DILLSBORO BICYCLE + PEDESTRIAN MASTER PLAN

ADOPTED: March 27, 2023



ADOPTION RESOLUTION



RESOLUTION 2023-3-

A RESOLUTION APPROVING THE ADOPTION OF THE BICYCLE + PEDESTRIAN MASTER PLAN

WHEREAS, the Town Council of Dillsboro, Indiana is aware that the Comprehensive Plan for the Town does not contain a Bicycle + Pedestrian Planning Element, and

WHEREAS, the Town Council of Dillsboro, Indiana has employed a consultant, made use of a steering committee and has offered several opportunities for input and has considered that input in developing the new Bicycle + Pedestrian Master Plan for Dillsboro, Indiana, and

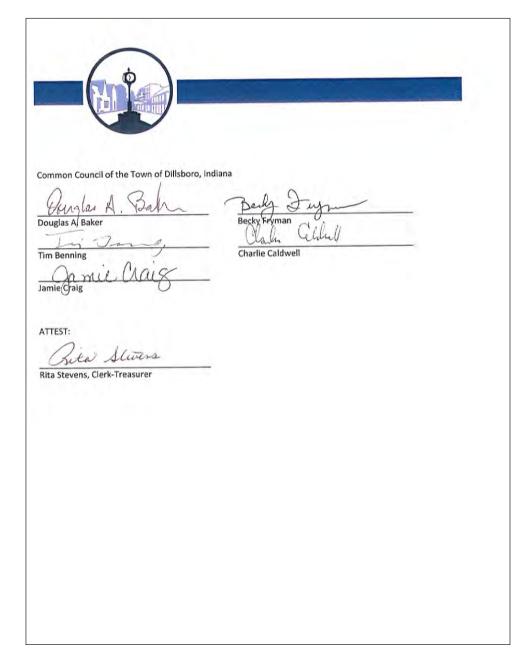
WHEREAS, the Town Council of Dillsboro, Indiana is hopeful that this new plan will supplement The Comprehensive Plan in assisting public and private entities in planning for future development and redevelopment of the incorporated Townof Dillsboro, and

WHEREAS, the Plan Commission of Dillsboro, Indiana, after notice to the public, held a public hearing on the draft Bicycle + Pedestrian Master Plan for the Town of Dillsboro, Indiana, which had previously been made available for public review at the Town Hall in Dillsboro. After hearing public input, the Plan Commission voted 5-0 (with 0 absent) to recommend that the Town Council of Dillsboro, Indiana adopt this Bicycle and Pedestrian Master Plan as an element of the Town's Comprehensive Plan.

WHEREAS, this finished project of the Plan Commission of Dillsboro, Indiana has be presented to the Town Council of Dillsboro, Indiana, in a document entitled "Dillsboro Bicycle + Pedestrian Master Plan, December 2022."

BE IT THEREFORE RESOLVED, by the Town Council of Dillsboro, Indiana, that the Council accepts and approves the "Dillsboro Bicycle + Pedestrian Master Plan", as a new element of the Town's Comprehensive Plan, and said plan element is now in full force and effect,

ADOPTED THIS 27TH DAY OF MARCH 2023,



ACKNOWLEDGMENTS

PREPARED FOR:

Town of Dillsboro, Indiana

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SPECIAL NOTE:

This plan was supported by funds made available from the Centers for Disease Control and Prevention (CDC), Center for State, Tribal, Local and Territorial Support, under NH75OT000073-01-00, administered by the Indiana Department of Health, Division of Nutrition and Physical Activity. The contents of this plan are those of the authors and do not necessarily represent the official position of or endorsement by the CDC.

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EXECUTIVE SUMMARY



WHY DOES DILLSBORO NEED A BICYCLE + PEDESTRIAN MASTER PLAN?

Dillsboro leaders have long had a vision to connect the many great institutions and destinations in our town. The Bicycle + Pedestrian Master Plan is the next step in translating this vision for a complete system of bicycle and pedestrian paths into reality. A well-connected bicycle and pedestrian network serves as a critical link in the overall transportation network providing access to neighborhoods, employment centers, schools, retail destinations, and recreation opportunities. The bicycle and pedestrian system will enhance community livability by providing transportation choices and recreation options for all residents and visitors regardless of age, ability, or economic status.

VISION

It is safe and easy to walk and bike in Dillsboro. Key destinations, neighborhoods, and businesses are connected through a network of dedicated, off-street pedestrian and bicycle paths and well-marked crossings. Bicycle and pedestrian travel are important for both transportation and recreation purposes and the mobility needs of users of all ages and abilities are balanced with the needs of motorists. Walking and biking facilities in Dillsboro are highly visible assets that contribute to community health, the ability to attract and retain families, and individual well-being.

GOALS

CONNECTIVITY: Develop a complete network of pedestrian and bicycle facilities that connects all areas of Dillsboro.

SAFETY: Ensure existing and future facilities are designed to prioritize user safety when traveling both along and across streets.

EQUITY: Recognize bicycle and pedestrian travel as important transportation modes for users of all ages, abilities, and incomes.

PUBLIC HEALTH: Promote a safe and connected bicycle and pedestrian system as a means to improve public health and encourage active lifestyles.

ECONOMIC DEVELOPMENT: Use pedestrian and bicycle infrastructure to leverage private investment and attract and retain residents and businesses.

SUPPORTING AMENITIES: Develop amenities to support and encourage walking and biking, including lighting, landscaping, benches, bike racks, trash receptacles, and signage.

EDUCATION + **PROGRAMMING:** Enhance education, enforcement, and advocacy efforts to better develop a culture of walking and biking in Dillsboro.

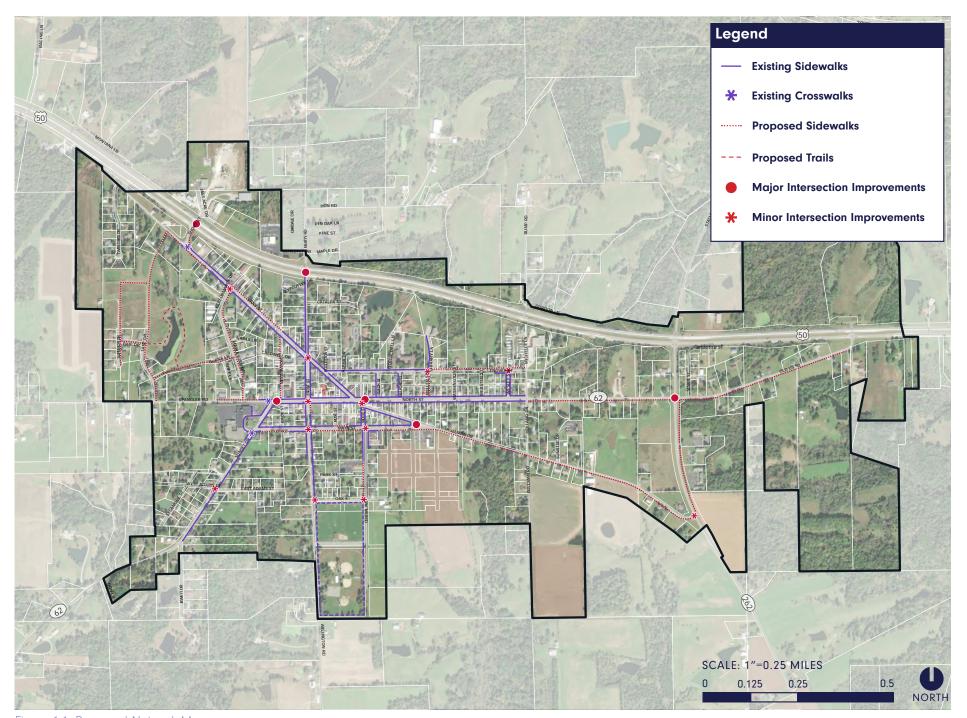


Figure 1.1: Proposed Network Map

PROJECT PRIORITIES

The following implementation priorities were developed by the Advisory Committee based on community input, perceived project need, and the potential for safety enhancement. They are not listed in a particular order. Implementation will be based on available resources, funding opportunities, and inclusion with other roadway and infrastructure projects.

- 1 Lenover Street sidewalk extension east of Dillsboro Public Library.
- 2 Sidewalk gaps along Main Street.
- 3 Rullman Drive and Main Street intersection in front of Dillsboro Family Market.
- 4 Rullman/Bank/North/Wood intersection crosswalk markings.
- Sidewalks along Western Row.
- Sidewalk gaps along Central Avenue.
- 7 Spangler Road sidewalk extension west to SIEOC Head Start.
- 3 SR 62 / Old US 50 sidewalk extension east.
- Protected north/south crossing of North Street near the intersection with Rullman Drive.



Lenover Street looking east.

INTRODUCTION



PURPOSE

Well before the bicycle and pedestrian master planning process began, Dillsboro leaders had a vision to connect the numerous destinations across the community that in many instances had been created on the Town periphery because that is where land was available. This includes new housing development and Dillsboro Elementary to the west, Dillsboro Community Park to the south, grocery and apartments to the east, and a collection of properties that originally made up the Dillsboro Sanitarium to the north. Today, what had been the sanitarium area includes long-term senior care facilities, low-income housing, a service center for the intellectually disabled, and the Dillsboro Public Library. The Bicycle + Pedestrian Master Plan is needed to synthesize and convey this vision for a complete system of bicycle and pedestrian paths that connects community destinations, thereby creating alternate transportation options and promoting fitness and recreation.

North Street serves as the main eastwest thoroughfare through Town, and Front Street is the primary north-south route. Despite recent improvements, Front Street still contains critical sidewalk gaps, and sidewalks along North Street don't extend west to where new homes are being constructed or east to the Dillsboro Townhouses apartments and other development along SR 262. The purpose of this study is to examine how to plan for and construct bicycle and pedestrian facilities safely and efficiently along these key thoroughfares as well as other Town streets and open spaces. It seeks to recognize bicycle and pedestrian travel as an essential means of transportation, not just for recreation or exercise. By realizing this vision, the community will be providing much desired quality of life amenities for existing families while also supporting efforts to attract new residents and businesses.



