



ACTIVE TRANSPORTATION PLAN



Lorain, Ohio | March 2018



**Lorain County
Public Health**
For the Health of Us All



**OHIO DEPARTMENT OF
TRANSPORTATION**



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Acknowledgements

The city-wide Active Transportation Plan (ATP) for the City of Lorain was prepared by Toole Design Group, with assistance from MurphyEpson and TranSystems, in cooperation with the Ohio Department of Transportation (ODOT), Lorain County Public Health, Lorain City Schools (LCS), City of Lorain, Northeast Ohio Areawide Coordinating Agency (NOACA) and staff members from other non-profits, agencies and organizations as well as local bicycle advocates and other community advocates.

This diverse group of professionals and volunteers who make up the Lorain ATP Team shared their time, expertise and knowledge to assist with the development of the ATP. A special thanks to them.

The City of Lorain ATP Team would like to especially thank the following people for their help and support.

City of Lorain

Chase Ritenaur, Mayor
Joel Arredondo, Council President
Mary Springowski, Council At-Large
Mitchell Fallis, Council At-Large
Joseph F. Koziura, Councilman At-Large

Beth Henley, First Ward Councilman
Dennis Flores, Second Ward Councilman
Pamela Carter, Third Ward Councilwoman
Greg Argenti, Fourth Ward Councilman
JoAnne Moon, Fifth Ward Councilwoman

Angel Arroyo, Jr., Sixth Ward Councilman
Joe Faga, Seventh Ward Councilman
Joshua Thornsberry, Eighth Ward Councilman

Lorain County Public Health

David Covell, MPH, RS, Health Commissioner
Douglas G. McDonald MD, Medical Director
Joyce Davis, BS, MCHES, Director of Health Promotion and Chronic Disease Prevention

Lorain City School District

David Hardy, Jr., CEO



1 Executive Summary

An Active Transportation Plan (ATP) is a guide for planning, designing, constructing and maintaining a safe, comfortable and efficient roadway network for users of all ages and abilities including pedestrians, bicyclists, transit riders, motorists, commercial and emergency vehicles. The ATP helps plan a network that provides connectivity, improves safety, supports consistent project implementation and increases awareness.

INTRODUCTION

The City of Lorain is located on the shores of Lake Erie and at the mouth of the Black River, about 25 miles west of Cleveland. It is the largest city in Lorain County by population and the third largest in the Greater Cleveland region behind Cleveland and Parma. Like many similarly sized urban centers, Lorain has experienced population decline in recent decades. Its population as of July 1, 2016 is 63,730. Lorain is known as the “International City” because of its residents’ rich and diverse cultural heritage.

The Lorain City School District serves 6,650 students in grades PreK-12 at 10 elementary schools, three middle schools and one high school. As the population of Lorain has declined, so has the school district. This has led to consolidation of students into fewer buildings. Several new or refurbished buildings were constructed in the last 10 years.

Ohio has a very successful and robust Safe Routes to School program, with a presence in 77 of Ohio’s 88 counties. In Ohio and across the country,

there is renewed interest in walking and bicycling by residents of all ages. This has led Ohio to take its Safe Routes to School program to the next level with ATPs, which will encompass Safe Routes to “Everywhere.” The City of Lorain’s ATP has a significant focus on its schools and is incorporating many Safe Routes to School elements into its hybrid Active Transportation-School Travel Plan. In addition to growing interest among Ohioans, it is well documented that non-motorized active transportation promotes healthy lifestyles, improves air quality, boosts the local economy and can enhance community character.

VISION AND GOAL

The Lorain ATP Planning Team created this Vision Statement for the Plan.

- City of Lorain’s Active Transportation Plan will create and expand safe, accessible and effective options - walking, biking and busing - throughout the City that are equitable and reliable for residents and visitors of all ages and abilities for a healthy Lorain.

GOAL

The goal is to create a framework for a comprehensive, community-driven, transportation network for all users, of all ages. Active transportation is any method of travel that does not rely entirely on a car.



2 Introduction: Active Transportation Team

ACTIVE TRANSPORTATION PLAN COORDINATORS

Like the model used for the Safe Routes to School large district plans, Lorain County Public Health assigned a health educator to serve as the ATP Coordinator to guide the development of the process locally.

Katherine (Kat) Bray is the Lorain ATP Coordinator. Kat is a Certified Health Education Specialist in the Health Promotion and Chronic Disease Prevention Division at Lorain County Public Health where she collaborates with partners from various sectors to implement chronic disease prevention strategies that aim to improve population health outcomes. She specializes in community organizing around active transportation,

school health and worksite wellness. She coordinates the Creating Healthy Communities program at the health department. Kat earned her Master's in Community Health from the University of Cincinnati and attended Miami University of Ohio to earn her Bachelor's degree in Kinesiology and Health Promotion.

Sara Tille, also with Lorain County Public Health, is supporting Kat to develop and implement the AT Plan.

LORAIN AT TEAM

- Rick Soto, City of Lorain Police Department, Traffic Commissioner
- Phil Dore, City of Lorain, Chief of Staff, Deputy Safety-Service Director
- Derek Feuerstein, City of Lorain, former Chief of Staff, Deputy Safety-Service Director
- Dale Vandersommen, City of Lorain, City Engineer
- Veronica Newsome, City of Lorain, Engineering
- Victor Leandry, El Centro De Servicios Sociales, Executive Director
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- Jamie Montague, Lorain City School District, Director of Safety and Security
- Jeff Hawks, Lorain City School District, Executive Director of Operations
- Rachel Tansey, Lorain City School District, Grant Coordinator
- Bryan Hilko, Lorain City School District, Principal, General Johnnie Wilson Middle School
- Don Jacopin, Lorain City School District, Procurement Supervisor
- Thomas Orlosky, Lorain City School District, former School Resource Officer (SRO)
- Cindy Coyle, Lorain City School District, former Transportation Coordinator
- Carmen Ransom, Lorain City School District, Transportation Services
- Jennifer Bracken, Lorain County Metro Parks, Assistant Director
- James Ziemnik, Lorain County Metro Parks, Director
- Neil Hamilton, Lorain County, Engineering
- Evelisse Atkinson, Lorain Metropolitan Housing Authority, Resident Coordinator
- Rick Payerchin, Lorain Morning Journal, Reporter



- Tiffany McClelland, Lorain Port Authority, Economic Development Specialist
- Tom Brown, Lorain Port Authority, Executive Director
- Eric Newsome, Lorain Proud Community Group, Resident
- Katie Sieb, Northeast Ohio Area Coordinating Agency (NOACA) Planner
- Julie Walcoff, Ohio Department of Transportation, Active Transportation Manager
- Jeremy Adato, Ohio Department of Transportation, District 3, Safe Routes to School Coordinator
- Max Schaefer, Ohio Environmental Council, Northeast Ohio Director, Resident

- Mark Jones, Resident
- Bob Burkhardt, Silverwheels Cycling Club, Resident

CONSULTANT TEAM

- David F. Shipps, AICP – Toole Design Group (formerly with TranSystems Corporation) (Project Manager)
- Stephanie Tresso – MurphyEpson (Public Involvement Lead)
- Jennifer Hefferan – Toole Design Group
- Galen Omerso – Toole Design Group
- Wendy Phelps – Toole Design Group



3 Public Involvement

3.1 Public Involvement Process

Public Involvement Process

This section summarizes input and feedback the team obtained as part of a multi-faceted public involvement process. Input was received from the Lorain AT Team, school and city leadership, residents, parents and partners (i.e., organizations that can help with implementation).

The goal of the process was to identify demand for active transportation in Lorain — Where do residents go? How do they get there? Are there places where they would like to be able to walk, bicycle, or take transit, such as schools, parks, libraries, health care, shopping, jobs and Lake Erie?

Lorain Active Transportation Team Input

The AT Team held a kick-off meeting in February 2017. The meeting included an overview of active transportation, Safe Routes to School and an overview and general timeline of the plan development process. Meeting materials are in Appendix B. The team continued to meet during the entire planning process, typically once a month.

Community Input and Outreach

Survey

The Lorain AT Team collected input through ODOT's new Active Transportation survey, in English and Spanish, distributed to residents, parents, students and others.

There were 133 residents who took the Ohio Department of Transportation's Active Transportation survey. The team promoted the survey extensively through members' networks, in the local media, on social media, on the City and School District's web sites and by word of mouth at events. There were especially high responses from students, as evidenced by the large number of under 16 respondents and high ranking of school bus as a mode of transportation.

The age breakdown is as follows:

- Under 16: 41%
- 16-25: 1%
- 26-40: 19%
- 41-65: 34%
- Over 65: 5%



The top five ways that respondents most often made daily trips for work or school are:

- Drive alone or dropped off – 69%
- Car pool – 45%
- School bus – 32%
- Other – 32%
- Public transit – 30%

The top five ways that respondents made daily trips to the store, etc. for errands are:

- Drive alone or dropped off – 73%
- Car pool – 50%
- Public transit – 39%
- School bus – 37%
- Walking – 35%

Respondents were asked how often they have used the following travel modes in the past year.

- Driving a personal vehicle: 65% said yes, 35% said no
- Bicycling: 61% said yes, 39% said no
- Walking: 91% said yes, 9% said no
- Riding public transit: 11% said yes, 89% said no

The top five reasons that prevent respondents from bicycling are:

- I am uncomfortable riding in the road with cars.
- There are no bike-friendly roads near my home.
- I don't own a bike.
- It would take too long to bike to the places where I would go. (tie with #3)
- Other

The top five reasons that prevent respondents from walking are:

- It would take me too long to walk to the places where I would go.
- I am uncomfortable walking on the road with cars.
- Other



- I do not feel safe from crime.
- I have to carry heavy or bulky items.

The top five reasons that prevent respondents from riding the bus are:

- There is not a bus route where I go.
- There are no bus routes near my home.
- I didn't know my community has bus service.
- It would take me too long to ride the bus to the places where I would go.
- Other

Among respondents who had bicycled in the past year, when asked to describe themselves as a “person who bikes,” the top three descriptions are:

- I bike on low traffic roads.
- I bike on trails, not on roads.
- I bike on high-traffic roads without a bike lane.

Among respondents who had walked in the past year, when asked to describe themselves as a “person who walks,” the top three descriptions are:

- I walk on sidewalks, not on roads.
- I walk on low-traffic roads with sidewalks.
- I walk on trails, not sidewalks.

Among respondents who had ridden public transit in the past year, when asked to describe themselves as a “person who rides the bus,” the top three descriptions are:

- I would ride the bus if it went to places that I go.
- I don't ride the bus and don't plan to in the future.
- I ride the bus because it is “green.”

WikiMap

An interactive online map, called a WikiMap, was used to gain additional feedback from the community. About 30 respondents provided feedback on destinations to which they would like to be able to walk or bicycle and places that are barriers to walking and bicycling. Respondents also provided feedback on places in the City where conditions are good for walking or bicycling and place that need improvement for walking and bicycling.

Walk, Bike, and Transit Audits



Walk, bike and transit audits were conducted to gain additional feedback on key routes for walking, bicycling and transit. The consultant team and members of the Planning Team participated in these activities the week of June 19. Written notes from the audits are included in Appendix C.

During the week of audits, the Lorain AT team also hosted a Walk Audit training session through ODOT’s Safe Routes Academy. Twelve people attended from nine organizations, including the Lorain Historical Society, Lorain County Public Health, the Ohio Environmental Council, Lorain City Schools, the City of Lorain, United Way, Lorain Port Authority, Lorain Public Library and Mercy Health System. The training was a “train the trainer” format so that team members and other community volunteer leaders could conduct additional walk audits on their own.

Participants in the walk audits observed conditions along adjacent roadways. Notes and photographs of existing bicycle and pedestrian infrastructure and likely barriers to walking and bicycling to school were documented. The information collected contributed to the plan’s recommendations.

Walk audits were conducted around Downtown Lorain, along Leavitt Road and Washington Avenue, as well as at and around Larkmoor Elementary School, Longfellow Middle School, General Johnnie Wilson Middle School and Lorain High School.

The team’s two bicycle audits were: Black River Bikeway to Colorado Avenue, ending near Riverside Park; and Erie Avenue (US 6) between roughly Lakeview Park and Century Park.

The team also participated in a transit analysis by riding two routes on Lorain County Transit (LCT). The group started at Meridian Plaza on LCT Route 2, continued on LCT Route 1 at the transfer point and returned to Meridian Plaza. While on the bus, team members spoke with riders about riding the bus in Lorain and their opinions, likes and dislikes about the service.

Community Outreach

During the AT Team’s initial week of site work, the consultant team and planning team members also sought input and suggestions from Lorain residents. The team went to the following locations to drop off maps and seek feedback. El Centro, Salvation Army, Lorain Library downtown branch, City Hall, Lorain Head Start, Lorain City Schools’ bus depot and Slovak Club, among others. The team also hosted and participated in “listening sessions” with the Lorain Proud Young Professionals group and at the Lorain International Princess Pageant, and attended the Eastside Block Watch meeting.

Student Travel Tallies

The Ohio Department of Transportation’s School’s Student Travel Tally Forms were distributed district-wide in fall 2017. The purpose of the Student Travel Tally Forms is to establish a baseline for current student travel modes. Student Travel Tally Forms were completed in the classroom and were returned from 12 of the District’s 14 schools (86%).

Walk	Bike	School Bus	Family Vehicle	Carpool	Public Transit	Other
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Morning trips (7,924 trips)	25%	.05%	25%	48%	0%	0%	1.8%
Afternoon trips (7,877 trips)	25%	.05%	25%	48%	0%	0%	1.8%

shows a summary of the morning and afternoon travel modes. The Travel Tally Summary is in **Appendix F**.

Table 1: Student Travel Tally Results

	Walk	Bike	School Bus	Family Vehicle	Carpool	Public Transit	Other
Morning trips (7,924 trips)	25%	.05%	25%	48%	0%	0%	1.8%
Afternoon trips (7,877 trips)	25%	.05%	25%	48%	0%	0%	1.8%



4 Existing Conditions

City Context

Lorain is a lakefront community in an urban setting. Its population is 63,700. Today the City is a mix of owner-occupied (58%) and rental (42%) homes. The city's previous employer base was dominated by the automotive and steel industries. Today, its anchor institutions include Mercy Hospital.

The City of Lorain has high a poverty rate. Twenty-eight percent of residents in the City of Lorain are at or below the poverty line, and 10% of county residents are. Residents are faced with multiple, arduous social factors that make healthy lifestyles more difficult to achieve.

The City has a well-developed sidewalk infrastructure, although some sidewalks are reaching the end of their useful lifespan. The street network was built to accommodate a higher volume of vehicles than currently use the streets today. Some of the excess road capacity could be converted into bike lanes and other active transportation uses.

There are newly installed bike lanes along East Erie Street from Root Road to the Black River. Bike lanes also exist on Leavitt Road, starting just south of W 24th Street and extending south of Eastman Drive, although their design does not meet current bike lane design standards.

In addition, residents of all ages can use trails that are part of Lorain County Metro Parks, including the Black River Reservation. It connects Lorain to Elyria, the county seat. Additionally, the soon-to-be designated US Bike Route 30 runs through the City of Lorain (from west to east) on Lake Road, Erie Avenue, Kansas Avenue, Garfield Blvd., Root Road and back onto Lake.

School District Context

During the 2016-17 school year, Lorain City School District (LCS) had 16 K-12 schools. According to the 2016-2017 Ohio Department of Education Report Card, the district had an enrollment of 6,546 students. The ethnic distribution for the District is: African-American (27.7%), Caucasian (23.8%), Multi-Racial (7.9%), Hispanic (40%), Asian or Pacific Islander (0.3%), and American Indian or Alaskan Native (0.3%). It is of note that 7.6% of LCS students have limited English proficiency and 19.5% of students have disabilities. Fully 100% of students are eligible to participate in the federal free/reduced-price breakfast and lunch programs. During the 2016-2017 school year LCS offered transportation for students in grades K-8 who live more than two miles from their school on a yellow bus. A list of the 14 schools included in the City of Lorain Active Transportation Plan is shown in **Appendix D**.

