on the long-range transportation plan and designed to serve the region's goals while using spending, regulating, operating, management, and financial tools. This Plan recommends that the City and its partners continue to work closely with the COG to ensure pedestrian, bikeways and transit improvement projects recommended in this Plan are programmed in the TIP.</p>
GENERAL FUND	<p>The General Fund is often used to pay for maintenance expenses and limited capital improvement projects. Projects identified for reconstruction or re-pavement as part of the Capital Improvements list should also incorporate recommendations for bicycle or pedestrian improvements in order to reduce additional costs.</p>
LOCAL BOND MEASURES	<p>Local bond measures, or levies, are usually general obligation bonds for specific projects. Bond measures are typically limited by time based on the debt load of the local government or the project under focus. Funding from bond measures can be used for engineering, design and construction of trails, greenways, and pedestrian and bicycle facilities.</p>
STREET USER FEES	<p>Many cities administer street user fees through residents' monthly water or other utility bills. The revenue generated by the fee can be used for operations and maintenance of the street system, and priorities would be established by the Public Works Department. Revenue from this fund can be used to maintain pedestrian facilities such as sidewalks.</p>
UTILITY LEASE REVENUE	<p>A method to generate revenues from land leased to utilities for locating utility infrastructure on municipally owned parcels. This can improve capital budgets and support financial interest in property that would not otherwise create revenue for the government.</p>



LOCAL FUNDING SOURCES

SOURCE	SUMMARY
LOCAL IMPROVEMENT DISTRICTS	<p>Local Improvement Districts (LIDs) are most often used by cities to construct localized projects such as streets, sidewalks or bikeways. Through the LID process, the costs of local improvements are generally spread out among a group of property owners within a specified area. The cost can be allocated based on property frontage or other methods such as traffic trip generation. Based on South Carolina's Municipal Improvements Act of 1999, LIDs can include a Municipal Improvement District (MID), a County Public Works Improvement District (CPWID) or a Residential Improvement District (RID).</p> <p>Several cities have successfully used LID funds to make improvements on residential streets and for large scale arterial projects. LIDs formed to finance commercial street development can be "full cost," in which the property assessments are entirely borne by the property owners.</p>
BUSINESS IMPROVEMENT AREA OR DISTRICT	<p>Trail development and pedestrian and bicycle improvements can often be included as part of larger efforts aimed at business improvement and retail district beautification. Business Improvement Areas collect levies on businesses in order to fund area wide improvements that benefit businesses and improve access for customers. These districts may include provisions for pedestrian and bicycle improvements, including as wider sidewalks, landscaping and ADA compliance.</p>
SALES TAX	<p>Local governments that choose to exercise a local option sales tax can use the tax revenues to provide funding for a wide variety of projects and activities.</p>
EXCISE TAXES	<p>Excise taxes are taxes on specific goods and services. These taxes require special legislation and the use of the funds generated through the tax are limited to specific uses. Examples include lodging, food, and beverage taxes that generate funds for promotion of tourism, and the gas tax that generates revenues for transportation-related activities.</p>



PRIVATE FUNDING SOURCES

SOURCE	SUMMARY	MORE INFORMATION
THE ROBERT WOOD JOHNSON FOUNDATION	<p>The Robert Wood Johnson Foundation was established as a national philanthropy in 1972 and today it is the largest U.S. foundation devoted to improving the health and health care of all Americans. Grant making is concentrated in four areas:</p> <ul style="list-style-type: none"> • To assure that all Americans have access to basic health care at a reasonable cost • To improve care and support for people with chronic health conditions • To promote healthy communities and lifestyles • To reduce the personal, social and economic harm caused by substance abuse: tobacco, alcohol, and illicit drugs 	<p>More information: http://www.rwjf.org/en/how-we-work/grants/funding-opportunities.html</p>
BANK OF AMERICA CHARITABLE FOUNDATION, INC	<p>The Bank of America Charitable Foundation is one of the largest in the nation. The primary grants program is called Neighborhood Excellence, which seeks to identify critical issues in local communities. Another program that applies to greenways is the Community Development Programs, and specifically the Program Related Investments. This program targets low and moderate income communities and serves to encourage entrepreneurial business development.</p>	<p>More information: http://www.bankofamerica.com/foundation</p>
THE WALMART FOUNDATION	<p>The Walmart Foundation offers a Local, State, and National Giving Program. The Local Giving Program awards grants of \$250 to \$5,000 through local Walmart and Sam's Club Stores. Application opportunities are announced annually in February with a final deadline for applications in December. The State Giving Program provides grants of \$25,000 to \$250,000 to 501c3 nonprofits working within one of five focus areas: Hunger Relief & Nutrition, Education, Environmental Sustainability, Women's Economic Empowerment, or Workforce Development. The program has two application cycles per year: January through March and June through August. The Walmart Foundation's National Giving Program awards grants of \$250,000 and more, but does not accept unsolicited applications.</p>	<p>More information: http://foundation.walmart.com/apply-for-grants</p>
DUKE ENERGY FOUNDATION	<p>Funded by Duke Energy shareholders, this non-profit organization makes charitable grants to selected non-profits or governmental subdivisions. Each annual grant must have an internal Duke Energy business "sponsor" and a clear business reason for making the contribution.</p> <p>The grant program has three focus areas: Environment and Energy Efficiency, Economic Development, and Community Vitality. Related to this project, the Foundation would support programs that support conservation, training and research around environmental and energy efficiency initiatives.</p>	<p>More information: http://foundation.walmart.com/apply-for-grants</p>



