Transportation Opportunity Plan

School of Planning and Public Affairs | IOWA | Initiative for Sustainable Communities

City of Burlington, Iowa
A Great Place to Live, Work and Play

West Burlington Iowa

Acknowledgements

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Why is Transportation Important?

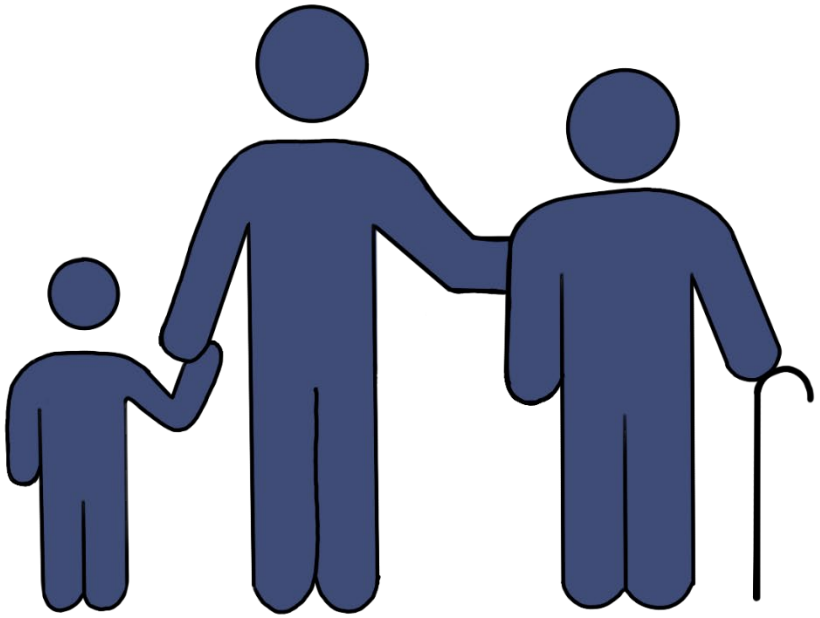
Transportation is necessary to access...

- Employment
- Education
- Recreation
- Healthcare

Someone who struggles to access transportation will also struggle to access **economic opportunities**.

Demographics

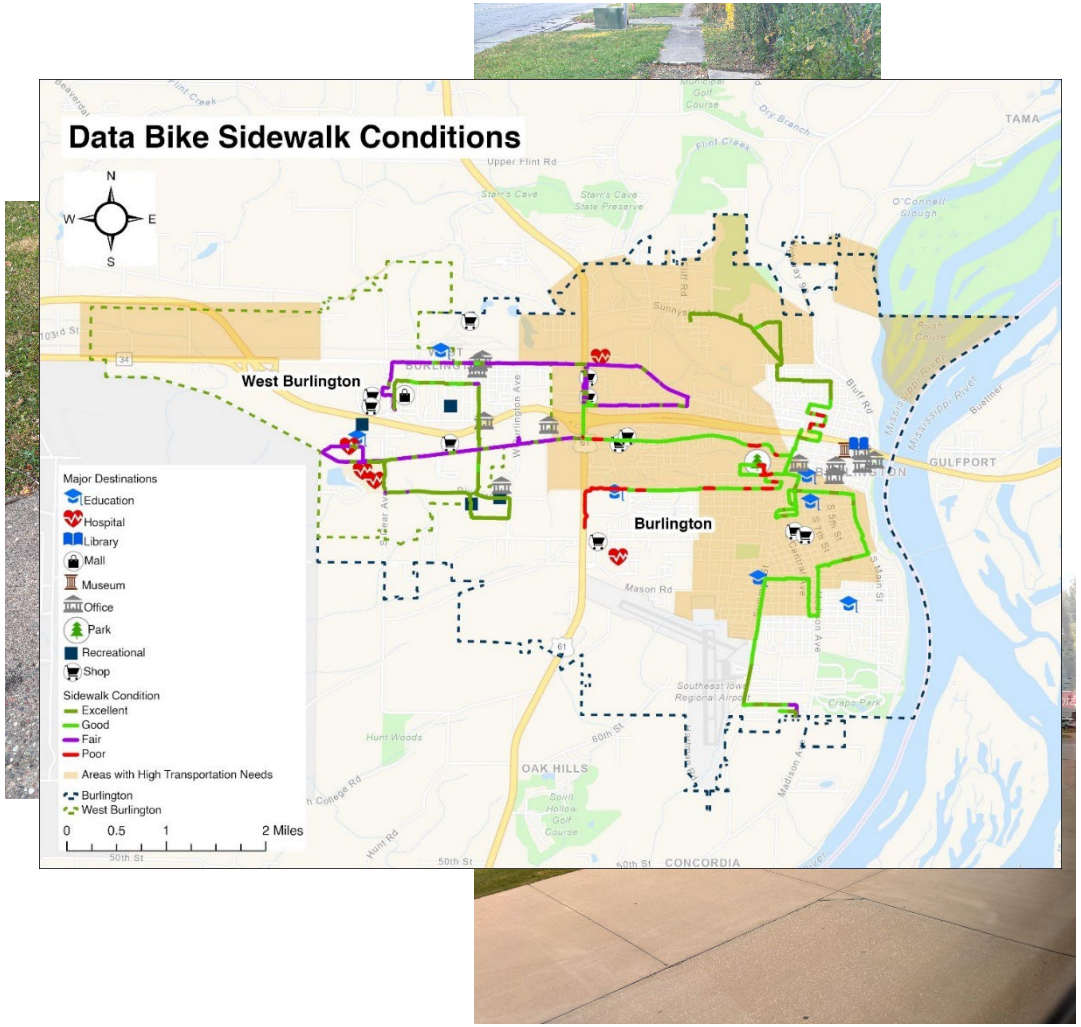
- Top age cohorts: **5-9, 65-69 years old**
  - The average age in the State of Iowa is **38.6 years old**
- **17%** of residents below the poverty line
  - 11% of State of Iowa residents live below the poverty line
- **17.7%** of residents live with a disability
  - 13% of State of Iowa residents live with a disability



Introduction to Barriers

- **What is a barrier?**
  - Transportation barriers are obstacles that limit the ability of individuals to travel within their community efficiently and safely.
- **Why is it important to address these barriers?**
  - To ensure that vulnerable populations without easy access to transportation can travel
  - Increased/improved mobility, accessibility, and opportunity for all

Barrier 1: Pedestrian Infrastructure



- **How was this barrier identified?**
  - Planning team observations
  - Community engagement feedback
  - Iowa Data Bike
- **Why does this barrier matter?**
  - Connectivity
  - Accessibility
  - Safety

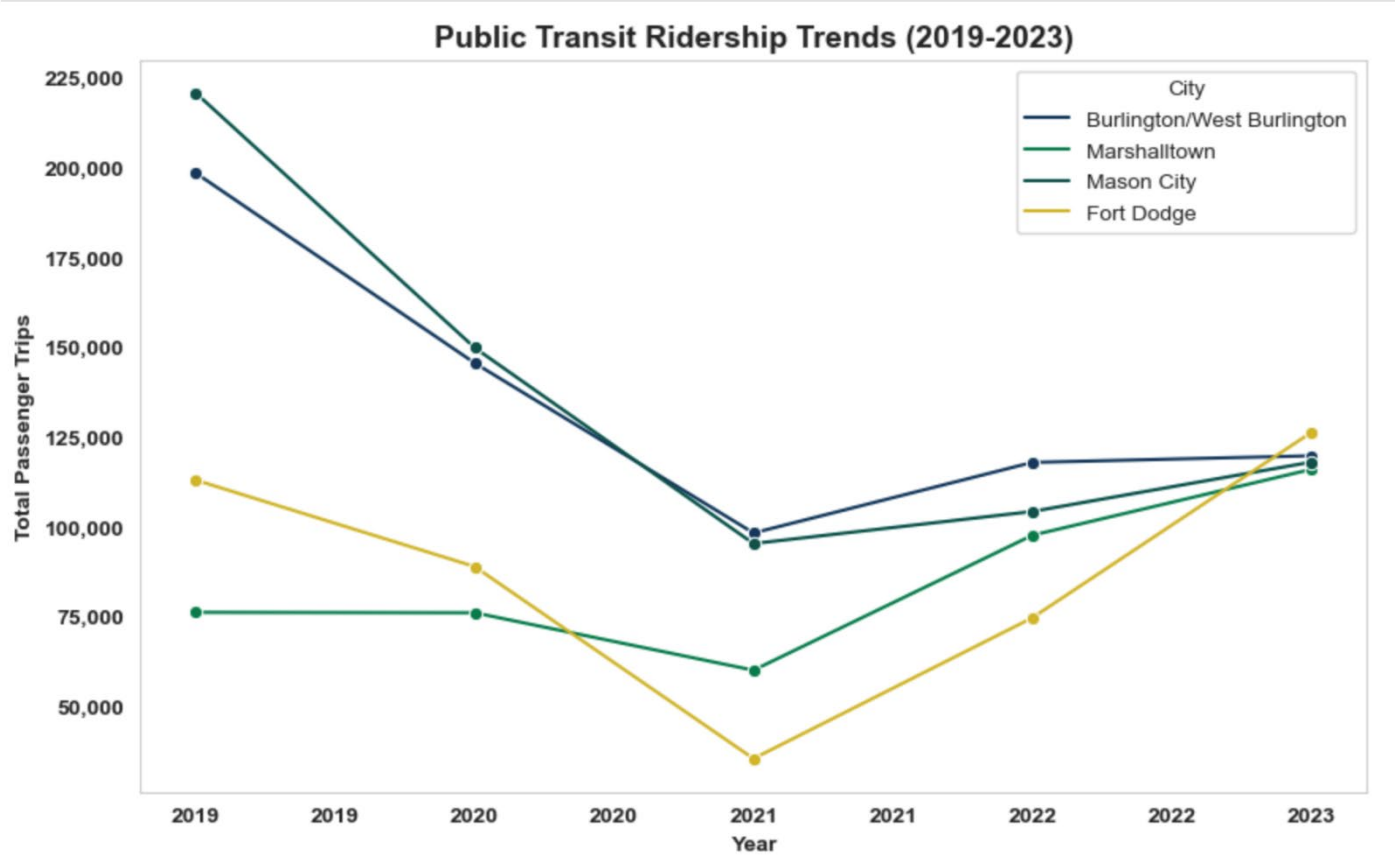
Barrier 2: Transit

How was this barrier identified?