Health Contexts

Obesity and chronic diseases have reached epidemic levels around the state. Ohio and other states are starting to take a more holistic approach to addressing these preventable issues. Incorporating health with active transportation is one way that agencies at all levels are working to combat these public health crises.

City of Lorain

Among adults in the City of Lorain, 29% are obese and 39% are overweight, compared to 33% who are overweight in the rural and suburban areas of Lorain County. Additionally, nearly a quarter of Lorain County adults (23%) do not participate in any physical activity regularly. This includes 2% who are unable to exercise. The good news is that 53% of Lorain County adults



engage in some type of physical activity for at least 30 minutes three or more days per week.

Lorain County Health Rankings

The Robert Wood Johnson Foundation, in partnership with the University of Wisconsin, has ranked the health of residents in nearly every county in the United States. The County Health Rankings (countyhealthrankings.org) measure what is making people sick or healthy, and identify how healthy residents are and how long they will live. Out of Ohio's 88 counties, Lorain County, where the City of Lorain is located, ranked 41st in 2017.

Lorain City Schools — Body Mass Index for Third Grade Students

A review of the *Report on the Body Mass Index of Ohio's Third Graders*, conducted by the Ohio Department of Health (ODH), found that childhood obesity is one of the most important public health issues in Ohio with more than 30% of children and adolescents classified as overweight or obese. In a 2009-2010 study, it was reported that 39.2% of third grade students living in Lorain County, where the City of Lorain is located, have a prevalence of being overweight or obese. A map of the State of Ohio showing the percentage of overweight and obese third graders by county can be found in **Appendix A**.

Lorain County Community Health Assessment

The 2015 Lorain County Community Health Assessment included questions for 6th, 8th and 10th graders in Lorain County, which includes the City of Lorain. It had three questions for youth related to physical activity.

The results summary for 6th graders in Lorain County is that: 70% participated in at least 60 minutes of physical activity three or more days in the past week; 48% did so on five or more days a week; and 27% participated daily. Additionally, 12% reported not participating in at least 60 minutes of physical activity on any day in the past week.

The results summary for 8th graders in Lorain County is that: 76% participated in at least 60 minutes of physical activity three or more days in the past week; 52% did so on five or more days a week; and 30% participated daily. Additionally, 9% reported not participating in at least 60 minutes of physical activity on any day in the past week.

The results summary for 10th graders in Lorain County is that: 73% participated in at least 60 minutes of physical activity three or more days in the past week; 48% did so on five or more days a week; and 25% participated daily. Additionally, 11% reported not participating in at least 60 minutes of physical activity on any day in the past week.

Physical activity, including walking and biking, as well as educating residents of all ages about the importance of an active lifestyle, are key components of the City of Lorain Active Transportation Plan to foster awareness and prevention to combat this serious public health issue.

Crash Statistics

According to the Ohio Department of Transportation (ODOT), from 2011-2013, 759 crashes were reported involving pedestrians or bicyclists within 1.5 miles of a Lorain City Schools building serving kindergarten through 12th grade students. Overall, 356 crashes involved pedestrians and 418 involved bicyclists. These crashes resulted in five fatalities and 678 injuries.

While 759 pedestrian- and bicycle-related crashes may seem like a high number, it is important to remember that this is an urban area where larger populations lead to higher numbers of walkers and cyclists. Walking and bicycling are great modes of transportation, and are safe in most cases. Travelling from one location to another poses some degree of inherent danger regardless of mode, but the crash numbers do show that more work needs to be done to make streets safer to walk, bike, bus and ride in vehicles.



School District Policies and Accomplishments

Current LCS policies that impact school travel are listed below and are organized by category.

School District Policies

Busing, Walking and Bicycling Policies

The District offers busing to students in grades K-8 who live more than two miles away from their school. It does not offer busing to high school students. This encourages students to choose active transportation to get to and from school and after-school activities.

However, Ohio Department of Education (ODE) regulations prohibit school bus drivers from picking up or dropping off students at locations that are not assigned stops. Consequently, school bus drivers cannot drop students off at a remote drop off or park and walk locations as part of a walk or bike to school event.

Student Wellness Policy

The District has a student wellness policy that promotes physical activity during the school day and after school in the community and that educates and promotes nutrition to students.

Additionally, the District offers free, in-school health services to students through its Titan Wellness Program. This program includes a wide range of physical and mental health services to students at no cost. There are more than 500 community partners that work with Titan Wellness and other, related special programs.

Regarding Pedestrian and Bicycle Accommodation on School Campuses

Bike racks are available for student use at all 14 schools that are part of the Plan.

Idling Policy

The District has an engine idling policy. Its goal is to eliminate all unnecessary idling by school buses and delivery vehicles on and around school grounds, as well as during field trips and extra-curricular activities.

Personal Security Policies

At the policy level, LCS addresses the issue of personal security, which includes walking and bicycling to school, theft and damage of property (including a bicycle) through its district-wide Code of Student Conduct.

Liability Policies

The school district does not require waivers for students who regularly walk and bicycle to school. It is decided on a building-by-building basis if students who participate in special walking and bicycling activities will need parental permission. These activities include Walk to School Day, Bicycle Rodeos, Walking School Buses and Bicycle Trains. LCS requires background checks for adults who volunteer with their programs when unsupervised by LCS staff.

School District Accomplishments

The following list of accomplishments highlights the school(s) who participated in the activity and denotes the corresponding *E* (Encouragement, Education, Enforcement, Evaluation and Engineering).

- International Bike (and Walk) to School Day Event – General Johnnie Wilson MS, Washington ES, planned spring 2017. (Education, Encouragement)
- International Walk to School Day Event – General Johnnie Wilson MS, fall 2017. (Education, Encouragement)



- Walk Audit Training – summer 2017 (Education, Encouragement)
- Walking School Bus Pilot - General Johnnie Wilson MS, fall 2017. (Education, Encouragement)
- Walk Audits – Walk audits were conducted at four LCS schools in June 2017 as part of the development of the AT Plan. (Education, Encouragement)
- Active Transportation Community Surveys – Conducted in summer-fall 2017. (Evaluation)
- Student Travel Tallies – Conducted in in fall 2017. (Evaluation)
- Reviewed LCS policies related to wellness, busing, walking and bicycling to school – Completed during the 2017-2018 school year. (Evaluation)
- Adult crossing guard program – district wide at multiple locations around the City (Enforcement)

Grants Awarded

- The Ohio Department of Transportation – ATP Development

Local Government Policies, Plans and Programs

This section summarizes the local government policies, plans and programs that impact active transportation.

Local Government Policies

The AT and Consultant Team Members reviewed relevant city and regional policies to incorporate existing recommendations. The list of policies reviewed include:

- The City of Lorain ensures all curb ramps are ADA accessible when doing roadway rehabilitation projects.
- The City of Lorain reviews all plans that are submitted for roadway and sidewalk widths.

- The City of Lorain regularly analyzes and evaluates where bike facilities are needed based on data, some of which is contained in the ATP. In the past, the City used crash data to identify and locate bike facilities.

Local Government Plans

The AT and Consultant Team Members reviewed relevant city and regional plans to incorporate existing recommendations. Additionally, coordination will be ongoing as plans are updated. The plans reviewed with their implementation date include:

- Northeast Ohio Areawide Coordinating Agency (NOACA) *Connections+ 2035* Metropolitan Transportation Plan
- NOACA 2013 Regional Bikeway Plan
- NOACA 2016 Street Design Guidelines
- NOACA Transportation Improvement Program
- NOACA Transportation for Livable Communities Initiative (TLCI) plans

Local Government Programs

The SRTS and Consultant Team Members reviewed relevant local government programs as they relate to walking and biking. The list of programs reviewed include:

- Lorain County Public Health Live Healthy Lorain
- NOACA Lorain County Bicycle Map
- NOACA Temporary Infrastructure Program

Local Walking and Bicycling Route Conditions

As part of the public involvement process, residents gave feedback on an online interactive map, called a WikiMap, on current and potential walking and bicycling routes and destinations around the city. The following is a summary of the suggestions and feedback.



Some key routes indicated as needing improvement for bicycling were:

- Highway 611 (W 21st Street/Henderson Drive) from W Erie Ave to Colorado Avenue
- Kansas Avenue from Colorado Avenue to E Erie Avenue
- Colorado Ave from E Erie Avenue to Root Road
- Erie Avenue from the Black River to the western city boundary

Some key routes indicated as good for bicycling were:

- Ashland Avenue from W 17th Street to Cooper Foster Park Road
- Washington Avenue from Erie Avenue to Meister Road
- E Erie Avenue from Broadway Avenue to Root Road
- Cleveland Boulevard from Kansas Avenue to Day Drive
- F Street/Garfield Boulevard from Kansas Avenue to Root Road
- Louisiana Avenue from Erie Avenue to E Street/Longfellow Park
- River Bend Drive from Colorado Avenue to Cromwell Park
- Pearl Avenue from E 28th Street to N Ridge Road
- E 31st Street from the Black River to Fulton Road
- Fulton Road from E 31st Street to E 36th Street

Some key routes indicated as good for walking were:

- Pearl Avenue from E 28th Street to N Ridge Road
- Washington Avenue from W Erie Avenue to Meister Road
- Broadway Avenue from Erie Avenue to W 14th Street
- Black River Landing
- E Erie Avenue from Broadway to Root Road

Key barriers were:

- The Henderson Drive bridge over the Black River

- The Erie Street bridge over the Black River (and missing connections from the bridge)

Key destinations were:

- Central Park
- Lakeview Park
- Longfellow Park
- Century Park
- Dining and retail along Lakeside Avenue and E Erie Street
- Dining and retail near the intersection of Colorado Avenue and Henderson Drive

Local Gaps and Barriers to Active Transportation

Based on the information collected during the public involvement and data collection process, gaps and barriers to active transportation around the City of Lorain fell into three primary categories: land use, streetscapes and facilities. An additional conclusion is that the city lacks an overall culture of active transportation.

Specific issues include:

Land Use

- Large commercial parcels located away from residential; poor pedestrian and/or bicycle access
- Lack of activity in downtown

Streetscape

- Lack of street trees
- Lack of bicycle parking
- Lack of pedestrian scale lighting



Facilities

- Lack of facilities for walking and bicycling
 - Maintenance issues with existing facilities
 - Lack of ADA accessible curb ramps at many intersections
 - Missing pedestrian signal heads at many traffic signals
- Confusing transit. There are many signs making it difficult to find the bus stops



5 Recommendations

5.1 Background

This section discusses issues that impact active transportation in the City of Lorain and proposes recommendations to address them. There are two broad types of recommendations.

- *Infrastructure* which includes changes to the built environment, also called engineering or design
- *Non-infrastructure* which are policies and programs that include education, encouragement, enforcement and evaluation

Here are brief descriptions of the recommendation types.

Encouragement

Encouragement programs make walking, biking and taking the bus fun and help create a culture of using active transportation throughout the community, including at workplaces. When implemented in conjunction with education, encouragement improves skills and raises awareness.

Education

Education and awareness programs teach people of all ages how to walk, bike and ride the bus safely. When implemented in tandem with encouragement programs and supported by enforcement activities in the community and at schools, they can create a culture of active transportation, making the active choice the easy choice.

Enforcement

To increase active transportation, people who walk, bike and take the bus must feel safe while using sidewalks and roads, and on the bus. One key component of enforcement is education of all road users about properly using infrastructure and obeying all road rules. A second is enforcement of

laws for motorists when interacting with pedestrians, bicyclists and buses. A third is educating law enforcement on the rights of all road users. The goal is to foster responsibility and respect to reduce conflicts.

Evaluation

A wise woman once said, “If you can’t count it, you can’t fund it.” Just as implementing an active transportation plan is multi-faceted, so is its evaluation. Communities should seek quantitative research and feedback on programs and projects by using tools like ODOT’s Active Transportation Survey and Student Travel Tallies. Communities also should obtain qualitative information – for example, from listening sessions, public meetings and open-ended questions on surveys – on the why’s and how’s of the plan. This combination will show what is working, where additional investments and improvements are needed, and the community’s wishes.

Engineering

Engineering is designing and building safe and convenient infrastructure for people who walk, bike and take the bus, as well as for people who drive by making physical changes to the road and adjacent areas like sidewalks, lighting and tree lawns.

The plan’s recommendations are organized into three sections. They include background information and a table of infrastructure and non-infrastructure recommendations to emphasize the multi-faceted approach necessary to address the identified issues. They are:

- Support for Active Transportation (AT) – The recommendations in this section include plans, policies, procedures and stakeholder involvement.

Appendix A – Infrastructure Countermeasure Concepts

Crehore Street Neighborhood Bikeway

Consider 5 mini traffic circles:

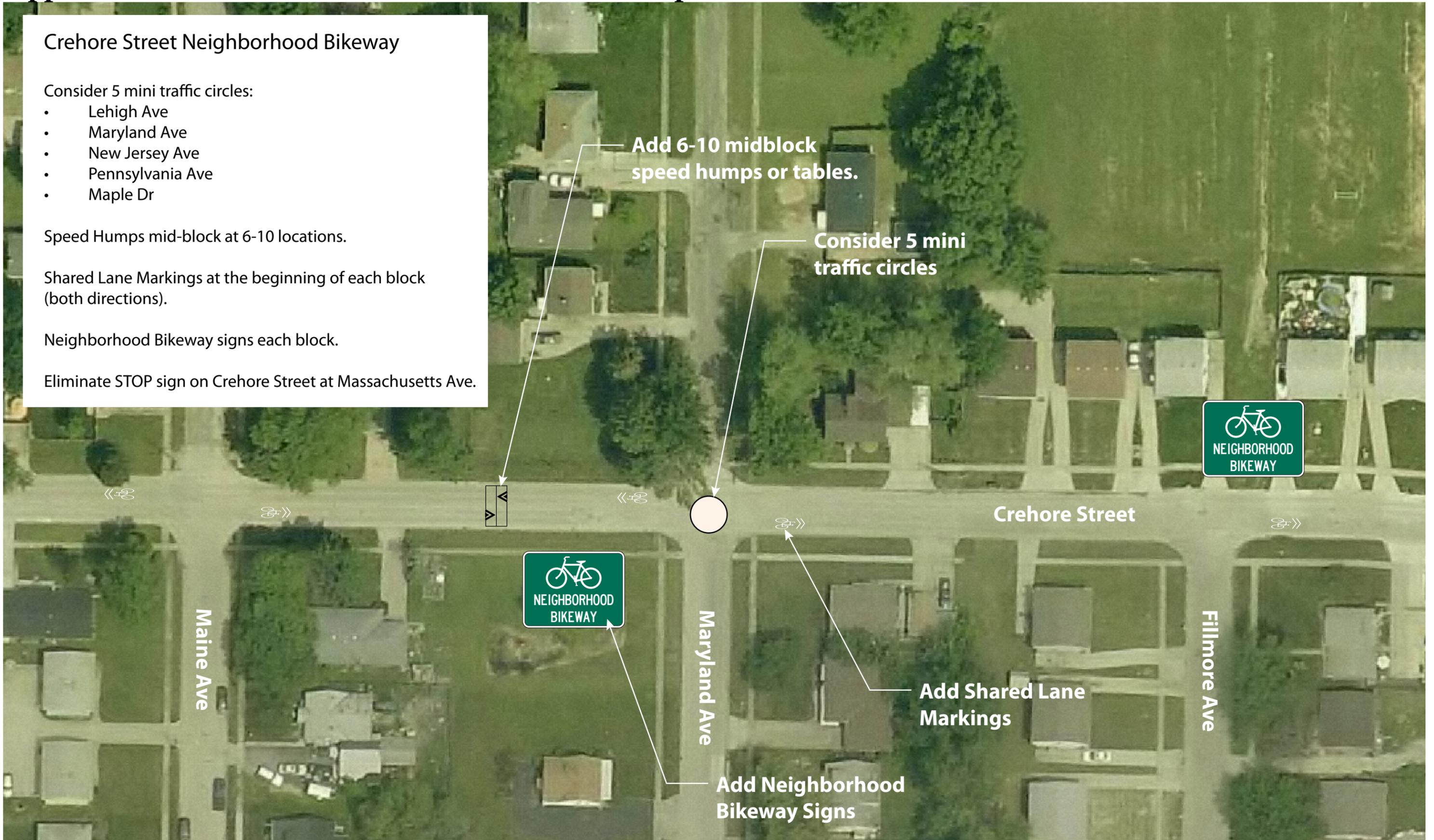
- Lehigh Ave
- Maryland Ave
- New Jersey Ave
- Pennsylvania Ave
- Maple Dr

Speed Humps mid-block at 6-10 locations.

