

# DRIVE TO PROSPERITY: MANUFACTURING DRIVE AND BLUFF BOULEVARD RECONSTRUCTION CITY OF CLINTON, IOWA



BUILD Grant Application

Prepared By:  
McClure Engineering Company

Prepared For:  
US Department of Transportation

July 12, 2018

[www.drivetoprosperity.com](http://www.drivetoprosperity.com)





## TABLE OF CONTENTS

<a href="#">1. Letter from the Mayor .....</a>	<a href="#">1</a>
<a href="#">2. Project Description .....</a>	<a href="#">2</a>
2.1 Manufacturing Drive- US Route 30 to Valley West Drive.....	3
2.2 Manufacturing Drive- Valley West Drive to South 19th Street.....	3
2.3 Manufacturing Drive/Bluff Boulevard- South 19th Street to South 14th Street.....	6
2.4 Bluff Boulevard- South 14th Street to North 5th Street .....	7
<a href="#">3. Project Location .....</a>	<a href="#">9</a>
<a href="#">4. Project Parties .....</a>	<a href="#">10</a>
<a href="#">5. Grant Funds, Sources, and Uses of Project Funds.....</a>	<a href="#">11</a>
<a href="#">6. Selection Criteria.....</a>	<a href="#">12</a>
6.1 Safety .....	12
6.2 State of Good Repair .....	14
6.3 Economic Competitiveness.....	14
6.4 Environmental Protection .....	17
6.5 Quality of Life .....	19
6.6. Innovation .....	20
6.6.1 Design.....	20
6.6.2 Construction Materials .....	21
6.6.3 Contracting.....	21
6.7 Partnership .....	21
6.8 Non-Federal Revenue for Transportation Infrastructure Investment .....	22
<a href="#">7. Project Readiness.....</a>	<a href="#">23</a>
7.1 Technical Feasibility.....	23
7.2 Project Schedule.....	23
7.3 Required Approvals .....	24
7.3.1 Environmental Permits and Review .....	24
7.3.2 State and Local Approvals.....	24
7.3.3 Federal Approvals .....	24
7.4 Assessment of Project Risk and Mitigation Strategies.....	25
7.5 Benefit-Cost Analysis.....	25
<a href="#">8. Federal Wage Rate Certification .....</a>	<a href="#">26</a>

## APPENDIXES

[A. Project Support Letters](#)

[B. Benefit Cost Analysis](#)

[C. NEPA Summary](#)



## Office of the Mayor

Phone: 563-242-2144 Fax: 563-242-0057  
611 South Third Street  
P. O. Box 2958  
Clinton, IA 52733-2958  
[markvulich@cityofclintoniowa.us](mailto:markvulich@cityofclintoniowa.us) [www.cityofclintoniowa.us](http://www.cityofclintoniowa.us)

June 29, 2018

The Honorable Elaine L. Chao  
Secretary of Transportation  
US Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

RE: Support for the City of Clinton's **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction BUILD Grant Application**

Dear Secretary Chao:

The City's proposed **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction project** will enhance access to retail, manufacturing and essential services, including multiple healthcare providers, provide a safe route for all students (to include the new arrival of high school-aged international students in the Clinton STEM Academy), bolster pedestrian and bicyclist amenities, and support increased community vibrancy and better health outcomes.

This roadway is an important component to Clinton's infrastructure, connecting the north and south parts of the community. The nearly 100 year old roadway is now stressed with capacity constraints and has seen 384 crashes in just the last 5 years alone, in addition to severe flooding incidents over the last few years.

This project includes the complete reconstruction of Manufacturing Drive and Bluff Boulevard from US Route 30 to 7th Avenue North. It includes numerous safety and environmental improvements to bring this road up to a good state of repair.

This project does not just improve the roadway surface, but improves the quality of life to residents and businesses along the corridor by including the infrastructure necessary for future implementation of utilities for both water and a high-speed fiber and broadband network. This infrastructure will position the City of Clinton to be a 21<sup>st</sup> century leader and serve as a primary gateway to the area that has been identified as an "Opportunity Zone" by the US Department of the Treasury.

The **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction project** is a necessary and worthwhile investment which will have a profound effect on the future viability of the area. Consistent with the goals of the BUILD grant program, this project will improve safety, provide a good state of repair, foster innovation, and provide a much-needed boost to economic vitality for not only the City but the surrounding region as well. For these reasons I fully support this project.