- Planning team observations
- Rider and resident feedback
- Analysis of route maps, schedules, and ridership data

Why does this barrier matter?

- Mobility
- Access to jobs, healthcare, and services
- Equity and environmental impact



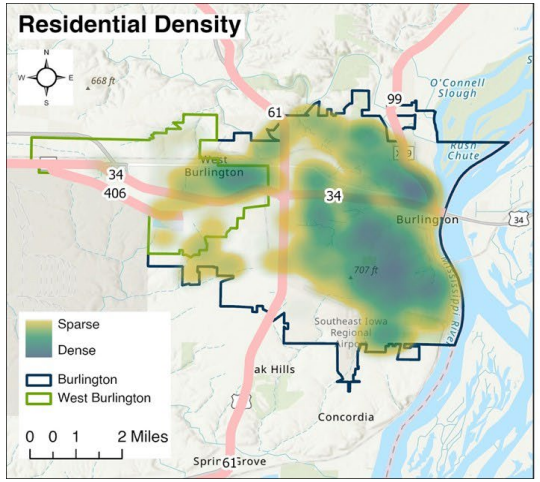
Barrier 3: Land Use

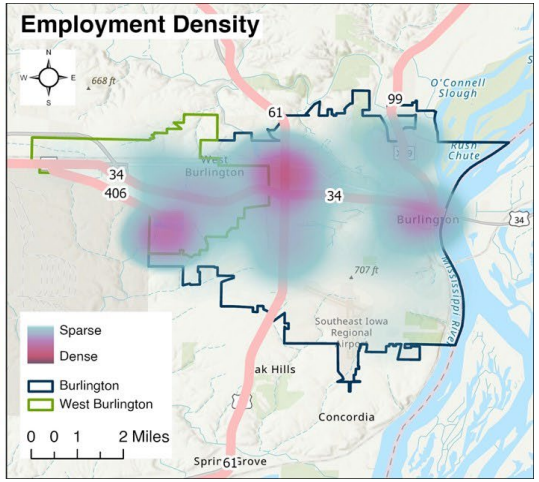
How was this barrier identified?

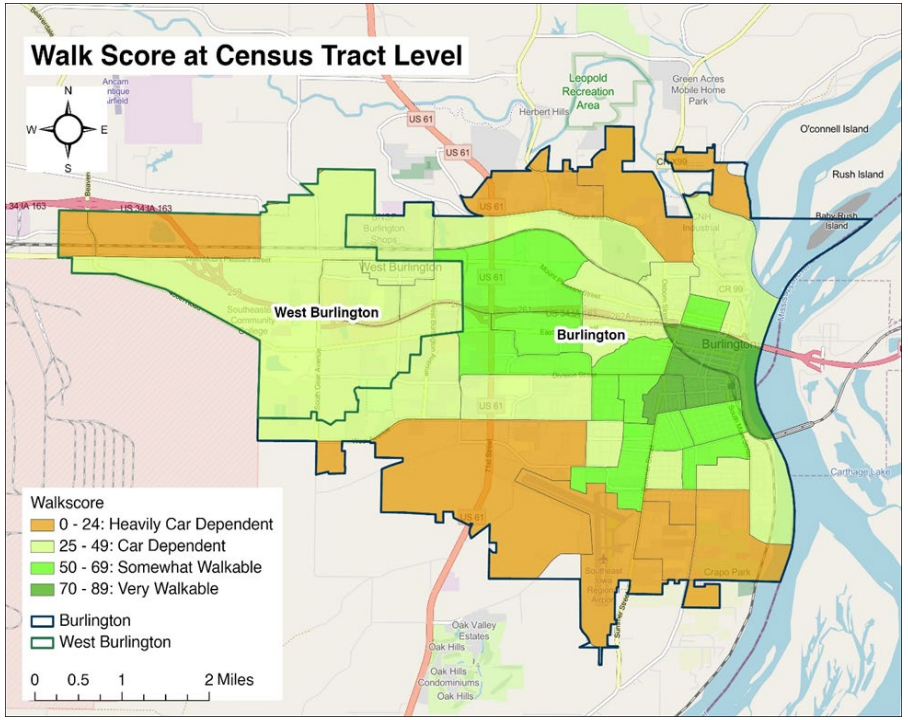
- Analysis of job-residence mix
- Analysis of Walk Score data
- Planning team observations

Why does this barrier matter?

- Facilitates walk and transit access
- Stimulate economic activity and provide opportunities in vulnerable neighborhoods







Purpose Statement

- *Improve transportation system **opportunity***
- *Enhance the **accessibility** of destinations*
- *Enable transportation mode choice for **all community members***
- *Ensure accessing **daily needs** does not rely on personal vehicle availability*

Transportation Barriers and Their Interactions

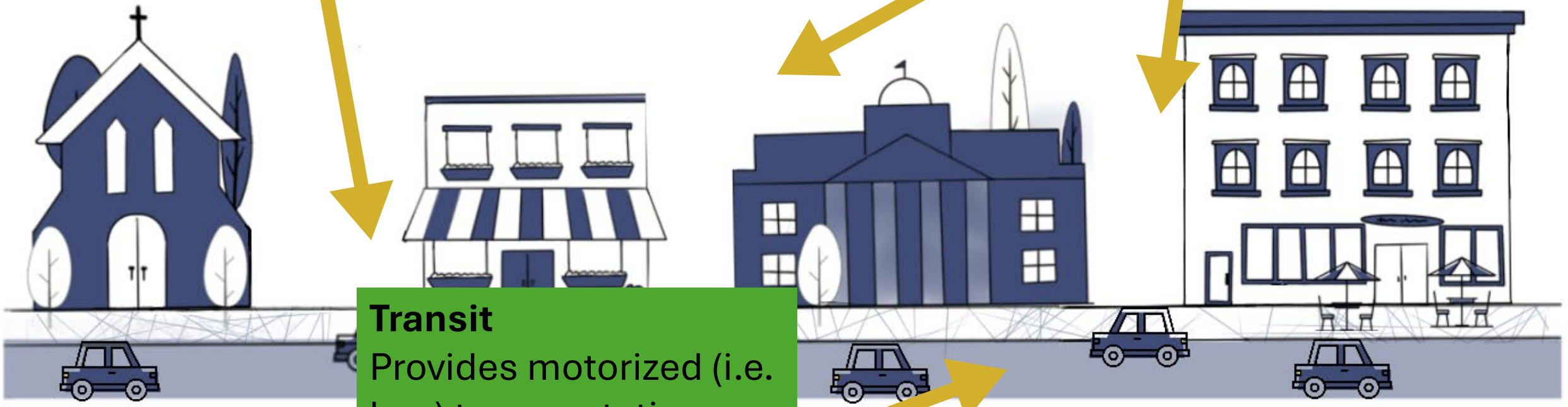
Land Use
The physical layout of, and distance between, destinations

Pedestrian Infrastructure
Allows people to walk between destinations

Transit
Provides motorized (i.e. bus) transportation between destinations

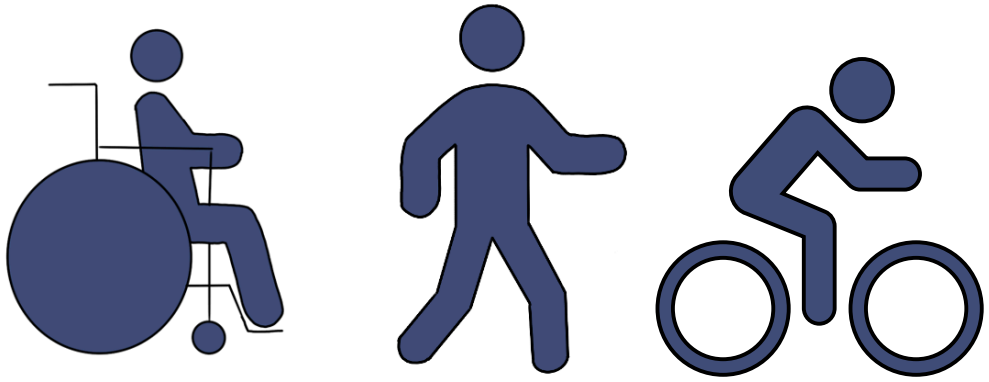
Pedestrian Infrastructure
Allows people to walk between destinations