Shared Lane Markings at the beginning of each block (both directions).

Neighborhood Bikeway signs each block.

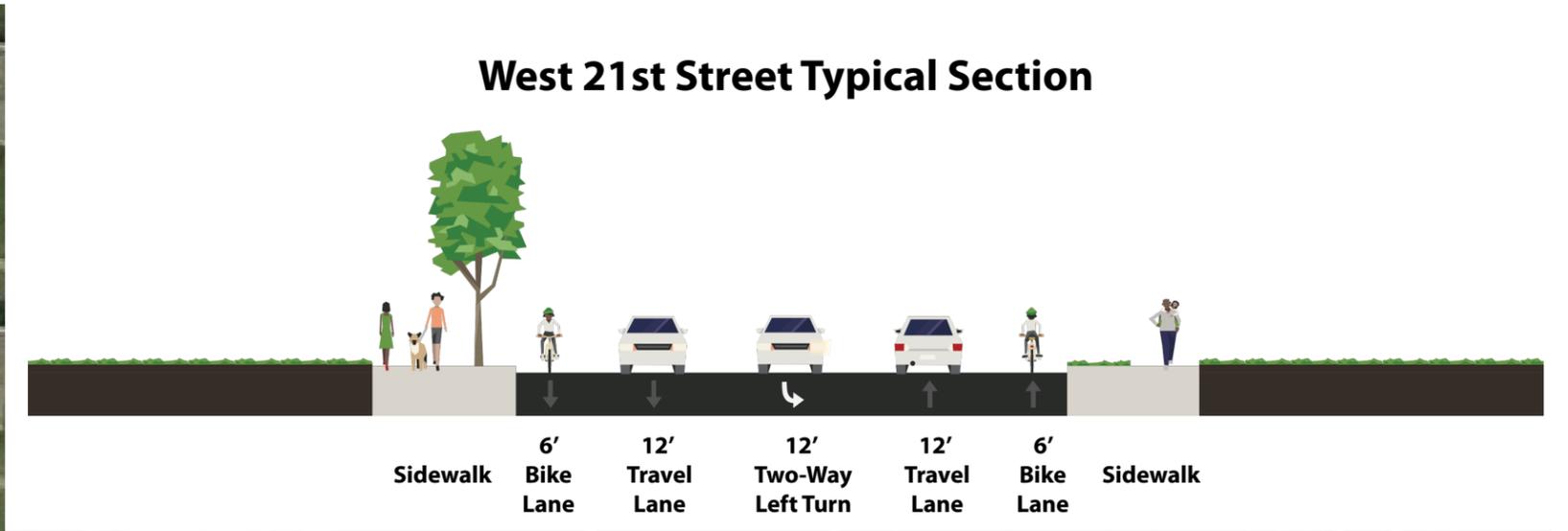
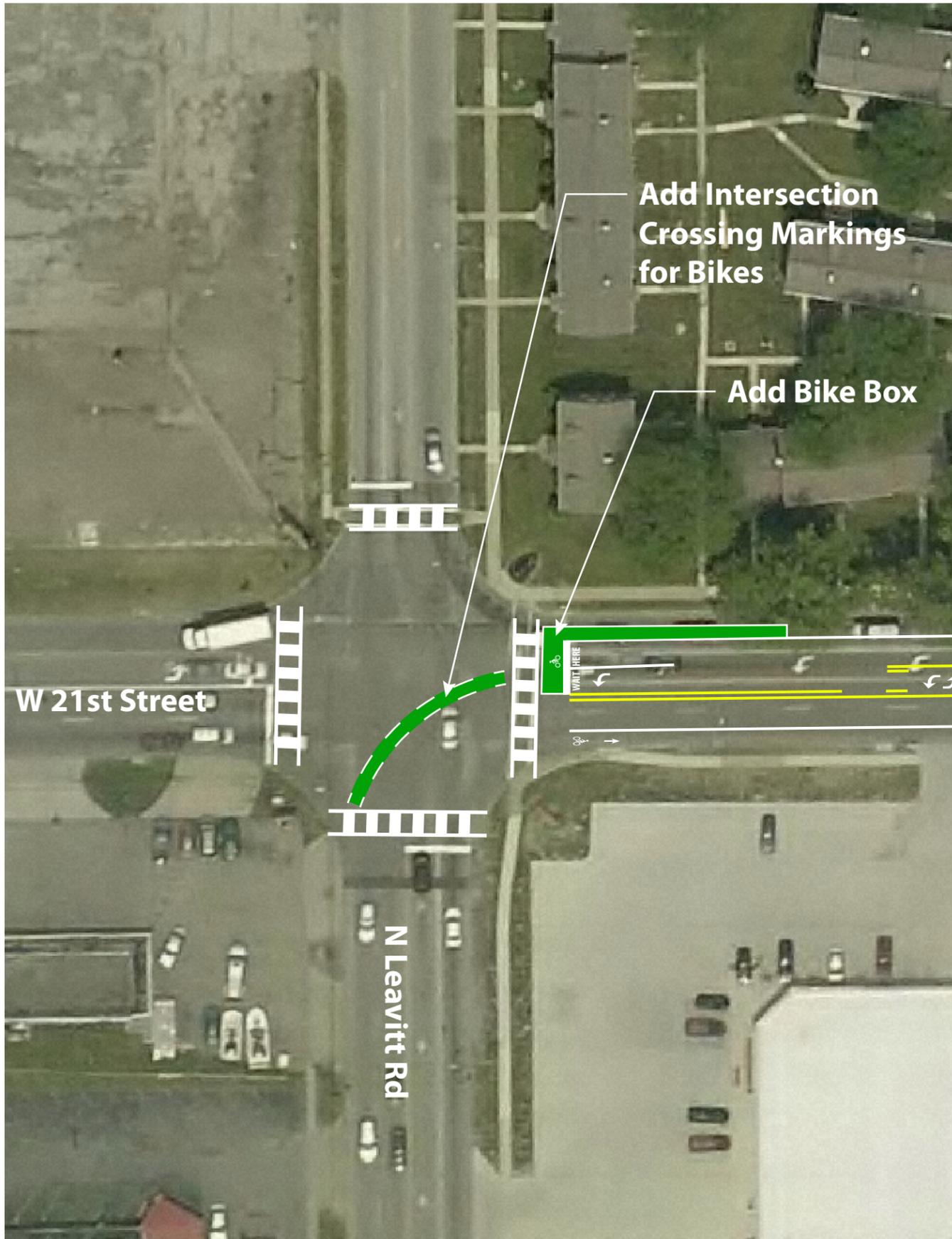
Eliminate STOP sign on Crehore Street at Massachusetts Ave.



**Concept: Crehore Street from Maine Avenue to Fillmore Avenue
Neighborhood Bikeway**



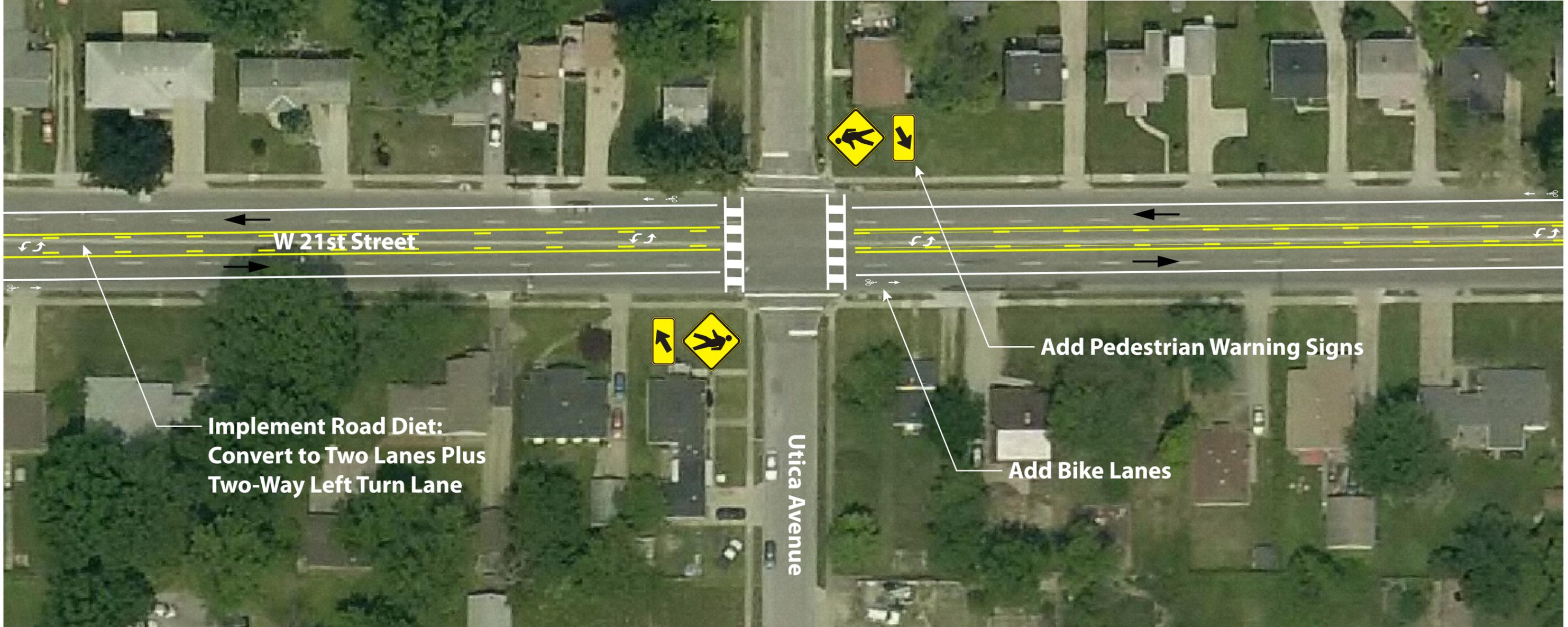
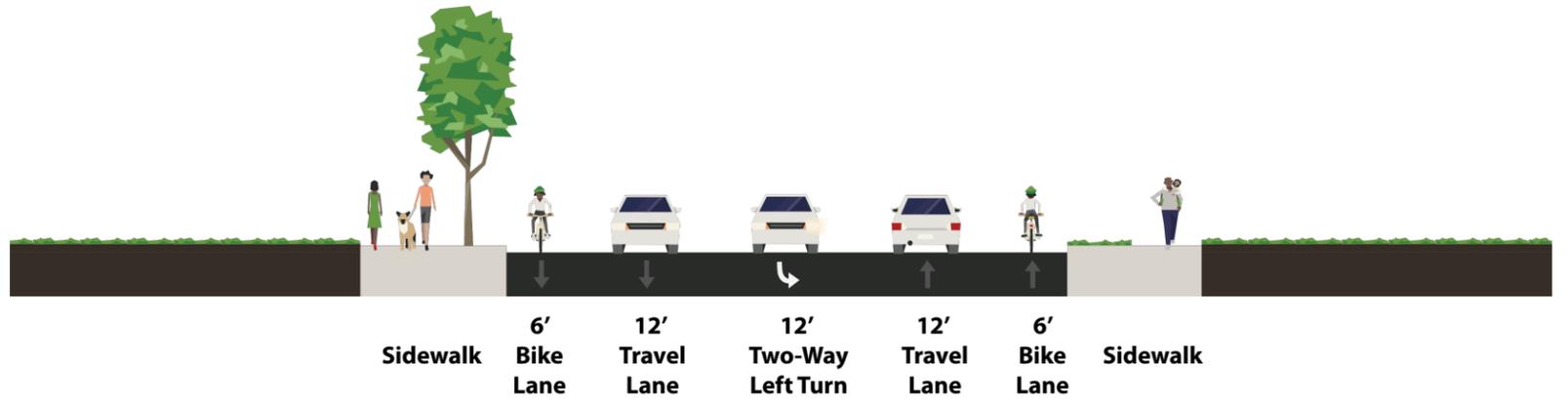
**Concept: E 28th Street at Grove Avenue
Community Walking Route**



Concept: W 21st Street and N Leavitt Road Bike Lanes



West 21st Street Typical Section



Implement Road Diet:
Convert to Two Lanes Plus
Two-Way Left Turn Lane

Add Pedestrian Warning Signs

Add Bike Lanes

**Concept: W 21st Street and Utica Avenue
Bike Lanes**

Appendix B — Prioritization Matrix, Projects, Recommendations

Lorain AT Prioritization Matrix

Category	New Criterion Language	Weighting
Pedestrian/ bicycle potential	Project supports identified corridor (on identified corridor = 20 points; within 1/4 mile of priority corridor and on street that connects to priority corridor = 5 points)	4
Pedestrian/ bicycle potential	K-8 schools within 1/2 mile of project (4+ schools = 20 points, 3 schools = 15 points, 2 schools = 10 points, 1 school = 5 points)	11
Deficiency	Sidewalk project is on a block with missing sidewalk (block has no sidewalks and project would provide continuous sidewalk on at least one side = 20 points; block does not have continuous sidewalks and project would provide continuous sidewalk on at least one side = 15 points; block has continuous sidewalk on one side and project would provide continuous sidewalk on the other side = 10 points; block has continuous sidewalk on one side and discontinuous sidewalk on the other side and project would complete the discontinuous sidewalk, 5 points)	4
Deficiency	Project is along or facilitates crossing a road where traffic speed or traffic volume may be a concern (road classification is US Highway = 20 points; road classification is State Highway = 15 points; road classification is collector = 10 points)	4
Deficiency	Project is within 500 feet of a pedestrian or bicycle crash location that has occurred within the last 5 years (5 or more crashes = 20 points; 4 crashes = 16 points; 3 crashes = 12 points; 2 crashes = 8 points; 1 crash = 4 points)	7
Feasibility	Estimated project cost is categorized as low or medium (estimated project cost is under \$20,000 = 20 points; estimated project cost is \$20,000 to \$149,999 = 10 points; estimated project cost is \$150,000 or more = 0 points)	9
Feasibility	Project requires ROW acquisition (yes = -20)	3
School demographics	Percent of students at school closest to project that are classified by the Ohio Department of Education school report card as economically disadvantaged (over 75% = 20 points; 50-75% = 14 points; 25-50% = 6 points)	3
School demographics	Percentage of students with disabilities at school closest to project is above the state average of 15% (yes = 20 points)	2
Support	Project is within 1/4 mile of a K-8 school that has delivered a child pedestrian or bicycle safety education program in the last 2 years (yes = 20)	2
Support	Project is within 1/4 mile of K-8 school that has participated in International Walk to School Day in the last 2 years (yes = 20)	2