PRIVATE FUNDING SOURCES

SOURCE	SUMMARY	MORE INFORMATION
THE CONSERVATION FUND'S SUSTAINABLE COMMUNITY PROGRAM	The Conservation Fund's Sustainable Community Development Program awards community grants to provide social, economic, and environmental benefits. These grants can be used for activities such as eco-tourism, asset mapping, youth development, access to healthy food, and rural economic development.	More information: https://www.conservationfund.org/our-work/sustainable-community-development
THE TRUST FOR PUBLIC LAND	<p>Land conservation is central to the mission of the Trust for Public Land (TPL). Founded in 1972, the Trust for Public Land is the only national nonprofit working exclusively to protect land for human enjoyment and wellbeing. TPL helps conserve land for recreation and spiritual nourishment and to improve the health and quality of life of American communities. Also, TPL is the leading organization helping agencies and communities identify and create funds for conservation from federal, state, local, and philanthropic sources.</p> <p>Since 1996, TPL has helped states and communities craft and pass over 382 successful ballot measures, generating \$34 billion in new conservation-related funding.</p>	More information: http://www.tpl.org/services/conservation-finance

OTHER FUNDING SOURCES

SOURCE	SUMMARY
VOLUNTEER WORK AND PUBLIC-PRIVATE PARTNERSHIPS	<p>Individual volunteers from the community can be brought together with groups of volunteers from church groups, civic groups, scout troops and environmental groups to work on greenway development on special community workdays. Volunteers can also be used for fundraising, maintenance, and programming needs. Local schools or community groups may use the bikeway projects as a project for the year, possibly working with a local designer or engineer.</p> <p>Work parties may be formed to help clear the right-of-way where needed. A local construction company may donate or discount services. A challenge grant program with local businesses may be a good source of local funding, where corporations 'adopt' a bikeway and help construct and maintain the facility.</p>
PRIVATE INDIVIDUAL DONATIONS	Private individual donations can come in the form of liquid investments (i.e. cash, stock, bonds) or land. Municipalities typically create funds to facilitate and simplify a transaction from an individual's donation to the given municipality. Donations are mainly received when a widely supported capital improvement program is implemented. Such donations can improve capital budgets and/or projects.



OTHER FUNDING SOURCES

SOURCE	SUMMARY
INNOVATIVE FUNDING SOURCES	Increasingly, non-profits organizations, municipalities, and individual advocates are using crowdsourcing to fund innovative pedestrian and bicycle projects. Crowdsourcing uses a large audience for fundraising, typically with the help of internet donation websites such as lobby.org and kickstarter.com.
DEMONSTRATION PROJECTS	<p>Temporary pop-up or “demonstration projects” can demonstrate the success of walking and biking infrastructure without a long-term commitment and a big budget. Pop-up projects include temporary protected bike lanes, painted sidewalks, parklets, pedestrian plazas in formerly vacant spaces, and traffic calming techniques.</p> <p>A “Space Activation” program can identify the best candidates for pop-up projects in local communities within the river region. Pop-up projects should reflect community needs and should be easy to implement. Ideas for transforming spaces and projects may emerge from community conversations or neighborhood association meetings. Typically, the most effective demonstration projects are grassroots efforts by passionate citizens that know what problems exist but don’t have the resources for permanent solutions. While demonstration projects may be led by citizens, they should be supported by the City and County. This enables increased communication and allows for neighborhoods and the city or county to test the effectiveness of a proposed project. While Demonstration projects rely primarily on volunteer time, for larger efforts innovative funding sources and private donations are often used to purchase materials.</p>
FUNDRAISING	Organizations and individuals can participate in a fundraiser or a campaign drive. It is essential to market the purpose of a fundraiser to rally support and financial backing. Oftentimes fundraising satisfies the need for public awareness, public education, and financial support.

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04

APPENDIX

58 APPLICABLE DESIGN
GUIDELINES

71 REVIEW OF PREVIOUS
PLANS

APPLICABLE DESIGN GUIDELINES

OVERVIEW

At the state and national levels, there are existing guidelines that apply to pedestrian facilities, as well as shared use paths and bicycle facilities. While these documents are not absolute standards, many public agencies require projects to meet the guidelines as a minimum condition for key dimensions including slope, horizontal and vertical clearances, and surface condition, signage, and pavement markings.

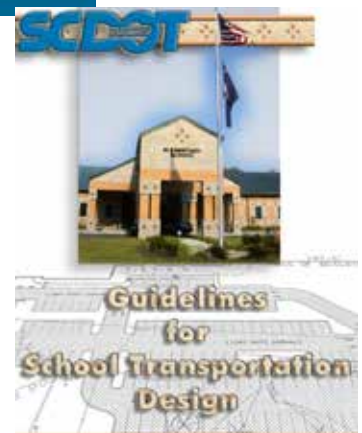
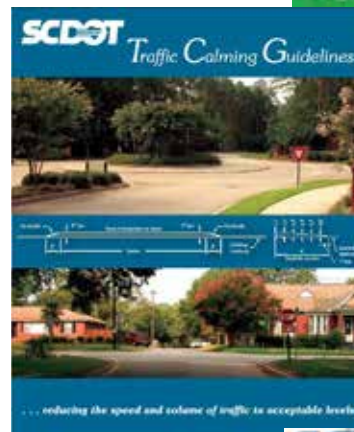
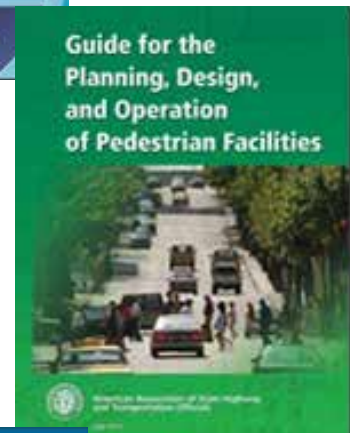
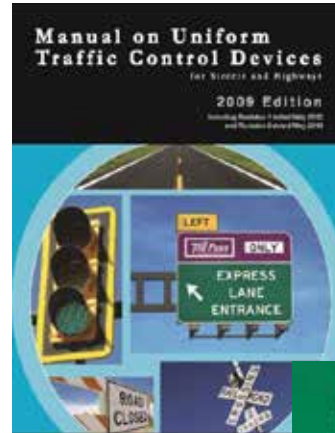
The guidelines recommended in this document are intended to assist Dillon staff and consultants in the selection and design of pedestrian facilities and their ancillary facilities. The standards draw together best practices by facility type from public agencies and municipalities nationwide. In addition, all applicable local design and construction standards will need to be followed.