Land Use
The physical layout of, and distance between, destinations



Transit
Provides motorized (i.e. bus) transportation between destinations

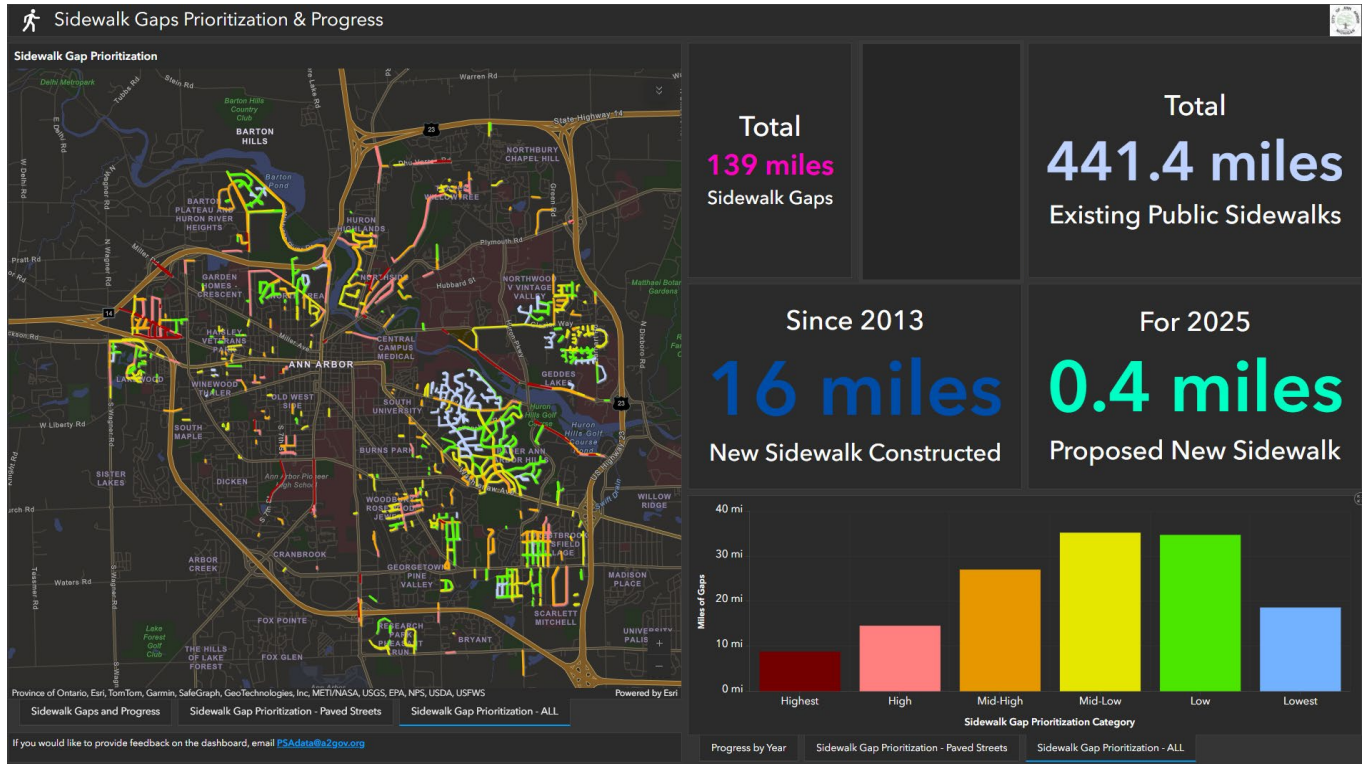
Pedestrian Infrastructure Recommendations



Sidewalk Inventory Update and Sidewalk Improvement Program

Sidewalk conditions vary across the community, many are in need of repair

Update and implement a sidewalk inventory and sidewalk replacement program



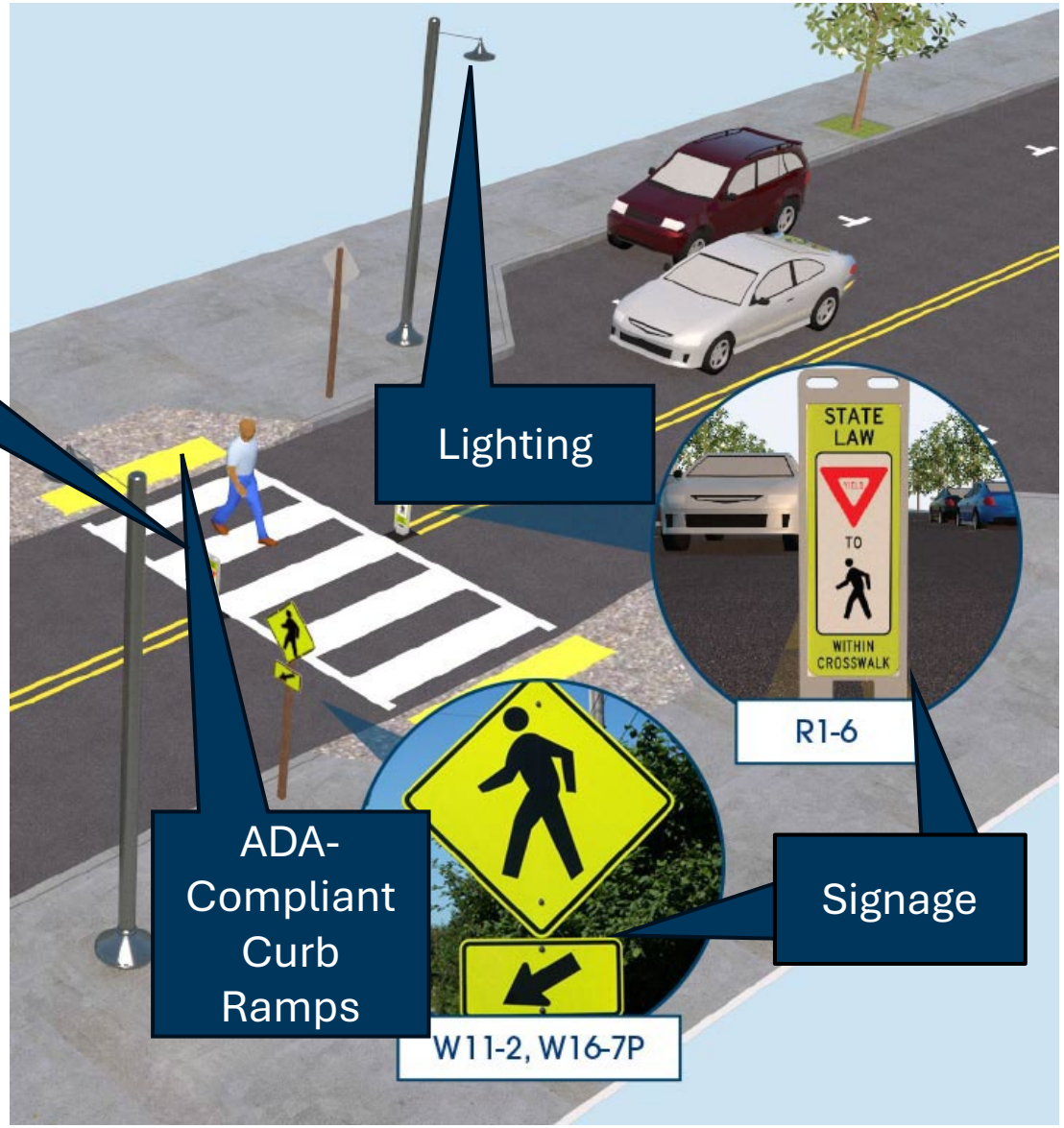
Dashboard of Sidewalk Gaps and Replacement and Installation Prioritization

Source: City of Ann Arbor

Crossing Improvements

Pedestrians feel unsafe crossing streets

Evaluate and install crossing improvements to improve pedestrian safety and comfort



Crossing Improvements
Source: FHWA

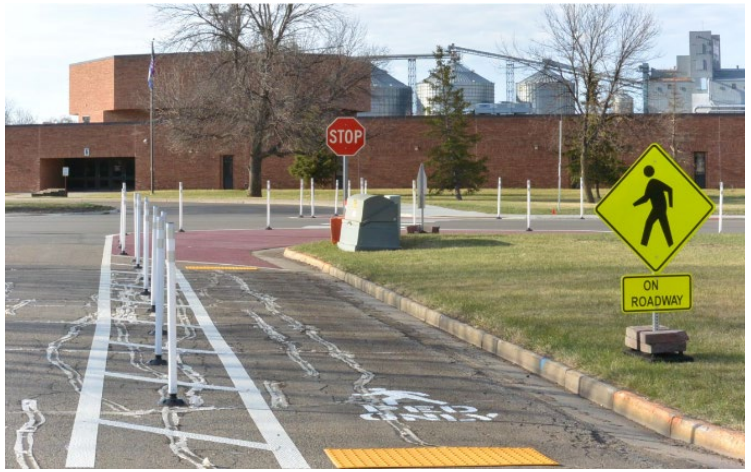
Demonstration or Quick-Build Projects

Improvements to pedestrian infrastructure can be expensive, and the construction process is often long

Low-cost, quick-build demonstration projects can be installed to test improvements before investments

Traffic Circle/Roundabout

Curb Extensions/Bulb-Outs



Walking Lane

(Source: MnDOT, 2021)

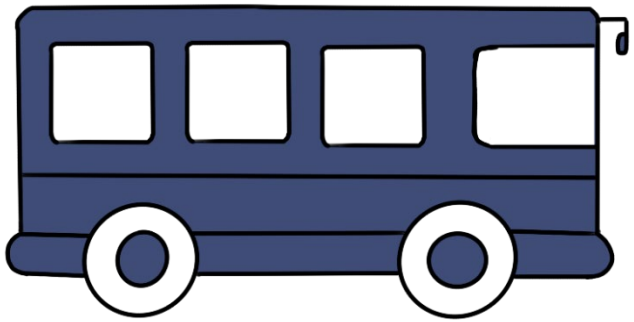
Demonstration or Quick-Build Projects

Improvements to pedestrian infrastructure can be expensive, and the construction process is often long

Low-cost, quick-build demonstration projects can be installed to test improvements before investments

Location	Intersection Location or Corridor?	Number of Crashes Involving Non-Motorists
Central Avenue from Vine Street to Columbia Street	Corridor	7
Division Street & Plane Street	Intersection Location	3
South Street & S 9th Street	Intersection Location	2
Gear Avenue from Agency Road to Division Street	Corridor	2