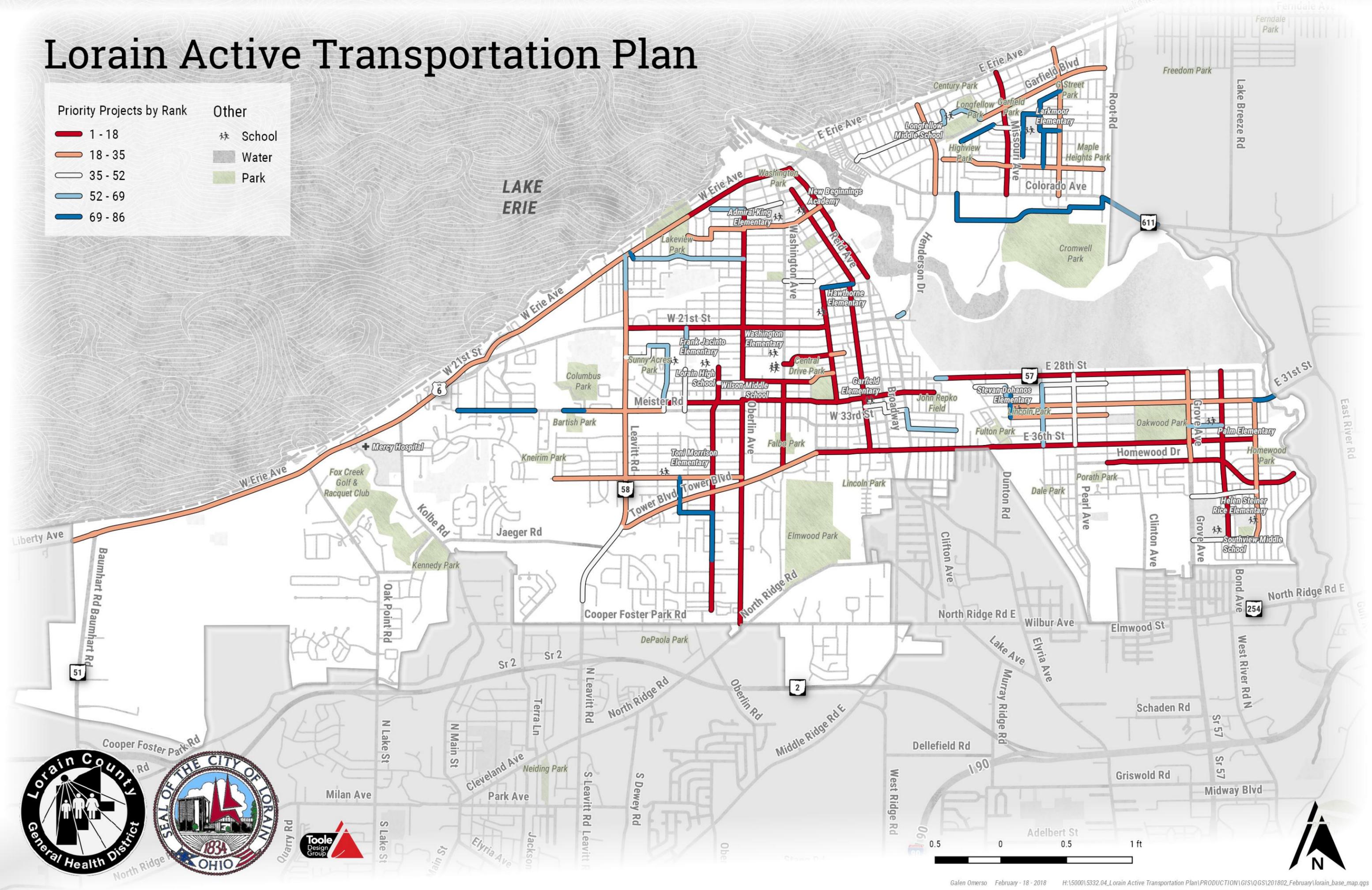
Lorain Active Transportation Plan

Priority Projects by Rank

- 1 - 18
- 18 - 35
- 35 - 52
- 52 - 69
- 69 - 86

Other

- School
- Water
- Park



Lorain Active Transportation Plan

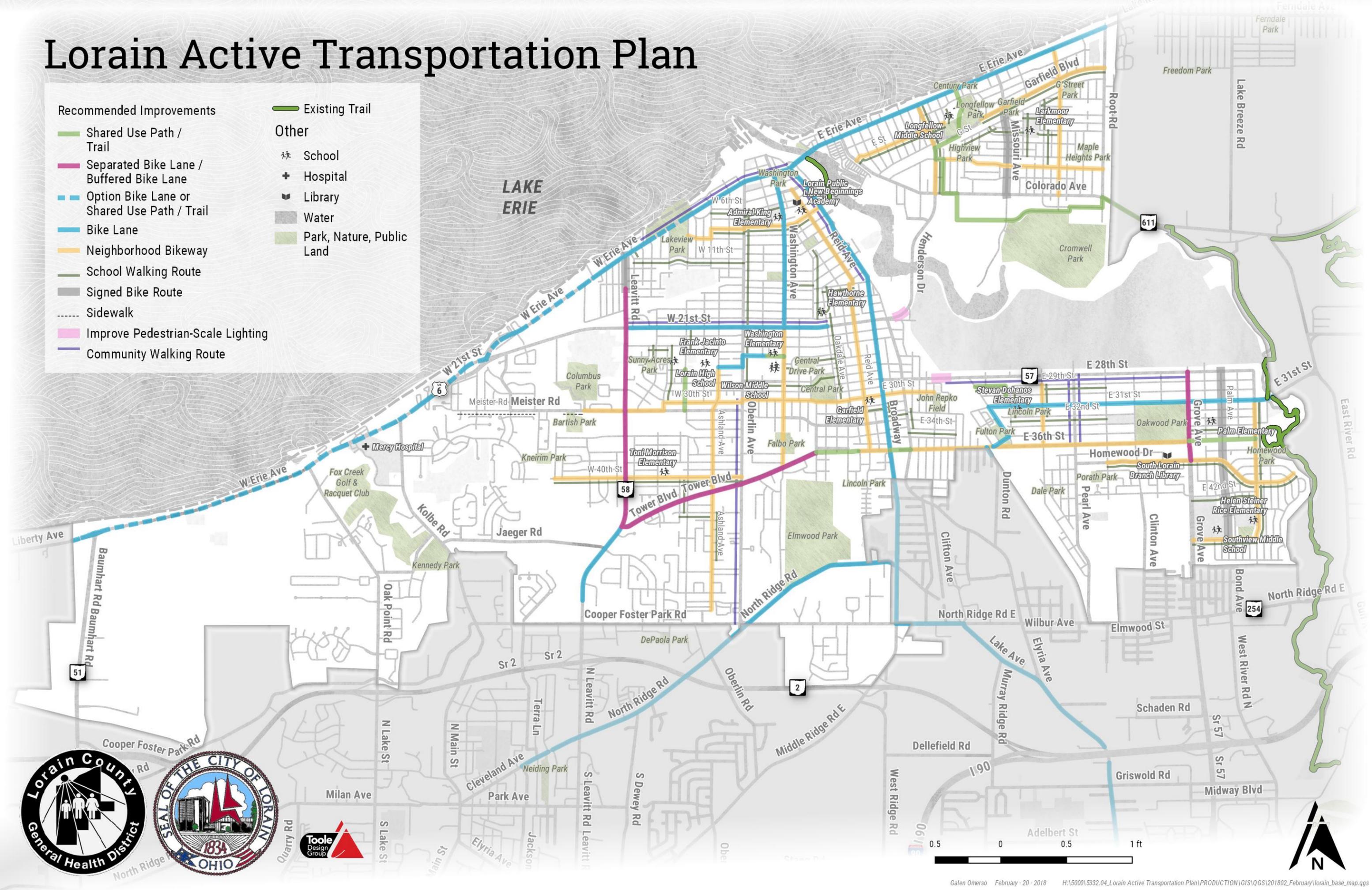
Recommended Improvements

-  Shared Use Path / Trail
-  Separated Bike Lane / Buffered Bike Lane
-  Option Bike Lane or Shared Use Path / Trail
-  Bike Lane
-  Neighborhood Bikeway
-  School Walking Route
-  Signed Bike Route
-  Sidewalk
-  Improve Pedestrian-Scale Lighting
-  Community Walking Route

Existing Trail

Other

-  School
-  Hospital
-  Library
-  Water
-  Park, Nature, Public Land



Lorain Active Transportation Plan

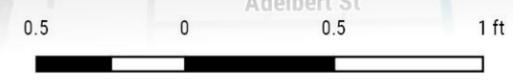
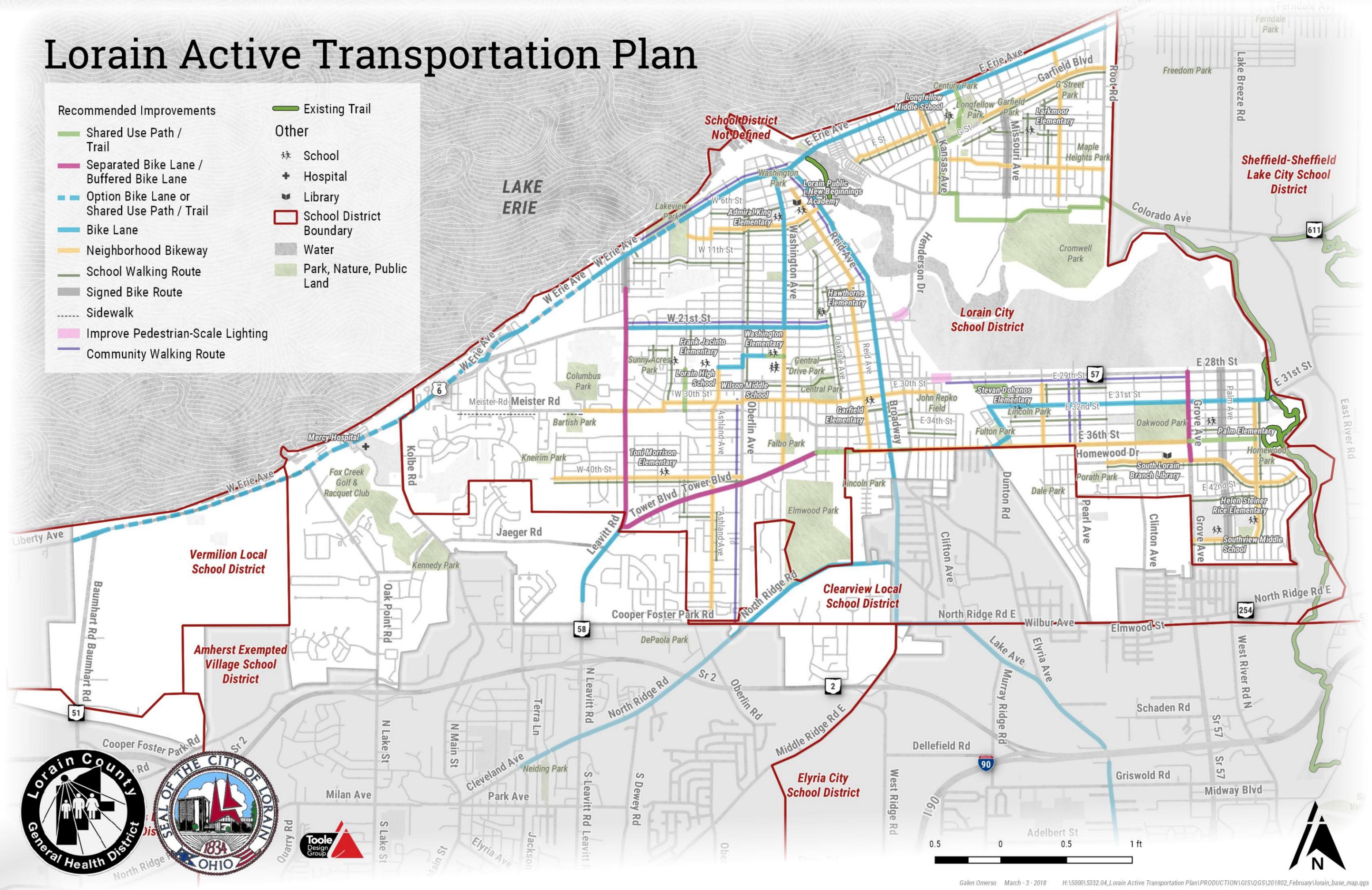
Recommended Improvements

-  Shared Use Path / Trail
-  Separated Bike Lane / Buffered Bike Lane
-  Option Bike Lane or Shared Use Path / Trail
-  Bike Lane
-  Neighborhood Bikeway
-  School Walking Route
-  Signed Bike Route
-  Sidewalk
-  Improve Pedestrian-Scale Lighting
-  Community Walking Route

Existing Trail

Other

-  Existing Trail
-  School
-  Hospital
-  Library
-  School District Boundary
-  Water
-  Park, Nature, Public Land





- Safety and Comfort – The recommendations in this section address the safety and comfort of residents and students as they walk, bicycle and take the bus around the city.
- AT Program Sustainability – The recommendations in this section are intended to help sustain the Lorain AT Team beyond the creation of the city-wide Active Transportation Plan and its implementation.

Issues

The issues covered in this section were identified through discussions with Lorain AT Team members, feedback from the public involvement process; field evaluation; evaluation of online and written documents detailing City and School District plans, policies, procedures and programs; and evaluation of data provided by the State of Ohio, NOACA, the City of Lorain and Lorain City Schools.

An Implementation Action Plan, including a general schedule and key stakeholder roles is included in Section 5.

Priority Routes

The team created Priority Routes to focus recommendations in smaller geographic areas that will have the most impact on improving conditions for active transportation. Priority Routes are defined as routes where high numbers of residents currently walk, bike and/or take the bus or could potentially walk, bike and/or take the bus.

The Consultant Team identified Priority Routes by analyzing the spatial relationship between existing walking and bicycling facilities and school locations, student addresses and key destinations around the city, such as parks, grocery stores, medical offices, etc. Sidewalks and signalized locations for crossing streets functionally classified as collectors and/or

arterials (i.e., streets that are designed for heavier traffic volumes than local streets) were determining factors in this process. The identified Priority Routes are listed in Attachment 2 with accompanying recommendations that are aimed at improving the walking, bicycling and busing conditions on the corridors.

Infrastructure Countermeasures Concepts

The team created infrastructure countermeasure concepts to illustrate how some of the plan's recommendations could be implemented. Four countermeasure concept drawings are in Appendix A.

Two of the drawings illustrate how bike lanes could be implemented on W 21st Street.

- The first drawing shows the intersection of W 21st Street and N Leavitt Road. It includes bike lanes, a bike box to assist bicyclists with the left turn from W 21st Street onto N Leavitt Road, and high visibility crosswalks.
- The second drawing shows the intersection of W 21st Street and Utica Avenue. In addition to bike lanes, this drawing shows high visibility crosswalk markings and pedestrian warning signs to improve visibility of the pedestrian crossing at Utica Avenue.
- A third drawing illustrates a proposed community walking route on E 28th Street. The drawing shows the intersection of E 28th Street and Grove Avenue with the addition of high visibility crosswalk markings, reconstructed curb ramps and replacing missing pedestrian signal heads to assist pedestrians in crossing all legs of the intersection.
- The final drawing shows a proposed neighborhood bikeway on Crehore Street. It includes shared lane markings, neighborhood bikeway signs, speed humps or tables, and mini traffic circles.



5.2 Support for Active Transportation

The recommendations in this section are related to the plans, policies and procedures for implementing improvements for active transportation as well as the involvement of constituencies whose support is needed to build the City of Lorain Active Transportation Program and improve conditions for residents of all ages who engage in active transportation in and around the City.

City Support for Active Transportation

Many of the recommendations recommended in this ATP would have to be implemented directly by the City of Lorain or with the City's support and approval. Consequently, this plan's success depends on support from the Office of the Mayor and Lorain City Council; coordination with City agencies; and alignment with plans, regulations and programs that guide

The Lorain AT Team will spearhead the implementation of these recommendations with support from the City of Lorain, Lorain City Schools, residents, students and parents/caregivers. An active and engaged team, with members from a wide range of agencies and organizations working together, will work together to build the City of Lorain Active Transportation Program while implementing prioritized recommendations. Prioritized recommendations and an Action Plan are detailed in Section 5.

the inspection, maintenance, improvement and regulation of neighborhood development and City-owned streets. In addition, continued participation from NOACA on the Lorain AT Team will help the plan's implementation.