North Street looking west.



Crosswalk across SR 62 in front of the elementary school.

WHAT IS A BICYCLE + PEDESTRIAN MASTER PLAN



Dillsboro Townhouses apartments on the far east side of Town.



Maple Glen Drive serves a number of apartments.

A bicycle and pedestrian master plan is an important tool in advancing the transportation network of a community with a specific focus on enhancing nonmotorized travel through the creation of dedicated facilities and supportive policies and programs. A bicycle and pedestrian master plan includes an examination of existing sidewalks, trails, shared-use paths, and other supporting amenities that together make up the bicycle and pedestrian network. The plan establishes an overarching vision for bicycle and pedestrian travel in the community, which is further defined by a series of goals and objectives. In addition to recommending new and upgraded bicycle and pedestrian facilities for both transportation and recreation purposes, the plan includes programming and policy recommendations to further develop biking and walking culture, activity, and safety. Finally, a bicycle and pedestrian master plan begins to prioritize individual projects to assist in implementing plan recommendations.

Ultimately, a well-connected bicycle and pedestrian network serves as a critical link in the overall transportation network providing access to neighborhoods, employment centers, schools, retail destinations, and recreation opportunities.

These facilities, and the entire bicycle and pedestrian system, can help to enhance community livability when they provide transportation choices and recreation options that are available to all residents and visitors regardless of age, ability, or economic status.

How the Plan Will be Used

The master plan will be used to advertise the Town's interest in safe bicycle and pedestrian travel. It should be used to inform capital projects planning and funding by the Town, as well as expectations for private property owners as new development or investment occurs. The plan should also be used to communicate desired facilities and intersection improvements along state roads so that when the Indiana Department of Transportation (INDOT) is making repairs or improvements in Dillsboro, a record of past discussions and future vision is already in place. Finally, this plan should be used to establish a planning foundation by which to pursue future grants and leverage limited local funds to more quickly realize bicycle and pedestrian system enhancements.

BACKGROUND

Process

The Town of Dillsboro received a grant from the Indiana Department of Health Division of Nutrition and Physical Activity (DNPA) to fund this planning process. The grant was awarded in early 2022. After selecting HWC Engineering to help facilitate and create the plan, the planning process began in August 2022 and concluded in December 2022.

The process was guided by an Advisory Committee comprised of Town officials, residents, business owners, and other community leaders. This group met four times throughout the process to provide direction on the plan vision, goals, and objectives, provide feedback on draft materials, and spread the word about broader engagement opportunities.

Planning Area

The Town of Dillsboro is located in southwest Dearborn County at the intersection of US Highway 50, State Road 62, and State Road 262. The Town covers 1.33 square miles of land area. According to the 2020 US Decennial Census, the Town's population is 1,360. The planning area coincides with the municipal limits of the Town of Dillsboro, as shown in Figure 2.1.



Spangler Road looking east.

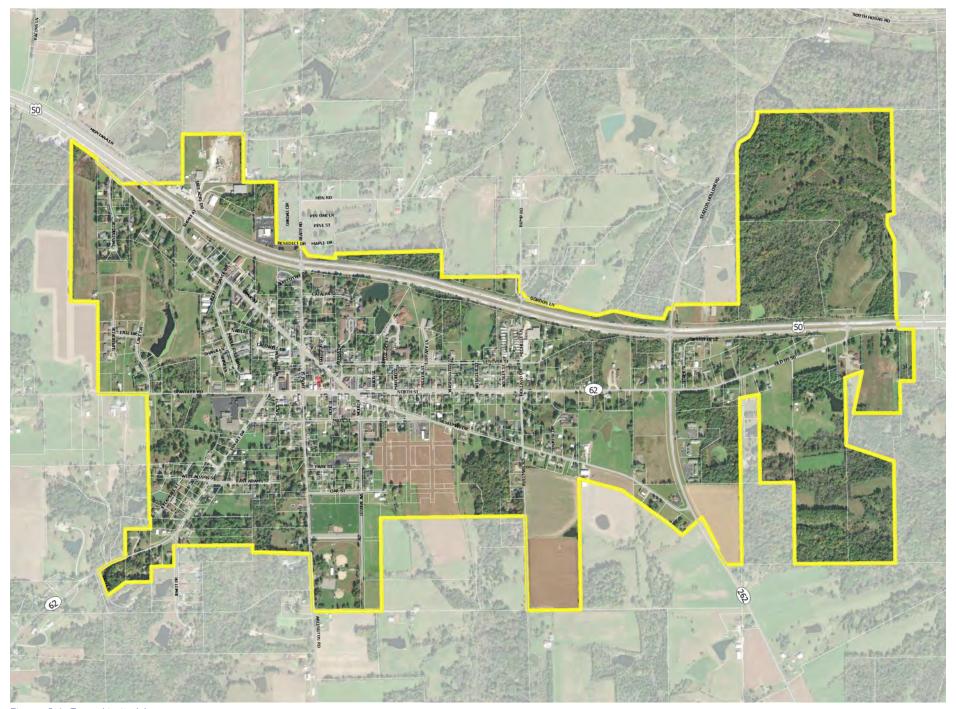


Figure 2.1: Town Limits Map

BENEFITS OF A WALK AND BIKE-FRIENDLY COMMUNITY

A complete bicycle and pedestrian network creates more than just transportation and recreation options in town. A walk and bike friendly community creates significant overflow benefits in the form of improved community health, higher property values, more business retention and attraction successes, lower healthcare costs, and enhanced safety for facility users.

- Transportation is the second highest household expense, behind only rent/ mortgage, for American households.
 Walking and biking make transportation more affordable.
- People who cannot or choose not to drive are reliant on others for transportation if safe and convenient pedestrian and bicycle facilities aren't present in the community.
- People who live in walkable communities are two times more likely to get adequate amounts of physical activity as compared to those who don't.

- Studies in several states have shown that walking and biking to school can increase up to 37% when sidewalks and crosswalks were improved.
- Walkable commercial areas frequently command higher rents and generate more tax revenue on a square foot bases when compared to auto-oriented commercial corridors and districts.
- The Center for Disease Control and Prevention (CDC) reports that regular, moderate intensity exercise combined with a healthy diet may reduce the risk of developing Type 2 diabetes by 40-60%.
- Just three hours of cycling per week may reduce the risk of heart disease and stroke by 50%.
- According to the Environmental Protection Agency (EPA), transportation is responsible for nearly 80% of carbon monoxide and 55% of nitrogen dioxide emissions in the U.S.

 60% of pollution created by vehicle emissions happens in the first few minutes of operation, before pollution control devices can work effectively.
 Since "cold starts" create high levels of emissions, shorter car trips create more pollution on a per mile basis when compared to longer trips.

Sources:

- Smartgrowthamerica.org
- Strongtowns.org
- The National Complete Streets Coalition
- National Recreation and Parks Association
- Activelivingresearch.org
- Pedbikeinfo.org

EXISTING CONDITIONS



EXISTING FACILITIES + PROGRAMS

Facilities

While Dillsboro has numerous sidewalks throughout Town, there are several areas where key connections are missing.

Additionally, certain sections of sidewalk become very narrow, or are in poor condition with cracking and overgrown weeds. In addition to its sidewalks, Dillsboro does have an asphalt trail that loops around the park located on the south side of Town.

Within the central part of Town, there are existing sidewalks extending along North Street. However, moving north or south of North Street sidewalk connections are broken or missing all together. Additionally, there are no sidewalks east of Holland Drive or west of Sunset Drive, resulting in poor pedestrian connections to the outer edges of the Town.

Programs

Currently, bicycle and pedestrian programs are limited in Dillsboro although the Dillsboro Public Library does have a walking group that meets on Wednesdays, walking from the library to the park.

With improved sidewalk connections in key areas throughout the town, more opportunities for programming could be made available to the public.



Park Trail



Main Street

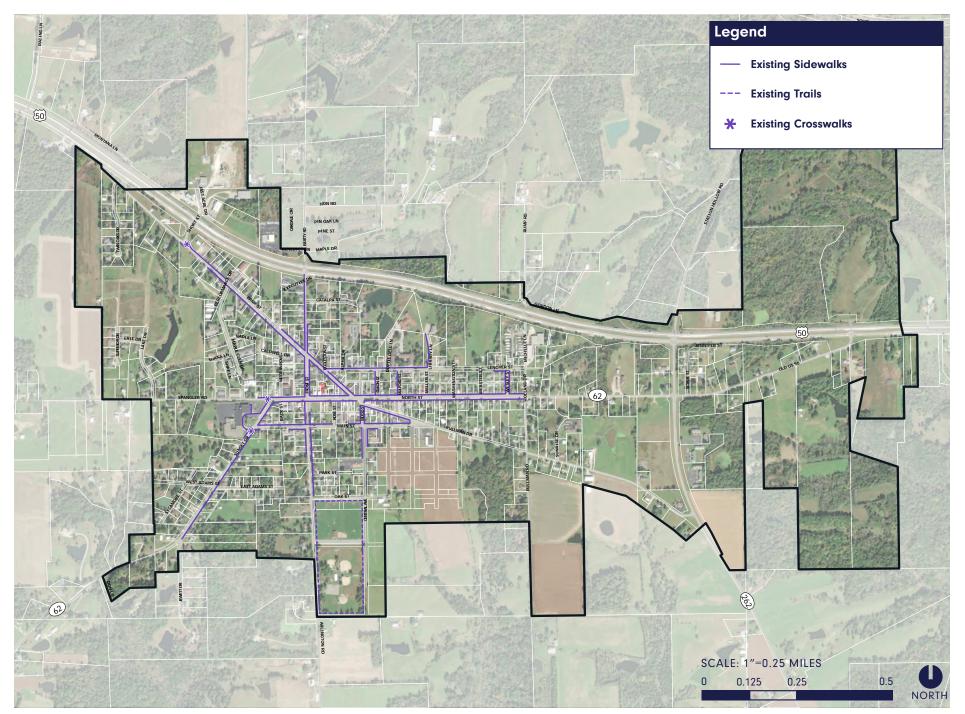


Figure 3.1: Existing Facilities Map

DESTINATIONS

Key Destinations

The following pages begin to identify both key destinations throughout the Town as well as areas with issues or safety concerns. These locations were identified through a series of advisory committee meetings and public workshops.