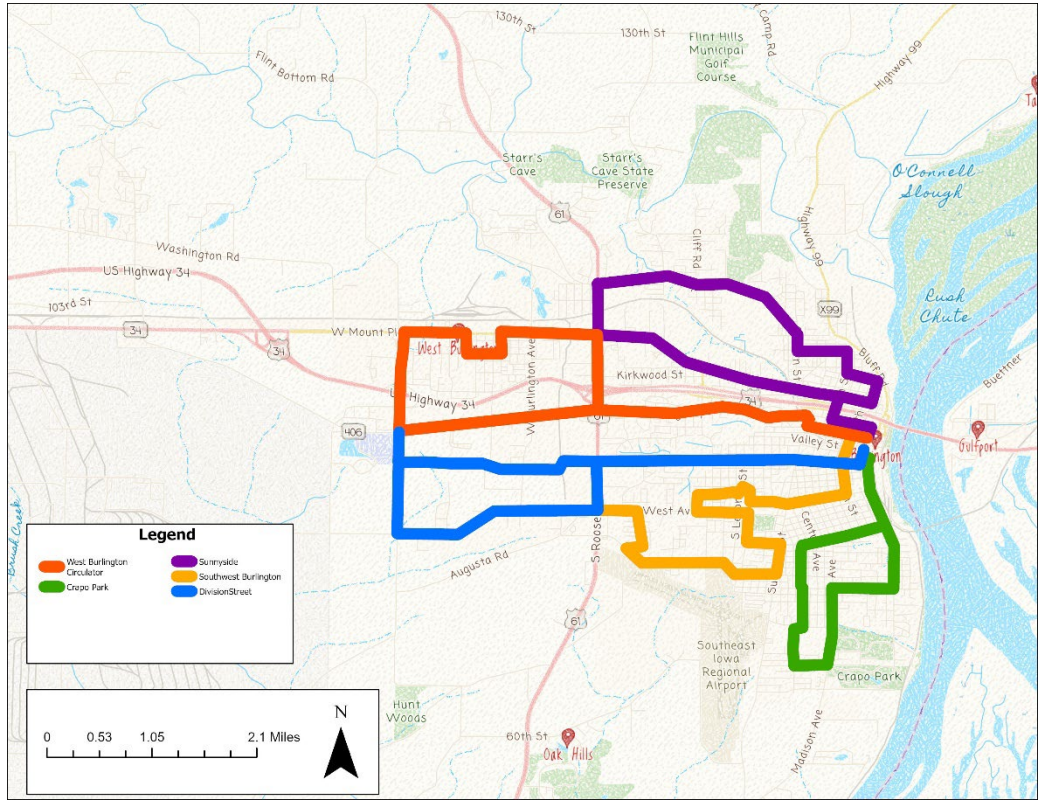
Transit Recommendations



Transition to a Fixed-Route System

Current system is confusing and inconsistent

Shift to a fixed-route network with clearer paths and targeted route improvements



Extend Evening Service to 7 PM

Riders lack transportation after work hours

Extend weekday service on key routes

Source: Burlington Today

Improve Infrastructure and Wayfinding

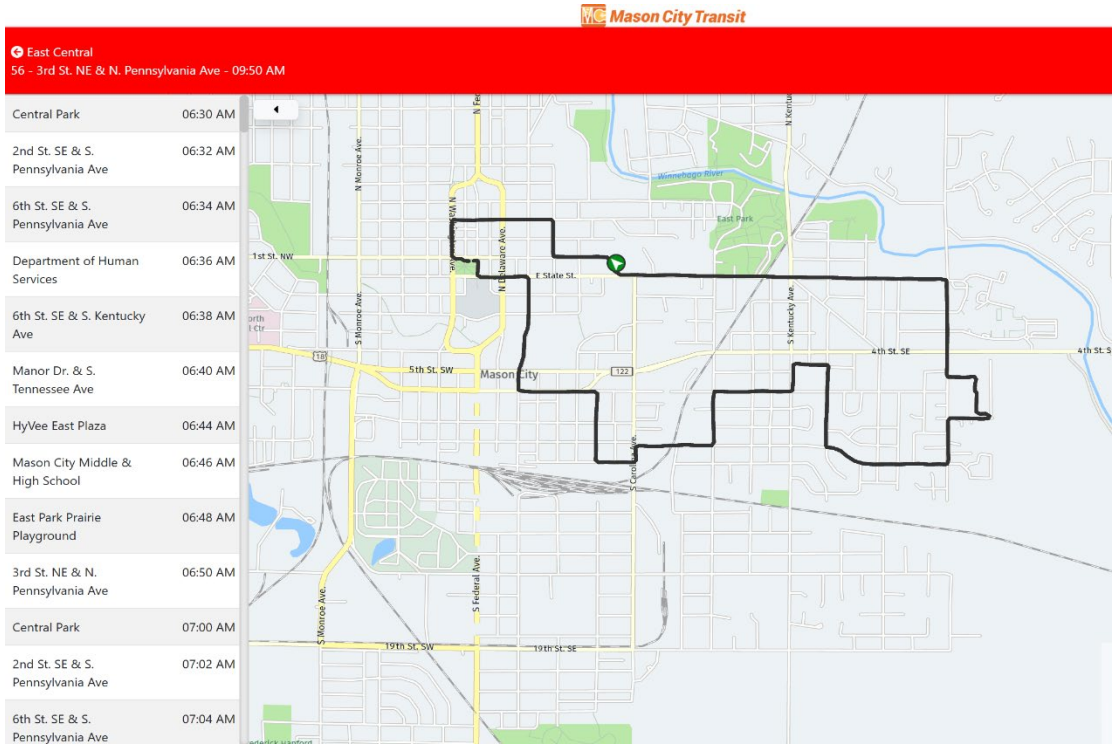
No formal bus stops with signage, shelters, or benches

Installing wayfinding signs, benches, shelters, and other transit infrastructure

Real-Time Tracking & Mobile Fare Payment

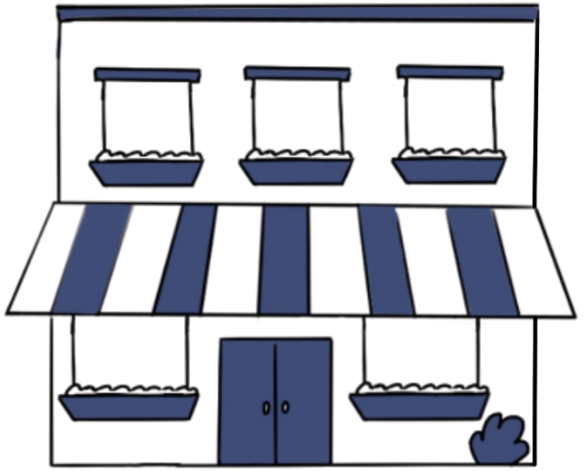
No live tracking option

Unite GPS and allow mobile fare payments



Source: Mason City Transit

Land Use Recommendations



Mixed Use

Single-use zoning limits walkability between residences and jobs/services

Expand permitted commercial uses in residential zones

"Corner" stores

Urban agriculture

Accessory commercial units

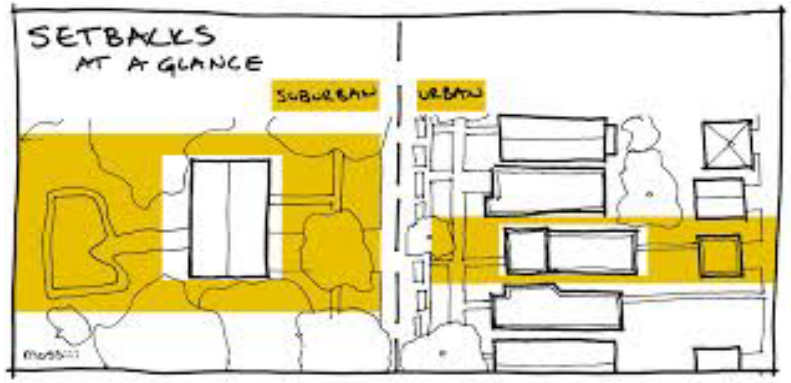
Image credits: City of Seattle, The Urban Homestead, Congress for the New Urbanism

Density

Low permitted density of buildings and housing units limits number of walkable destinations

Two-, three-, four-family housing

Loosen regulations to allow increased housing units and greater lot coverage



Decreasing setback/lot coverage requirements

Image credits: Oregon Live, Moss Design

Form-Based Code

Current codes do not require pedestrian-oriented design

Implement form-based codes along key areas (transit routes)