Below is a list of recommendations focused on City support for the Lorain Active Transportation Program and its implementation.



Recommendations for City Support

Recommendation	Es Addressed	Recommendation Type
Seek formal adoption of the Lorain ATP by City Council.	All	School/city support
Continue the City's participation on the Lorain AT Team. Especially participation of the Departments of Engineering and Police, in support of the plan's recommendations.	All	School/city support
Continue NOACA's participation on the Lorain AT Team.	All	School/city support
Invite City leadership, including the Mayor, City Council Members and Department Directors to participate in high-profile Plan-sponsored activities, such as Walk and Bike to School Days, Open Street Events, Bike Share program planning and implementation milestones.	All	School/city support
Look for opportunities to include Lorain ATP infrastructure recommendations into planned City roadway improvement projects and other initiatives, such as vacant home demolition.	Engineering, Encouragement, Enforcement	School/city support
Identify areas with poor, broken or missing street lighting, work with the City of Lorain Street Department and First Energy on repairs. This will improve lighting in certain areas, as well as having a positive effect on higher crime locations.	All	School/city support
Research implementing Vision Zero in the City, including adopting a Vision Zero policy.	All	School/city support
Research implementing a complete streets policy, possibly modeled on NOACA's Street Design Guidelines.	All	School/city support



County Support for Active Transportation

The County is a key partner in implementing recommendations in this ATP, including coordination with County agencies and alignment with plans, regulations and programs. In addition, staff at the County Public Health Department, Metroparks and Engineer’s office are needed for the plan’s implementation.

Below is a list of recommendations focused on County support for the Lorain Active Transportation Program and its implementation.

Recommendations for County Support

Recommendation	Es Addressed	Recommendation Type
Continue the County’s participation on the Lorain AT Team. Especially participation of County Public Health Department, Metroparks and Engineer’s office.	All	County support
Coordinate the City AT plan’s implementation with the countywide AT plan.	All	County support

School District Support for Active Transportation

Support from LCS Administration and the Board of Education is critical to continuing and expanding the AT program. The Board of Education sets the vision, mission, goals and priorities for the District. They also establish policies that directly or indirectly influence the environment for walking and bicycling to LCS school buildings. The LCS Administration implements the Board of Education’s visions, goals and policies.

The success of the City of Lorain AT Program depends on aligning policies, procedures and practices at the district- and school-levels to support safe walking and bicycling to and from school. LCS Administration and the Board of Education have already taken several steps in this direction, including participation in *Walk and Bike to School Days* and installing bicycle racks at all newly renovated schools.



Recommendations for School District Support

Recommendation	Es Addressed	Recommendation Type
Continue providing regular updates to LCS Administration and Board of Education regarding the progress of the ATP.	All	School/city support
Obtain LCS Administration's approval of ATP.	All	School/city support
Request that members of the school board and Administration participate in AT activities (e.g., Walk and Bike to School Days).	All	School/city support
Incorporate active transportation into the LCS Student Wellness Policy as a way for students to obtain regular physical activity and reduce motor vehicle traffic and air pollution near schools. Develop, if needed, and provide resources to support this addition.	Encouragement	School/city support
Identify and task appropriate LCS staff and/or Lorain AT Team members to distribute priority route maps.	Encouragement	School/city support
Establish an AT presence online on LCS's site. The logical location is on the Titans Wellness page. Content could include: links to the ATP and details on the school-specific recommendations and activities.	Education, Encouragement	School/city support
Annually review district and school policies to determine if they encourage or discourage walking and bicycling to school.	All	School/city support

Parent and Caregiver Support for Active Transportation

Parent and caregiver support is crucial for students' regular participation in active transportation programs and activities. Parents and caregivers decide how children get to and from school, model pedestrian, bicycle and transit behaviors, and influence their travel environment by following (or failing to follow) traffic laws and arrival/dismissal procedures at school.

Parents and caregivers may understand the barriers to walking, bicycling and taking the bus better than City, school or district staff.

The Lorain AT program encourages parents and caregivers to participate in Walk and Bike to School Day events and provide feedback regarding barriers to walking, biking and busing through ODOT's Active Transportation Survey.



The Lorain AT Program recognizes the importance of enlisting parent and caregiver support and understanding their concerns. The following are

recommendations for parents and care givers to support students and active transportation.

Recommendations for Parent and Care Giver Support

Recommendation	Es Addressed	Recommendation Type
Lorain AT Team to provide guidance to schools on how to involve parents in the AT programming and communicate with parents regarding pedestrian, bicycle and busing safety issues.	All	Non-infrastructure
Make presentations at back-to-school events, parent meetings and other community meetings as appropriate.	Education	Non-infrastructure
Add a parent volunteer representative(s) to the Lorain AT Team.	All	Non-infrastructure
Send parents recorded voicemails from LCS’s CEO. Messages can address activities, safety, policies and other AT-related issues.	Education, Encouragement, Enforcement	Non-infrastructure
Create and distribute information on the Lorain Active Transportation Plan to parents via a flyer or email. Include information about what they can do to support the plan.	Education	Non-infrastructure
Conduct the Active Transportation Survey annually.	Evaluation	Non-infrastructure

5.3 Safety and Comfort of Students and Residents

This chapter covers issues and recommendations related to the safety and comfort of residents and LCS students as they walk, bicycle and take the bus. Prioritized recommendations and an Action Plan are detailed in Section 5.

Student Pedestrian and Bicycle Safety Education

Young children may have difficulty judging the speed of cars, when it is safe to cross a street, where to position themselves on the sidewalk while waiting to cross and how to walk along the road. Pedestrian and bicycle infrastructure (e.g., crosswalks and bike lanes) are most effective when everyone understands the rules of the road and uses facilities as they are intended. Pedestrian and bicycle infrastructure makes it easier to predict each other’s movements and make decisions that keep everyone safe.



Parents who are confident that their children have the skills needed to make smart decisions are more likely to encourage walking and biking to school.

Safe walking and biking behavior comes from repeated skill practice rather than intuition. Pedestrian and bicycle safety skills can be introduced as

early as Kindergarten and develop throughout a child’s school career. Middle school, high school or college students can serve as role models for younger students, and can help communicate pedestrian and bicycle safety messages.

Recommendations for Safety and Comfort of Students and Residents

Recommendation	Es Addressed	Recommendation Type
Implement ODOT’s “Every Move You Make, Make It Safe” Campaign to educate students (and parents) about the proper ways to walk and bicycle to school, as well as the benefits of doing so.	Education, Encouragement	Non-infrastructure
Support Lorain County Engineer’s Safety Star program for LCS elementary school students.	Education, Encouragement	Non-infrastructure
Add bicycle and pedestrian safety into LCS physical education (PE) and/or health curriculum.	Education, Encouragement	Non-infrastructure
Host <i>Fix-it Events</i> at schools, where students can bring their bike to school and have it checked for safety and for minor repairs with a local bike co-op or non-profit.	Education, Encouragement	Non-infrastructure
Host <i>Fix-it Events</i> in the community, where residents can bring their bikes and have them checked for safety and for minor repairs with a local bike co-op or non-profit.	Education, Encouragement	Non-infrastructure
Establish a monthly walk and bicycle to school day. Consider incorporating competitions between schools in the same area or district-wide.	Education, Encouragement	Non-infrastructure
Establish a bicycle to work day. Consider incorporating competitions between employers in the same area or city-wide.	Education, Encouragement	Non-infrastructure



Add a bike rodeo, bike safety and helmet fitting techniques to the LCS PE curriculum, including for students with disabilities.	Education, Encouragement	Non-infrastructure
Identify and target a middle school to pilot <i>Girls in Gear</i> , a female-focused, middle school student empowerment program.	Education, Encouragement	Non-infrastructure
Work with local employers to create Active Commute programs and supports.	Education, Encouragement	Non-infrastructure

Pedestrian and Bicycle Accommodations

The school campus is the final destination for all trips to school and the starting point for all trips from school. Consequently, the presence or absence of appropriate on-campus pedestrian and bicycle accommodations can have a significant impact on the safety and comfort of student walkers and bikers, which can also influence the number of students who walk and bicycle.

Common issues associated with pedestrian and bicycle accommodations on school campuses include:

- Campus sidewalk/path system does not provide convenient, comfortable and/or accessible connections to off-campus sidewalks and paths
- Marked crosswalks are not provided at locations where the campus sidewalk/path system intersects school driveways and parking lots
- Bicycle racks are not provided or existing bicycle racks are difficult to use, in poor repair, not in a secure location and/or not protected from rain and snow
- Driveways and curb radii are wider than necessary to accommodate cars and busses, increasing pedestrian crossing distances and exposure to traffic

Additionally, similar pedestrian and bicycle accommodation in the community, especially along priority routes and to popular destinations, can have a significant impact on the safety and comfort of all pedestrians and bicyclists and can impact the number of residents who walk and bicycle.

Common issues associated with pedestrian and bicycle accommodations in the community include:

- Sidewalks are beyond their useful life or are not up to current design standards, thereby not providing convenient, comfortable and/or accessible connections
- Marked crosswalks are not provided
- Pedestrian signals are not provided at key intersections
- Bicycle racks are not provided at key community locations or existing bicycle racks are difficult to use, in poor repair, not in a secure location and/or not protected from rain and snow
- Driveways and curb radii are wider than necessary to accommodate cars, trucks and busses – public transit and school buses, increasing pedestrian crossing distances and exposure to traffic



Recommendations for Pedestrian and Bicycle Accommodations

Recommendation	Es Addressed	Recommendation Type
Provide bicycle racks at all schools that are easy to use, in good repair, in a secure location and, if possible, protected from rain and snow.	Engineering	Infrastructure
Provide pedestrian pathways connecting school entrances to sidewalks and pathways adjacent to school properties.	Engineering	Infrastructure
Provide crossing facilities at locations where pedestrian pathways intersect school driveways and parking lots.	Engineering	Infrastructure
Increase number of bike racks and bike rack locations around the City.	Engineering	Infrastructure
Analyze, repair, replace or add sidewalks along frequently-used walking routes used by residents.	Engineering	Infrastructure
Provide crossing facilities on frequently-used walking routes used by residents.	Engineering	Infrastructure
Create and pilot an AT wayfinding program	Education, Encouragement, Engineering	Non-infrastructure, Infrastructure
Plan and implement a demonstration Open Streets event	Education, Encouragement	Non-infrastructure, Infrastructure
Work with community partners to create a community bike share program	Education, Encouragement, Engineering (?)	Non-infrastructure, Infrastructure
Research developing a bicycle rack ordinance, perhaps modeled on Lakewood's or Cleveland's.	Education, Enforcement	Non-Infrastructure, City support
Create a map of bike rack locations around the city and distribute.	Education, Encouragement	Non-Infrastructure



School Zone Awareness

The SCHOOL ZONE is generally referred to as the roadway(s) adjacent to the school within a one- to two-block radius. Drivers from outside of the local community may be unaware when they are driving through a school zone and may not exercise appropriate caution, including moderating speed and looking out for student pedestrians and bicyclists. School zone

signs and markings help increase awareness of the school zone and communicate the need for special care and attention. The Ohio Revised Code establishes a 20-mile-per-hour speed limit for school zones during school arrival and dismissal. The Ohio Manual of Uniform Traffic Control Devices (OMUTCD) establishes standards and guidelines for school zone signs and markings.

Recommendations for School Zone Awareness

Recommendation	Es Addressed	Recommendation Type
Add school zone signage and markings as needed.	Engineering	Infrastructure
Install flashing school zone beacons and speed feedback signs as needed.	Engineering	Infrastructure
Update existing school zone signage and markings to meet new Ohio MUTCD standard.	Engineering	Infrastructure
Provide parents with information regarding driver and pedestrian safety within the school zone.	Education	Non-Infrastructure
Distribute school walking and bicycling maps to all students at the beginning of each school year. This will not only allow parents to know the best routes for their children to take, it will also make them aware of where other students may be walking and bicycling.	Education, Encouragement	Non-infrastructure

Driver Behaviors

Today's drivers are often eating, using phones or other devices, and operating various buttons in their vehicles, all while traveling at speeds sometimes higher than the posted speed limits. They may be distracted, which puts pedestrians and other motorists at risk. A driver typically needs nearly 200 feet to stop a vehicle moving at just 30 MPH. Driving distracted

significantly reduces the driver's reaction time, which is particularly critical if drivers are traveling at high speeds.

The odds of a pedestrian dying in a collision with a motor vehicle increase dramatically with vehicular speeds. For example, a pedestrian hit by a vehicle traveling at 20 MPH has 95% chance of survival, while a pedestrian hit by a vehicle traveling 40 MPH has only a 15% chance of survival.



Recommendations for Driver Behaviors

Recommendation	Es Addressed	Recommendation Type
Implement traffic calming measures (traffic circles, chicanes, speed humps, road diets, etc.) at problem locations, where feasible.	Engineering	Infrastructure
Research current speed studies at Lorain PD and conduct speed studies with DPD at locations where speeding is suspected/identified as a concern.	Enforcement	Non-infrastructure
Install speed feedback signs at problem locations.	Enforcement	Non-infrastructure
Encourage Lorain residents, LCS parents and high school students to sign a pledge that they will avoid distracted driving, drive at a safe speed and abide by traffic laws, especially during school arrival and dismissal times.	Education	Non-infrastructure
Establish a district-wide speed reduction and/or “No Phone Zone” campaign.	Education, Enforcement	Non-infrastructure

Volume of Vehicular Traffic Along Identified Walking and Biking Routes

The volume of vehicular traffic along student walking and biking routes is a significant concern. In the AT survey, residents cited being uncomfortable walking on the road with cars and fear of crime as two of the top five reasons that prevent them from walking.

The top two reasons from residents about why they do not bike are: “I am uncomfortable riding in the road with cars,” and “There are no bike-friendly roads near my home.”

Traffic volumes along walking and biking routes present several challenges for pedestrians and bicyclists. High traffic volumes make it difficult for to cross the street, even with pedestrian signals and other crossing assistance devices. This can be especially worrisome for parents of elementary-aged children, knowing that students are still learning how to judge the speed of cars and how to cross within the sight of cars. High-traffic volumes also contribute to the perception of the street as a place dominated by automobiles and unsafe for pedestrians and bicyclists.



Recommendations for Reducing the Volume of Vehicular Traffic Along Identified Walking and Biking Routes

Recommendation	Es Addressed	Recommendation Type
Establish and implement at least one district-wide education/ encouragement event every quarter, such as Walk and Bike to School Day, Walking or Biking Wednesdays. Identify possible remote drop-off and pick- up locations at pilot schools.	Education, Encouragement	Non-infrastructure
Enable school bus drivers to drop-off/pick-up students at remote locations on designated Walk and Bike to School Days.	Encouragement	Non-infrastructure
Encourage and facilitate carpooling, use <i>MORPC's School Pool</i> program as a resource.	Encouragement	Non-infrastructure
Establish remote drop-off/pick-up locations and/or bus hubs.	Encouragement	Non-infrastructure
Establish a LCS-Sponsored <i>Mileage Club or Contest</i> that includes pedometers for students to track their mileage.	Encouragement	Non-infrastructure
Consider adding pedestrian and bicyclist signage or painted markings on the road along priority routes to alert motorists to the presence of pedestrians and bicyclists.	Engineering	Infrastructure

Safety and Comfort at Intersections and Crossings

Throughout the City of Lorain, many of the primary and secondary roadways have been designed with motorists in mind. In fact, the primary consideration is generally the efficient movement of motorists that in most instances warrants wider roadways with multiple lanes and limited pedestrian crossing cycles at signalized intersections.

Several of these roadways were designed to accommodate higher volumes of traffic than the roadway currently experiences. Because the roadways are large compared to the volume of traffic, vehicles tend to travel at speeds higher than the posted limit, which can impact the safety of the

crossing for all pedestrians. Additionally, the wider the streets are, the more difficult it is for people to safely cross. This is especially true for younger and older pedestrians, who cross at a slower pace. Vehicular traffic is only part of the issue.

