

FINAL DELIVERABLE

Title	Clinton Bicycle Infrastructure – Greening Downtown
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Instructor	Carrie Schuettpelz
Community Partners	City of Clinton

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MEMO

Date: December 9, 2022

To: City of Clinton

CC: Karen Rowell

From: Hannah Teague, Katie Stovold, Natalie Tapscott, Bob Pentuic, and Hunter DeJager

Re: Clinton Bicycle Infrastructure

SUMMARY

The state of Iowa has seen over \$41 million dollars of direct economic impact from bicycle commuters.¹ Most of this revenue comes from pulling bikers off existing recreational bike trails and creating bike infrastructure that leads them through downtown districts. According to U.S. Census data, in Clinton biking accounts for less than 1% of commuter transportation. Additionally, there were only 732 people who used taxis, motorcycles, bicycles, or walking to get to work, and. Improving the bicycle network around the city could create a more sustainable and vivacious downtown, as well as improve the local economy and overall health of the community.

BACKGROUND

Biking has become a popular form of recreation and transportation in the U.S. in recent years. From 2019 to 2021, biking increased 10 percent in the U.S., thanks in part to safer bike infrastructure and fewer cars on the road due to COVID.² There are many benefits to biking, both for individuals and for communities. Biking is often called the zero-emission vehicle because it does not emit any type of emissions while riding, reducing air and noise pollution. Biking is also a great form of cardiovascular exercise. The Iowa Bicycle Coalition reported that recreational and commuter biking has resulted in health savings for Iowa taxpayers of \$87 million.

Despite these benefits, very few residents of Clinton are taking advantage of bike infrastructure. Of the 21,000 people from Clinton who are employed, only 0.1% of them commute to work via bicycle. One reason why Clinton sees a lack of bike transportation is because its roads don't support bike infrastructure. The National Association of City Transportation Officials states that 43% of riders in the U.S. don't feel safe sharing the road with vehicles. To support the rise in bicycling, it is imperative for cities to support cyclists by creating infrastructure to encourage the practice.

BEST PRACTICES

Many Midwestern cities are working to implement successful bike infrastructure.

1. **Iowa City** has a biking master plan that details the funding for each type of bike lane it has implemented. The city was able to finance much of its bike infrastructure through a combination of regional and national level US Department of Transportation grants. These grants and sources of funding could be useful for Clinton as it looks to implement and renovates its bike lanes.
2. **Moline, Illinois** created a survey for residents for city officials to gather input and recommendations about the city's bike lanes. This makes it possible for council members to better understand what needs the community has when it comes to bike infrastructure.

CURRENT EFFORTS IN CLINTON

- **MyBike Program**

¹ Iowa Bicycle Coalition. <https://www.iowabicyclecoalition.org/>

² <https://www.smartcitiesdive.com/news/cycling-surge-here-to-stay-in-many-cities-report-suggests/610480/>

- A self-serve bike share system that can be used with any smartphone (iOS or Android). To use these bikes, riders must download the MyBike app and follow the instructions to rent the bikes. This type of bike system is new in recent years and caters primarily to tourists.
- **Bike Lanes**
 - There are some bike lanes and “sharrows” (arrows painted on the road indicating a shared roadway for bikes and cars). There are also 14 miles of scenic recreational trails.
 - There have been ongoing efforts to change the bike lane on 5th Avenue so that it is safer for cyclists

POLICY RECOMMENDATIONS

1. Data Collection

In order to better understand the needs of Clinton residents, the city should conduct a survey of its residents. This survey will determine the number of bikers within Clinton, obstacles to biking (both recreational and commuter), and where residents would like to see changes in existing bike infrastructure. This survey is to be delivered to residents online via the city website and social medias (Facebook, Instagram, etc.), using a website like Survey Monkey, which allows for greater data analysis. A full mockup of the survey can be found in the Appendix.

2. Information Dissemination

To encourage support for this project, Clinton should disseminate information to both decision makers and stakeholders. A sample infographic can be found in the Appendix. It summarizes key data points regarding environmental, economic, and health benefits of bike infrastructure.