- Dillsboro Elementary School
- 2 Dillsboro Public Library
- 3 Dillsboro Family Market
- Dollar General
- 5 J&J Liquor
- 6 Dillsboro Community Park
- Event Lawn
- 8 Dillsboro Town Hall
- Dillsboro Civic Center
- 10 Churches
- Heritage Pointe
- 12 Daycare

- 13 Maple Glen Apartments
- 14 Dillsboro Townhouses
- 15 Dillsboro Village Apartments
- 13 Waters of Dillsboro Ross Manor
- 17 Mobile Homes
- 18 Residential Development
- 19 SIEOC Head Start
- 20 Dillsboro Primary Care
- 21 Downtown Businesses



Dillsboro Public Library



Dillsboro Elementary School



Dillsboro Family Market



Dollar General

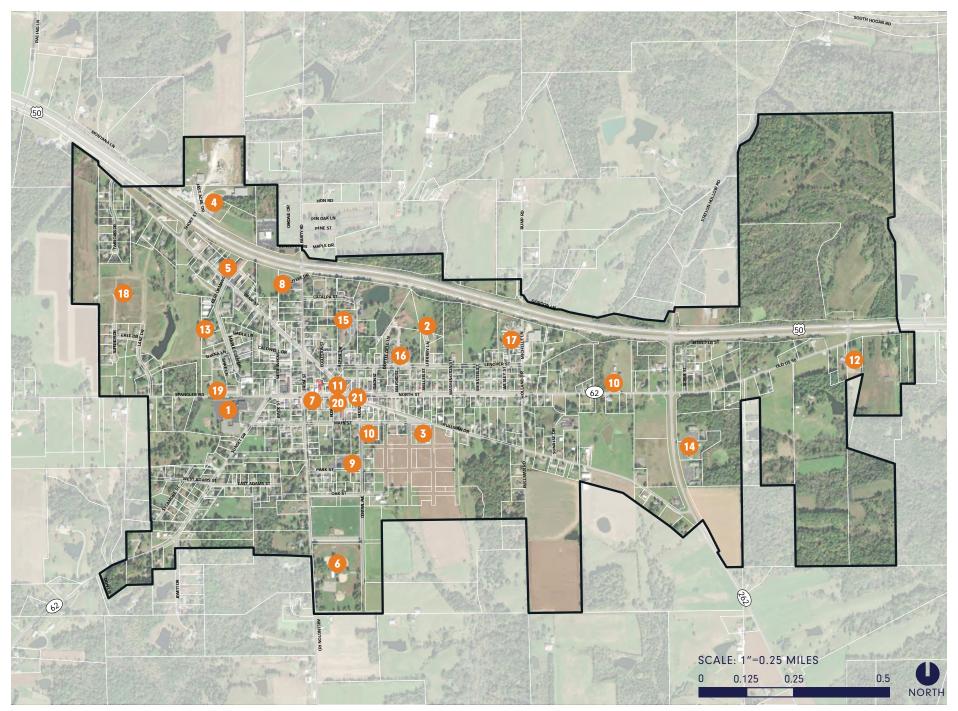


Figure 3.2: Key Destinations Map

ISSUES/CHALLENGES

Intersections

- » Rullman Dr & Main St
- » Rullman Dr & North St
- » Spangler Rd & North St
- » US 50 & Short St
- » US 50 & Front St
- » SR 262 & SR 62

Other Issues

» Pond at Dillsboro Village Apartments



Rullman Dr & Main St



Rullman Dr & North St



US 50 & Short St



Spangler Rd & North St

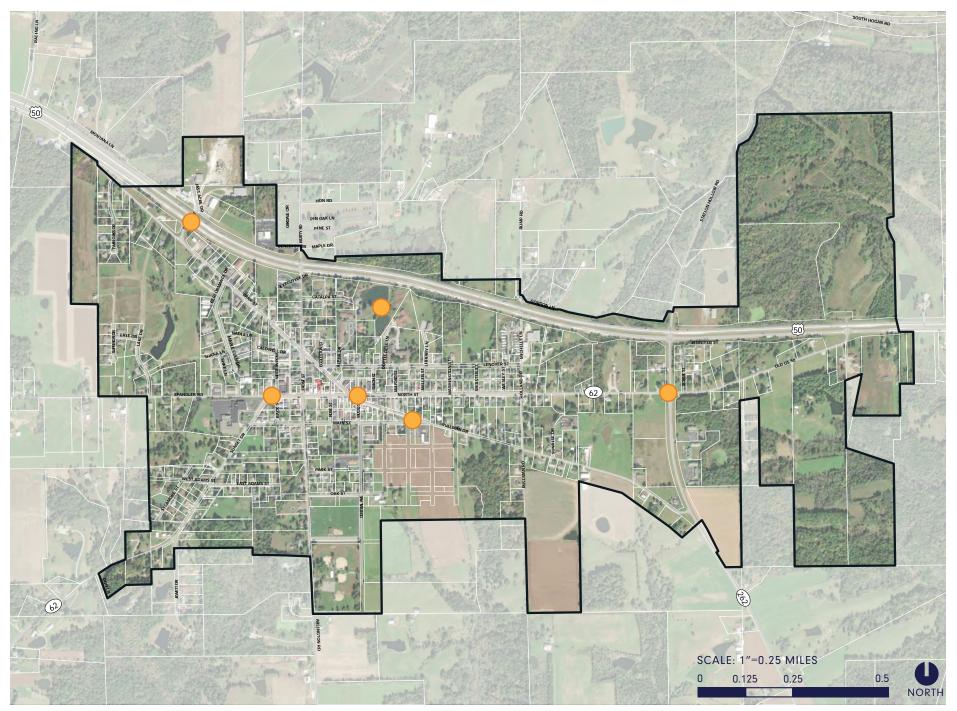


Figure 3.3: Issues/Challenges Map



PROCESS + ENGAGEMENT



PROCESS + ENGAGEMENT

A strong foundation of community engagement and participation is critical to a successful planning effort. Creation of the Dillsboro Bicycle & Pedestrian Master Plan involved community residents, businesses, property owners, and elected and appointed officials. Their leadership and input throughout the process helped to ensure plan recommendations are supported by the community and realistic given local context. An overview of the planning process and key engagement findings is included on the following pages. More detailed survey and community meeting results can be found in the Appendix.

Pre-Kickoff

This plan and process were funded by a planning grant from the Indiana Department of Health's Division of Nutrition and Physical Activity. The Town of Dillsboro applied for and was awarded the grant in early 2022. After notice of the grant award, the Town prepared a Request for Qualifications statement and accepted qualifications submissions until July 22, 2022. After reviewing qualifications packages, the Town selected HWC Engineering (HWC) to facilitate the planning process and create the bicycle and pedestrian master plan. Also during this time, the Town organized an advisory committee to provide input and guidance to the consultant team.

Kickoff

Members of the Advisory Committee and representatives from HWC met on August 30, 2022 for an organizational meeting to refine the project scope, schedule, and process. This meeting was also used to discuss current projects and initiatives that may inform the bicycle and pedestrian planning process as well as begin identifying issues that need to be addressed in the plan.



The first Advisory Committee meeting was held on September 27, 2022.



Several Advisory Committee members participated in a walking tour before the first meeting.



A public workshop was held after the Advisory Committee meeting on September 27.



Workshop attendees participated in various mapping and input exercises.

Walking Tour, Advisory Committee Meeting 1, and Public Workshop

The first Advisory Committee meeting and public workshop took place on September 27, 2022. In advance of the formal Advisory Committee meeting, several members of the committee and representatives from HWC conducted a walking tour of Town. This tour was used to highlight recent improvements, existing issues, key destinations, and more generally discuss the relative ease or difficulty of walking and biking in Dillsboro. Several key facility gaps and challenging intersections were identified during this tour, including a lack of sidewalks along Lenover Street east of the library, and the intersection of Rullman Drive and Main Street in front of the Dillsboro Family Market.

The first Advisory Committee meeting included an introduction to bicycle and pedestrian planning, review of the project schedule, and role of the advisory committee. The various types of pedestrian and bicycle facilities were presented before a discussion of the plan vision and a mapping exercise to identify key destinations, safety concerns, and desired routes.

Following the Advisory Committee meeting, a public workshop was held. The workshop had been advertised with flyers and on social media in advance. In addition to background information and a map of the existing bicycle and pedestrian network, workshop attendees were asked to complete several input exercises to better understand comfort level with various facility types, desired destinations, and safety concerns.

Online Survey

Even before the first Advisory Committee meeting and public workshop, an online survey was created and shared with the community. The survey was open from September 13, 2022 to October 18, 2022. Paper copies of the survey were available at Town Hall and the library. Additionally, Dillsboro Elementary School teachers had 5th and 6th grade classes complete the survey as part of a school project. In total, 148 responses were received. Similar to the in-person workshop, the online survey sought to understand walking and biking frequency of respondents, existing barriers to walking and biking in Dillsboro, key destinations, and comfort level with various facility types.

Advisory Committee Meeting 2

The second Advisory Committee meeting occurred on October 19, 2022. The consultant team presented the results of the public workshop and online survey to the committee. This meeting was also used to review the draft vision statement and preliminary goals. A proposed network map was reviewed and early thoughts on priority projects were shared by the committee.

Advisory Committee Meeting 3

The third Advisory Committee meeting took place on November 16, 2022. This was a virtual meeting conducted via Zoom to review the first draft of the plan that had been shared in advance. Additional priority projects and implementation timelines were discussed.

Public Presentation and Advisory Committee Meeting 4

The public draft of the Bicycle + Pedestrian Master Plan was presented to the community on December 7, 2022. The meeting was held at Town Hall and also offered virtually via Zoom. A brief discussion followed the presentation, but no major changes or omissions were identified.

After the public presentation, the Advisory Committee met for the fourth and final time. A few minor adjustments and additions were noted. Following this meeting, the final plan was prepared.