Students are generally driven to their destinations (school, errands, entertainment, etc.) and do not take many walking trips with their families. As a result, they have fewer opportunities to practice safe crossing skills at intersections and crossings with adult supervision. Creating a consistent, structured traffic safety curriculum that teaches younger students and



reinforces the information with older students and adults is a key recommendation recommended in this ATP.

The top reason residents who responded to the AT survey cited for not bicycling is because they are uncomfortable riding on roads with cars; and the second top reason for why people do not walk is that they are uncomfortable walking on roads with cars.

Safety at intersections and crossings was also a primary consideration in the development of Priority Corridors. The design and simplicity of the crossing was considered important for safe passage. The development of safe and accessible crossings that are used often by children is guided by several key principles including: the need to establish or identify good crossing locations; reduce crossing distances; provide crossings that are direct so that people with visual impairments can easily navigate them; use appropriate traffic controls, such as marked crosswalks, traffic signals and warning signs or flashers; and slow motor vehicle speeds.

Recommendations for Safety and Comfort at Intersections and Crossings

Recommendation	Es Addressed	Recommendation Type
Work with LCS on placement of adult crossing guards.	Enforcement	Non-infrastructure
Implement traffic calming measures at key crossing locations to reduce motor vehicle speeds and encourage yielding.	Engineering	Infrastructure
Install median crossing islands where appropriate.	Engineering	Infrastructure
Reduce pedestrian crossing distance where appropriate.	Engineering	Infrastructure
Mark and sign crosswalks at key crossing locations.	Engineering	Infrastructure
Install pedestrian countdown signals to provide pedestrians with a better understanding of the time remaining for crossing, where appropriate.	Engineering	Infrastructure
Establish leading pedestrian intervals to reduce conflicts between pedestrians and turning vehicles where appropriate. This traffic signalization strategy assigns the pedestrian(s) an exclusive three- to five-second signal to begin crossing the street before cars are given a green light.	Engineering	Infrastructure



Implement <i>no right turn on red</i> restrictions to reduce conflicts between pedestrians and turning vehicles where appropriate.	Engineering	Infrastructure
Mark stand back lines at crossings as a visual cue to students regarding where to stand while waiting to cross.	Engineering	Infrastructure

Safety and Comfort along Walking and Bicycling Routes

A common barrier to walking or biking is the lack of a safe, convenient and accessible route. Students may live within walking distance of a school (typically one mile or less for elementary school students); however, due to traffic conditions and the lack of convenient routes with continuous sidewalks or paths, parents will drive their children to school rather than allow them to walk and bike. Lacking safe, convenient and accessible routes is especially an issue for many LCS students that live within a 2-mile radius of their school, as LCS does not typically provide busing to those students. If parents cannot identify a safe and convenient route for their child to use, often they will choose to drive them instead. This increases traffic congestion around schools and deprives students of the benefits of walking and biking to school.

Residents often have the same experience, where there is not a safe, convenient route with continuous sidewalks or paths and there are adverse traffic conditions.

Although there are sidewalks along most streets in Lorain, locations where sidewalks are missing, inaccessible or in poor repair can be a significant barrier for people who walk and bike. Residents who responded to the AT cited as number one reason that they do not bicycle is because they are uncomfortable riding on roads with cars; and the second top reason for why people do not walk is that they are uncomfortable walking on roads with cars.

The availability of bicycle facilities, such as bicycle lanes and multi-use paths, on commonly used routes by students and residents is also an important consideration when accommodating bicyclists.

Another issue that is often overlooked is street lighting. For several months of the year, students are leaving their homes before the sun rises. Some students leave after-school activities during the dark hours after the sun sets. Visibility is a key safety issue. Therefore, lack of pedestrian-scale lighting can be a deterrent for many families to allow their children to walk or bike to school. The absence of lighting can also make a route seem uninviting and insecure. Even when lighting is provided, it is important to teach students how to safely walk and bike during dark hours. This includes wearing bright and reflective clothing, carrying flashlights and being extra cautious when crossing the street. Providing pedestrian-scale lighting and teaching students how to safely travel during dark and dusk hours will make the routes safer for all users.

Residents also experience similar issues when they are walking or bicycling to work or the bus on their way to work or other commitments in the morning before it is light and/or in the later afternoon or evening.

Improving walking and biking routes with new or improved sidewalks, multi-use paths, bike lanes and street lighting benefits the whole community. These facilities create safe places for everyone to walk and bike, and they also remind drivers that pedestrians and bicyclists are likely to be present and deserve a place in the greater transportation network.



Recommendations for Safety and Comfort Along Walking and Bicycling Routes

Recommendation	Es Addressed	Recommendation Type
Work with the City of Lorain to investigate locations along school walking routes where sidewalks are in poor condition.	Engineering	City, School District Support
Identify areas with poor, broken or missing street lighting, work with City of Lorain on repairs. This will not only improve lighting in certain areas, but also potentially have a positive effect on higher crime locations.	All	City, School District Support, City, School District Policies
Schedule and promote ODOT-sponsored <i>Walking School Bus Training</i> . Encourage school AT Champions to attend ODOT-sponsored Walking School Bus Trainings.	Education	Non-infrastructure
Establish Walking School Bus Program. Use ODOT's <i>Walking School Bus Kit</i> , MORPC's or Toledo AT's as training tools.	Encouragement, Education	Non-infrastructure
Expand Indoor Walking Club at General Johnnie Wilson MS to outdoors when weather is warm. Add bicycle and pedestrian safety educational programming to it.	Education, Encouragement	Non-infrastructure
Partner with high school to have seniors participate in Walking School Buses as a community service project. Research having members of Lorain PD Auxiliary also participate in Walking School Buses.	Education, Encouragement	Non-infrastructure
Educate administrators and families on how a Walking School Bus Program can alleviate concerns through parent meetings, principal meetings, school events and other forums.	Encouragement, Education	Non-infrastructure
Teach parents to talk to their children about personal safety.	Encouragement, Education	Non-infrastructure



Plan and implement International Walk and Bike to School Day events.	Encouragement, Education	Non-infrastructure
Add Walk and Bike to School Day resources and links to the AT webpages.	Encouragement, Education	Non-infrastructure
Work with NOACA to continue bike count program. Research funding options to conduct with greater frequency. Research creating a pedestrian count program.	Evaluation	Non-Infrastructure
Work with the City on re-establishing its street tree program. This may include researching local, state and federal public and private sector and non-profit grants.	Engineering	Infrastructure
Work with Lorain County Transit (LCT) on improving signage and bus stops. This may include removing signs around the City that are not bus stops, updating and clearly posting signs at bus stops and considering the addition of shelters, benches, trash cans and/or other amenities at stops.	Engineering	Infrastructure

Adult Supervision of Students

Parents generally appreciate the benefits of walking and biking to school. They recognize that walking and biking are healthy activities that children enjoy. While many parents would consider allowing their children to walk or bike to school, a key barrier may be the lack of adult supervision. The Lorain AT Program understands that while many parents cannot commit to walking or biking with their children to and from school every day, they may be able to take a morning or afternoon trip once a week.

Therefore, if students could walk or bike in groups with a rotating adult leader more students could have the opportunity to walk or bike to school more often.

These recommendations are aimed at initiating and organizing adult-led walking and biking groups. Adult leaders can include parents, grandparents or even high school or college students working on community service projects.



Recommendations for Adult Supervision of Students

Recommendation	Es Addressed	Recommendation Type
Use Walking School Bus kit to train administrators, parents, volunteers and educators on how to start a walking school bus program at their school. (ODOT, Toledo AT and MORPC have WSB toolkits)	Education, Encouragement	Non-infrastructure
Start a “Corner Captains” program at schools that express an interest. Corner Captains are adults who volunteer to provide an extra set of eyes along common school routes, making the environment around schools safer for students. Research having members of Lorain PD Auxiliary also participate in “Corner Captains.”	Education, Encouragement	Non-infrastructure
Increase the law enforcement presence around all school sites before and after school. Research having members of Lorain PD Auxiliary also participate.	Encouragement, Enforcement	Non-infrastructure
Educate parents and caregivers about benefits of active transportation including academics, health and traffic safety.	Education, Encouragement	Non-infrastructure

Personal Security

Personal security concerns can be a critical barrier for students who want to walk or bike to school. Children deserve to feel safe on their routes to and from school. When implementing an AT program, it is important to address actual and perceived safety issues. If parents believe that a school route poses a threat to personal security, it is unlikely that they will allow their child to walk or bike to and from school.

In the AT survey, residents cited being uncomfortable walking on the road with cars and fear of crime as two of the top five reasons that prevent them from walking.

Issues related to personal security cover a wide range of topics that affect the environment inside the school as well as along the school routes. These issues can include bullying, violent crime, abduction, human trafficking and gang activity. At a policy level, LCS addresses the issue of personal security while walking and bicycling to and from school through its district-wide Code of Student Behavior.



Recommendations for Personal Security

Recommendation	Es Addressed	Recommendation Type
Partner with law enforcement and district security staff on targeted security efforts.	Enforcement	Non-infrastructure
Work with local Block Watch groups.	Encouragement	Non-infrastructure

5.4 Program Sustainability

This chapter covers issues and recommendations associated with sustaining the Lorain AT Team and implementing the recommendations in this ATP. Sustainable AT programs are more likely to attain the desired goals and objectives. The infrastructure and non-infrastructure

recommendations identified in this ATP may take several years to implement. Education, Encouragement, Enforcement and Evaluation strategies must often be implemented continuously and concurrently to be effective. It may take some time for key messages to resonate within school and community populations that are in a constant state of flux. This is why creating a sustainable structure for an AT program is so important.

Recommendations for Program Sustainability

Recommendation	Es Addressed	Recommendation Type
Continue employing a full-time AT Coordinator.	All	City, School District Support
Recruit new Lorain AT Team members. Include parent volunteer representatives, identify local AT champions.	All	Non-infrastructure
Establish a calendar. Create an annual calendar of AT activities for the District. Determine where and how frequently the Lorain AT Team will meet. Include a timeline for evaluations, which should occur at least annually.	All	Non-infrastructure
Monitor and evaluate. Establish measurable goals and conduct regular reviews to determine the progress toward meeting them.	Evaluation	Non-infrastructure



Secure a summer intern to assist in project design and implementation.	All	Non-infrastructure
Identify potential funding sources for high-priority projects and programs.	All	Non-infrastructure
Identify stakeholders and keep them informed about Lorain AT Program implementation. Stakeholders are people who should be consulted when planning and implementing a AT program but may not necessarily contribute in an active way. Potential stakeholders include residents and business owners with properties adjacent to proposed improvements, as well as elected and appointed officials.	All	Non-infrastructure
Purchase special event materials, such as a tabletop exhibit, pop-up banner or booth, as well as AT event support items such as helmets (AAP grant), bike locks, bike lights, flashlights, etc.	All	Non-infrastructure
Continue employing a full-time AT Coordinator.	All	City, School District Support
Recruit new Lorain AT Team members. Include parent volunteer representatives, identify local AT champions.	All	Non-infrastructure
Work with the City on re-establishing its street tree program. This may include researching local, state and federal public and private sector and non-profit grants.	Engineering	Infrastructure



6 Active Transportation Facility Types, Prioritized Recommendations and Action Plan

This Section includes descriptions of the different types of bicycle and pedestrian facilities recommended and an Action Plan for implementing the recommendations in the Issues and Recommendations section. The recommendations are for planning purposes only and may require further analysis, design and public input prior to implementation.

The Action Plan brings together key information for the implementation of each, including:

- A brief description
- The priority
- The expected timeframe for implementation
- The estimated cost and potential sources of funding for implementation (non-infrastructure and infrastructure only)
- The Lorain AT Team member(s) or committee responsible for overseeing implementation
- Potential partners (non-infrastructure only)
- The existing status including: pending implementation, currently being implemented or implementation is complete

The Action Plan has three sections: policies, non-infrastructure and infrastructure. The AT Planning Team will update these sections as appropriate to reflect changes in status; Team priorities; and available human, financial and material resources.

Notes on Prioritization, Timeframes, and Estimated Cost

A key purpose of the Action Plan is to communicate information about the priority and timeframe (or sequencing) of each recommendation. The

following chapters provide information on how priorities and timeframes were assigned.

Notes on Prioritization

The Action Plan distinguishes “high” priority recommendations from other recommendations. The Lorain AT Team prioritized school/city policy recommendations and non-infrastructure recommendations based on the following criteria:

- Feasibility and estimated costs
- Alignment with the Lorain AT Team vision and goals for this AT Plan
- The Lorain AT Team prioritized infrastructure recommendations using a prioritization matrix that included the following factors:
 - Pedestrian and bicycle potential (including proximity to a priority corridor and proximity to K-8 schools)
 - Pedestrian and bicycle deficiency (including sidewalks, high-speed/high-volume roads and crashes involving pedestrians or bicyclists)
 - Support (including Local School participation in AT activities such as International Walk to School Day, bicycle and pedestrian safety education and priorities identified by the Lorain AT Team)
 - Feasibility (including estimated project cost and whether right-of-way would be required)
 - Demographics (including percent of economically disadvantaged families and/or students and residents with disabilities)

The matrix used to calculate priorities is included as Appendix B. The matrix shows the definition, scoring and weight assigned to each criterion used in the prioritization.



The infrastructure recommendations were developed from: consultant field visits; Team field visits; Team analysis and discussion; prior documents and studies completed for the City; and analysis in Geographic Information Systems (GIS). It is important to note that the recommendations are considered “planning level” and will require further analysis to confirm that Ohio Manual of Uniform Traffic Control Devices (OMUTCD) as well as, city criteria, policies and/or procedures are met.

Active Transportation Facility Types

The prioritized recommendations included in this section include a variety of different types of facilities to accommodate active transportation. The following are brief descriptions of the types of facilities recommended for Lorain.

Bike Lane		
	<p>A bike lane is a pavement marking that designates a portion of a street for the preferential or exclusive use of bicycles. Bike lane markings are typically dashed where vehicles are permitted to cross the bike lane, such as for right turns or at bus stops.</p> <p>Bike lanes are best suited for two-way arterial and collector streets where there is enough width to accommodate a bike lane in both directions, and on one-way streets where there is enough width for a single bike lane.</p>	<p>9.6 miles recommended</p> <p>Locations: W 21st Street W Erie Avenue N Leavitt Road (Tower to Shopping Center)</p>



Buffered Bike Lane



Buffered bike lanes are created by striping a buffer zone between a bike lane and the adjacent travel lane, between a bike lane and adjacent parking lane, or both. These buffers help increase the distance between bicyclists and motor vehicles, making the facility feel more comfortable for a wider range of bicyclists. Buffered bike lanes should be considered in locations where there is excess pavement width or where adjacent traffic speeds are at or above 35 mph.

2.5 miles recommended

Locations:
 Grove Avenue
 N Leavitt Road (Stonepath to Tower)



Separated Bike Lane



Separated bike lanes, sometimes called cycle tracks, isolate bicyclists from motor vehicle traffic with a vertical barrier. There are a variety of vertical barriers that can be used: curbs, raised concrete medians, bollards, on-street parking, large planting pots/boxes, landscaped buffers (trees and lawn) and others. Separated bike lanes designed to be level with the sidewalk should provide a vertical separation between bicyclists and pedestrians, as well as a different surface treatment to delineate the bicycle from the pedestrian space (such as asphalt vs. concrete).

Separated bike lanes can be one way for bicycles on each side of a two-way road, or two-way and installed on one or both sides of the road. Separated bike lanes provide cyclists with a higher level of comfort compared to bike lanes, and are typically used on large multi-lane arterials where higher vehicle speeds exist. They may also be appropriate on high-volume but lower-speed streets near parks and schools.