Sincerely,

Mark S. Vulich  
Mayor

## 2. Project Description

The **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction Project** ([www.drivetoprosperty.com](http://www.drivetoprosperty.com)) will reconstruct approximately 4.0 miles of Manufacturing Drive and Bluff Boulevard from US Route 30 to North 5th Street. The reconstruction includes converting the roadway into a 3-lane section, adding a roundabout, separating sewer and sanitary lines, including bio-swells to capture rainwater and filter storm water. The project will reduce runoff volume, improve water quality, improve and upgrade traffic signals, add sidewalks and a bicycle route, add transit shelters and will include intersection modifications for this vital artery of rural Clinton, Iowa. ***In addition to providing much needed safe access for the businesses along Manufacturing Drive, the project will also serve as a gateway for the area along Bluff Blvd that has been identified as an Opportunity Zone.*** This project will provide a safe and easy access to the more than 300 expected international students who use this road to travel from the Ashford campus to the high school.



*Manufacturing Drive and South Bluffs Boulevard Intersection (looking South)*

By addressing intersection improvements, sight distance improvements, horizontal and vertical alignment, lane width, and drainage, the project will reduce the number and severity of crashes. The project will improve pavement that is currently in poor condition and will reduce the impacts of flooding on the roadways, such as reducing pollutants entering the storm water system and preventing vehicles from traversing the flooded roadway. In addition, this project will replace two bridges that are currently too low and too narrow, relieve congestion on the heaviest traveled road in this rural community, allow for partnerships for improved essential services to include water, energy and fiber optics, and remedy the flooding problems that have plagued this 4.0 mile stretch for close to 100 years. The project will convert the existing roadway to three lanes throughout the entire corridor. This conversion will reduce the number in crashes by about a half, from the 384 crashes that have occurred over the last 5 years. This heavily traveled road supports over 4 million vehicles per year and between 10,000-15,000 vehicles per day. The Iowa DOT average daily traffic map can be found [here](#). In addition, this project will remove truck traffic from Harts Mill road which is a parallel road. ***This project will be a springboard for other transportation improvements as outlined in the [City of Clinton 2032 Comprehensive Plan](#) which will turn around the City's economic and population decline.***

The following sections provide additional information about geometric, safety, ADA access and bike path improvements along the **Drive to Prosperity** project corridor. A strip map showing the proposed improvements along the entire project corridor is available [here](#) and a brief video highlighting some of the improvements is presented [here](#).

## 2.1 Manufacturing Drive – US Route 30 to Valley West Drive

This section will include the removal of the existing 2-lane, 22-foot wide, concrete road that is the middle two lanes of this 4-lane section. ***These two center lanes are nearly 100 years old and structurally deficient.*** This section of Manufacturing Drive was widened from 2-lanes to the current 4-lane section in 2010 as part of a \$1.5 million enhancement project. This section will include a hot mix asphalt overlay, construction of an off-road bike path on the south side of the street, and construction of a roundabout at the intersection of Manufacturing Drive and Valley West Drive. The hot mix asphalt overlay will allow the section to look consistent and permit the conversion of the 4-lane roadway to a 3-lane roadway. The 3-lane road will have two through lanes and a center two-way-left-turn lane. By constructing a roundabout at Valley West Drive instead of the traffic signal there will reduce vehicle crashes, lower emissions, decrease traffic delay, and decrease operating and maintenance costs. The conversion of the roadway to 3-lanes will reduce the crash rate on this section.



*Manufacturing Drive and US Route 30 Intersection (looking northeast)*

Other innovative improvements will include LED street lights, numerous tree plantings, and a joint utility trench.