VISION, GOALS + OBJECTIVES



VISION

It is safe and easy to walk and bike in Dillsboro. Key destinations, neighborhoods, and businesses are connected through a network of dedicated, off-street pedestrian and bicycle paths and well-marked crossings. Bicycle and pedestrian travel are important for both transportation and recreation purposes and the mobility needs of users of all ages and abilities are balanced with the needs of motorists. Walking and biking facilities in Dillsboro are highly visible assets that contribute to community health, the ability to attract and retain families, and individual well-being.

GOALS + OBJECTIVES

Connectivity

Develop a complete network of pedestrian and bicycle facilities that connects all areas of Dillsboro.

- Plan and construct bicycle and pedestrian facilities that serve both transportation and recreation purposes.
- Fill in existing gaps in the sidewalk network and extend facilities where they are present along a portion of, but not all the street.

- Prioritize routes between residential concentrations and key destinations such as the elementary school, park, and library.
- Include sidewalks on both sides of the street for all newly constructed roadways.
- If a relinquishment agreement can be reached with the Indiana Department of Transportation (INDOT) for the Town to assume control and maintenance of SR 62/North Street, make sure INDOT extends new sidewalks from Holland Drive to SR 262.
- Require new development and redevelopment to construct sidewalks or shared-use paths along all road frontages.
- Advocate for new or enhanced bicycle and pedestrian facilities along state roads 62 and 262 as the Indiana Department of Transportation (INDOT) makes improvements in the future, especially a safe north/south crossing of SR 62/North Street near the intersection with Rullman Drive.

Safety

Ensure existing and future facilities are designed to prioritize user safety when traveling both along and across streets.

- Design new bicycle and pedestrian facilities, and retrofit existing ones, to meet or exceed safety guidelines established by the Federal Highway Administration (FHWA), American Association of State Highway and Transportation Officials (AASHTO), and National Association of City Transportation Officials (NACTO).
- Provide clearly marked crosswalks and crossing signs at all stop-controlled intersections.
- Evaluate the safety and feasibility of useractivated crossing signalization at critical intersections where motor vehicles are not presently required to stop.
- Provide a planted buffer strip between sidewalks or shared-use paths and the adjacent vehicle travel lanes.
- Enforce vehicle speed limits and hold both motorists and cyclists accountable for the rules of the road.
- Provide safe pedestrian and cyclist crossing of US Highway 50 as future intersection improvements are made at both Short Street and Front Street.
- Develop a maintenance schedule to ensure bicycle and pedestrian facilities remain safe and usable.

Equity

Recognize bicycle and pedestrian travel as important transportation modes for users of all ages, abilities, and incomes.

- Continue to make Americans with Disabilities Act (ADA) compliant improvements to existing sidewalks and crossings.
- Where adequate right-of-way exists, construct shared-use path facilities instead of sidewalks since they accommodate the broadest range of cyclists and pedestrians.
- Plan and construct missing pedestrian facilities that will serve key employment and shopping destinations for individuals and families without a personal motor vehicle.
- Distribute bicycle and pedestrian investments across all areas of the Town.

Public Health

Promote a safe and connected bicycle and pedestrian system as a means to improve public health and encourage active lifestyles.

- Make walking and cycling safe and easy for short trips around town so that they are more frequently chosen as a means of transportation.
- Plan and construct attractive and easy to follow recreation routes that connect to Dillsboro Community Park.
- Add distance markers to create multiple loops of different lengths using the existing trail network in the park, and mark dedicated bicycle and pedestrian paths through parking lots when they are used as part of the loop system.

Economic Development

Use pedestrian and bicycle infrastructure to leverage private investment and attract and retain residents and businesses.

- Extend sidewalks to new development areas so that they are connected into the larger bicycle and pedestrian network.
- Promote regional trail efforts throughout Dearborn County that would connect to Aurora, Lawrenceburg, and Greendale.
- Require dedication of right-of-way or a public access easement in new development and redevelopment projects to accommodate bicycle and pedestrian infrastructure.

Supporting Amenities

Develop amenities to support and encourage walking and biking, including lighting, landscaping, benches, bike racks, trash receptacles, and signage.

- Include amenities that improve the bicycle and pedestrian experience in future roadway and public works projects, such as lighting, street trees, benches, and trash receptacles.
- Install secure bicycle parking at Townowned facilities including Town Hall, the fire station, EMS station, and the park, as well as key locations within the public right-of-way when it can be safely located outside of pedestrian and bicycle travel areas.
- Encourage secure bicycle parking to be provided by private businesses throughout town.
- Provide wayfinding and safety signage directed to pedestrians, cyclists, and motorists.

Education + Programming

Enhance education, enforcement, and advocacy efforts to better develop a culture of walking and biking in Dillsboro.

- Support the development of Safe Routes to School programming with Dillsboro Elementary.
- Conduct targeted outreach to increase both adult and youth knowledge of safe walking, biking, and driving behaviors and traffic laws related to bicycle and pedestrian travel.
- Continue to grow the Dillsboro Library Walking Club program as means to promote active lifestyles and raise the visibility of pedestrians in the community.
- Use the INDOT Bike IN Safe program and materials to provide free helmets and safety information in partnership with Dillsboro Elementary.
- Explore creating a program to teach rider safety and basic bicycle maintenance skills through the Fire Department, Police Department, or other organization.
- Renew the Flying Frog Walking/Running Club, that was suspended due to the COVID pandemic.
- If necessary, use targeted enforcement to stop unsafe behaviors of motorists, bicyclists, and pedestrians.

MASTER PLAN



INFRASTRUCTURE

Overview

The map to the right identifies proposed facilities to fill key gaps and make important connections throughout the Town of Dillsboro. The connections ultimately focus on providing pedestrians with easily accessible and safe routes to all the major destinations throughout the Town, including the school to the west, park to the south, family market to the east, and the library to the north.

Additionally, important intersections were identified for improvements to both vehicular and pedestrian flow. The identified intersections were further denoted as needing minor improvements or major improvements. These were determined by multiple factors including the condition, size, and level of vehicular traffic. Some of the major intersections included improvements to Rullman Drive and Main Street, North Street and Sunset Drive, as well as Short Street and US 50. These intersections would require more significant improvements to enhance pedestrian access and safety through higher levels of traffic control.

Other intersections that were important but identified as minor improvements included Lenover Street and Miller Street, Oak Street and Central Avenue, as well as multiple intersections within the center part of Town along Main Street and Front Street. The following pages outline a complete list of projects and begin to look at some of these intersections in more detail.

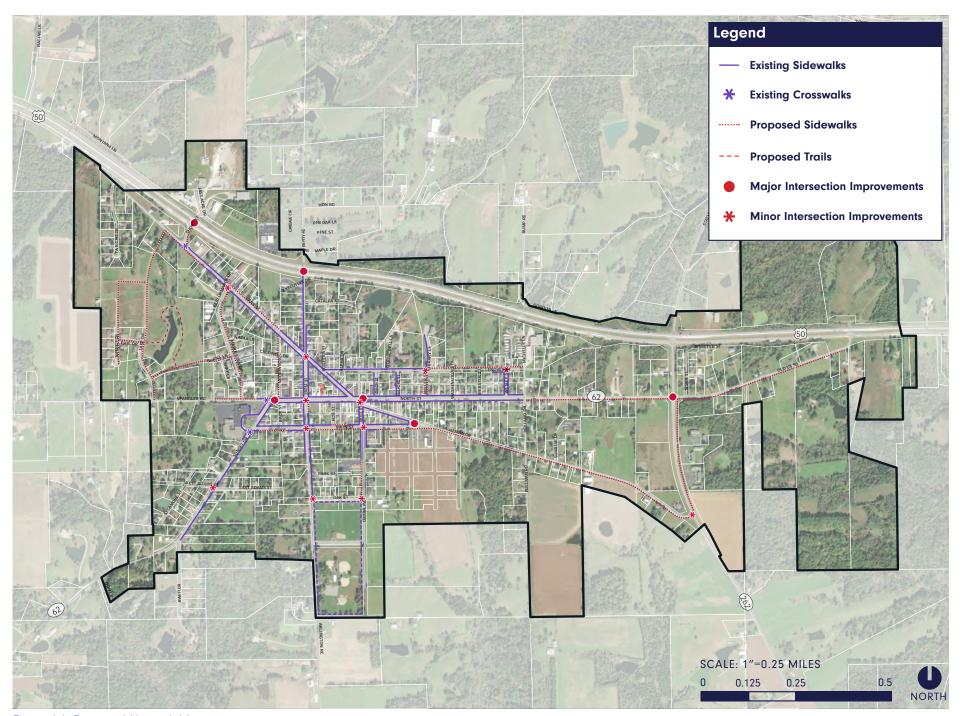


Figure 6.1: Proposed Network Map

INFRASTRUCTURE

PEDESTRIAN FACILITIES (SIDEWALKS)	LENGTH (FT)	PROJECT PURPOSE
SHORT STREET	225 FT	KEY CONNECTION (DOLLAR GENERAL)
BANK STREET (SOUTHSIDE)	250 FT	KEY GAPS
BANK STREET (NORTHSIDE)	700 FT	KEY GAPS
MAPLE GLEN DRIVE	1400 FT	KEY CONNECTION (MAPLE GLEN APARTMENTS)
SPANGLER ROAD	500 FT	KEY CONNECTION (HEAD START, SCHOOL)
SHANA LANE	1050 FT	KEY CONNECTION (RESIDENTIAL DEVELOPMENT)
LAKE DRIVE	2200 FT	KEY GAPS
ERIE DRIVE	300 FT	KEY GAPS
SUPERIOR DRIVE	1400 FT	KEY GAPS
MAIN STREET (SOUTHSIDE)	1600 FT	KEY EAST/WEST CONNECTION
MAIN STREET (NORTHSIDE)	150 FT	KEY EAST/WEST CONNECTION
FRONT STREET	150 FT	KEY CONNECTION (COMMUNITY PARK)
CENTRAL AVENUE	500 FT	KEY CONNECTION (COMMUNITY PARK)
RULLMAN DRIVE	3500 FT	KEY EAST/WEST CONNECTION
MILLER STREET	300 FT	KEY CONNECTION (PUBLIC LIBRARY)
LENOVER STREET	1100 FT	KEY EAST/WEST CONNECTION
SR 62	1800 FT	KEY EAST/WEST CONNECTION
OLD US 50	2200 FT	KEY EAST/WEST CONNECTION
SR 262	1500 FT	KEY NORTH/SOUTH CONNECTION
WESTERN ROW	800 FT	KEY NORTH/SOUTH CONNECTION