Because separated bike lanes may require adjustments to signal timing and phasing and/or modifications to pavement and curb sections, traffic studies should be performed before implementation.

1.6 miles recommended

Locations:
Tower Boulevard (Leavitt to Falbo)



Neighborhood Bikeway



A neighborhood bikeway is a street with low motorized traffic volumes and speeds designed to provide priority to bicyclists and neighborhood motor vehicle traffic. Neighborhood bikeways may simply have signs and shared lane markings, or may include traffic calming elements consisting of speed humps (pictured), traffic circles, chicanes, traffic diverters or curb extensions. Neighborhood bikeways benefit all users by reducing cut-through traffic and speeding without limiting access by residents.

16.5 miles recommended

Locations:
 Crehore Street (Kansas to Root)
 W 8th/W 9th Streets (Black River Ln to Lakeview Park)
 Ashland Avenue (Herbert to 26th)

Signed Bike Route



Signed bike routes provide distance and directional information as a wayfinding aid for bicyclists. Signed routes may be established on streets, paths or any combination of facility types that offer a continuous bicycling environment. Signs should offer cyclists information about alternative routes and accessible destinations from their current location. They also can be used to suggest the conditions cyclists can expect on a route by referencing trails or roadways by name. Signed routes provide cyclists with greater confidence when they are exploring new routes or when they are in unfamiliar territory.

2.5 miles recommended

Locations:
 Missouri Avenue (E Erie to Colorado)
 Palm Avenue (28th St to Fairless)
 N Leavitt Road (Erie to Stonepath)



Shared Use Path/Trail



A shared use path is an off-street facility for non-motorized use. Typically, shared use paths are built in an independent right-of-way such as a park, stream valley, along a utility corridor or an abandoned railroad corridor. Shared-use paths are used by a variety of non-motorized users including pedestrians, skaters, wheelchair users, joggers and sometimes equestrians.

5.8 miles recommended

Locations:
 W Erie Avenue (Lorain city limits to Parkview)
 Existing path connecting Meister to 26th
 Existing path connecting 29th to 30th



Sidewalks		
	<p>Sidewalks are separated, paved pedestrian routes that make up the spine of the pedestrian network. In general, the minimum width for a sidewalk should be 5-feet to allow two pedestrians to comfortably pass one another. Optimum sidewalk width will vary depending on pedestrian volumes, land use and desired streetscape elements.</p>	
Pedestrian-scale Lighting		
	<p>Pedestrian-scale lighting improves the visibility of pedestrians and illuminates the pedestrian environment. Lighting should be provided evenly along a corridor and in advance of crosswalks, transit stops and intersections where pedestrians are frequently present. Appropriate lighting helps make the active transportation network accessible 24-hours a day, year-round.</p>	<p>0.1 miles recommended (in addition to community and school walking routes)</p> <p>Priority Locations: E 28th Street under the railroad tracks. RR underpass at Henderson/21st</p>



School Walking Routes and Community Walking Routes



Walking Routes fall into two categories based on location: School and Community Walking routes. Designed to help people reach important destinations on foot, both categories feature a complete pedestrian network with sidewalks, curb ramps, marked crosswalks, pedestrian signal heads at intersections and pedestrian-scale lighting. They may also include additional treatments at intersections such as curb extensions, median refuge islands and pedestrian signals to make crossing the street safer and easier for pedestrians.

28.4 miles recommended total
 20.9 miles of School Walking Routes
 7.5 miles of Community Walking Routes



Action Plan

Policy Recommendations

Recommendation	Issues Addressed	Es Supported	Priority	Timeframe	Responsible Party	Countermeasure Lead(s)	Status
City Support							
Seek formal adoption of the ATP by City Council.	City support	All	High	1 year	Planning Team	Kat Bray	Planned
Continue the City's participation on the AT Team.	City support	All	High	1 year	Planning Team	Kat Bray	Ongoing
Continue NOACA's participation on the AT Team.	City support	All	High	1 year	Planning Team	Kat Bray	Ongoing
Invite city leadership to participate in high-profile Plan-sponsored activities.	City support	All	High	1 year	Planning Team	Kat Bray	Planned
Look for opportunities to include ATP infrastructure priorities in planned City roadway improvement projects and other initiatives, such as vacant home demolition.	City support	Engineering	High	1 year	Planning Team	Kat Bray	Planned
Identify areas with poor, broken or missing street lighting, work with the City and First Energy on repairs.	City support	Enforcement	High	1 year	Planning Team	Kat Bray	Not yet implemented
Research implementing Vision Zero in the City and adopting a Vision Zero policy.	City support	All	High	1-2 years	Planning Team	Kat Bray	Not yet implemented
Research implementing a complete streets policy, possibly modeled on NOACA's Street Design Guidelines.	City support	All	High	1-2 years	Planning Team	Kat Bray	Not yet implemented
Research developing a bicycle rack ordinance, perhaps modeled on Lakewood's or Cleveland's.	City support	All	High	1-2 years	Planning Team	Kat Bray	Not yet implemented
County Support							
Continue County's participation on AT Team.	County support	All	High	1 year	Planning Team	Kat Bray	Ongoing
Coordinate City's AT plan's implementation with countywide AT plan	County support	All	High	1 year	Planning Team	Kat Bray	Planned
Continue employing a full-time SRTS coordinator.	County support	All	High	1 year	Planning Team	Kat Bray	Planned



School District Support							
Continue providing regular updates to the Administration and Board of Education regarding the progress of the SRTS initiative.	School district support	All	High	1 year	Planning Team	Kat Bray, Jamie Montague	Planned
Obtain DPS Administration's approval of ATP.	School district support	All	High	1 year	Planning Team	Kat Bray, Jamie Montague	Planned
Request that members of the school board and administration participate in ATP activities (e.g. Walk and Bike to School Days).	School district support	All	High	1 year	Planning Team	Kat Bray, Jamie Montague	Planned
Incorporate active transportation into the LCS Student Wellness Policy as a way for students to obtain regular, physical activity and reduce motor vehicle traffic and air pollution near schools.	School district support	Encouragement	High	1-3 years	Planning Team	Kat Bray, Jamie Montague	Not yet implemented
Identify and task appropriate LCS staff or AT Team members to distribute priority route maps.	School district support	Encouragement	High	1 year	Planning Team	Kat Bray, Jamie Montague	Not yet implemented
Annually review district and school policies to determine if they encourage or discourage walking and bicycling to school.	School district support	All	High	Ongoing	Planning Team	Kat Bray, Jamie Montague	Not yet implemented
Establish an SRTS presence on LCS's site.	School district support	All	High	1 year	Planning Team	Kat Bray, Jamie Montague	Not yet implemented

Non-Infrastructure Countermeasures

Countermeasure	Issues Addressed	Es Supported	Priority	Timeframe	Responsible Party	Countermeasure Lead(s)	Status
Parent and Caregiver Support							
Provide guidance to individual schools on how to involve parents in the AT programming and communicate with parents regarding pedestrian and bicycle safety issues.	Building Parent Support	All	High	1 year	Planning Team	Kat Bray, Jamie Montague	Planned
Make presentations at back-to-school events, parent meetings and others.	Building Parent Support	Education	High	1-5 years	Planning Team	Kat Bray, Jamie Montague	Planned
Add a parent volunteer representative to the AT Team.	Building Parent Support	All	High	1 year	Planning Team	Kat Bray, Jamie Montague	Planned
Conduct AT survey annually.	Building Parent Support	Evaluation	High	1-5 years	Planning Team	Kat Bray, Jamie Montague	Ongoing
Create and distribute information on AT Plan to parents via a flyer or email and what they can do to support it.	Building Parent Support	Education, Encouragement	High	1-5 years	Planning Team	Kat Bray, Jamie Montague	Not yet implemented
Send parents recorded voicemails recorded by the CEO.	Building Parent Support	Education, Encouragement, Enforcement	Medium	2-3 years	Planning Team	Kat Bray, Jamie Montague	Not yet implemented



Safety & Comfort of Students & Residents							
Implement ODOT's "Every Move You Make, Make It Safe" campaign.	Safety & Comfort of Students & Residents	Education, Encouragement	High	1-3 years	Planning Team	Kat Bray	Not yet implemented
Support Lorain County Engineer's Safety Star program	Safety & Comfort of Students & Residents	Education, Encouragement	High	1-3 years	Planning Team	Kat Bray	Not yet implemented
Add bicycle and pedestrian safety into PE and/or health curricula	Safety & Comfort of Students & Residents	Education, Encouragement	High	1-3 years	Planning Team	Kat Bray	Not yet implemented
Host fix-it events at schools, where students can bring their bike to school and have it checked for safety and for minor repairs with a local bike co-op or non-profit.	Safety & Comfort of Students & Residents	Education, Encouragement	High	1 year	Planning Team	Kat Bray	Not yet implemented
Host fix-it events in the community, where residents can bring their bikes and have them checked for safety and for minor repairs with a local bike co-op or non-profit.	Safety & Comfort of Students & Residents	Education, Encouragement	High	1 year	Planning Team	Kat Bray	Not yet implemented
Establish a monthly walk and bicycle to school day. Consider incorporating competitions between schools in the same area or district-wide.	Safety & Comfort of Students & Residents, Reduce Traffic	Education, Encouragement	Medium	1-2 years	Planning Team	Kat Bray	Not yet implemented
Establish a monthly walk and bicycle to work day. Consider incorporating competitions between employers in the same area or city-wide.	Safety & Comfort of Students & Residents, Reduce Traffic	Education, Encouragement	Medium	1-2 years	Planning Team	Kat Bray	Not yet implemented
Identify and target a middle school to pilot Girls in Gear to female middle school age students.	Safety & Comfort of Students & Residents	Education, Encouragement	Medium	1-2 years	Planning Team	Kat Bray	Not yet implemented
Work with local employers to create Active Commute programs and supports.	Safety & Comfort of Students & Residents	Education, Encouragement	Medium	1-3 years	Planning Team	Kat Bray	Not yet implemented
Add a bike rodeo, bike safety and helmet fitting techniques to the PE curriculum, including for students with disabilities.	Safety & Comfort of Students & Residents	Education, Encouragement	Low	3-5 years	Planning Team	Kat Bray	Not yet implemented
Pedestrian & Bicycle Accommodations							
Create and pilot an AT wayfinding program	Pedestrian & Bicycle Accommodations	Education, Encouragement			Planning Team	Kat Bray	Not yet implemented
Plan and implement a demonstration Open Streets event	Pedestrian & Bicycle Accommodations	Education, Encouragement			Planning Team	Kat Bray	Not yet implemented



Work with community partners to create a community bike share program	Pedestrian & Bicycle Accommodations	Education, Encouragement			Planning Team	Kat Bray	Not yet implemented
Create a map of bicycle rack locations	Pedestrian & Bicycle Accommodations	Education, Encouragement			Planning Team	Kat Bray	Not yet implemented
Increase School Zone Awareness							
Distribute priority route maps to all students at the beginning of each school year. This will not only allow parents to know the best routes for their children to take, it will also make them aware of where other students may be walking and bicycling.	Increase School Zone Awareness	Education, Encouragement	High	1 year	Planning Team	Kat Bray	Planned
Encourage & Enforce Safe Driver Behaviors							
Research current speed studies at LPD and conduct speed studies with LPD at locations where speeding is suspected/identified as a concern.	Encourage and Enforcing Safe Driver Behaviors	Enforcement	Medium	1-2 years	Planning Team, City of Lorain	Kat Bray	Not yet implemented
Encourage residents, parents and high school students to sign a pledge that they will avoid distracted driving, drive at a safe speed and abide by traffic laws, especially during school arrival and dismissal times.	Encourage and Enforcing Safe Driver Behaviors	Education	Medium	2-3 years	Planning Team	Kat Bray	Not yet implemented
Establish a district-wide speed reduction and/or “No Phone Zone” campaign.	Encourage and Enforcing Safe Driver Behaviors	Education, Enforcement	Medium	2-3 years	Planning Team	Kat Bray	Not yet implemented
Reduce Traffic							
Enable school bus drivers to drop-off/pick-up students at remote locations on designated Walk/Bike to School Days.	Reduce Traffic	Encouragement	Medium	2-3 years	Planning Team	Kat Bray	Not yet implemented
Encourage and facilitate carpooling (consider MORPC’s School Pool Program as a model)	Reduce Traffic	Encouragement	Medium	2-3 years	Planning Team	Kat Bray	Not yet implemented
Establish remote drop-off/pick-up locations and/or bus hubs.	Reduce Traffic	Encouragement	Medium	2-3 years	Planning Team	Kat Bray	Not yet implemented
Establish a district-sponsored Mileage Club or Contest that includes pedometers to track their mileage.	Reduce Traffic	Encouragement	Medium	2-3 years	Planning Team	Kat Bray	Not yet implemented
Establish and implement at least one district-wide education/encouragement event every quarter, such as Walk and	Reduce Traffic	Encouragement	Medium	1-2 years	Planning Team	Kat Bray	Not yet implemented



Bike to School Day, Walking or Biking Wednesdays. Identify possible remote drop-off and pick-up locations at pilot schools.							
Improve Crossings							
Work with district on placement of adult crossing guards	Improve Crossings	Enforcement	High	1 year	Planning Team	Kat Bray	Not yet implemented
Improve Safety & Comfort on Walking & Bicycling Routes							
Establish walking school bus program. Use ODOT's, MORPC's or Toledo's SRTS Walking School Bus Kit as a training tool.	Improve Walking & Bicycling Routes, Improve Adult Supervision of Students	Education, Encouragement	High	1-2 years	Planning Team	Kat Bray	Planned
Educate administrators and families on how a walking school bus program can alleviate concerns through School Parent Organizations (SPOs), principal meetings, school events, parent meetings and any other forums.	Improve Walking & Bicycling Routes, Improve Personal Security	Education, Encouragement	High	1 year	Planning Team	Kat Bray	Not yet implemented
Teach parents to talk to their children about personal safety.	Improve Walking & Bicycling Routes, Improve Personal Security	Education, Encouragement	High	1-2 years	Planning Team	Kat Bray	Not yet implemented
Partner with high school to have seniors participate in WSB as a community service project. Research having Lorain PD Auxiliary also participate in WSBs.	Improve Walking & Bicycling Routes, Improve Adult Supervision of Students	Education, Encouragement	High	1-2 years	Planning Team	Kat Bray	Not yet implemented
Add Walk and Bike to School Day resources and links to AT web pages.	Improve Walking & Bicycling Routes, Improve Adult Supervision of Students	Education, Encouragement	High	1-5 years	Planning Team	Kat Bray	Not yet implemented
Plan and implement International Walk to School and Bike to School Day events.	Improve Walking & Bicycling Routes	Education, Encouragement	High	1-5 years	Planning Team	Kat Bray	Planned
Schedule and promote ODOT-sponsored Walking School Bus Training.	Improve Walking & Bicycling Routes, Improve Adult-Led Walking and Biking	Education	High	1-2 years	Planning Team	Kat Bray	Not yet implemented
Expand Indoor Walking Club at Gen. Johnnie Wilson MS to outdoors when weather is warm.	Improve Walking & Bicycling Routes	Education, Encouragement	High	1-2 years	Planning Team	Kat Bray	Not yet implemented