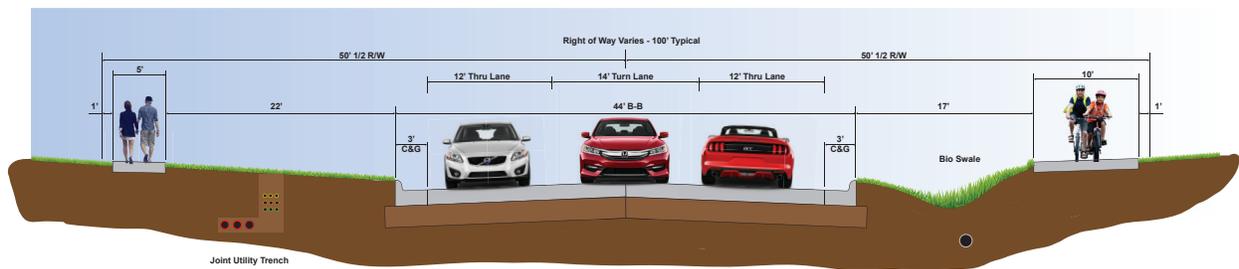
## 2.2 Manufacturing Drive – Valley West Drive to South 19<sup>th</sup> Street

This section of Manufacturing Drive will include the removal of ***existing rural 2-lane, 22-foot wide, concrete road which is over 100 years old and is structurally deficient.***



*Manufacturing Drive at Mill Creek with Nestle Purina on the right (looking North)*

The roadway will be reconstructed as a 3-lane urban roadway with curb and gutter. The 3-lane road will have two through lanes and a center two-way-left-turn lane. This will add the necessary capacity to mitigate congestion caused by left turning vehicles.



**US Route 30 to South 14th Street**



**South 14th Street to 7th Avenue North**

## Clinton, IA - Manufacturing Drive and South Bluff Boulevard

Typical Roadway Sections



### *Proposed Typical Sections*

Right turn lanes will be added at the driveway entrance to Nestle Purina, South 21st Street, and South 19th Street. This will alleviate peak hour congestion at the busiest intersections by getting slower, right turning traffic out of the through lanes and reduce accidents. Nestle Purina particularly has heavy congestion around shift changes. Adding right turn lanes at this location will improve safety at this location. The two roadway bridges over Harts Mill Creek and Mill Creek

will be replaced. These bridges are not wide enough to accommodate an additional lane, bike path, and sidewalk. The replacement bridges will be increased in length and widened to allow for greater hydraulic area under the bridge. This will reduce flooding on Manufacturing Drive and the surrounding area.



*Flooding at Nestle Purina in July 2017. Circles indicate location of the bridges proposed for replacement. (looking south); photo credit: Clinton KCWQ & Clinton Herald*

A new storm sewer system will be constructed along this section to collect storm water from the right-of-way and discharge to nearby creeks and streams. The existing ditch sections are flat and consistently sit with stagnant water, even during extended dry periods. The new storm sewer system will consist of storm water treatment systems where runoff enters the right-of-way from private parking lots. **Bioretention cells, rain gardens, and bioreactors along each side of the right-of-way will be both functional and aesthetically pleasing to the traveling public. There is expected to be a significant reduction in pollutant loads to Mill Creek with this improvement.**

A 10-wide bike path will be constructed on the south side of Manufacturing Drive and a 5-wide sidewalk on the north side of Manufacturing Drive. Both the sidewalk and bike path will go across both proposed bridges. Since the right-of-way in this section of Manufacturing Drive was never developed as part of a subdivision, a proper pedestrian pathway was never installed. This bike path will connect the residential districts of Bluff Boulevard to the Valley Bluff commercial shopping district. It is anticipated that other amenities, such as park benches and picnic tables could be added along the path.



*Manufacturing Drive just south of South 19th Street during recent flooding in June 2018.*

Traffic signals will be replaced at South 19th Street intersection. This signal will be interconnected to the other signals on the corridor with fiberoptic to allow for progression of traffic. Emergency preemption will be added to the traffic signal to assist with emergency response.

Other innovative improvements will include LED street lights, numerous tree plantings, and a joint utility trench.

### 2.3 Manufacturing Drive/Bluff Blvd – South 19th Street to South 14th Street

The intersection of South Bluff Boulevard and Manufacturing Drive will be realigned to create a 90-degree intersection with 13th Avenue South. The current alignment is uncomfortably close to College Avenue, and re-alignment will also allow better site distance in all directions. At certain times of the day, it can be difficult to turn out into traffic from South Bluff Boulevard onto Manufacturing Drive. ***This re-alignment, along with addition of right turn lanes, will improve capacity at this intersection and reduce crashes.***



*Manufacturing Drive & 13th Avenue South Intersection (looking north)*

The intersection of College Avenue will have right turn lanes added to increase capacity and remove the traffic from the through lane. The traffic signal will be replaced and interconnected to the other signals on the corridor with fiberoptic to allow for progression of traffic. Emergency preemption will be added to the traffic signal to assist with emergency response.