National Guidelines

- Federal Highway Administration's (FHWA) *Manual on Uniform Traffic Control Devices* (MUTCD) defines the standards used by road engineers nationwide to install and maintain traffic control devices on all public streets, highways, trails, and private roads open to public traffic. The MUTCD is the primary source for guidance on lane striping requirements, signal warrants, and recommended signage and pavement markings.
- American Association of State Highway and Transportation Officials (AASHTO) Guide for the Planning, Design, and Operation of Pedestrian Facilities provides guidance on dimensions, use, and layout of specific pedestrian facilities. The standards and guidelines presented by AASHTO provide basic information, such as minimum sidewalk widths, and recommended signage and pavement markings.
- The United States Access Board's proposed Public Rights-of-Way Accessibility Guidelines (PROWAG), the ICC/ANSI A117.1 Accessible and Usable Buildings and Facilities, the 2010 ADA Standards for Accessible Design (2010 Standards) which contains standards and guidance for the construction of accessible facilities. This includes requirements for sidewalk curb ramps, slope requirements, and pedestrian railings along stairs. Some of these treatments are not directly referenced in the current versions of the AASHTO Guide or the MUTCD, although many of the elements of these treatments are found within these documents. In all cases, engineering judgment is recommended to ensure that the application makes sense for the context of each treatment, given the many complexities of urban streets.

State Guidelines

- SCDOT has published a number of technical documents for traffic engineering which are available online. Specific publications and manuals include:
- SCDOT Supplement to the MUTCD
- South Carolina Department of Transportation Highway Design Manual and Engineering Directive Memoranda
- 2009 Edition of Signal Design Guidelines which details standard methodology of handling signal requests, as well as the review, design, installation, operation, and maintenance of traffic signals.
- Guidelines for School Transportation Design is a supplement to SCDOT's Access and Roadside Management Standards (ARMS) and offers design assistance to maintain safe and efficient traffic operations in and around school premises.
- Railroad Inspection Procedure Manual provides guidance for grade crossing inspectors, ensuring compliance and uniformity.
- Traffic Calming Guidelines provides guidance concerning traffic calming by describing eligibility requirements, application forms, various traffic calming measures, and construction specifications.