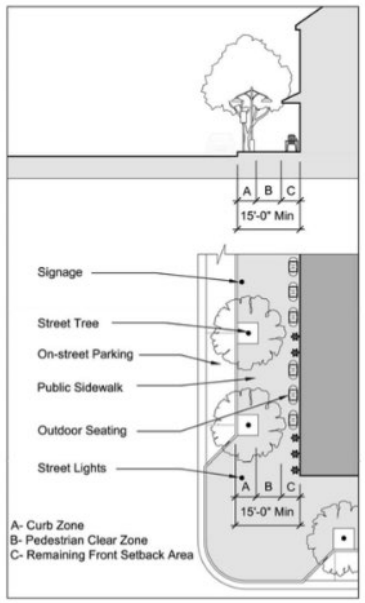


Image credits: Smart Growth America, City of Washington

Parking Reform

Overflow of parking reduces density and impedes walk access

Reduce minimums and implement quick-build placemaking projects

Public gathering space

Market

Business pop-ups

Image credits: Little Italy of Los Angeles, 5280, Sioux Falls Business

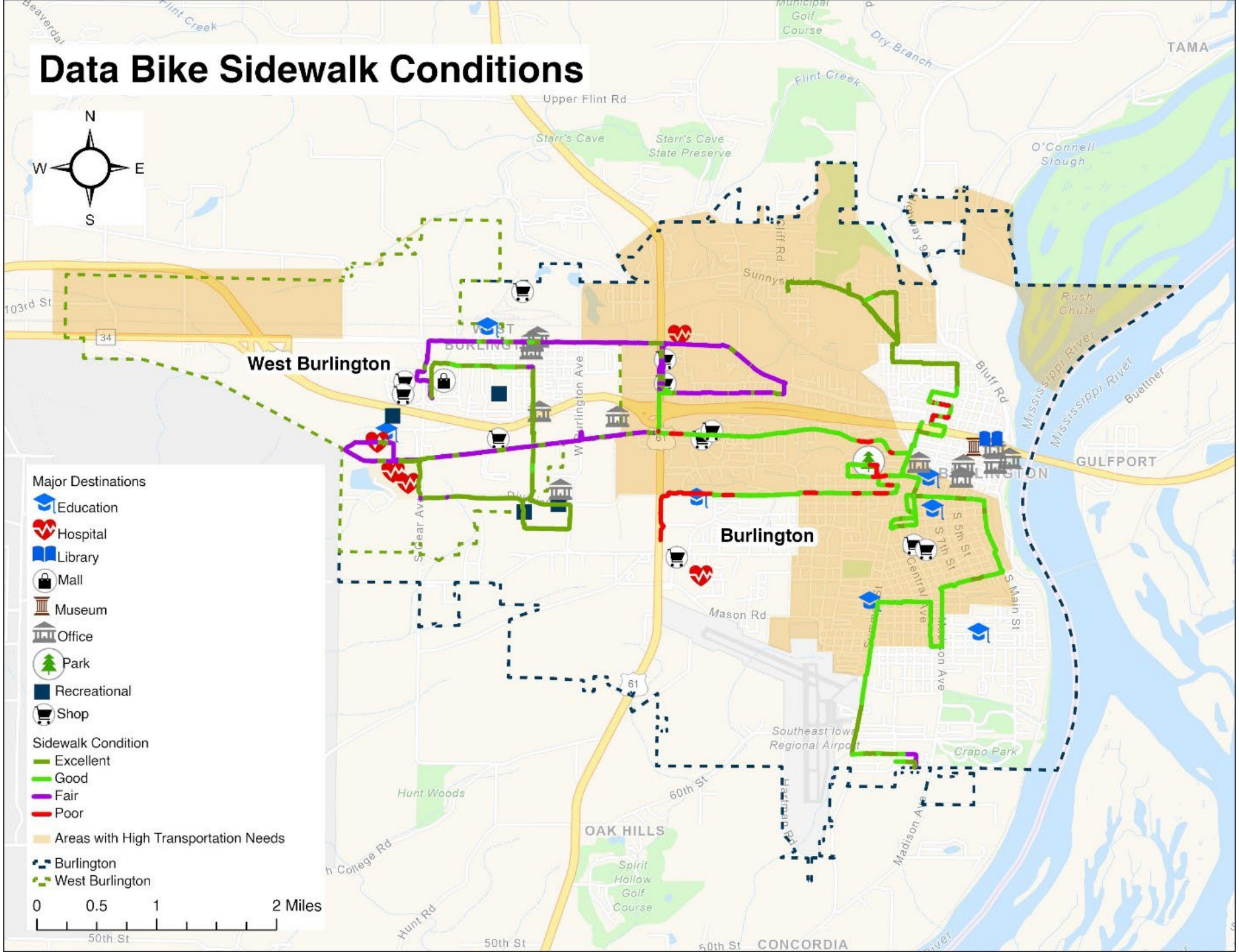
Next Steps

Recommendation Timeline and Cost Diagram

Thanks!

Questions?

Recommendation Time Frame and Cost Estimates	
Time Frame	
Short Term	Less than 1 year
Medium Term	1 – 5 years
Long Term	More than 5 years
Cost Estimates	
$	Less than $100,000
$$	$100,000 - $250,000
$$$	$250,000 - $1,000,000
$$$$	More than $1,000,000


Data Bike Sidewalk Conditions
N
W
E
S
West Burlington
Burlington
Major Destinations
Education
Hospital
Library
Mall
Museum
Office
Park
Recreational
Shop
Sidewalk Condition
Excellent
Good
Fair
Poor
Areas with High Transportation Needs
Burlington
West Burlington
0
0.5
1
2 Miles
Upper Flint Rd
Starr's Cave
Starr's Cave State Preserve
Flint Creek
Dry Branch
Municipal Golf Course
TAMA
O'Connell Slough
Rush Chute
Mississippi River
Bluff Rd
Buettner
GULFPORT
Mason Rd
Southeast Iowa Regional Airport
Crapo Park
OAK HILLS
Spirit Hollow Golf Course
Hunt Woods
60th St
50th St
CONCORDIA
Madison Ave
S Main St
S 5th St
S 7th St
Central Ave
Washington Ave
Burlington Ave
Cliff Rd
103rd St
34
61

Sidewalk Condition Ranking	Miles of Sidewalk	Percent of Total Surveyed Length
Excellent	9.37	41.87%
Fair	3.73	16.67%
Good	7.38	32.98%
Poor	1.90	8.49%

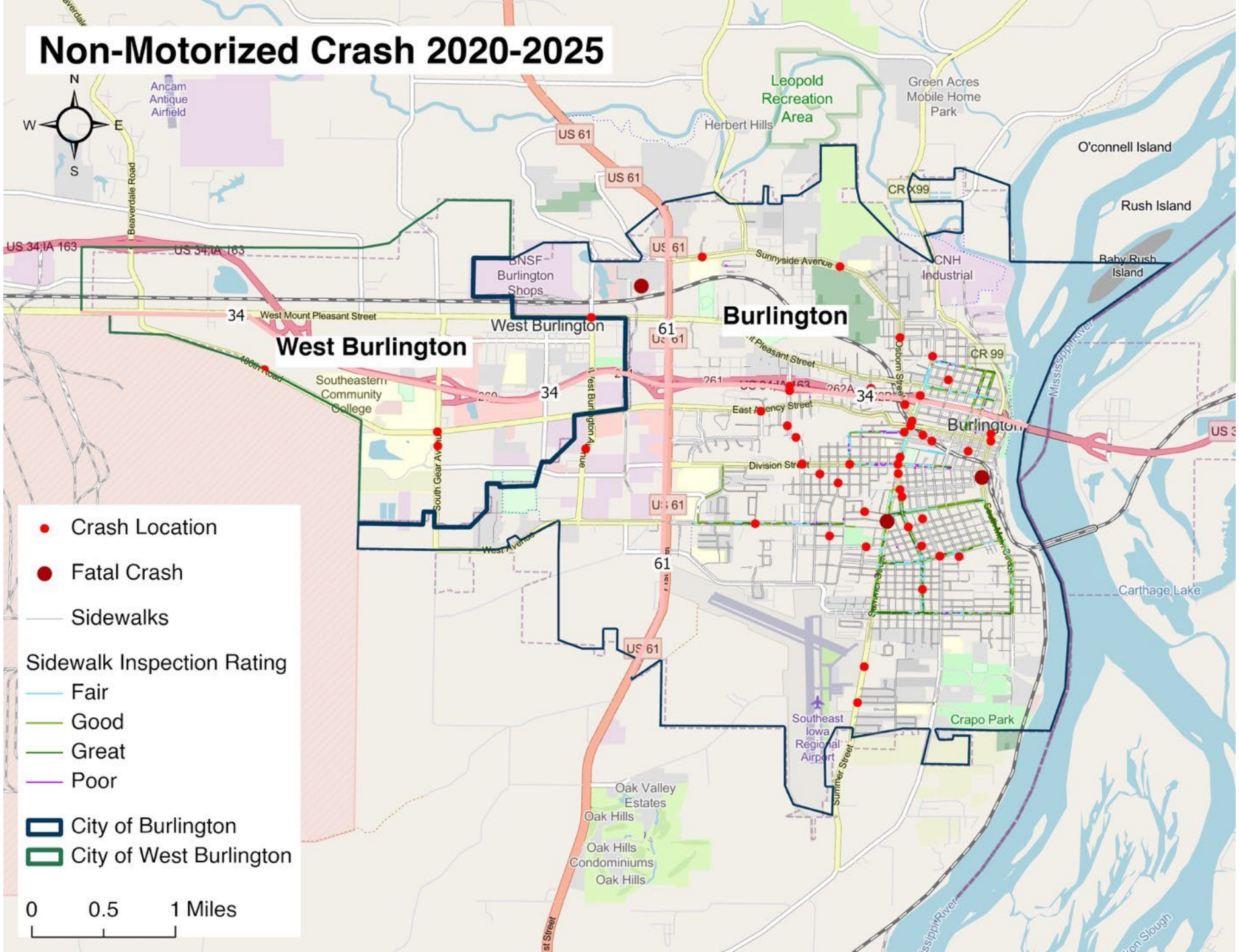
Community Sidewalk Conditions

Sidewalk Condition Ranking	Miles of Sidewalk	Percent of Total Surveyed Length
Excellent	6.24	38.25%
Good	6.52	39.97%
Fair	1.65	10.14%
Poor	1.90	11.64%