The intersection of South 14th Street will be realigned to create a 90-degree intersection. Right turn lanes will be added northbound and the traffic signal will be replaced. The signal will be interconnected to the other signals on the corridor with fiberoptic to allow for progression of traffic. Emergency preemption will be added to the traffic signal to assist with emergency response. These improvements will increase capacity and reduce queuing which will reduce crashes and improve the safety of this intersection.

The existing narrow sidewalk along the south side of the street will be removed and replaced with a 10-wide bike path. A new 5-wide sidewalk will be installed on the north side of the street. These enhancements will improve the access to the school and connect the bike path along Manufacturing Drive to the proposed South 14<sup>th</sup> Street bike path. The planned bike and pedestrian routes can be found in the [City of Clinton 2032 Comprehensive Plan](#).

A new storm sewer system will be constructed along this section to collect storm water from the right-of-way and discharge to nearby creeks and streams. The existing ditch sections are flat and consistently sit with stagnant water, even during extended dry periods. ***Bioretention cells, rain gardens, and bioreactors along each side of the right-of-way will be both functional and aesthetically pleasing to the traveling public. Flash flooding events will be reduced by these improvements.***

Other improvements include sanitary sewer improvements where necessary, LED street lights, a joint utility trench, and numerous tree plantings throughout the of right-of-way.

## **2.4 Bluff Blvd – South 14th Street to 7th Avenue North**

This section will include the reconstruction of existing 4-lane roadway to a 3-lane roadway with a center turn two-way-left-turn lane and curb and gutter. This center turn lane will service all intersections and driveways along this corridor and will increase capacity to accommodate future growth.

The following intersections will be redesigned, and improvements made which will reduce crashes:

- 8th Avenue South- Realigned to 90-degree intersection. Right turn lanes will also be added northbound on Bluff Boulevard
- 7th Avenue South/Thorwaldsen Place- Realigned to 90-degree intersection. Right turn lanes will also be added on Bluff Boulevard. Traffic signal will be replaced, and radii will be widened.
- Melrose Court- Realigned to 90-degree intersection.
- Kenilworth Court- Cul-de-sac will be installed, and road will no longer connect into Bluff Boulevard.
- 5th Avenue South- Realigned to 90-degree intersection.
- 4th Avenue South- Realigned to 90-degree intersection.
- 3rd Avenue South- Cul-de-sac will be installed, and road will no longer connect into Bluff Boulevard.
- 2nd Avenue South – Traffic signal will be replaced
- 1st Avenue West- Realigned to 90-degree intersection.
- Locust Place- Cul-de-sac will be installed, and road will no longer connect into Bluff Boulevard.
- Adams Place- Cul-de-sac will be installed, and road will no longer connect into Bluff Boulevard.



*Bluff Boulevard & 4th Avenue North/Springdale Drive Intersection (looking north)*

- 3rd Avenue North- Cul-de-sac will be installed, and road will no longer connect into Bluff Boulevard.
- 4th Avenue North/Springdale Drive - Realigned to 90-degree intersection and create an intersection with both streets at a proper alignment. Right turn lanes will be added on Bluff Boulevard.

***The project will eliminate the existing narrow reverse curve along Bluff Boulevard between Woodland Drive and 4th Avenue South.*** This will allow the project to meet the [design criteria](#) for the project.



*Existing reverse curve on Bluff Boulevard between Woodland Avenue and 4th Avenue South.*

***The existing narrow sidewalk along the south side of the street will be removed and replaced with a proposed 5-wide sidewalk with space between the sidewalk and street. This will improve safe access to the school.***



*Existing sidewalk adjacent to Bluff Boulevard near 1st Avenue West (looking north)*

A new storm sewer system will be constructed along this section to collect storm water from the right-of-way and discharge to nearby creeks and streams. Bioretention cells, rain gardens, and bioreactors will be installed where space permits. These enhancements will alleviate flash flooding events.