3. Bikeway Modification

Despite a bike-share program and a few marked bike trails, Clinton lacks interconnectedness of existing trails. To address this, the Appendix contains a reworking of existing trails. Highlights of this rework include connecting:

- the Clinton County Courthouse, City Hall, and Post Office to the bike network
- the Bicklehaupt Arboretum and Ericksen Center via a sharrow loop along 2nd Ave. S, N 18th St, and 13th Ave N.
- downtown bike trails to the recreational route along Rte. 30, allowing factory workers to commute more easily via bicycle.

Two areas within Clinton specifically require further modification—South 2nd Street and 5th Avenue. South 2nd Street is the largest north/south road in Clinton and is dangerous for bikers. This street could be a perfect candidate for a 4-3 conversion, in which a four-lane road is taken down to three, creating a middle turn lane. As 2nd Street is also a state highway, this may be logistically difficult, so the group recommends creating bike lanes on other N/S streets. If a 5th Avenue’s two-lane bike lane in the middle of the road cannot be relocated to the sides of the street due to parking, then it is recommended that the lane be protected with bollards, tubular markers, or raised pavement on either side of the lanes. The NACTO Design Guide lists these protective measures under “Protected Cycle Tracks.”

APPENDIX

1) Data Collection

A mockup survey can be found at: [Clinton Bike Infrastructure Survey](#)

This link will open a new browser to a survey created to gain insight from the city of Clinton residents.

2) Information Dissemination

Below is an infographic to be shared with decision-makers and the general public.

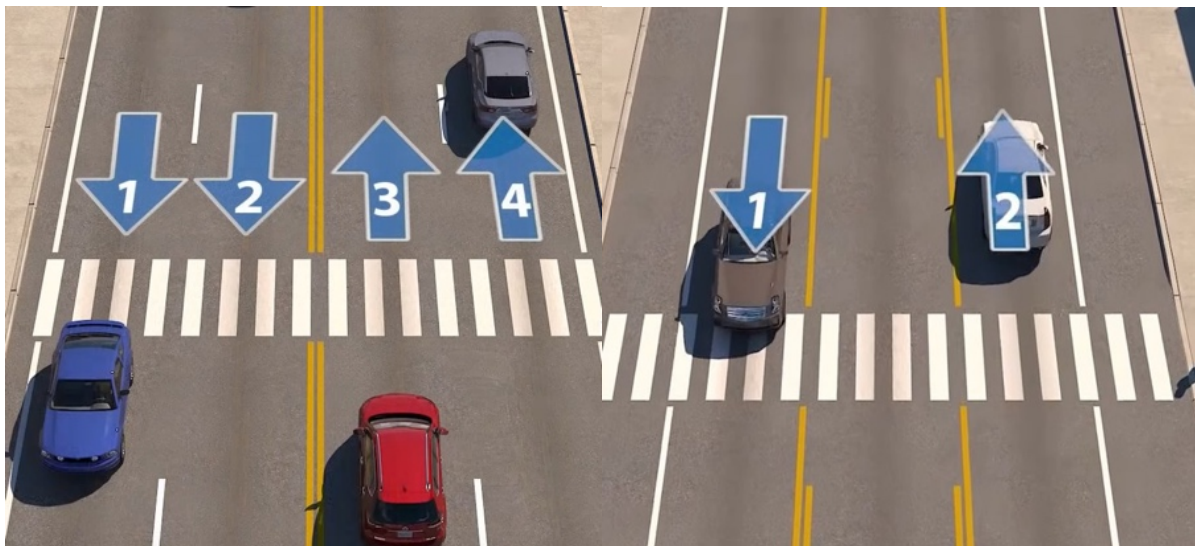


3) Bikeway Modification

Draft of Proposed Bike Network Update



4 – 3 Conversion





Improving Bike Infrastructure in Clinton

12/06/2022

Natalie Tapscott, Hannah Teague, Katie Stovold, Bob Pentuic, and Hunter DeJager

Background

- **Demographics of Clinton**
 - 21,146 workers
 - 17 minutes – Average Commute
- **MyBike encourages bike usage**
- **Mode of Transport**
 - 90.4% Motor Vehicle
 - 0.1% Bicycle