Figure 6.2: Proposed Projects

BICYCLE + PEDESTRIAN FACILITIES (SHARED-USE PATHS)	LENGTH (FT)	PROJECT PURPOSE
New Residential Development Trail (around pond)	1500′	RECREATIONAL

INTERSECTIONS	CLASSIFICATION	PROJECT PURPOSE
US 50 & SHORT STREET	MAJOR	Alignment, Crosswalks, Signalized Crossing, Ada Ramps
US 50 & FRONT STREET	MAJOR	Alignment, Crosswalks, Signalized Crossing, Ada Ramps
BANK STREET & MAPLE GLEN DRIVE	MINOR	CROSSWALKS
BANK STREET & FRONT STREET	MINOR	ADJUST STOP BARS
LENOVER STREET & MILLER STREET	MINOR	CROSSWALKS, ADA RAMPS
LENOVER STREET & WESLEY STREET	MINOR	CROSSWALKS
NORTH STREET & SUNSET DRIVE	MAJOR	CROSSWALKS, SIGNALIZED CROSSING, ADA RAMPS
NORTH STREET & FRONT STREET	MINOR	CROSSWALKS
NORTH STREET, RULLMAN DRIVE, WOOD STREET & BANK STREET	MAJOR	CROSSWALKS, SIGNALIZED CROSSING, ADA RAMPS
NORTH STREET, RULLMAN DRIVE, WOOD STREET & BANK STREET	MINOR	CROSSWALKS
MAIN STREET & FRONT STREET	MINOR	CROSSWALKS
MAIN STREET & CENTRAL AVENUE	MINOR	CROSSWALKS
MAIN STREET & RULLMAN DRIVE	MAJOR	CROSSWALKS, ADA RAMPS, ROAD ALIGNMENT
SUNSET DRIVE & ADAMS STREET	MINOR	CROSSWALKS
FRONT STREET & OAK STREET	MINOR	CROSSWALKS
CENTRAL AVENUE & OAK STREET	MINOR	CROSSWALKS
SR 62 & SR 262	MAJOR	CROSSWALKS, SIGNALIZED CROSSING
RULLMAN DRIVE & SR 262	MINOR	CROSSWALKS

TYPICAL SECTIONS

Lenover Street

Through the evaluation of Dillsboro's existing pedestrian facilities, it became evident that Lenover Street is a significant corridor. While Lenover does have some existing sidewalks, they end at Library Lane going east. New pedestrian facilities east of Library Lane would connect the residences to the library as well as into the center of the Town.



Lenover Street (east of library)



Lenover Street (east of library)



Figure 6.3: Existing Lenover Street (east of library)

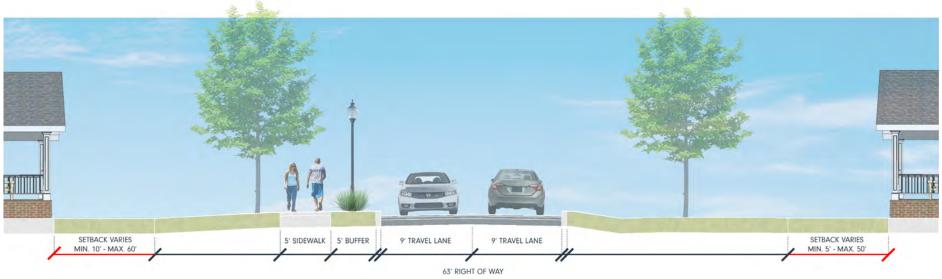


Figure 6.4: Proposed Lenover Street (east of library)

TYPICAL SECTIONS

Miller Street

Through the various community engagement efforts, it was evident that the Dillsboro Public Library was a major destination within Town and should be seen as a priority in making strong connections to and from this location. Miller Street does not currently have any pedestrian facilities, making it a higher priority for sidewalk improvement. This connection would allow pedestrians traveling from both the east and west sides of Town to access the library from North Street via a new sidewalk along Miller Street.







Miller Street

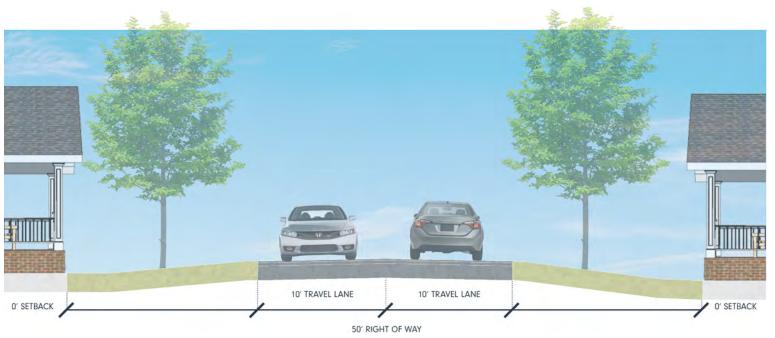


Figure 6.5: Existing Miller Street

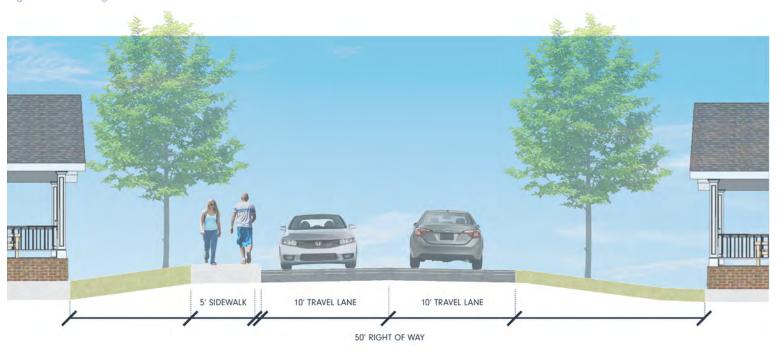
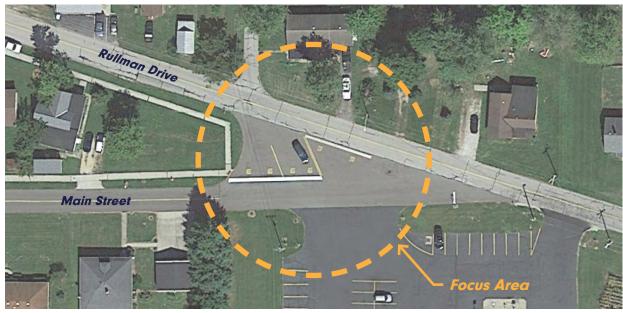


Figure 6.6: Proposed Miller Street

ENLARGEMENT PLANS

Rullman & Main Intersection

Throughout the Advisory Committee meetings, public workshop, and site visits, it was made clear that the intersection of Rullman Drive and Main Street was a major area of safety concern. With its prominent location in front of the Dillsboro Family Market, it is important that this intersection be functional and safe for both vehicles and pedestrians. The concept to the right, starts to explore how this intersection could be improved to maximize circulation in a safe and efficient way.



Existing Rullman & Main Intersection



Existing Rullman & Main Intersection



Existing Rullman & Main Intersection

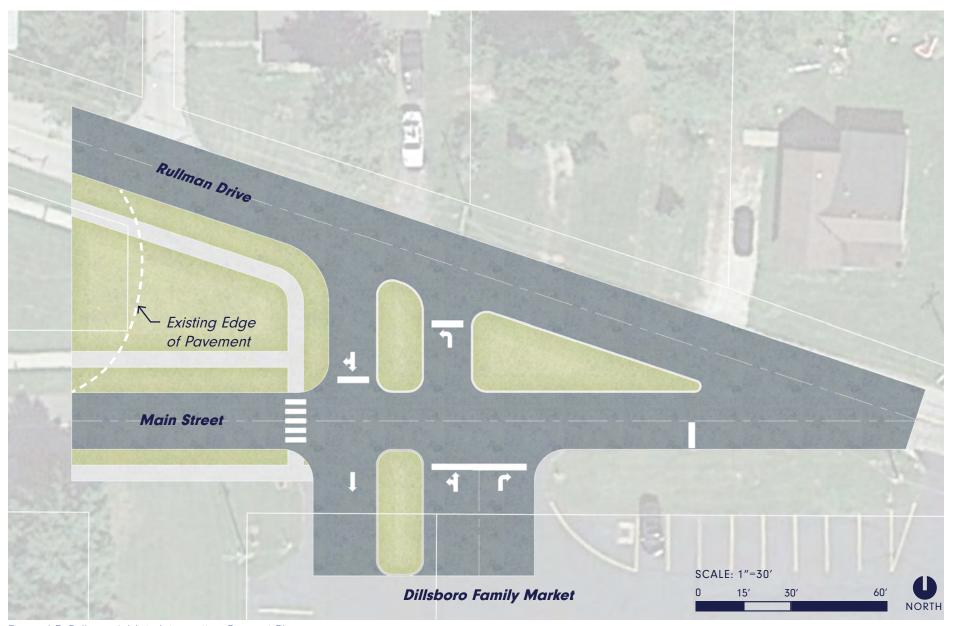
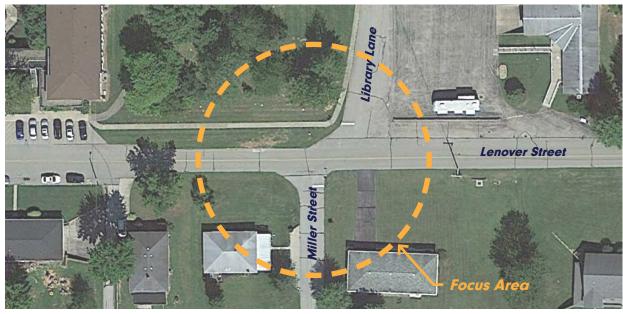


Figure 6.7: Rullman & Main Intersection Concept Plan

ENLARGEMENT PLANS

Lenover & Miller Intersection

Another intersection that was identified as critically important during the planning process was the intersection of Lenover Street and Miller Street. This intersection is located in front of the Dillsboro Public Library and was identified as an important connection to make for pedestrians traveling to and from the library. Through the addition of a sidewalk along Miller Street, as well as providing a pedestrian crossing at this intersection, pedestrians will be able to safely travel from the center of Town to the library.