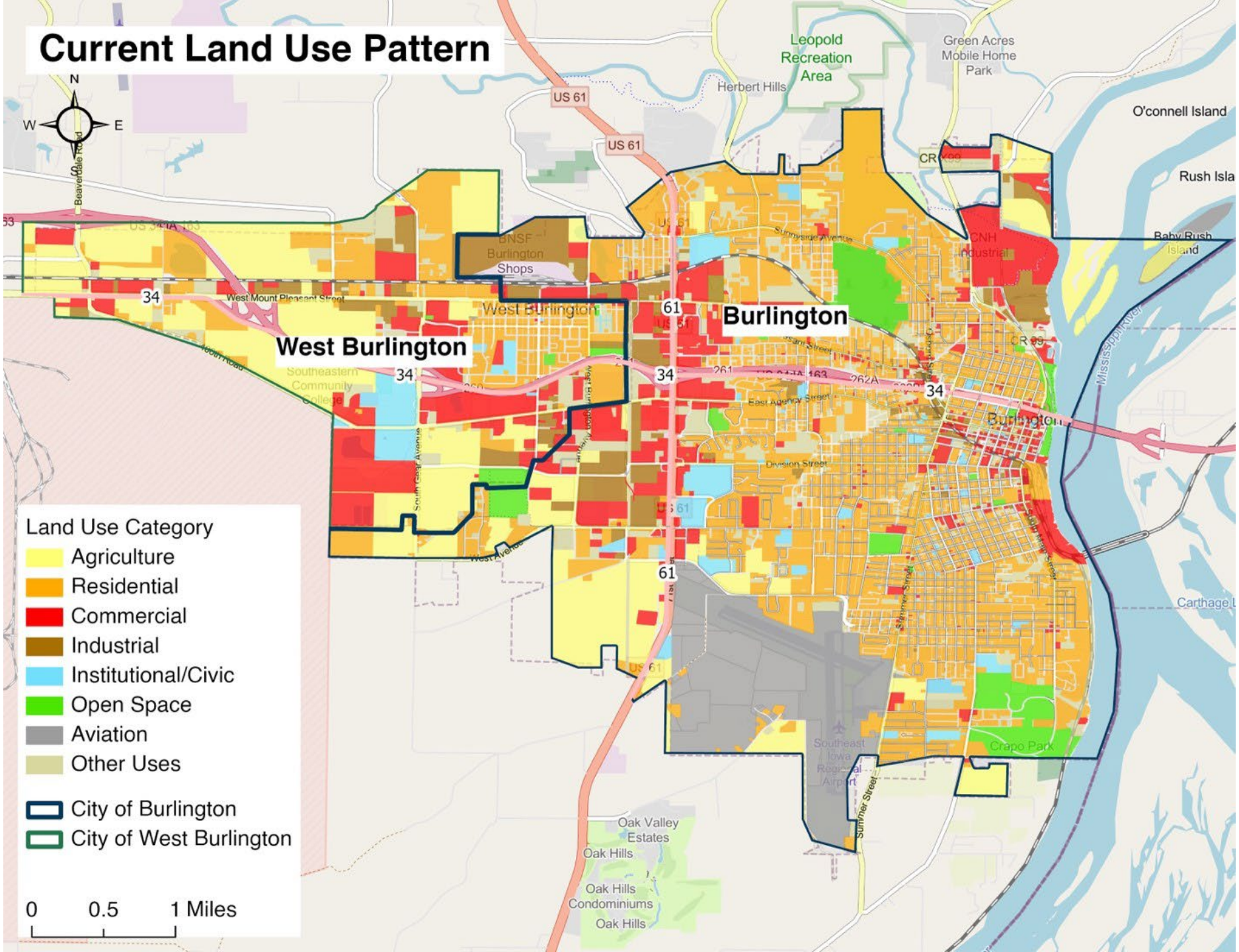
Burlington Sidewalk Conditions

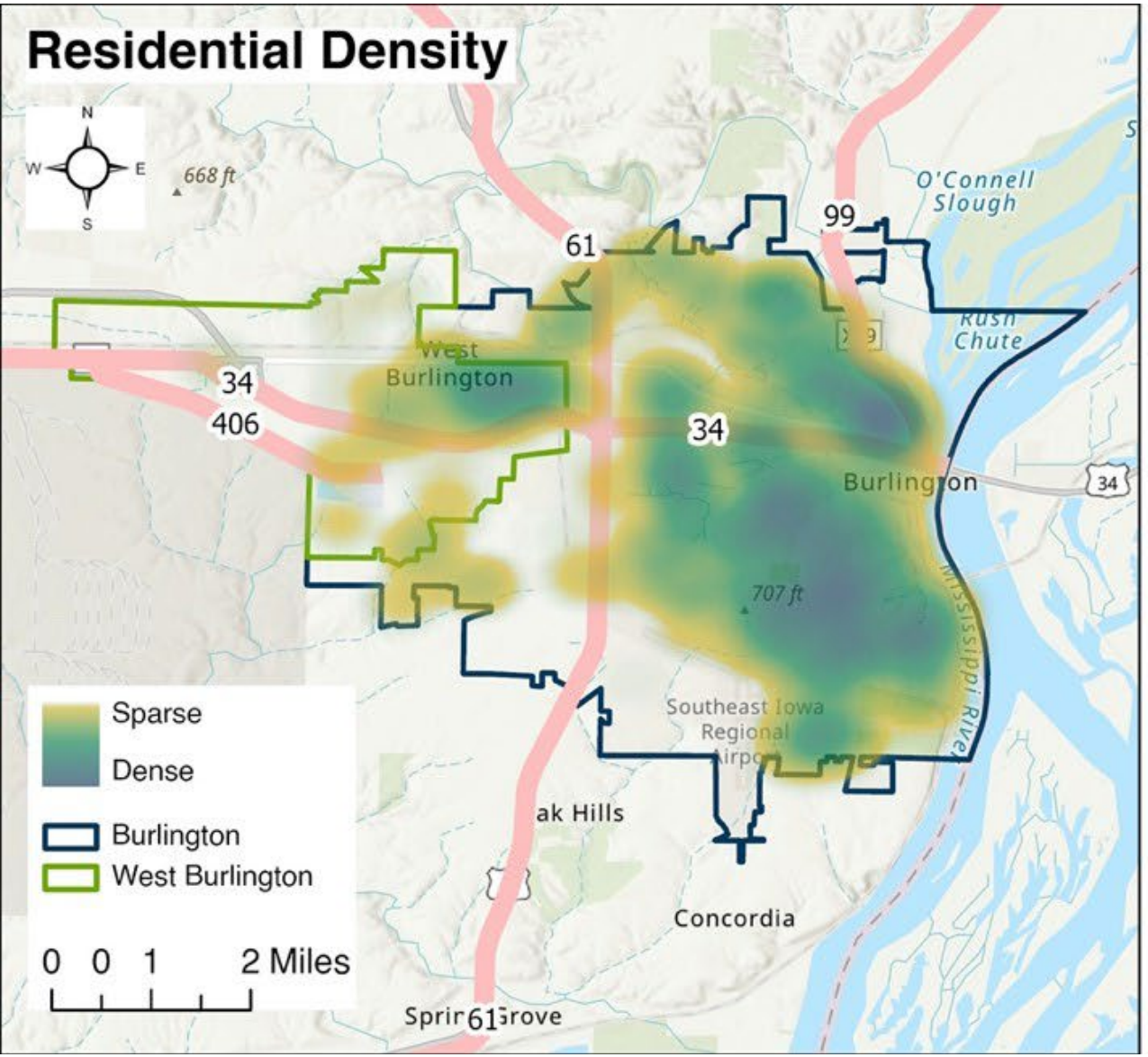
Sidewalk Condition Ranking	Miles of Sidewalk	Percent of Total Surveyed Length
Excellent	2.97	51.99%
Good	0.86	15.01%
Fair	1.89	33.09%

West Burlington Sidewalk Conditions


Non-Motorized Crash 2020-2025
N
W
E
S
Ancam Antique Airfield
Beaverdale Road
US 34;IA 163
West Mount Pleasant Street
West Burlington
Southeastern Community College
BNSF Burlington Shops
US 61
Leopold Recreation Area
Herbert Hills
Green Acres Mobile Home Park
O'connell Island
Rush Island
CR X99
Sunnyside Avenue
CNH Industrial
Baby Rush Island
Burlington
CR 99
Osborn Street
Mississippi River
East Agency Street
Division Street
South Gear Avenue
West Avenue
Carthage Lake
Southeast Iowa Regional Airport
Crapo Park
Summer Street
Oak Valley Estates
Oak Hills
Oak Hills Condominiums
Crash Location
Fatal Crash
Sidewalks
Sidewalk Inspection Rating
Fair
Good
Great
Poor
City of Burlington
City of West Burlington
0
0.5
1 Miles

Current Land Use Pattern




Residential Density
N
W
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668 ft
O'Connell Slough
99
61
Rush Chute
West Burlington
34
406
34
Burlington
34
707 ft
Mississippi River
Southeast Iowa Regional Airport
ak Hills
Concordia
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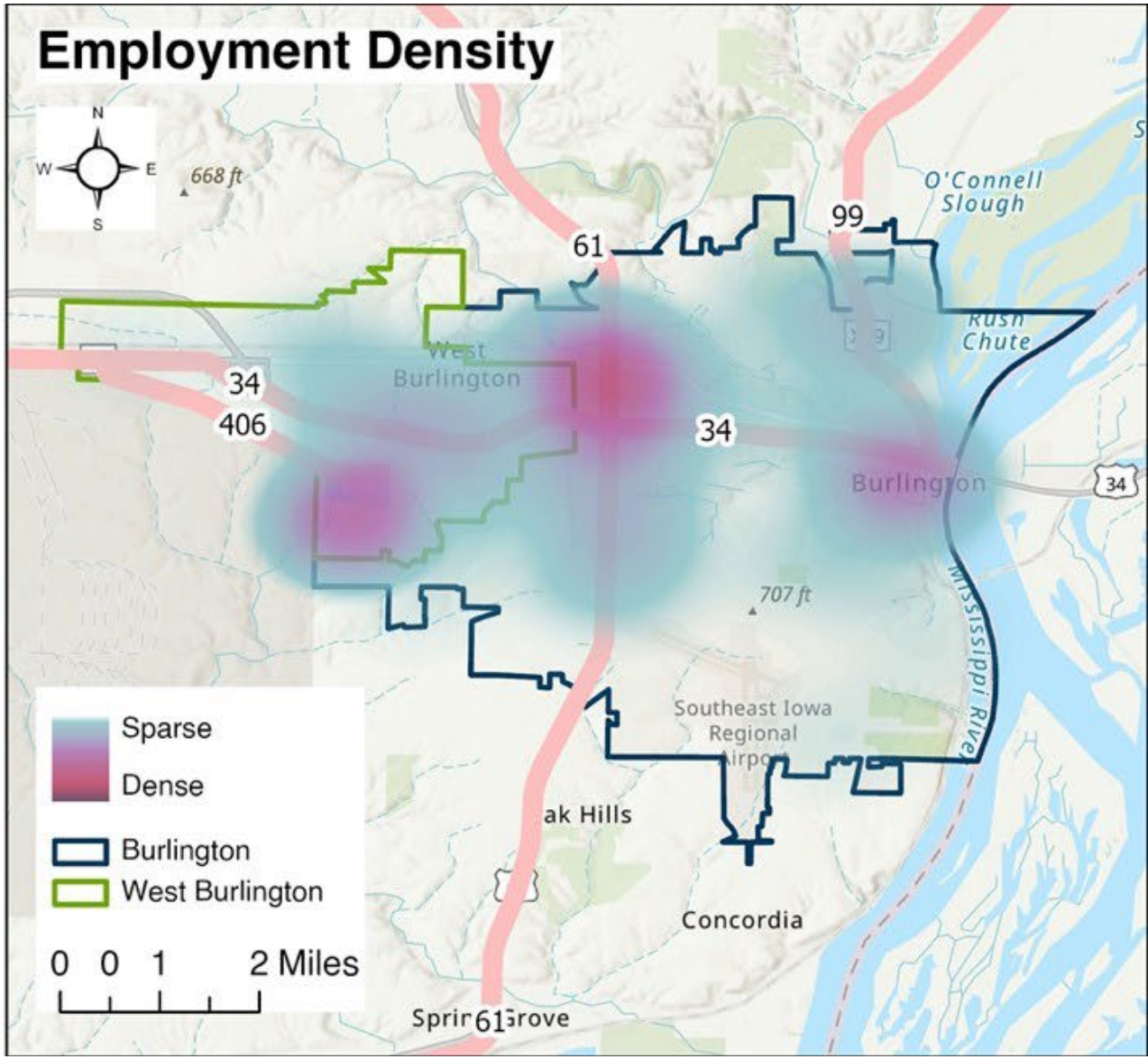
Sparse
Dense
Burlington
West Burlington
0 0 1 2 Miles