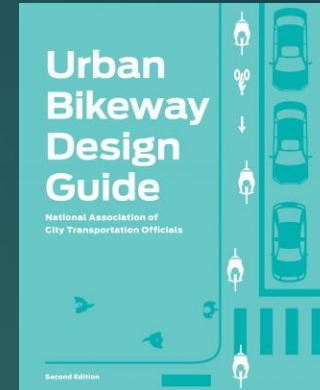


Source: Clinton Iowa Tourism

Best Practices

- **National Association of City Transportation Officials (NACTO)**

- Detailed design guide on all types of bike lanes



- **City of Moline, IL Bike Survey**

- Resident's opinions on where bike lanes should be

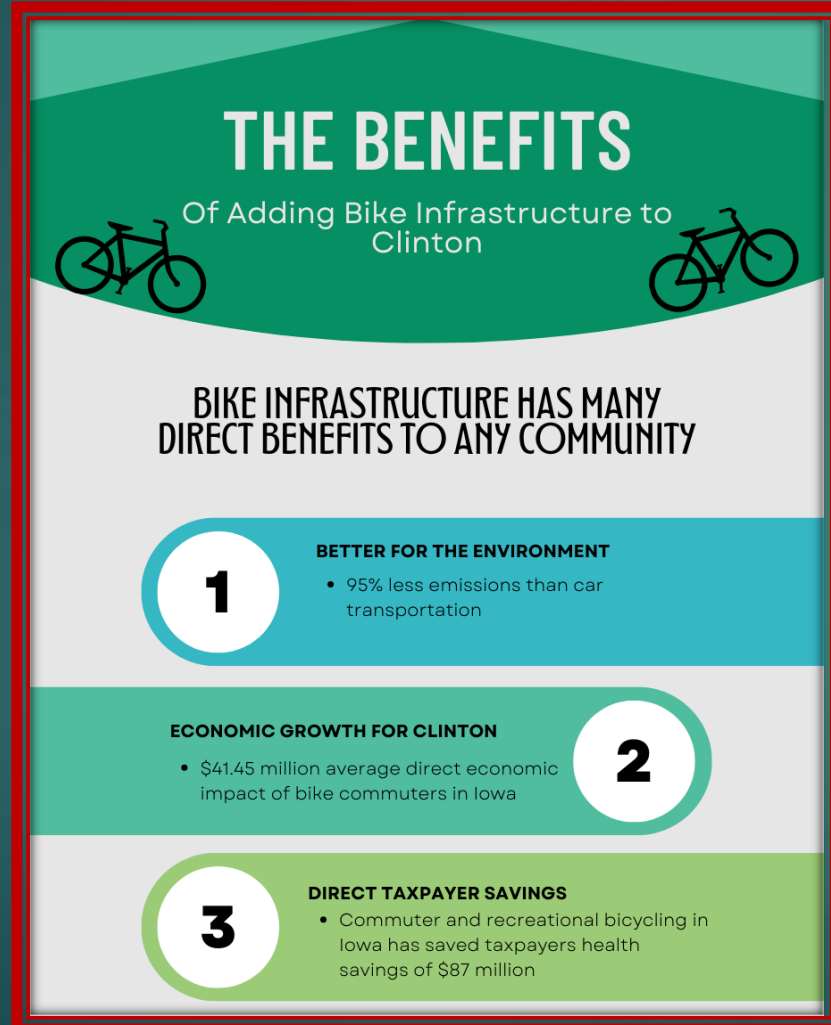


- **Iowa City Bike Master Plan**

- Cost estimate by facility type.
- Funding



Policy Recommendation #1: Infographic and Education



The Impact of Bike Infrastructure

- 95% less transportation emissions than vehicles
- \$41.45 million direct impact from bike commuters
- \$250,000 per mile compared to \$60 million for urban freeways



Policy Recommendation #2

Survey

- Gain insight from residents
- Find importance on types of improvements
- Learn about challenging roads

If there were more bike paths and bike lanes in Clinton, would you ride your bike more?