Existing Lenover & Miller Intersection



Existing Lenover & Miller Intersection



Existing Lenover & Miller Intersection

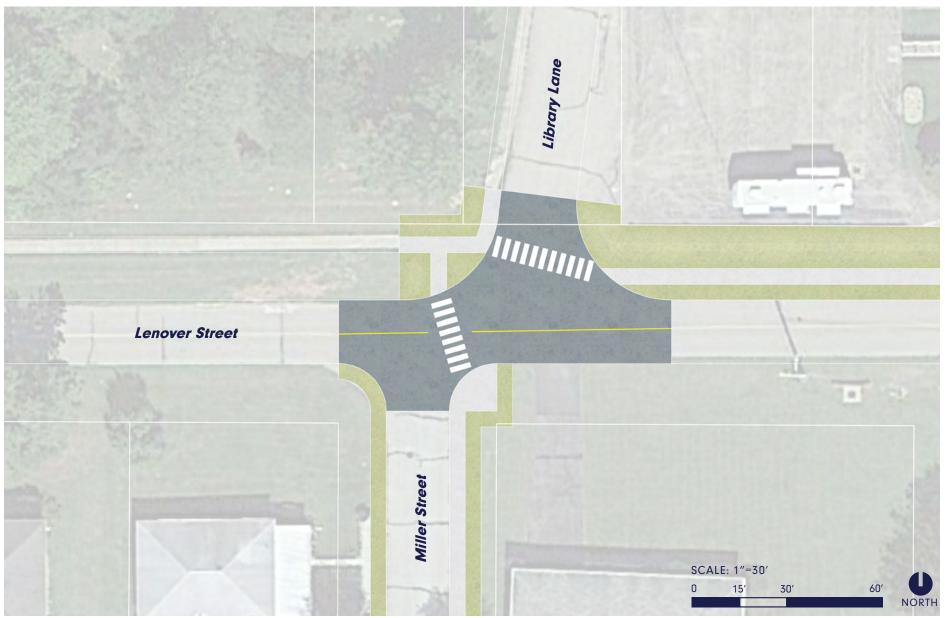


Figure 6.8: Lenover & Miller Intersection Concept Plan

PRECEDENT IMAGERY

Facility Types

The images to the right identify the different facility types that can be implemented to ensure strong pedestrian circulation and safety within Dillsboro. Some of these facilities include sidewalks and shared-use paths, marked pedestrian crosswalks, as well as different traffic calming techniques such as various signals and pavement markings to alert vehicles of pedestrians and bicyclists.

Sidewalks



Shared-Use Paths







Bike Lanes + Signage



Crosswalks



Traffic Calming









PRECEDENT IMAGERY

Supporting Amenities

Equally as important as the facility itself are the amenities that support facility users and ensure that pedestrians and bicyclists feel comfortable and safe. Some of these amenities include benches along sidewalks and trails, bike racks, litter receptacles, site lighting, as well as both traffic and wayfinding signage.

Resources for national design standards of streets and roadside amenities/facilities include the National Association of City Transportation Officials (NACTO), American Association of Highway and Transportation Officials (AASHTO), and the Manual on Uniform Traffic Control Devices (MUTCD). These standards should be used when implementing any of the proposed facility and intersection enhancements included on the previous pages.

Benches



Bike Racks







Litter Receptacles



Site Lighting



Signage









PROGRAMS

Safe Routes to School

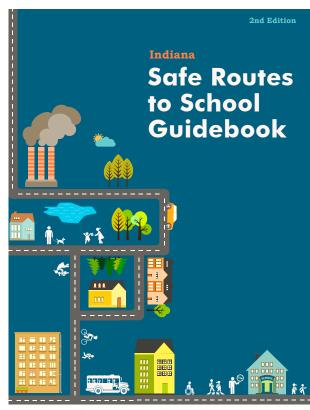
Safe Routes to Schools (SRTS) is a national initiative to promote walking and bicycling to school through infrastructure improvements and encouragement, education, and enforcement tools that make it safe to do so. A SRTS program can be implemented by the Town, school district, or individual school. Significant resources to assist in developing a SRTS program have already been created and are available at www.saferoutesinfo.org. Indiana has also developed a Safe Routes to School Guidebook to help parents, teachers, school administrators, and other community members develop a SRTS program. Creating a SRTS plan is usually the first step in implementing a program locally. A SRTS plan should address:

- Parent/driver educational materials
- Walk/Bike to School Day events
- Student education on school zone safety, proper attire, safe walking habits
- Supervised walking to school programs, such as walking school buses
- Safety patrols

Bike IN Safe

The Indiana Department of Transportation (INDOT) created the Bike IN Safe program to promote safety and ensure that every first- and second-grade student who needs a bike helmet has one. INDOT partners with elementary schools to help make bike safety information and gear available for free. The program is primarily geared towards 6- and 7-year-old students, but can be adapted to any elementary grade level. In addition to providing free helmets, the program includes:

- Posters & Flyers
- Social Media Kit
- Classroom Activities
- Safety videos
- Ability to request an in-person bike safety program



The Indiana Safe Routes to School Guidebook was updated in 2019.



The Dillsboro Library walking program occurs weekly throughout the year.

Dillsboro Library Walking Club

The Aurora Public Library District created a walking club in conjunction with Purdue Extension's Get WalkIN' program. That program has concluded but the walking club continues at both the Dillsboro and Aurora public libraries. In Dillsboro, the group meets at the library on Wednesday mornings, walks to and around Dillsboro community park, and then returns to the library. This is a valuable program the promotes public health and raises the visibility of walking culture in Dillsboro. The program should be continued and expanded as resources and interest allow. Police/Fire Rider Safety & Maintenance Training

Police/Fire Rider Safety & Maintenance Training

Early education and training can create safer and more confident riders and better develop a culture of bicycling in the community. These lessons don't have to be limited to youth, as they can also be beneficial to adults. Bike rodeos are special events, usually geared towards children, to teach skills in a safe and protected environment. Subjects typically covered may include bicycle components, how to safely mount and dismount a bicycle, on bike skills typically done in a closed parking lot, flat tire repair, proper helmet fitting, and rules of the road. The Dillsboro Police Department and/or Fire Department should consider developing a program and regularly scheduling such events. Model programs are available through the League of American Bicyclists (www.bikeleague.org).



IMPLEMENTATION



IMPLEMENTATION MATRIX

Development of a complete and connected bicycle and pedestrian system will require collaboration among many entities within the community, including town government, INDOT, South Dearborn Community School Corporation, and business and property owners. While this plan is ambitious in its scope, it is achievable with continued focus on and advocacy for safe pedestrian and bicycle travel in Dillsboro. The master plan includes facilities and improvements that can be implemented in the shortterm. Larger projects, especially those along state routes and associated with future development, will take more time to complete. Additionally, municipal funds are limited and therefore must be used strategically, not just for bicycle and pedestrian projects, but all investments across Dillsboro. By focusing on existing assets and the goals and recommendations of this plan, a safer and more complete system can be accomplished in a timely and economically responsible manner.

Several priority projects are identified in this chapter. However, many factors influence project implementation including right-of-way availability, adjacent land ownership, funding, user needs, and political will. The recommendations for funding, implementing, and prioritizing proposed projects should

be considered guidelines which may change over the implementation timeline of this plan. Dillsboro should continue to evaluate priority projects as opportunities for funding become available. Exact routes and alignments for each recommended improvement have not been determined. In many cases, adequate public right-of-way exists to accommodate recommended facilities and crossing treatments. In some cases, additional right-of-way may be required to build desired facilities. Considerations which will continue to influence prioritization and implementation include:

- Presence of adequate right-of-way or publicly-owned land exists
- If a proposed project fills a key gap or connects important nearby facilities
- Whether a bicycle and pedestrian project can be paired with other infrastructure or public improvements
- Funding availability
- Ability to acquire grants and other resources
- Relative ease of construction
- Need to address immediate safety concerns

The tables on the following pages list each of the proposed segment and intersection improvements. In the case of sidewalk and shared-use path projects, the approximate length has been included. Intersection improvements have been classified as either major or minor. Major intersection improvements may require signalization or stop control as well as more significant infrastructure construction. Minor intersection improvements will typically involve crosswalk markings and minor signage additions. A relative timeline for implementation has also been included for each project. These timeframes are intended only to serve as a quide for plan implementation and should be considered flexible.