DESIGN NEEDS OF PEDESTRIANS

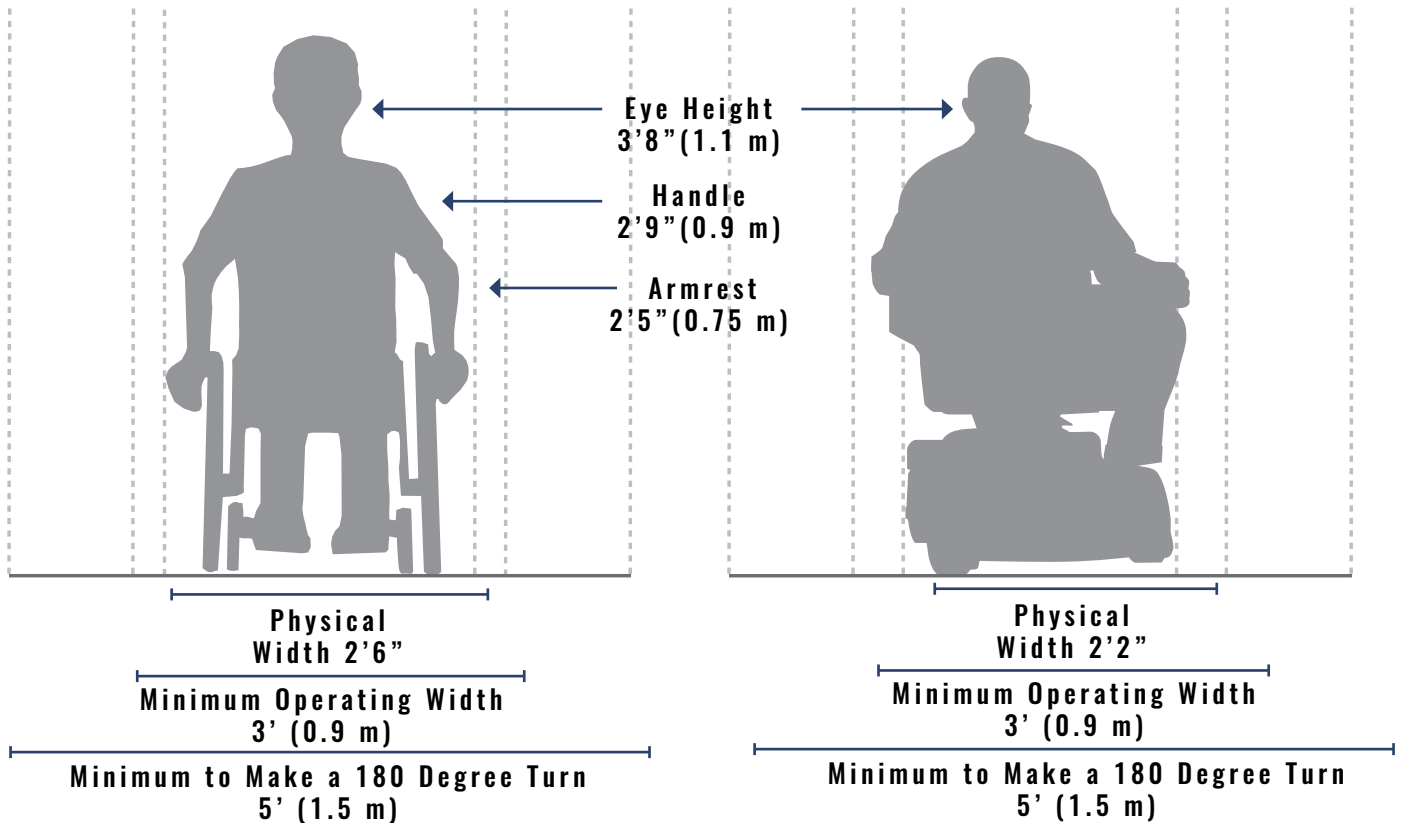
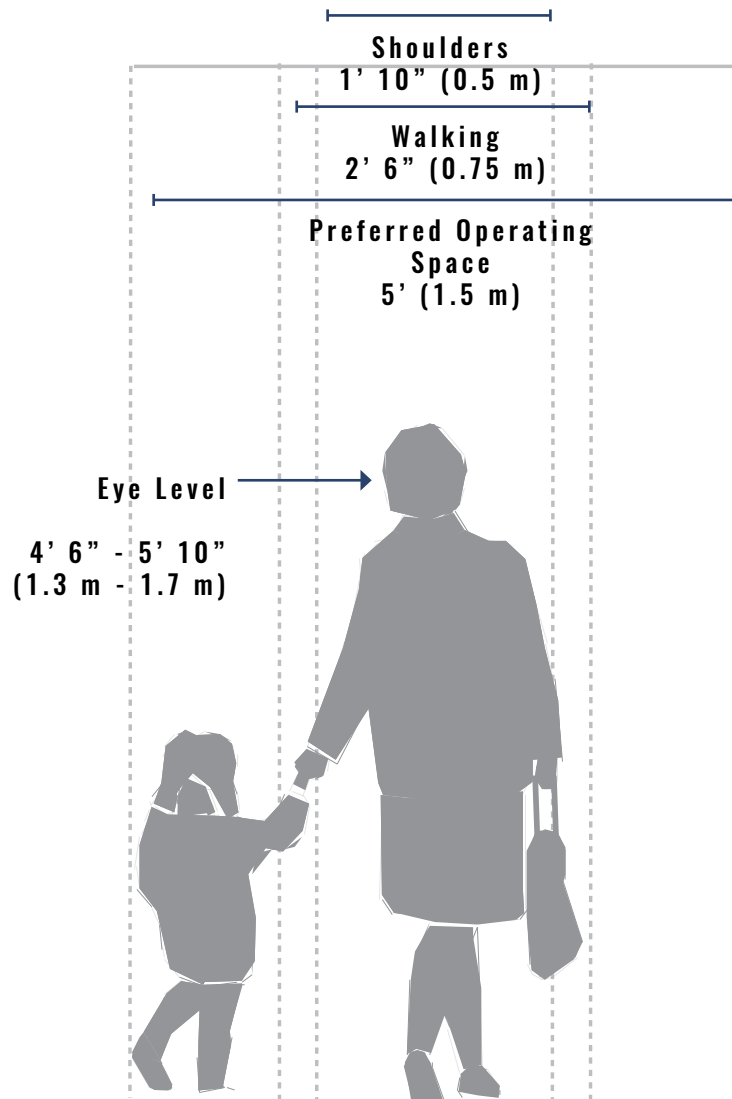
No one pedestrian is the same. Each pedestrian has a variety of characteristics and the network of pedestrian facilities in Dillon should accommodate a variety of needs, abilities, and possible impairments. Age is one major factor that affects pedestrians’ physical characteristics, walking speed, and environmental perception. Children have low eye height and walk at slower speeds than adults. They also perceive the environment differently at various stages of their cognitive development. Older adults walk more slowly and may require assisted devices for walking stability, sight, and hearing. The adjacent table summarizes common pedestrian characteristics for various age groups.

As a rule of thumb, the MUTCD recommends a normal walking speed of three and one half feet per second when calculating the pedestrian clearance interval at traffic signals. The walking speed can drop to three feet per second for areas with older populations and persons with mobility impairments. While the type and degree of mobility impairment varies greatly across the population, the pedestrian network should accommodate these users to the greatest reasonable extent.

Pedestrian Characteristics by Age

AGE	CHARACTERISTICS
0-4	Learning to walk Requires constant adult supervision Developing peripheral vision and depth perception
5-8	Increasing independence, but still requires supervision Poor depth perception
9-13	Susceptible to “dart out” intersection dash Poor judgment Sense of invulnerability
14-18	Improved awareness of traffic environment Poor judgment
19-40	Active, fully aware of traffic environment
41-65	Slowing of reflexes
65+	Difficulty crossing street Vision loss Difficulty hearing vehicles approaching from behind

Source: AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities. 2004. Exhibit 2-1.



DESIGN NEEDS OF MOBILITY ASSISTED DEVICE USERS

As the American population ages, the number of people using mobility assistive devices (such as manual wheelchairs or powered wheelchairs) increases.

Manual wheelchairs are self-propelled devices. Users propel themselves using push rims attached to the rear wheels. Braking is done through resisting wheel movement with the hands or arm. Alternatively, a second individual can control the wheelchair using handles attached to the back of the chair.

Power wheelchairs use battery power to move the wheelchair. The size and weight of power wheelchairs limit their ability to negotiate obstacles without a ramp. Various control units are available that enable users to control the wheelchair movement, based on user ability (e.g., joystick control, breath controlled, etc).

Maneuvering around a turn requires additional space for wheelchair devices. Providing adequate space for 180 degree turns at appropriate locations is an important element for accessible design.