- Yes
 No

Rate the importance of adding these types of improvements

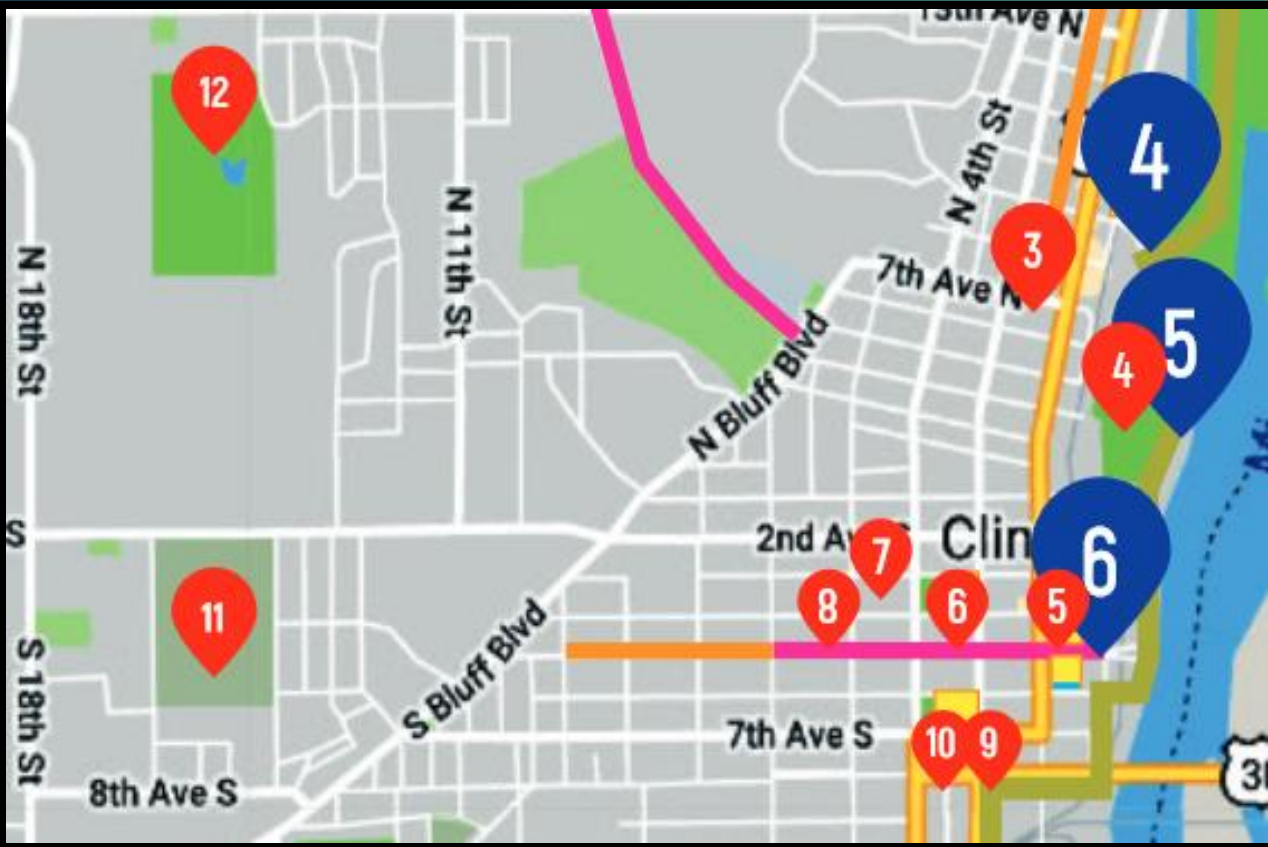
	Low importance	Average	High importance
Adding shoulders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Striped bike lanes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Multi-use path	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What barriers have you experienced that prevent bike trips to downtown