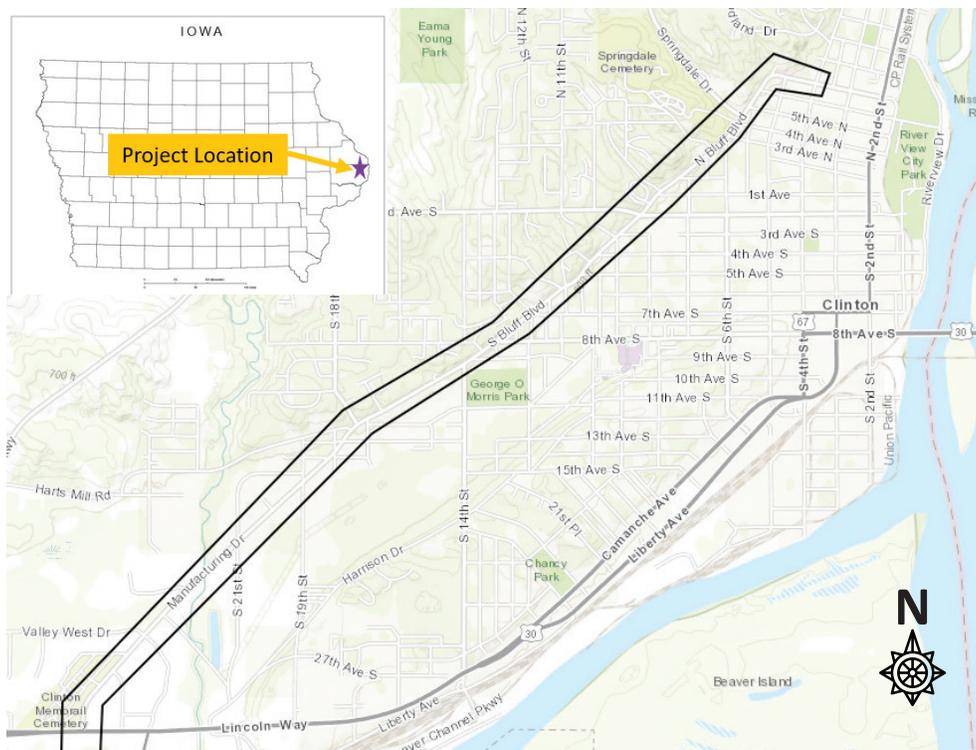
Sanitary and storm sewer separation will be completed in this section of Bluff Boulevard.

**The two traffic signals that will be replaced will be interconnected to the other signals on the corridor with fiberoptic to allow for progression of traffic.** Emergency preemption will be added to the traffic signal to assist with emergency response.

Other improvements include sanitary sewer improvements where necessary, LED street lights, joint utility trench, and numerous tree plantings throughout the vast expanse of right-of-way.

### 3. Project Location

The **Drive to Prosperity** project is in the City of Clinton, Iowa. The City of Clinton is the county seat of Clinton county and the further most east City in Iowa. City of Clinton is long, narrow, and adjacent to the Mississippi River. The Manufacturing Drive/Bluff Boulevard is the critical node that connects business and citizens to the river, manufacturing, commercial business. The project begins at the south end at US Route 30 and terminates at the north end at North 5<sup>th</sup> Street. See the project location map is presented in Figure 1.



## 4. Project Parties

The City of Clinton appreciates and sincerely thanks the many parties and partners who have pledged support to the City of Clinton **Drive to Prosperity** Project include Federal, State and Local representatives, businesses, schools, medical, bike clubs and a group called [Clinton Progress Coalition](#) which include citizens who unanimously support this project. Of note are [Iowa American Water](#), [Alliant Energy](#), and [Mediacom](#) who has committed to participate in the project. Iowa American Water has a \$2.9 million program for upgrading services along the project corridor. Alliant Energy will partner with the City to concurrently install underground electrical infrastructure in concrete vaults. Mediacom has committed to provide all labor and materials for installation of conduit duct system for existing and future fiber optic facilities.

The City has also received a letter from [Cindy Hufford](#), Commander of the American Veterans Post 28. The Hufford family has experienced the pain of losing a loved one because of a fatal incident that occurred in the project limits in April 2015.

Resolution by the Clinton City Council expressing unanimous support for the project, support letters from the entire Iowa Congressional delegation and other partners who have expressed support for the project can be found [here](#).

The City of Clinton commits to passing an amended resolution with approved grant application funding.