Work with NOACA to continue its bike count program.	Improve Walking & Bicycling Routes	Education	High	1-2 years	Planning Team	Kat Bray	Not yet implemented
Work with the City on re-establishing its street tree program.	Improve Walking & Bicycling Routes	Engineering	Medium-Low	2-3 years	Planning Team	Kat Bray	Not yet implemented
Work with Lorain County Transit on improving signage and bus stops.	Improve Walking & Bicycling Routes	Engineering	Medium	2-3 years	Planning Team	Kat Bray	Not yet implemented
Improve Adult Supervision of Students							
Use Walking School Bus kit to train administrators, parents, volunteers and educators on how to start a walking school bus program at their school. (ODOT, Toledo SRTS and MORPC have WSB toolkits)	Improve Adult Supervision of Students	Education, Encouragement	High	1-2 years	Planning Team	Kat Bray	Not yet implemented
Educate parents and caregivers about benefits of active transportation including academic, health, and traffic safety.	Improve Adult Supervision of Students	Education, Encouragement	High	1-2 years	Planning Team	Kat Bray	Not yet implemented
Start a "Corner Captains" program at schools that express an interest. Corner Captains are adults who volunteer to provide an extra set of eyes along common school routes, making the environment around schools safer for students. Research having members of Lorain PD auxiliary also participate.	Improve Adult Supervision of Students	Education, Encouragement	Medium	2-3 years	Planning Team	Kat Bray	Not yet implemented
Increase law enforcement presence around all school sites before and after school. Research having members of Lorain PD auxiliary also participate.	Improve Adult Supervision of Students	Education, Enforcement	High	1-5 years	Planning Team	Kat Bray	Not yet implemented
Improve Personal Security							
Partner with law enforcement and district security staff on targeted security efforts.	Improve Personal Security	Enforcement	High	1 year	Planning Team	Kat Bray	Not yet implemented
Work with local Block Watch groups.	Improve Personal Security	Encouragement	Medium	2-3 years	Planning Team	Kat Bray	Not yet implemented
Sustain SRTS Program							
Recruit new AT Team members.	Sustainable SRTS Program	All	High	1 year	Planning Team	Kat Bray	Planned
Establish a calendar.	Sustainable SRTS Program	All	High	1 year	Planning Team	Kat Bray	Planned



Identify a person or people to coordinate implementation of high-priority countermeasures.	Sustainable SRTS Program	All	High	1 year	Planning Team	Kat Bray	Not yet implemented
Monitor and Evaluate. Establish measurable goals and conduct regular reviews to determine progress toward meeting them.	Sustainable SRTS Program	Evaluation	High	1-5 years	Planning Team	Kat Bray	Not yet implemented
Identify potential funding sources for high-priority projects and programs.	Sustainable SRTS Program	All	High	1 year	Planning Team	Kat Bray	Planned
Identify stakeholders and keep them informed about SRTS Program implementation.	Sustainable SRTS Program	All	High	1-5 years	Planning Team	Kat Bray	Not yet implemented
Purchase special event materials, such as a tabletop exhibit, pop-up banner or booth, as well as AT event support items such as helmets (AAP grant), bike locks, bike lights, flashlights, etc..	Sustainable SRTS Program	All	High	1 year	Planning Team	Kat Bray	Not yet implemented
Secure a summer intern to assist in project design and implementation.	Sustainable SRTS Program	All	Medium	1-2 years	Planning Team	Kat Bray	Not yet implemented



Infrastructure Countermeasures

Rank	Score Overall	Length in miles	Street	from_st	to_st	Recommendation	Possible Action	Comments	Closest school	Neighborhood
1	830	1.53	W 21st St	Leavitt	Oakdale	Bike Lanes	Signs, Pavement Markings	Replace TWLTL with bike lanes	Washington Elementary	West
2	790	1.53	W 21st St	Leavitt	Oakdale	Community Walking Route			Hawthorne Elementary	West
3	782	1.85	Ashland Ave	Herbert	26th	Neighborhood Bikeway - Use sharrows and bicycle priority at minor intersections; bike box/crossbike markings at major intersections	Signs, Pavement Markings	Consider RRFB or other enhancements to cross Tower Blvd. This area is low volume, but high instance of cut through and speeders. Need advice on how to make enjoyable to bike, but also not increase neighborhood traffic.	Lorain High	West
4	775	1.02	Broadway	W Erie	W 17th	Community Walking Route			New Beginnings Academy	West
5	770	1.05	Washington Ave	28 th	Tower Blvd	Neighborhood Bikeway - traffic calming; bicycle priority at intersections	Signs, Pavement Markings, Trail	Add connection through Falbo Park; redesign crossing of Tower Blvd.	Admiral King Elementary	West
6	762	0.88	Oakdale Ave	17 th	30th	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Hawthorne Elementary	West
7	754	1.68	Oberlin Ave	W 30th	Cooper Foster Park	Community Walking Route		Meister to Tower waterline work will replace sidewalk in 2018	Wilson Middle	West
8	726	2.08	30th St	Clifton	Marshall	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps	Consider intersection enhancements at Oberlin	Garfield Elementary	West
9	718	2.16	Reid Ave	5th St	39th St	Neighborhood Bikeway - traffic calming; bicycle priority at intersections	Signs, Pavement Markings	Traffic control changes at intersections; wayfinding; jog at 17th St. Parallel to Broadway & Elyria with much lower traffic volumes.	Garfield Elementary	West
10	700	0.87	W Erie Ave	Lakeview Park	Broadway	Community Walking Route			Admiral King Elementary	West



11	692	1.29	Oberlin Ave	28 th	6th	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps	Important connection b/c it crosses railroad tracks; otherwise seems like a busy corridor without much space for dedicated bike facilities	Lorain High	West
12	687	0.39	N Central Dr.	Oakdale	Washington	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Washington Elementary	West
13	683	1.50	Homewood Dr.	Seneca	Riverside	Neighborhood Bikeway - Use sharrows and bicycle priority at intersections	Signs, Pavement Markings		Palm Elementary	South
14	680	1.84	E 28th St	Railroad Tracks	Grove	Community Walking Route		Focus on south side of E 28th St	Steven Dohanos Elementary	South
15	671	3.34	36th St	Tower	Grove	Neighborhood Bikeway - Use sharrows and construct shared use paths to create continuous E/W connection	ROW acquisition; shared use path construction	No road between Grove & Tacoma and from Falbo to Dayton. Also no road between Broadway and Elyria.	Steven Dohanos Elementary	Citywide
16	638	0.94	Missouri Ave	E Erie	Colorado	Signed Bike Route	Signs		Larkmoor Elementary	East
17	623	1.28	Palm Ave	28th	Fairless	Signed Bike Route	Signs		Palm Elementary	South
18	615	0.52	Highland Park Blvd	Oberlin	Park	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Wilson Middle	West
19	602	5.41	W Erie Ave	Lorain Border	Parkview	Option A - Bike lanes Option B - Shared use path	Option A - 4 to 3 road diet Option B - corridor redesign	US BR30A. Shared use path is a TLCI project.	Admiral King Elementary	West
20	601	0.67	Grove Ave	28th St	Homewood Dr.	Buffered bike lanes	4 to 3 road diet		Palm Elementary	South
21	600	0.60	Meister Rd	Campana Park Access Drive	Marshall	Neighborhood Bikeway - Use sharrows and bicycle priority at minor intersections; bike box/crossbike markings at major intersections	Signs, Pavement Markings	Missing sidewalks on north side of Meister between Leavitt and Collins.	Wilson Middle	West
22	600	1.80	N Leavitt Rd	Stonepath	Tower Blvd	Buffered bike lanes	4 to 3 road diet		Toni Morrison Elementary	West
23	588	1.22	Crehore St	Kansas	Root	Neighborhood Bikeway - Use sharrows and bicycle priority at intersections	Signs, Pavement Markings		Longfellow Middle	East



24	580	1.06	Tacoma Ave	Fairless	31st	Neighborhood Bikeway - traffic calming; bicycle priority at intersections	Signs, Pavement Markings		Helen Steiner Rice Elementary	South
25	568	1.86	E 31st St	Tacoma	Fulton	Bike lanes	Pavement markings (may require removal of parking)		Steven Dohanos Elementary	South
26	561	1.03	Garfield Blvd	Michigan	Root	School Walking Route - Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps		Longfellow Middle	East
27	553	1.42	W 40th St	Oberlin	Oxford	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Toni Morrison Elementary	West
28	521	0.10	W 24th St	Lexington	Oakdale	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Washington Elementary	West
29	507	0.89	W 8th St/W 9th St	Black River Ln	Lakeview Park	E/W Neighborhood Bikeway - Use sharrows and crossing treatments at major intersections		Extend to Lakeview Park via Allison and W 9th St	Palm Elementary	South
30	505	0.70	Kansas Ave	E Erie	Colorado	Neighborhood Bikeway - traffic calming; bicycle priority at intersections	Signs, Pavement Markings		Longfellow Middle	East
31	499	1.59	Tower Blvd	Leavitt	Falbo	Separated bike lanes	repurpose outside lanes		Toni Morrison Elementary	West
32	493	1.12	Euclid Ave	E Erie	Colorado	Neighborhood Bikeway - traffic calming; bicycle priority at intersections	Signs, Pavement Markings		Larkmoor Elementary	East
33	493	0.19	W 27th St	Park	Oakdale	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Wilson Middle	West



34	467	0.78	W 8th St	Reid	Allison	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps	Admiral King Elementary	West
35	466	0.73	E 32nd St	Vine	Seneca	School Walking Route: Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps	Steven Dohanos Elementary	South
36	465	0.48	Fairless Dr.	Grove	Tacoma	Neighborhood Bikeway - Use sharrows and bicycle priority at intersections	Signs, Pavement markings, and curb ramps	Southview Middle	South
37	465	0.18	W 28th Street	Ashland	Oberlin	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps	Lorain High	West
38	451	0.07	Broadway	32nd	31st	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps	Garfield Elementary	West
39	450	0.73	E St	Colorado	Louisiana	School Walking Route - Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps	Longfellow Middle	East
40	439	0.49	E 29th St	Globe	Seneca	School Walking Route: Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps	Steven Dohanos Elementary	South
41	439	0.16	E 32nd St	Elyria	Broadway	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps	Garfield Elementary	West
42	426	0.29	W 6th Street	Oberlin	Washington	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps	Admiral King Elementary	West



43	411	0.49	E 42nd St	Grove	Tacoma	School Walking Route: Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps	Wendy suggested bike lanes (may require parking removal).	Helen Steiner Rice Elementary	South
44	410	0.06	Marshall	30th	Meister	Neighborhood Bikeway - Use sharrows and bicycle priority at minor intersections; bike box/crossbike markings at major intersections	Signs, Pavement Markings	Question - why only 1 block in length?	Frank Jacinto Elementary	West
45	410	0.26	W 24th St	Leavitt	23rd	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Frank Jacinto Elementary	West
46	408	0.66	N Leavitt Rd	Tower	Shopping Center North of City Border	Bike lanes	Signs, Pavement Markings	Upgrade existing bike lanes to meet MUTCD standards	Toni Morrison Elementary	West
47	398	0.23	29th St	Fulton		School Walking Route: Enhance street crossings and upgrade curb ramps where needed.			Steven Dohanos Elementary	South
48	398	0.22	W 14th St	Washington	Long	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Hawthorne Elementary	West
49	390	0.31	Off road path	Meister	26th	Maintain existing pedestrian connection			Lorain High	West
50	383	0.15	31st	Broadway	Reid	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Garfield Elementary	West
51	383	0.53	Pearl Ave	E 28th	E 36th	Community Walking Route			Steven Dohanos Elementary	South
52	383	0.23	Wilson Street	G	Nebraska	School Walking Route - Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps		Larkmoor Elementary	East



53	383	0.08		RR underpass at E 28th		Improve Pedestrian-Scale Lighting			Steven Dohanos Elementary	South
54	371	0.46	Globe Ave	29th	36th	Neighborhood Bikeway - traffic calming; bicycle priority at intersections	Signs, Pavement Markings		Steven Dohanos Elementary	South
55	370	0.03	E 30th St		Vine	School Walking Route: Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps		Steven Dohanos Elementary	South
56	368	0.14	Elyria Ave	34th	32nd	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Garfield Elementary	West
57	368	0.24				Sidewalk on Longfellow MS Site	Construct new sidewalk		Longfellow Middle	East
58	355	0.25	E 34th St	Grove	Palm	School Walking Route: Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps		Palm Elementary	South
59	355	0.36	E 34th St	Dallas	Elyria	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Garfield Elementary	West
60	355	0.09	Louisiana Ave	E	Longfellow Middle School	School Walking Route - Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps		Longfellow Middle	East
61	355	0.44	Marshall Ave	Meister	23rd	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Frank Jacinto Elementary	West
62	355	0.25	N Leavitt Rd	Erie	Stonepath	Signed Bike Route	Signs	Appears to be slightly too narrow for bike lanes	Admiral King Elementary	West



63	355	0.19	Pole Ave	26th	21st	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Lorain High	West
64	355	0.14	W 23rd St	Marshall	24th	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Frank Jacinto Elementary	West
65	355	0.05		RR underpass at Henderson/21st		Improve Pedestrian-Scale Lighting			Hawthorne Elementary	West
66	343	0.24	Globe Ave	29th	32nd	School Walking Route: Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps		Steven Dohanos Elementary	South
67	343	0.85	W 11th St	Oberlin	Hillsdale	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Admiral King Elementary	West
68	343	0.25	W 6th Street	Oberlin	Allison	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Admiral King Elementary	West
69	343	0.07	Off road path	29th	30th	Add connection to private drive at housing development to connect from 29th St to 30th St			Steven Dohanos Elementary	South
70	340	0.27	Forest Hill Dr.	44th	40th	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps	Consider RRFB to cross Tower Blvd	Toni Morrison Elementary	West
71	315	0.17	G Street	Leroy	Euclid	School Walking Route - Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps		Larkmoor Elementary	East



72	315	0.17	Vine	30th	32nd	School Walking Route: Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps		Steven Dohanos Elementary	South
73	308	0.27	G Street	Fillmore	Wilson	School Walking Route - Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps		Larkmoor Elementary	East
74	300	0.36	Ashland Ave	44th	Douglas	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Toni Morrison Elementary	West
75	300	0.16	E 31st St	Days Dam Trailhead	Tacoma	Bike lanes	4 to 3 road diet	if road diet not feasible, consider widening sidewalk and adding crossing enhancements to connect bike lanes east of Tacoma to the Black River Bikeway	Steven Dohanos Elementary	South
76	300	0.24	W 17th St	Oakdale	Reid	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Hawthorne Elementary	West
77	300	0.25	W 44th St	Forest Hill	Ashland	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Toni Morrison Elementary	West
78	290	1.90	Off road path			Sidewalk on Longfellow MS Site	Construct new sidewalk		Longfellow Middle	East
79	260	0.05	Hillsdale Ave	11th	Erie	School Walking Route: Enhance street crossings and upgrade curb ramps where needed. Construct missing sidewalks.	Signs, Pavement markings, and curb ramps		Admiral King Elementary	West
80	260	0.22	Leroy St	G	Wilson	School Walking Route - Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps		Larkmoor Elementary	East



81	260	0.13	Mckinley St	Nebraska	Leroy	School Walking Route - Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps		Larkmoor Elementary	East
82	260	0.32	Nebraska Ave	Mckinley	Eastlawn	School Walking Route - Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps		Larkmoor Elementary	East
83	260	0.28	New Jersey Ave	Crehore	Wilson	School Walking Route - Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps		Larkmoor Elementary	East
84	260	0.15	Wilson	Leroy	Euclid	School Walking Route - Enhance street crossings and upgrade curb ramps where needed.	Signs, Pavement markings, and curb ramps		Larkmoor Elementary	East
85	231	0.59	Meister Rd	Kneirim	Fulmer	Construct missing sidewalks	Sidewalks	Sidewalks are missing on south side. Sidewalks exist in most places on north side.	Frank Jacinto Elementary	West
86	230	0.16	Meister Rd	Pickett	Park	Construct missing sidewalks	Sidewalks		Frank Jacinto Elementary	West

7 Endorsements

The City of Lorain’s Active Transportation Plan will create and expand safe, accessible and effective options - walking, biking and busing - throughout the City that are equitable and reliable for residents and visitors of all ages and abilities for a healthy Lorain.

The undersigned endorse this vision and goals, and pledge to support the City of Lorain’s Active Transportation Plan.

Name	Organization	Signature
David Hardy, Jr.	CEO, Lorain City Schools	
Chase Ritenauer	Mayor, City of Lorain	
Joel Arredondo	City Council President, City of Lorain	