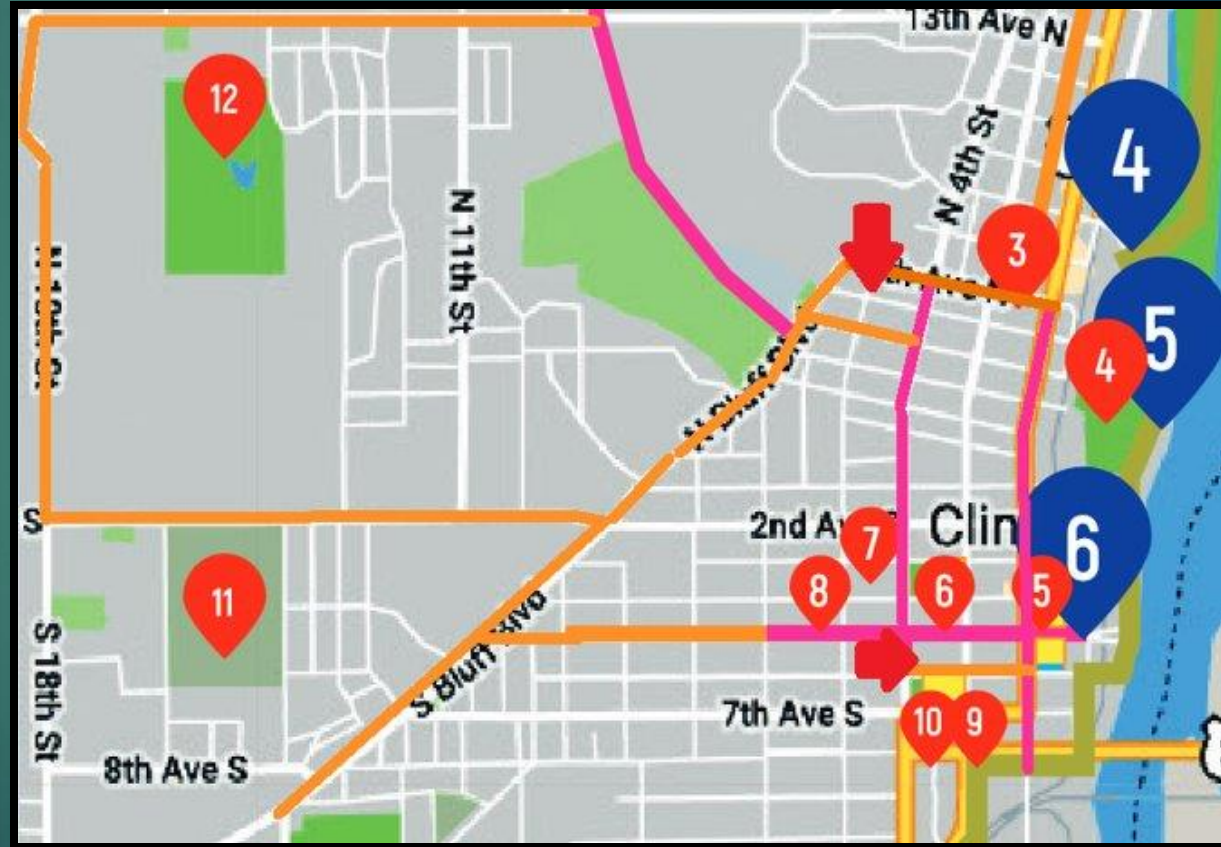
Your answer _____

Policy Recommendation #2

Bike Trails



Existing Bike Trails



Recommended Additions

Modified Plan

Bike Paths



Sharrow

A road that is shared by bikes and cars



Bike Lane

Designated space for bikers on a roadway

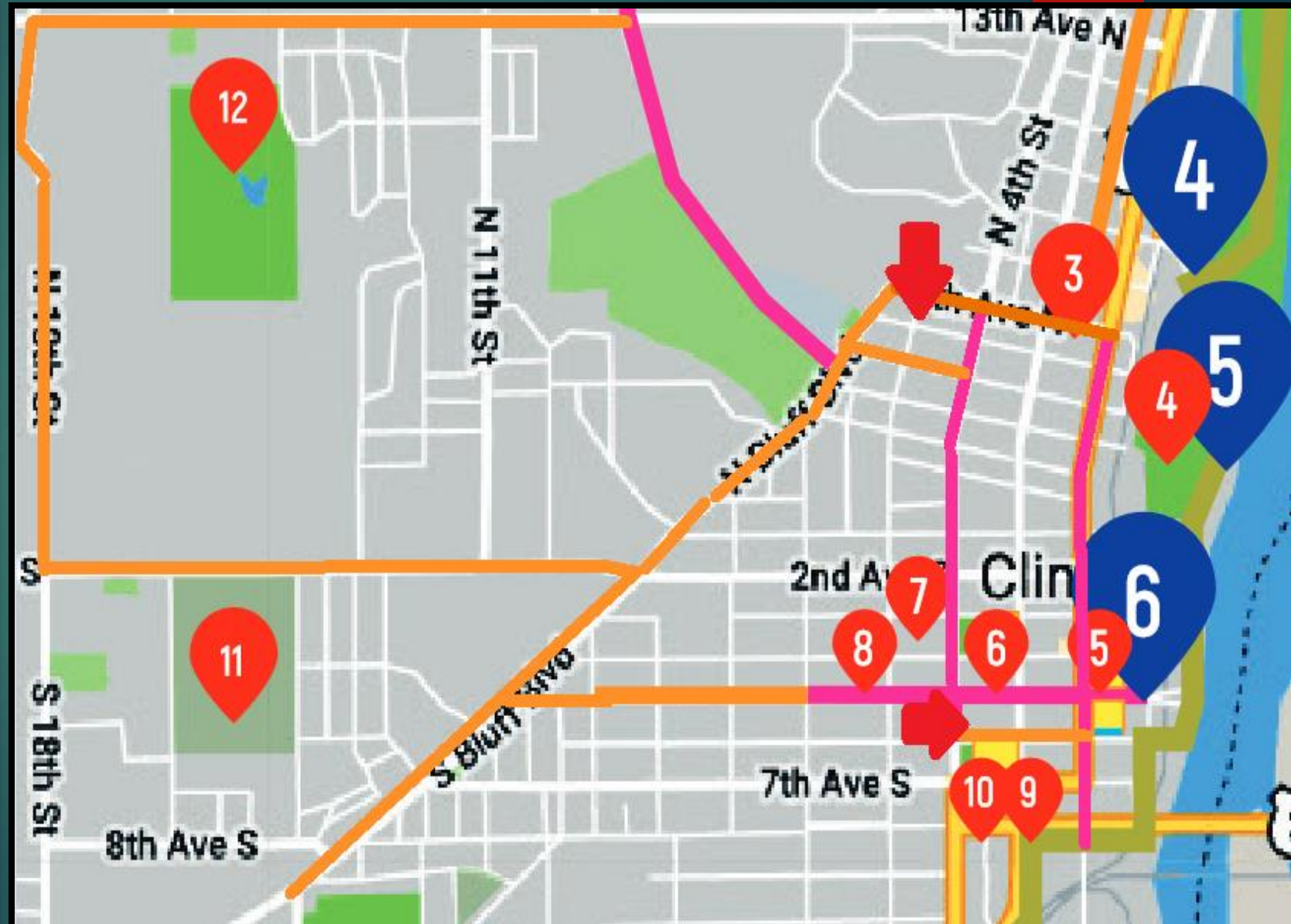


Rec Trail

A trail separate from the road used by bikers, runners, and walkers

PLACES OF INTEREST

1. Eagle Point Park
2. Lyons Shopping District
3. Courthouse
4. Showboat Theatre
5. Downtown Clinton
6. River Arts Center
7. RC Tennis & Pickleball
8. George M. Curtis Mansion
9. Clinton Historical Society
10. Clinton Library
11. Bickelhaupt Arboretum
12. Ericksen Center