Wheelchair User Typical Speed

USER	TYPICAL SPEED
Manual Wheelchair	3.6 mph
Power Wheelchair	6.8 mph

Wheelchair User Design Considerations

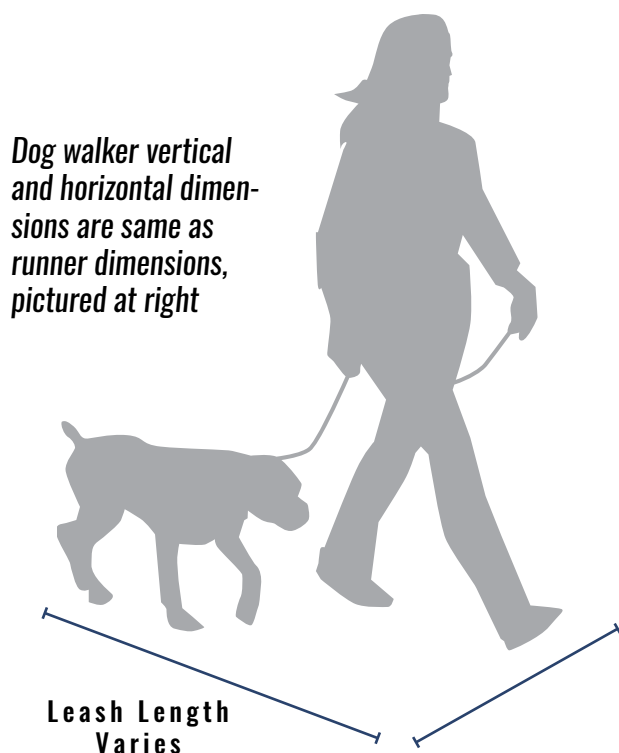
EFFECT ON MOBILITY	DESIGN SOLUTION
Difficulty propelling over uneven or soft surfaces.	Firm, stable surfaces and structures, including ramps or beveled edges.
Cross-slopes cause wheelchairs to veer downhill.	Cross-slopes of less than two percent.
Require wider path of travel.	Sufficient width and maneuvering space.

Source: FHWA. Characteristics of Emerging Road and Trail Users and Their Safety. (2004).

Design Needs of Dog Walkers

Dog walking is a common and anticipated use on sidewalks. Dog sizes vary largely, as does leash length and walking style, leading to wide variation in possible design dimensions.

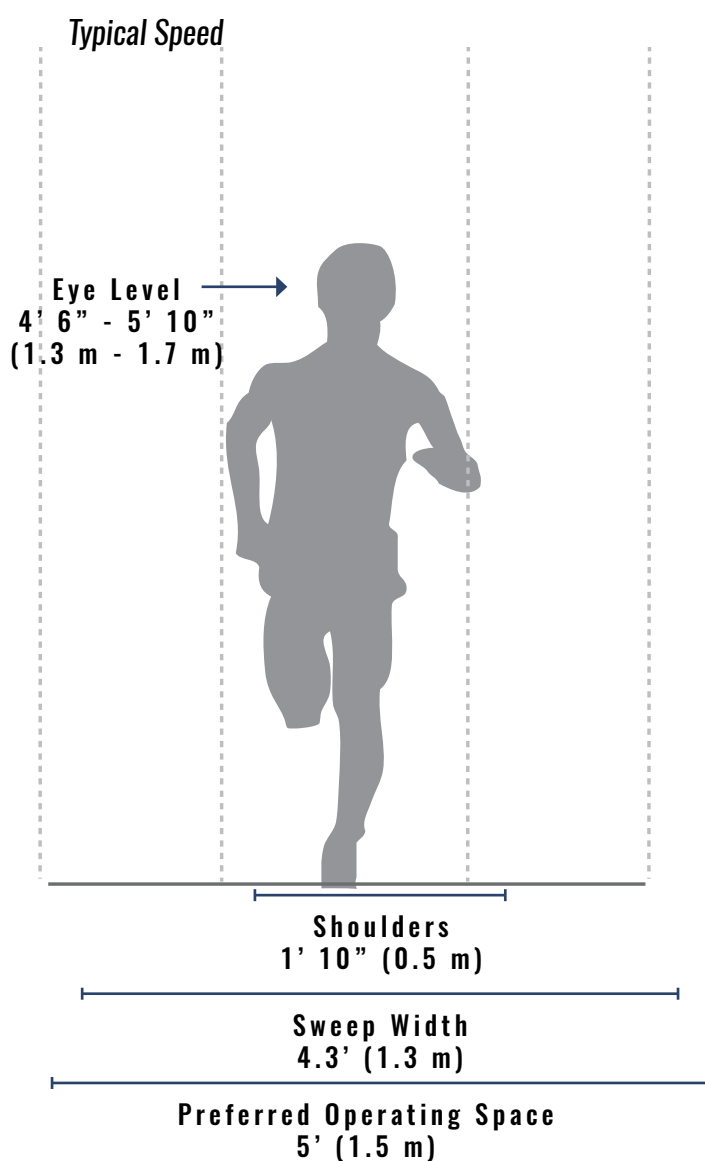
Sidewalks designed to accommodate wheelchair users are likely to provide the necessary dimensions for the average dog walker. Amenities such as dog waste stations, particularly in downtown and residential settings, enhance conditions for dog walkers.



Source: FHWA. Characteristics of Emerging Road and Trail Users and Their Safety. (2004).
USDOJ. 2010 ADA Standards for Accessible Design. (2010).

Design Needs of Runners

Running is an important fitness and recreation activity commonly performed in neighborhoods, in and around parks, across college campuses, and through downtown.



Sidewalks

Sidewalks are the most fundamental element of the walking network, as they provide an area for pedestrian travel that is separated from vehicle traffic. Sidewalks should be provided on both sides of major roadways and on at least one side of collectors and minor arterials or residential streets with at least 3 dwelling units per acre. Sidewalks are typically constructed of concrete and are separated from the roadway by a curb and gutter and preferably a landscaped planting strip area. Sidewalks are a common application in both urban and suburban environments. Attributes of well-designed sidewalks include the following:

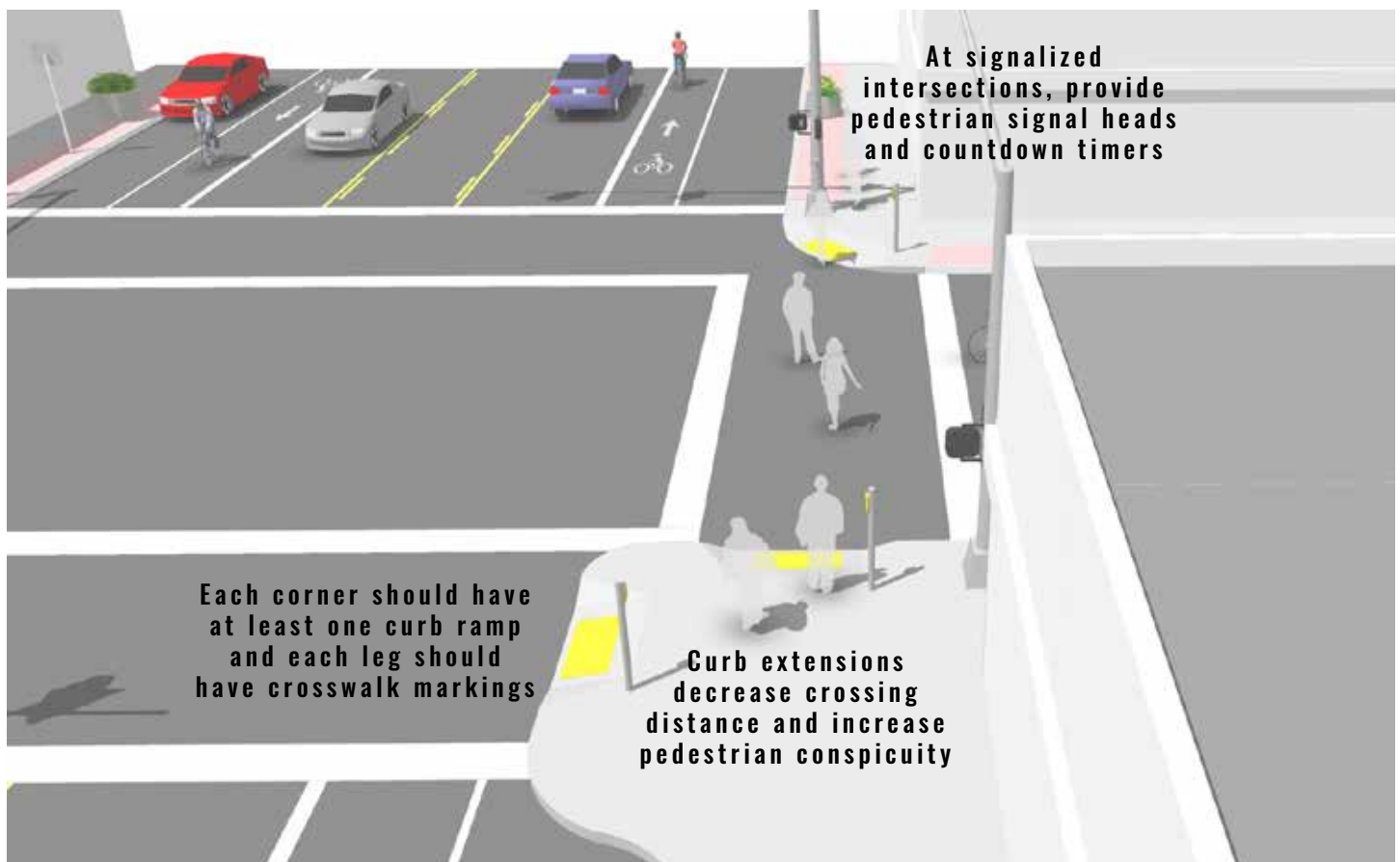
- **Accessibility:** A network of sidewalks should be accessible to all users. Roadway crossing distances and distances between crossings should be minimized to accommodate and encourage pedestrian travel.
- **Adequate width:** Two people should be able to walk side-by-side. Different walking speeds should be possible. In areas of intense pedestrian use, sidewalks should accommodate the high volume of walkers.
- **Safety:** Design features of the sidewalk should allow pedestrians to have a sense of security and predictability. Sidewalk users should not feel they are at risk due to the presence of adjacent traffic.
- **Continuity:** Walking routes should be obvious and should not require pedestrians to travel out of their way unnecessarily.
- **Lighting:** Good lighting is an important aspect of visibility, safety, and accessibility.
- **Landscaping:** Plantings and street trees contribute to the overall psychological and comfort of sidewalk users, and should be designed in a manner that contribute to the safety of people and provide shade.
- **Drainage:** Sidewalks and curb ramps should be designed so that standing water is minimized.
- **Social space:** There should be places for standing, visiting, and sitting. The sidewalk area should be a place where adults and children can safely participate in public life.
- **Quality of place:** Sidewalks should contribute to the character of neighborhoods and business districts.

Intersections

Intersections are also an important piece of the pedestrian realm. Attributes of pedestrian-friendly intersection design include:

- **Clear Space:** Corners should be clear of obstructions. They should also have enough room for curb ramps, for transit stops where appropriate, and for street conversations where pedestrians might congregate.
- **Visibility:** It is critical that pedestrians on the corner have a good view of vehicle travel lanes and that motorists in the travel lanes can easily see waiting pedestrians.
- **Legibility:** Symbols, markings, and signs used at corners should clearly indicate what actions the pedestrian should take.
- **Accessibility:** All corner features, such as curb ramps, landings, call buttons, signs, symbols, markings, and textures, should meet accessibility standards and follow universal design principles.
- **Separation from Traffic:** Corner design and construction should be effective in discouraging turning vehicles from driving over the pedestrian area. Crossing distances should be minimized.
- **Lighting:** Good lighting is an important aspect of visibility, legibility, and accessibility.

These attributes will vary with context but should be considered in all design processes. For example, more remote intersections may have limited or no signing. However, legibility regarding appropriate pedestrian movements should still be taken into account during design.



Pedestrian at-grade railroad crossings

Locations where sidewalks must cross railroad tracks are problematic for pedestrians, particularly for those with mobility or vision impairments. Wheelchair and scooter casters can easily get caught in the flangeway gap, and slippery surfaces, degraded rough materials, or elevated track height can cause tripping hazards for all pedestrians. Angled track crossings also limit sight triangles, impacting the ability to see oncoming trains.