Short-Term = 0-5 years

Mid-Term = 6-10 years

Long-Term = 10+ years

PEDESTRIAN FACILITIES (SIDEWALKS)	LENGTH (FT)	SHORT (0-5 YEARS)	TIMELINE MID (5-10 YEARS)	LONG (10+ YEARS)
SHORT STREET	225 FT	Х		
BANK STREET (SOUTHSIDE)	250 FT		Х	
BANK STREET (NORTHSIDE)	700 FT		Х	
MAPLE GLEN DRIVE	1400 FT		Х	
SPANGLER ROAD	500 FT		Х	
SHANA LANE	1050 FT			Х
LAKE DRIVE	2200 FT			Х
ERIE DRIVE	300 FT			Х
SUPERIOR DRIVE	1400 FT			Х
MAIN STREET (SOUTHSIDE)	1600 FT	Х		
MAIN STREET (NORTHSIDE)	150 FT	Х		
FRONT STREET	150 FT		Х	
CENTRAL AVENUE	500 FT		Х	
RULLMAN DRIVE	3500 FT			Х
MILLER STREET	300 FT	Х		
LENOVER STREET	1100 FT	Х		
SR 62	1800 FT			Х
OLD US 50	2200 FT			Х
SR 262	1500 FT			Х
WESTERN ROW	800 FT	Х		

Figure 7.1: Implementation Matrix

IMPLEMENTATION MATRIX

BICYCLE + PEDESTRIAN FACILITIES (SHARED-USE PATHS)	LENGTH (FT)	TIMELINE		
		SHORT (0-5 YEARS)	MID (5-10 YEARS)	LONG (10+ YEARS)
New Residential Development Trail (around pond)	1500′			Х

INTERSECTIONS	CLASSIFICATION	SHORT (0-5 YEARS)	TIMELINE MID (5-10 YEARS)	LONG (10+ YEARS)
US 50 & SHORT STREET	MAJOR	Х		
US 50 & FRONT STREET	MAJOR	Х		
BANK STREET & MAPLE GLEN DRIVE	MINOR		Х	
BANK STREET & FRONT STREET	MINOR	Х		
LENOVER STREET & MILLER STREET	MINOR	Х		
LENOVER STREET & WESLEY STREET	MINOR		Х	
NORTH STREET & SUNSET DRIVE	MAJOR		×	
NORTH STREET & FRONT STREET	MINOR		X	
NORTH STREET, RULLMAN DRIVE, WOOD STREET & BANK STREET	MINOR	Х		
NORTH STREET, RULLMAN DRIVE, WOOD STREET & BANK STREET	MAJOR			X
MAIN STREET & FRONT STREET	MINOR		×	
MAIN STREET & CENTRAL AVENUE	MINOR		X	
MAIN STREET & RULLMAN DRIVE	MAJOR	X		
SUNSET DRIVE & ADAMS STREET	MINOR		Х	
FRONT STREET & OAK STREET	MINOR		×	
CENTRAL AVENUE & OAK STREET	MINOR		Х	
SR 62 & SR 262	MAJOR			Х
RULLMAN DRIVE & SR 262	MINOR			Х

Figure 7.1: Implementation Matrix

TYPICAL UNIT COSTS



Sidewalks (5-6' wide)

\$4,000 / 100 LF



Shared-Use Paths (8' wide) \$3,000 / 100 LF



\$2,000 / EACH



Traffic Signage

\$2,000 / EACH

PROJECT PRIORITIES

PRIORITY ······	Lenover Street sidewalk extension east of Dillsboro Public Library.
PRIORITY ······	Sidewalk gaps along Main Street.
PRIORITY ······	Rullman Drive and Main Street intersection in front of Dillsboro Family Market.
PRIORITY ······	Rullman/Bank/North/Wood intersection crosswalk markings.
PRIORITY ······	Sidewalks along Western Row.
PRIORITY ······	Sidewalk gaps along Central Avenue.
PRIORITY ······	Spangler Road sidewalk extension west to SIEOC Head Start.
PRIORITY ······	SR 62 / Old US 50 sidewalk extension east.
PRIORITY ······	Protected north/south crossing of North Street near the intersection with Rullman Drive.

POTENTIAL FUNDING

Funding for complete development of the Dillsboro Bicycle + Pedestrian Master Plan will require creative use of resources, partnerships, leveraging opportunities, and judicious timing. While potential funding sources may be easy to identify, funds may be limited and competitive and securing them can be difficult. For these reasons, it is essential that the implementation of bicycle and pedestrian projects be accomplished in a way to maximize efficiency and return on investment.

Funding for bicycle and pedestrian facilities and programs can come from a variety of sources, including transportation and non-transportation state and federal funds as well as local resources such as tax revenues. The following section lists some potential funding sources.

FEDERAL FUNDING SOURCES

Bipartisan Infrastructure Law

- Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant Program
- Safe Streets and Roads for All (SS4A) Grant Program

Congestion Mitigation and Air Quality Improvement (CMAQ) Program

Surface Transportation Block Grant program (STBG)

- Transportation Alternatives Set-Aside (part of STBG, formerly Transportation Alternatives Program, Transportation Enhancements)
- Safe Routes to School (part of the Transportation Alternatives Set-Aside)

National Scenic Byways Program

STATE FUNDING SOURCES

Next Level Trails Grant Program

Community Crossings Matching Grant (CCMG) Program

Recreational Trails Program (RTP) Grant Program

Indiana Heritage Trust Program

LOCAL FUNDING SOURCES

Tax Revenues

Bonds

Impact Fees

Dearborn Community Foundation, Inc.

Public-Private Partnerships

Business Community



APPENDIX



PUBLIC WORKSHOP RESULTS

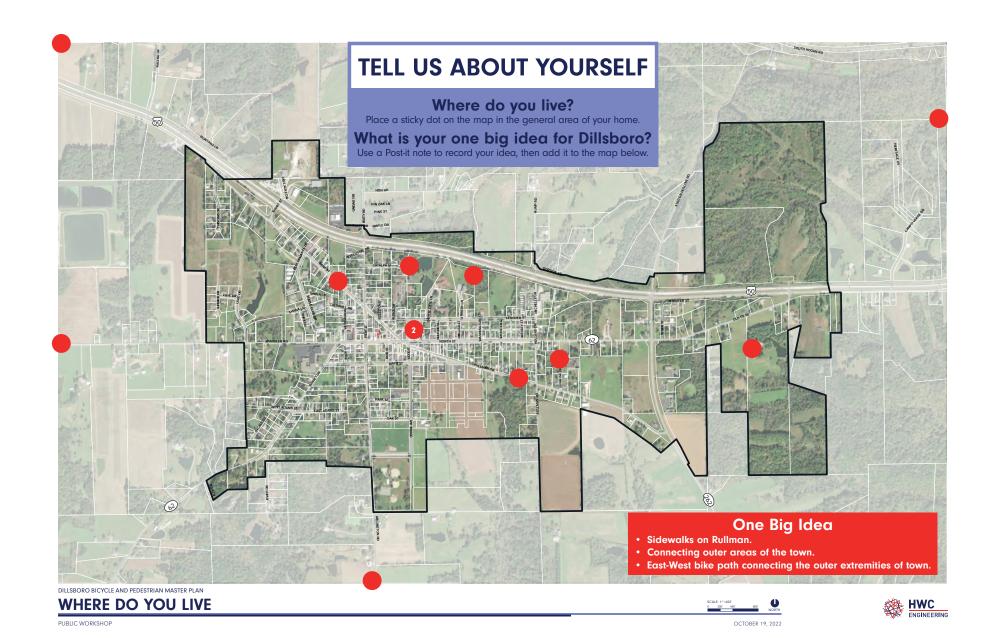
The community workshop took place on September 27, 2022. The workshop had been advertised with flyers and on social media in advance. In addition to background information and a map of the existing bicycle and pedestrian network, workshop attendees were asked to complete several input exercises to better understand comfort level with various facility types, desired destinations, and safety concerns.











Facility Types

Below are examples of bicycle and pedestrian facilities. Using a sticky dot, please tell us if you would feel comfortable biking or walking using each described facility.









Facility Type	Would you feel comfortable using this facility?		
Sidewalk	Yes	No	
Hard surface walkway (4-8 feet) along a street or right-of-way, typically for exclusive pedestrian use.	100%	0%	
Multi-Use or Side Path	Yes	No	
Paved path (10+ feet) hosting pedestrians and bicyclists. Typically located within a road right-of-way and can be an alternative to a sidewalk.	100%	0%	
Greenway	Yes	No	
Paved multi-use path (10+ feet) used for recreation and commuting. Located along natural features, rail lines, or utility corridors. A linear park.	100%	0%	
Bicycle Lane	Yes	No	
Five-foot space along the right side (typically) of a roadway dedicated for one-way bicycle travel, separated from vehicular traffic with a painted line.	42% 29	29 %	

DILLSBORO BICYCLE AND PEDESTRIAN MASTER PLAN

FACILITY TYPES

PUBLIC WORKSHOP

HWC ENGINEERING

OCTOBER 19, 2022

Facility Types

Below are examples of bicycle and pedestrian facilities. Using a sticky dot, please tell us if you would feel comfortable biking or walking using each described facility.









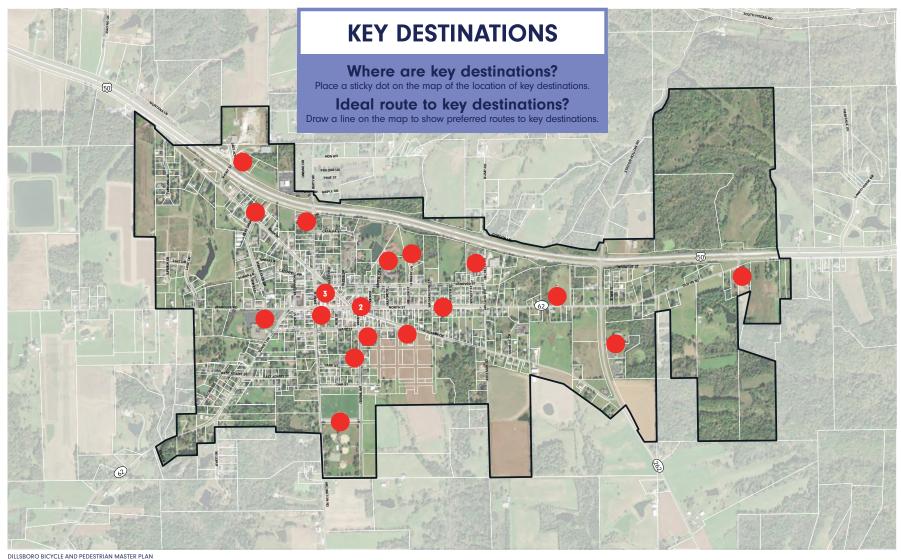
Facility Type	Do you or would you feel co	mfortable using this facility?
Sharrow	Yes	No
"Share the Road" marking with bicycle symbol and two chevrons. Used in cases where a roadway cannot accommodate a dedicated striped bicycle lane.	20% 60	20%
Signed Bicycle Route	Yes	No
Road/street that is safe for use by both bicycle and vehicles without a designated facility, but with appropriate signage. Often in rural settings.	20% 40	40 %
Cycle Track	Yes	No
Vehicle travel lane dedicated to two-way bicycle traffic on one side of a street. Separated from adjacent moving traffic with a physical barrier.	88%	12%
HAWK Signal	Yes	No
On-demand traffic signal used to help pedestrians and bicyclists safely cross busy streets. Stops vehicular traffic only as needed.	67%	33%