Employment Density
N
W
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668 ft
O'Connell Slough
99
61
Rush Chute
West Burlington
34
406
34
Burlington
34
707 ft
Mississippi River
Southeast Iowa Regional Airport
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Concordia
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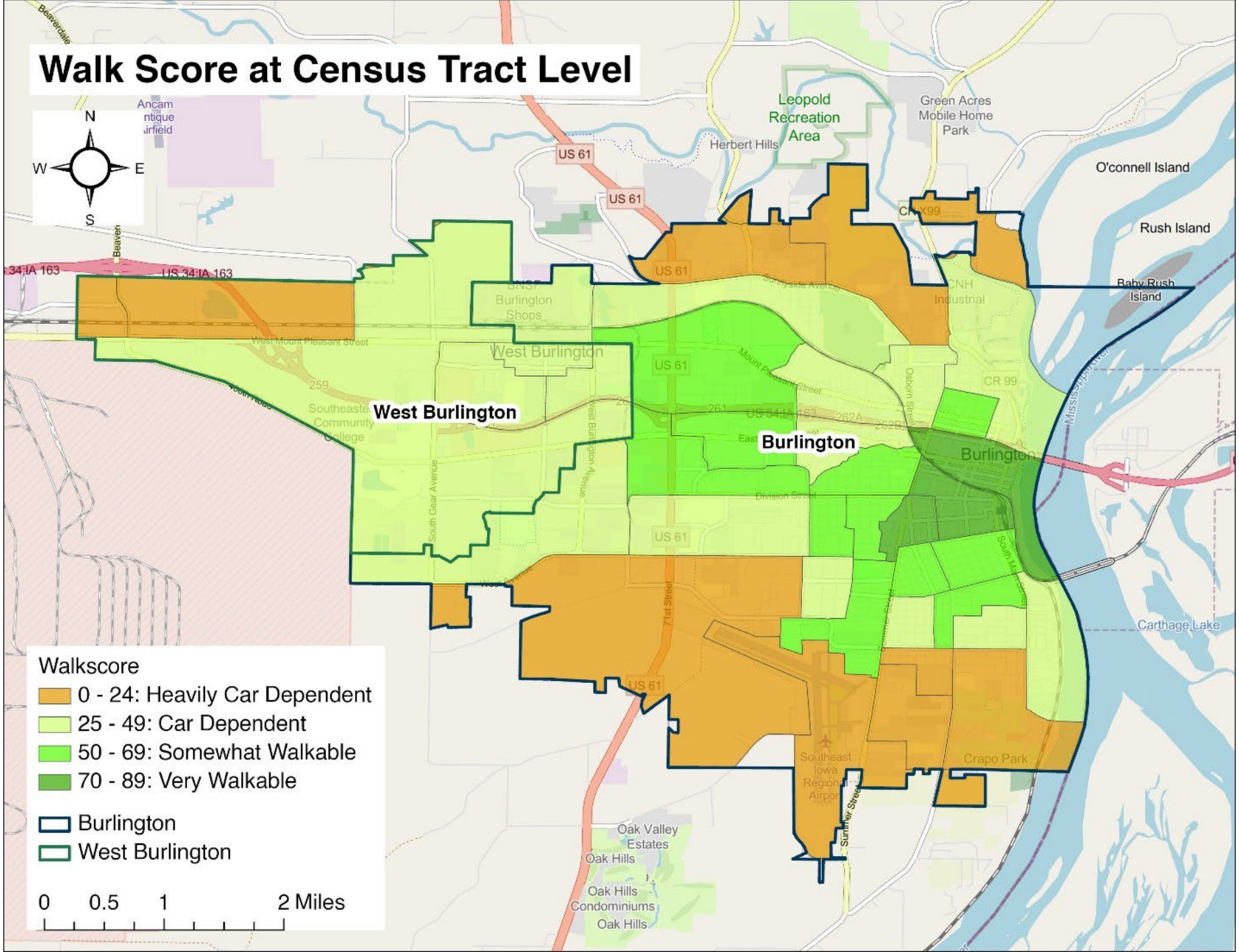
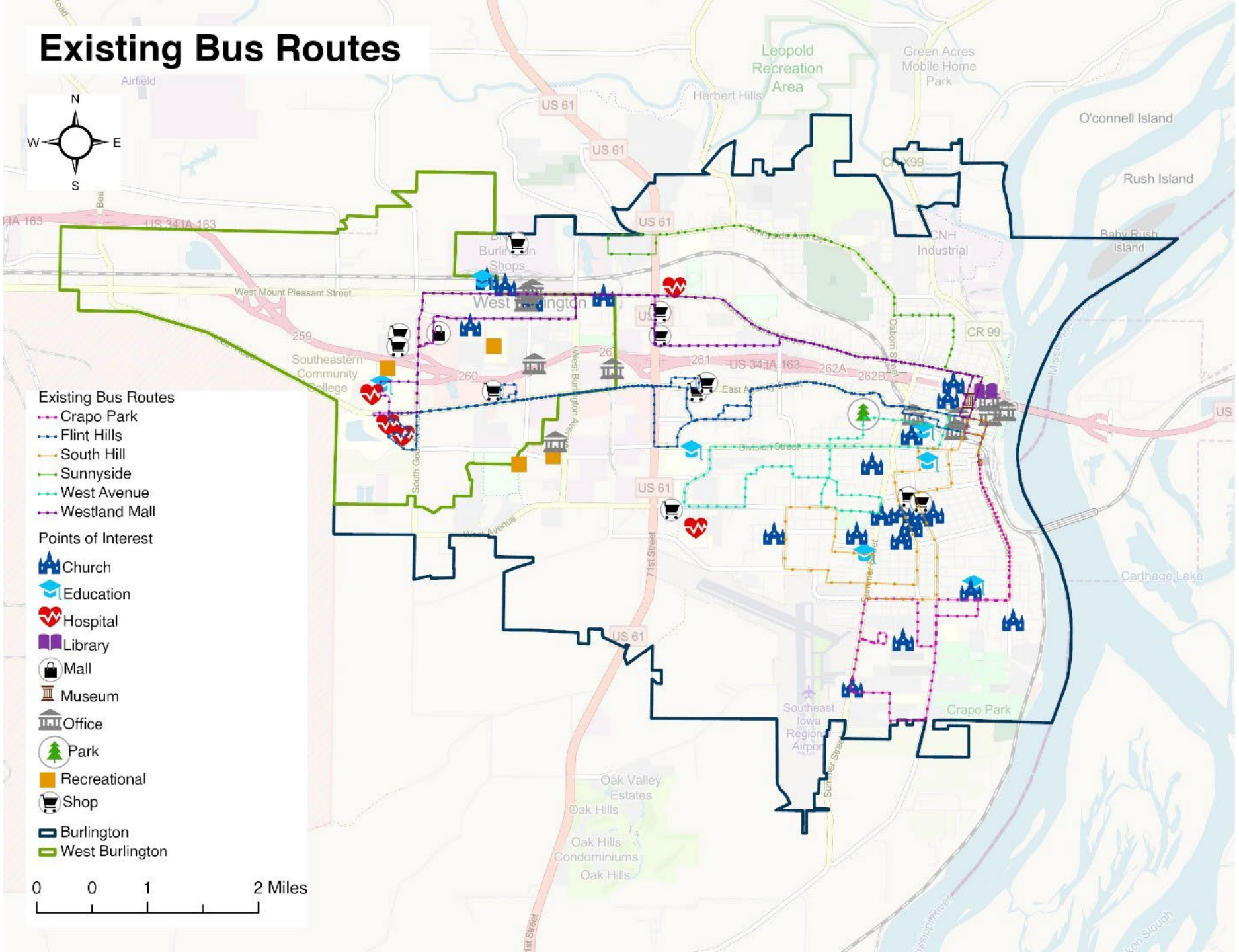
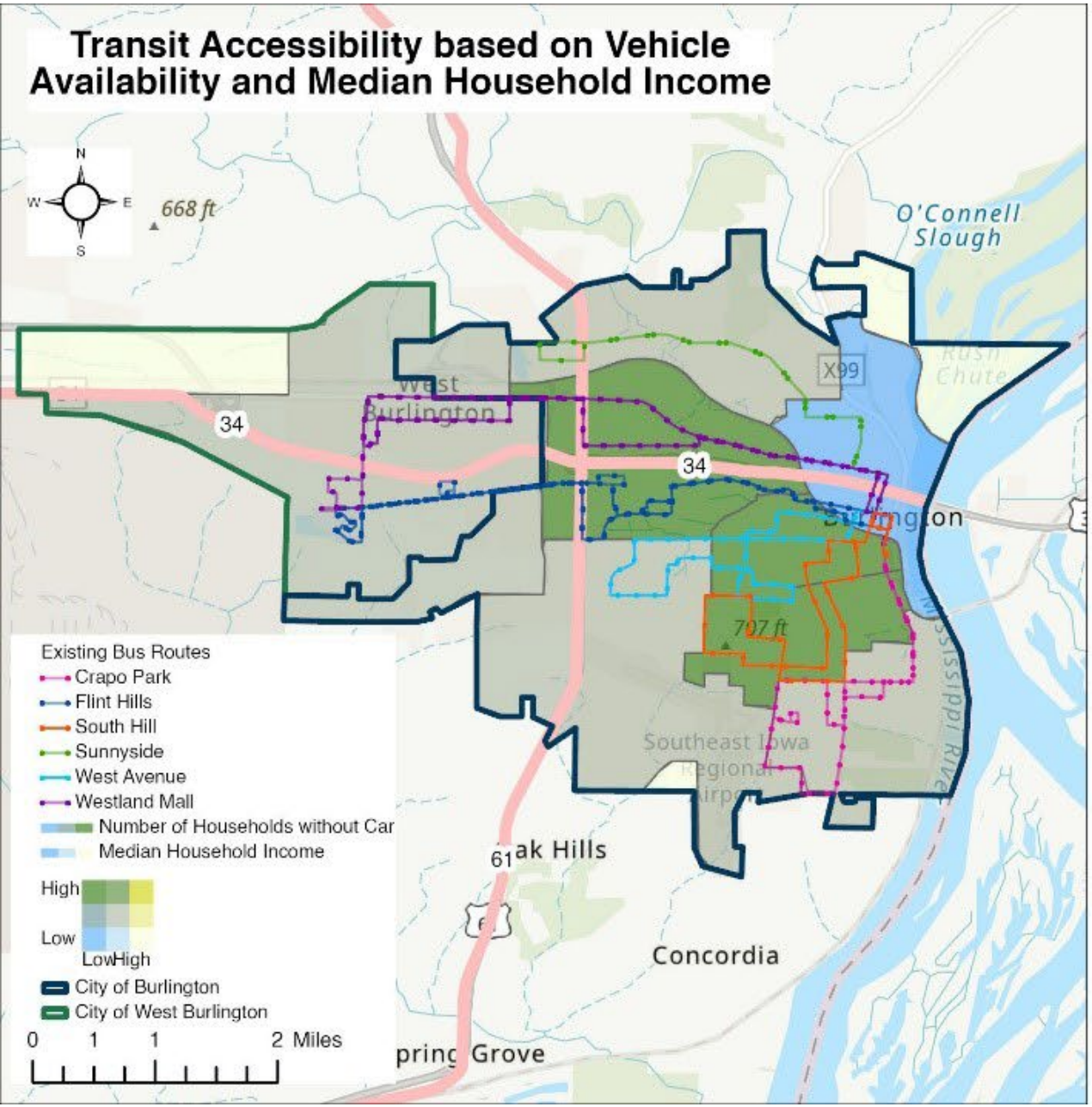
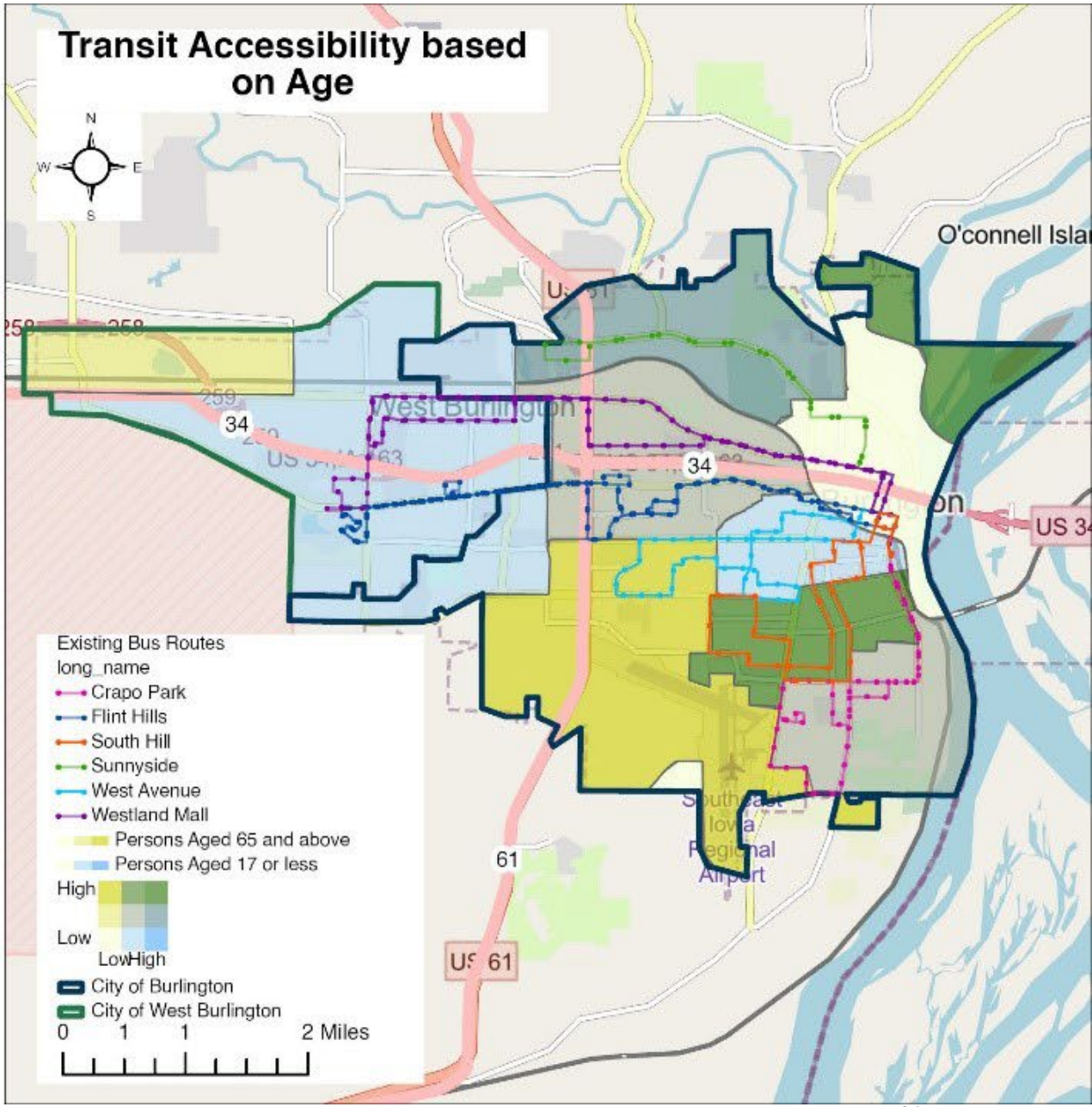
Sparse
Dense
Burlington
West Burlington
0 0 1 2 Miles