Changing Streets for Bike Safety

- ▶ **Designated Bike Lanes**
- ▶ Signage on Sharrows
- ▶ 4-3 Conversion

Source:
NACTO Design
Guide



Changing Streets for Bike Safety

- ❑ Designated Bike Lanes
- ❑ **Signage on Sharrows**
- ❑ 4-3 Conversion

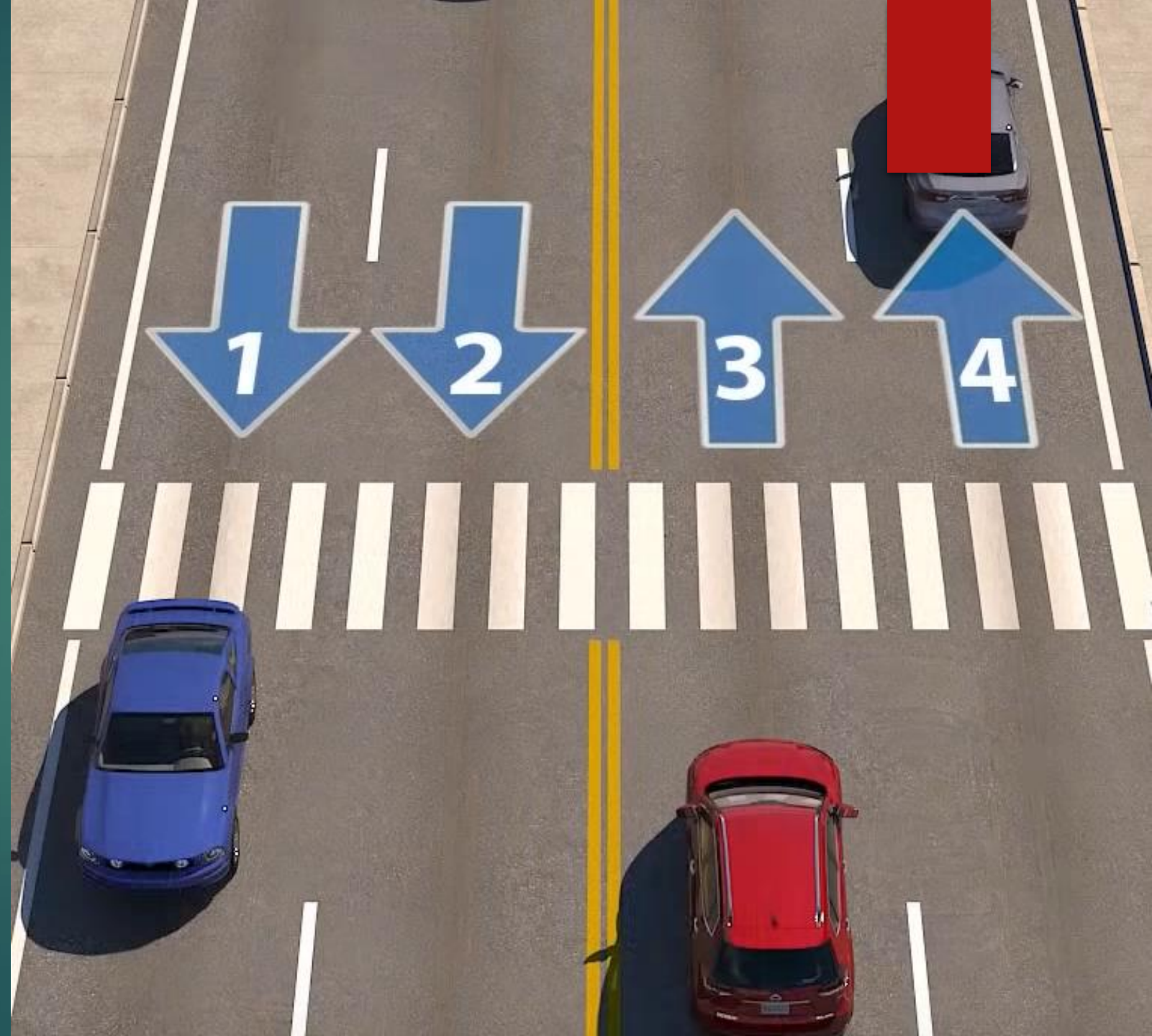
Source:
City of Iowa City



Changing Streets for Bike Safety

- ❑ Designated Bike Lanes