Guidance

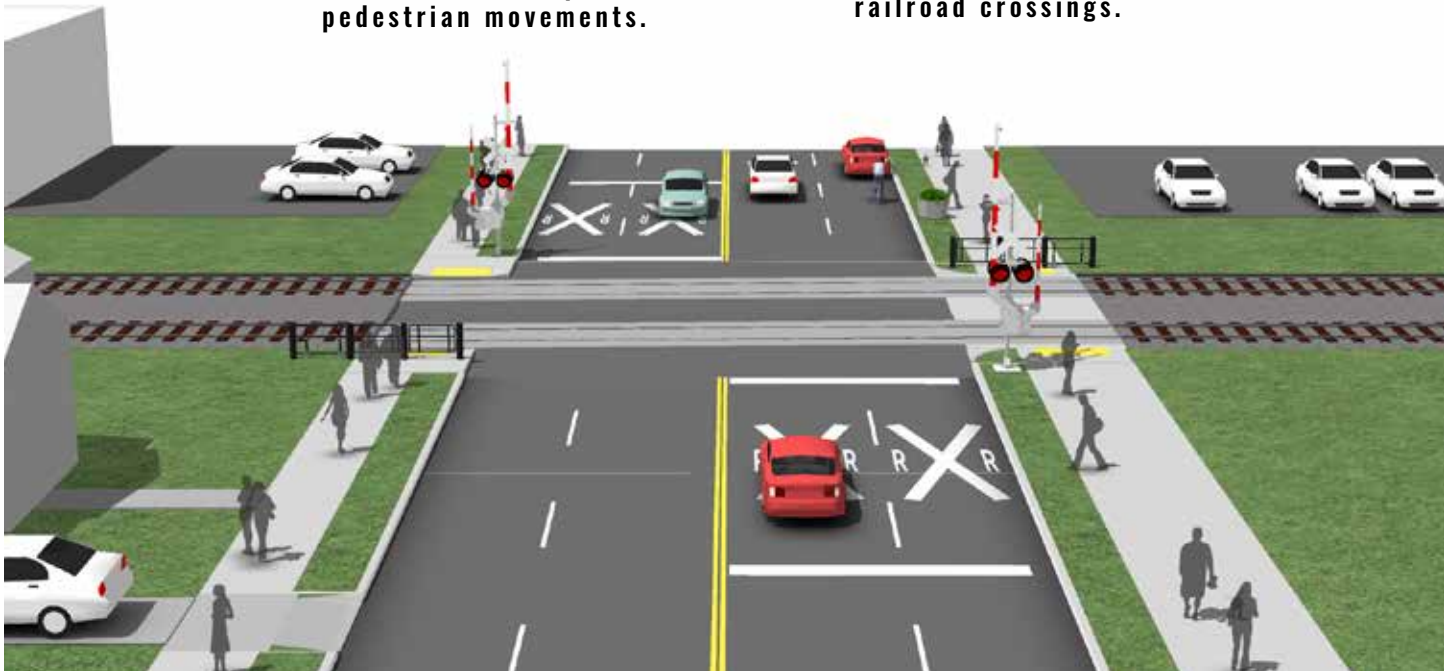
- Bells or other audible warning devices may be included in the flashing-light signal assembly to provide additional warning for pedestrians and bicyclists.
- Pedestrians need clear communication and warning to know that they may encounter a train and when a train is coming. Provide clear definition of where the safest place to cross is.

- The crossing should be as close as practical to perpendicular with tracks. Ensure clear lines of sign and good visibility so that pedestrians can see approaching trains
- The crossing must be level and flush with the top of the rail at the outer edge and between the rails.
- Flangeway gaps should not exceed 2.5 in (3.0 in for tracks that carry freight.)

Crossing design and implementation is a collaboration between the railroad company and highway agency. The railroad company is responsible for the crossbucks, flashing lights and gate mechanisms, and the highway agency is responsible for advance warning markings and signs. Warning devices should be recommended for each specific situation by a qualified engineer based on various factors including train frequency and speed, path and trail usage and sight distances.

Pedestrian automatic gate arms or manually operated swing gates may help control pedestrian movements.

Concrete or rubber is the best material for pedestrian railroad crossings.



Shared Use Trails

Shared use trails are bi-directional paths for all non-motorized user types. Trails may lie in an independent right-of-way, or run along features such as rivers or roads (see following section on sidepaths for guidance on trails along roads). Shared use trails are paved, between ten and 14 feet wide. They are accessible paths for a variety of active transportation and recreational activities.

Trails can sometimes provide easier and faster access for pedestrians and bicyclists compared to the on-road network because they can take more direct routes through certain types of lands, but are primarily beneficial for comfort and safety reasons. Because trail users are away from traffic lanes, there are generally fewer potential conflicts between vehicles and trail users, creating a safer environment. Where roadway crossings do occur, they should focus on trail user visibility, minimizing the length of crossing distance, and increasing motorists' awareness of Greenway Trail users.

Guidance

- Standard width: 12 feet minimum (up to 16 feet in areas with projected high use volumes to minimize user conflict)
- Lighting may be installed as necessitated by use and location
- Wayfinding, regulatory, and etiquette signage is critical to minimize the impacts of high user volumes, bicycle speeds, inappropriate uses, and multiple uses and activities
- Prioritized amenities include restrooms, water fountains, waste receptacles, seating, art, and lighting
- Surface tread material: concrete or asphalt
- Yellow dashed centerlines can indicate

direction of travel and remind users that the path is intended for multiple modes

- Maintain vegetation and landscaping to provide a buffer on both sides of the trail to enhance safety, visibility and comfort for the user

Sidepaths

Sidepaths are shared use trails located within the roadway right-of-way (ROW). They are wider than standard sidewalks to allow larger volumes and other users, such as bicyclists and skateboarders. .