Walk Score at Census Tract Level
N
W
E
S
West Burlington
Burlington
Walkscore
0 - 24: Heavily Car Dependent
25 - 49: Car Dependent
50 - 69: Somewhat Walkable
70 - 89: Very Walkable
Burlington
West Burlington
0 0.5 1 2 Miles
US 61
US 34;IA 163
Leopold Recreation Area
Green Acres Mobile Home Park
Herbert Hills
O'connell Island
Rush Island
Baby Rush Island
CNH Industrial
Burlington Shops
West Burlington
Southeastern Community College
Burlington
Carthage Lake
Crapo Park
Southeast Iowa Regional Airport
Oak Valley Estates
Oak Hills
Oak Hills Condominiums
CR 99
71st Street
Summer Street
Division Street
Mount Pleasant Street
West Burlington Avenue
South Gear Avenue


Existing Bus Routes
N
W
E
S
Existing Bus Routes
Crapo Park
Flint Hills
South Hill
Sunnyside
West Avenue
Westland Mall
Points of Interest
Church
Education
Hospital
Library
Mall
Museum
Office
Park
Recreational
Shop
Burlington
West Burlington
0 0 1 2 Miles
US 61
US 34/IA 163
West Mount Pleasant Street
Southeastern Community College
Leopold Recreation Area
Herbert Hills
Green Acres Mobile Home Park
O'connell Island
Rush Island
Baby Rush Island
CNH Industrial
CR 99
Division Street
71st Street
West Avenue
Carthage Lake
Crapo Park
Southeast Iowa Regional Airport
Oak Valley Estates
Oak Hills
Oak Hills Condominiums
Sunnyside Avenue
West Burlington Avenue
South Gear Avenue
Osborn Street
Summer Street
259
260
261
262A
262B


Transit Accessibility based on Vehicle Availability and Median Household Income
N
W
E
S
668 ft
O'Connell Slough
West Burlington
34
X99
Rush Chute
Burlington
707 ft
Southeast Iowa Regional Airport
Mississippi River
61
Oak Hills
Concordia
Spring Grove
Existing Bus Routes
Crapo Park
Flint Hills
South Hill
Sunnyside
West Avenue
Westland Mall
Number of Households without Car
Median Household Income
High
Low
Low
High
City of Burlington
City of West Burlington
0 1 1 2 Miles


Transit Accessibility based on Age
N
W
E
S
O'connell Island
West Burlington
34
US 34
61
US 61
Existing Bus Routes
long_name
Crapo Park
Flint Hills
South Hill
Sunnyside
West Avenue
Westland Mall
Persons Aged 65 and above
Persons Aged 17 or less
High
Low
Low
High
City of Burlington
City of West Burlington
0 1 1 2 Miles

Opportunity

The following goals seek to ensure that the transportation system serves all community members, particularly addressing groups that may have been overlooked in the past. Low-income people, elderly individuals, and children – groups that are traditionally more reliant on alternative modes of transportation—stand to benefit.

Connectivity and Mobility

Improving connectivity allows for alternative modes of transportation to be more appealing and accessible to community members. A high-quality, connected system allows network users to conveniently reach their destinations.

Safety

The plan seeks to improve the comfort and safety of road users, giving particular attention to those who bike, walk, roll, or use transit to get to their destinations. The reduction in frequency and severity of accidents due to changes in road design will increase comfort for all road users

Accessibility

Land use practices play a considerable role in ensuring community members have access to their needs. Compact and efficient development contribute to the effectiveness of pedestrian and transit networks.