- ❑ Signage on Sharrows
- ❑ **4-3 Conversion**

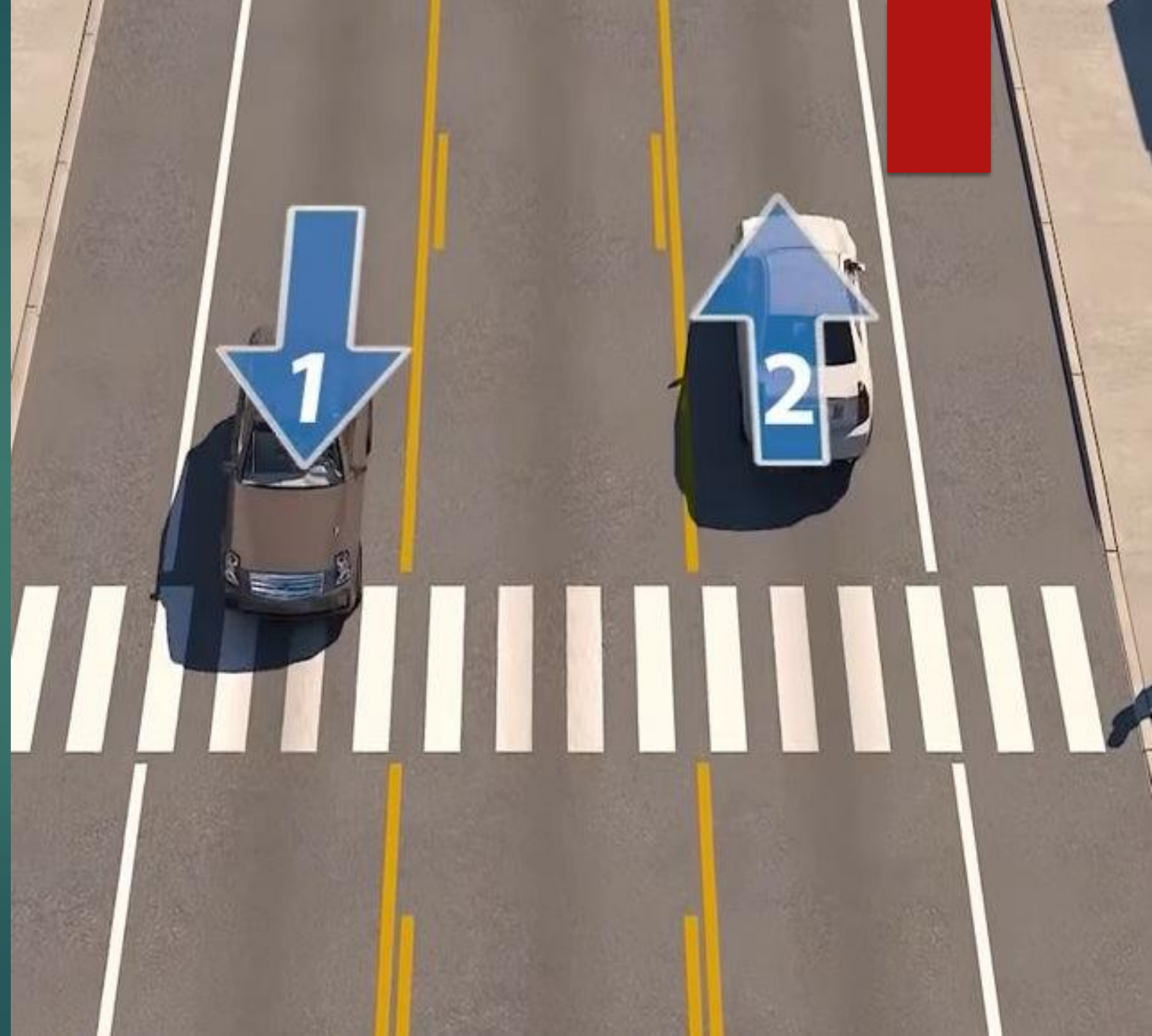
Source:
Iowa DOT



Changing Streets for Bike Safety

- ❑ Designated Bike Lanes
- ❑ Signage on Sharrows
- ❑ **4-3 Conversion**

Source:
Iowa DOT



Conclusion

- ▶ Decrease Commuter Traffic
- ▶ Increase Consumer Spending
- ▶ Grows Community
- ▶ **Clinton is on its way!**

Thank
You!