This configuration works best along roadways with limited driveway crossings and with destinations primarily located on one side of the roadway, or along a riverfront or other natural feature. It is not recommended in areas with frequent driveways or cross streets.

Guidance

- A minimum of 10 feet wide is necessary for bicyclists to pass other users safely on sidepaths.
- A 5 foot or greater vegetated buffer between the sidepath and the roadway should be provided. An 8' buffer is preferred to accommodate substantial shade trees.
- At driveway entrances and other roadway crossings, appropriate regulatory and way-finding signage and crossing treatments should be provided.

Wayfinding

The ability to navigate through a community is informed by landmarks, natural features, and other visual cues. Wayfinding signs should indicate:

- Direction of travel
- Location of destinations
- Location of access points

Wayfinding signage can also include minutes to reach destinations, and calories burned by walking there. These signs increase a pedestrian's comfort and accessibility to key destinations across the community. Wayfinding signage can serve many purposes including:

- Helping to familiarize users with the community's sidewalk network and the areas it reaches
- Helping users identify the best routes to destinations
- Helping overcome a "barrier to entry" for people who do not currently walk
- Wayfinding signs also visually cue motorists that they are driving near a pedestrian-oriented corridor and should use caution. Signs are typically placed at key locations leading to and along routes, including the intersection of multiple routes.



Gateway Monuments

Municipalities often desire identification and a favorable image of their community. A Gateway Monument is typically any freestanding structure or sign that will communicate the name of a local entity. Gateway signs provide the first welcome to visitors while reinforcing community identity, pride, and sense of place. They should be integrated into the greater wayfinding plan in order to create a unified, welcoming, and legible system.

Gateway monuments should:

- Be a maximum of one Gateway Monument, visible from the travel way, should be placed at the appropriate approach, to avoid distraction and visual clutter.
- Include the officially adopted City of Dillon logo/seal, however this is not required.
- Be located well beyond the clear recovery zone or otherwise placed to minimize the likelihood of being struck by an errant vehicle (if along a roadway).
- Be kept clean, free of graffiti, and in good repair. Their care should be incorporated into City maintenance schedules prior to installation.
- Be developed and placed to require low or no maintenance to minimize exposure of workers and others to potential risks. Protective graffiti resistant coatings should be applied.
- Be composed of materials that are durable for the projected life span of the project.
- Be appropriate to the proposed setting and community context.
- Be in proper size and scale with its surroundings.

Amenities

When designing functional, attractive, and inviting streetscapes, the small details matter. Elements such as lighting fixtures, public art, benches, and other amenities help create a unique identity for each community. It is important that these details work together to create a complete experience for all users.

Trash & Recycle Receptacles

Trash and recycle receptacles provide for proper maintenance and appearance of the pedestrian facilities system. For recycling receptacles, signage should be provided indicating what recyclables are accepted. Consider including educational signage about the importance of recycling and the environmental benefits.

Guidance

- Locate receptacles at each intersection and each seating area (one per every two benches).
- Placement of other receptacles will depend upon the location of concessions, facilities and areas of group activities.
- Receptacles need to be accessible to maintenance personnel.
- Receptacles should be selected using the following criteria:
 - Expected trash/recycling amount
 - Maintenance and collection program requirements
 - Durability
- Receptacles should be appropriately situated on the sidewalk so as not to interfere with pedestrian movement.

Seating

Seating along sidewalks and paths provides a place for users to rest, congregate, contemplate, or enjoy art, nature, and interpretive elements. Benches can be designed to support the community's identity or be strictly utilitarian.

Guidance

- Locate benches along streetscapes where appropriate, or where there is a demand by users. Providing seating at every block is the goal.
- Provide benches in areas that provide interesting views, are close to other amenities like trash receptacles and lighting, and offer shade.
- Drainage should slope away from the bench.
- Wheelchair access should be possible alongside benches. Provide access with a hardened surface such as concrete or asphalt.
- Seating should be securely anchored to the ground.



Public Art & Sculpture

Public art engages the community through artists' work and creates a memorable experience for pedestrians. Art and sculpture can create an identity for the community and strengthen the emotional connection between Dillon and its residents and visitors. Depending on the scale and form, it can become an "event" in itself and serve as a public attraction.

Public art can be aesthetic and/or functional, and double as sitting or congregational areas. Memorable installations can act as landmarks and serve as valuable wayfinding tools. Public art can be a device for telling a compelling and memorable story about the area's history.

Guidance

- Artists can be commissioned to provide art at one or multiple locations throughout Dillon. When appropriate, artists could be engaged as part of the corridor planning and development process.
- Artists should be encouraged to produce artwork in a variety of materials for sites along the corridor.
- When appropriate, consider developing furnishings and amenities with artistic intent. Key locations could be areas to highlight through the inclusion of public art. Consider how to provide continuity between elements while maintaining the unique styles of multiple artists.
- Provide art displays on streetscapes with anticipated high use and user exposure.
- Consider community based art and temporary installations.

Lighting

Lighting along sidewalks and paths should be analyzed on a case-by-case basis with full consideration of the maintenance commitment lighting requires. In general, lighting is not appropriate for sidewalks where there is little to no development. Lighting can improve visibility along corridors and intersection crossings at night for all pedestrians. Lighting may also be necessary for day-time use in tunnels and underpasses.

Guidance

- Recommended locations for lighting include the following:
 - Entrances and exits of bridges and underpasses and in tunnels;
 - Street crossings;
 - Central business districts;
 - Historic walking routes.
- Low-cost light emitting diodes (LED) offer a wide range of light levels and can reduce long term utility costs.
- Design lighting levels appropriate to each situation.
- Lighting should be at pedestrian scale.
- Solar powered lighting is available where utility collection is difficult or when alternative energy sources are desired.
- Avoid light fixtures at eye level that could impair visibility.
- Direct glare or excessive illumination on to adjacent properties, streets, or sidewalks should be avoided.