DILLSBORO BICYCLE AND PEDESTRIAN MASTER PLAN

FACILITY TYPES

PUBLIC WORKSHOP OCTOBER 19, 2022



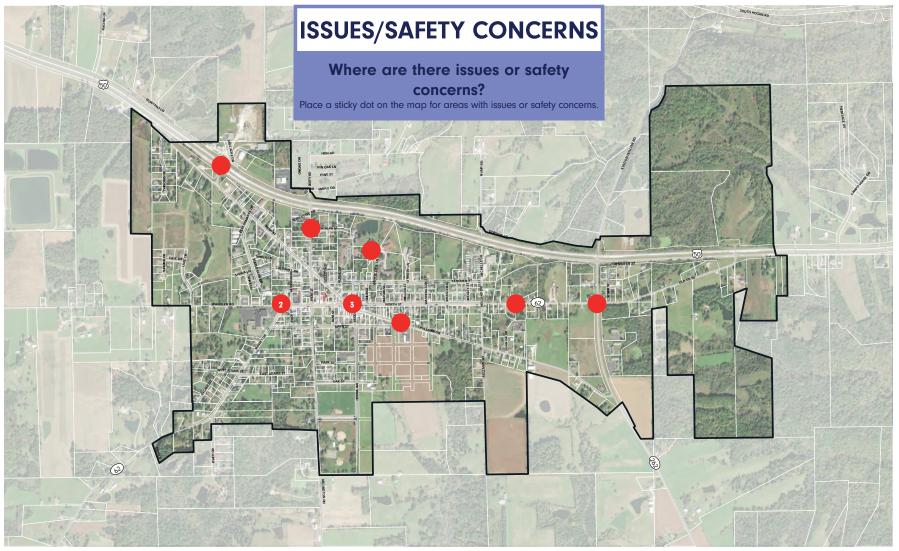


KEY DESTINATIONS





PUBLIC WORKSHOP



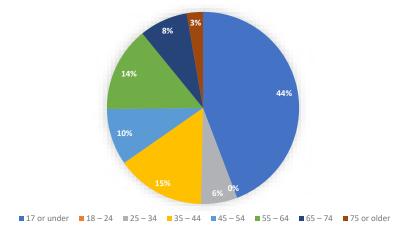
ISSUES / SAFETY CONCERNS



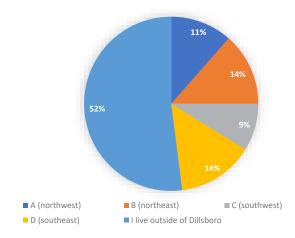
SURVEY RESULTS

The survey was open from September 13, 2022 to October 18, 2022. Paper copies of the survey were available at Town Hall and the library, and Dillsboro Elementary School teachers had 5th and 6th grade classes complete the survey as part of a school project. In total, 148 responses were received.

WHICH CATEGORY BELOW INCLUDES YOUR AGE?



WHERE DO YOU LIVE?

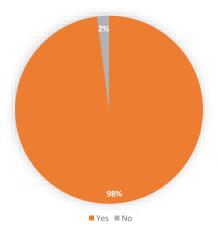




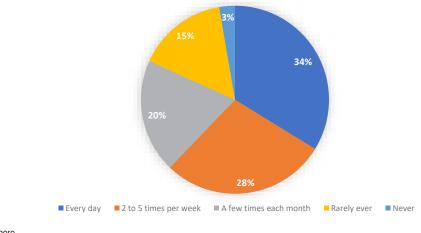
Town of Dillsboro

Bicycle & Pedestrian Master Plan

DOES YOUR HOUSEHOLD OWN A WORKING **MOTOR VEHICLE?**

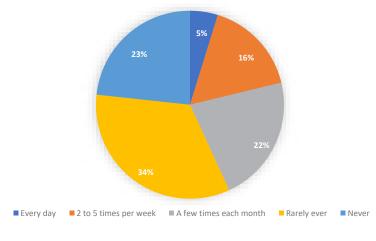


HOW OFTEN DO YOU WALK FOR AT LEAST 10 MINUTES AT A TIME?



Town of Dillsboro Bicycle & Pedestrian Master Plan

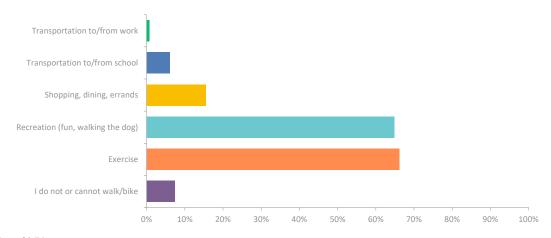
HOW OFTEN DO YOU RIDE A BICYCLE FOR AT **LEAST 10 MINUTES AT A TIME?**



Bicycle & Pedestrian Master Plan

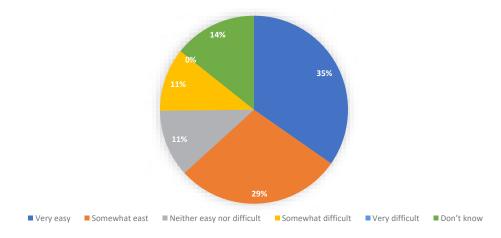
Town of Dillsboro

WHY DO YOU WALK OR BIKE?

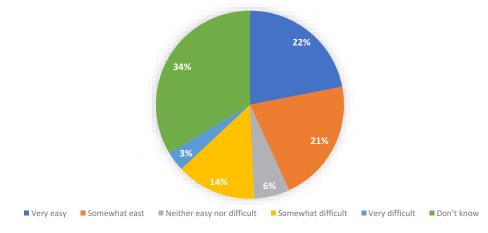


Town of Dillsboro
Bicycle & Pedestrian Master Plan

HOW WOULD YOU RATE THE EASE OR DIFFICULTY OF WALKING IN DILLSBORO?

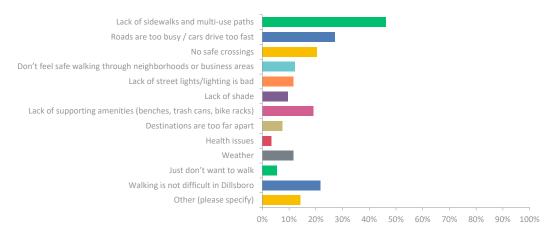


HOW WOULD YOU RATE THE EASE OR DIFFICULTY OF BIKING IN DILLSBORO?

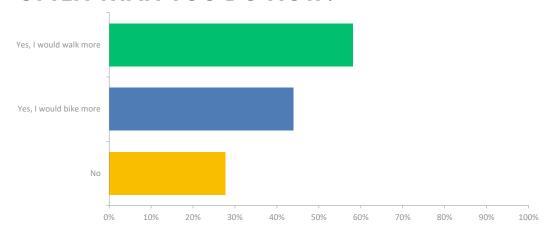


Town of Dillsboro
Bicycle & Pedestrian Master Plan

WHAT FACTORS MAKE IF DIFFICULT TO WALK OR BIKE IN DILLSBORO?

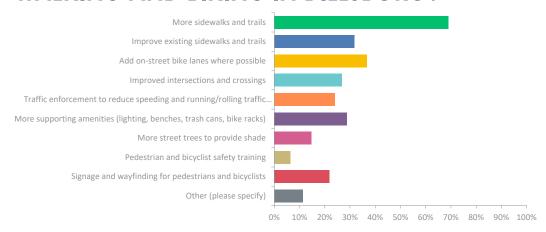


GIVEN SAFER FACILITIES AND IMPROVED ACCESS, WOULD YOU WALK OR BIKE MORE OFTEN THAN YOU DO NOW?

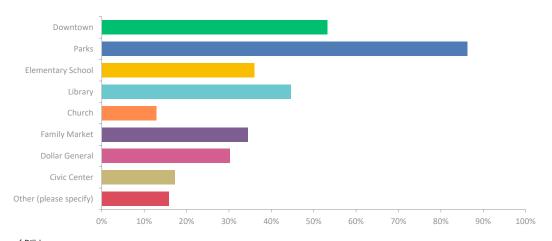


Town of Dillsboro
Bicycle & Pedestrian Master Plan

WHICH OF THE FOLLOWING CHANGES WOULD HAVE THE MOST BENEFICIAL IMPACT ON WALKING AND BIKING IN DILLSBORO?

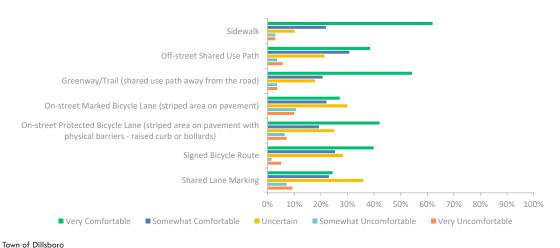


WHAT PLACES WOULD YOU LIKE TO WALK OR BICYCLE TO?



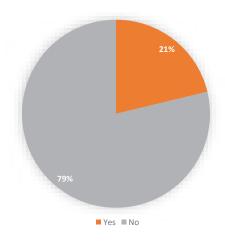
Town of Dillsboro Bicycle & Pedestrian Master Plan

RATE HOW COMFORTABLE YOU WOULD BE USING THE FOLLOWING FACILITY TYPES:



Bicycle & Pedestrian Master Plan

IS THERE A SIDEWALK OR TRAIL IN FRONT OF YOUR HOUSE?



Town of Dillsboro
Bicycle & Pedestrian Master Plan

IF THERE IS NOT A SIDEWALK OR TRAIL IN FRONT OF YOUR HOUSE, WOULD YOU GRANT AN EASEMENT SO THAT ONE COULD BE CONSTRUCTED?