## 5. Grant funds, Sources and Uses of Project Funds

The total estimated project budget is \$31,577,610. This cost includes engineering, construction, property acquisition, and Iowa American Water. The **Drive to Prosperity** project privately funded improvements by is requesting \$22.7 million in the BUILD Grant. The following is the budget broken down by fiscal year and fund source.

DRIVE TO PROSPERITY - MANUFACTURING DRIVE + BLUFF BOULEVARD PROJECT BUDGET										
Fund Source	FY 2020*		FY 2021*		FY 2022*		FY 2023*		Total	
Local- City of Clinton	\$652,700	20.9%	\$667,620	11.0%		0.0%	\$1,679,680	17.5%	\$3,000,000	9.5%
Local - Iowa DOT		0.0%		0.0%	\$3,000,000	23.5%		0.0%	\$3,000,000	9.5%
Local- Iowa American Water		0.0%	\$2,900,000	47.6%		0.0%		0.0%	\$2,900,000	9.2%
<b>BUILD GRANT</b>	<b>\$2,470,300</b>	<b>79.1%</b>	<b>\$2,526,730</b>	<b>41.5%</b>	<b>\$9,777,310</b>	<b>76.5%</b>	<b>\$7,903,270</b>	<b>82.5%</b>	<b>\$22,677,610</b>	<b>71.8%</b>
<b>TOTAL</b>	<b>\$3,123,000</b>		<b>\$6,094,350</b>		<b>\$12,777,310</b>		<b>\$9,582,950</b>		<b>\$31,577,610</b>	

\*FY 2020 is Iowa DOT Financial year beginning July 1, 2019 to June 30, 2020

Figure 2 - Funding Sources by Fiscal Year

Figure 3 is a chart showing the percentage of funding from each source. As can be seen the local partners have committed to contribute \$8,900,000 to the project. This commitment represents 28 percent of the total cost. This grant application request BUILD funding of \$22,677,610, representing 72 percent of the total cost.

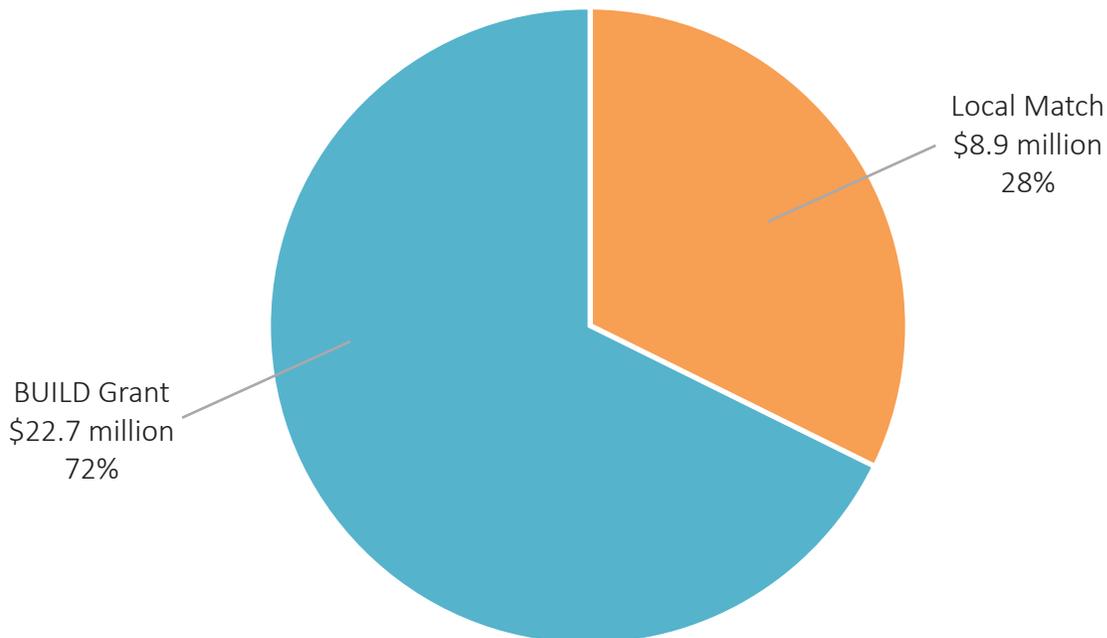


Figure 3 – Federal to Local Match Percentage

Figure 4 is a chart showing the percentages for each of the local partners. Each partner is contributing over 9 percent each.

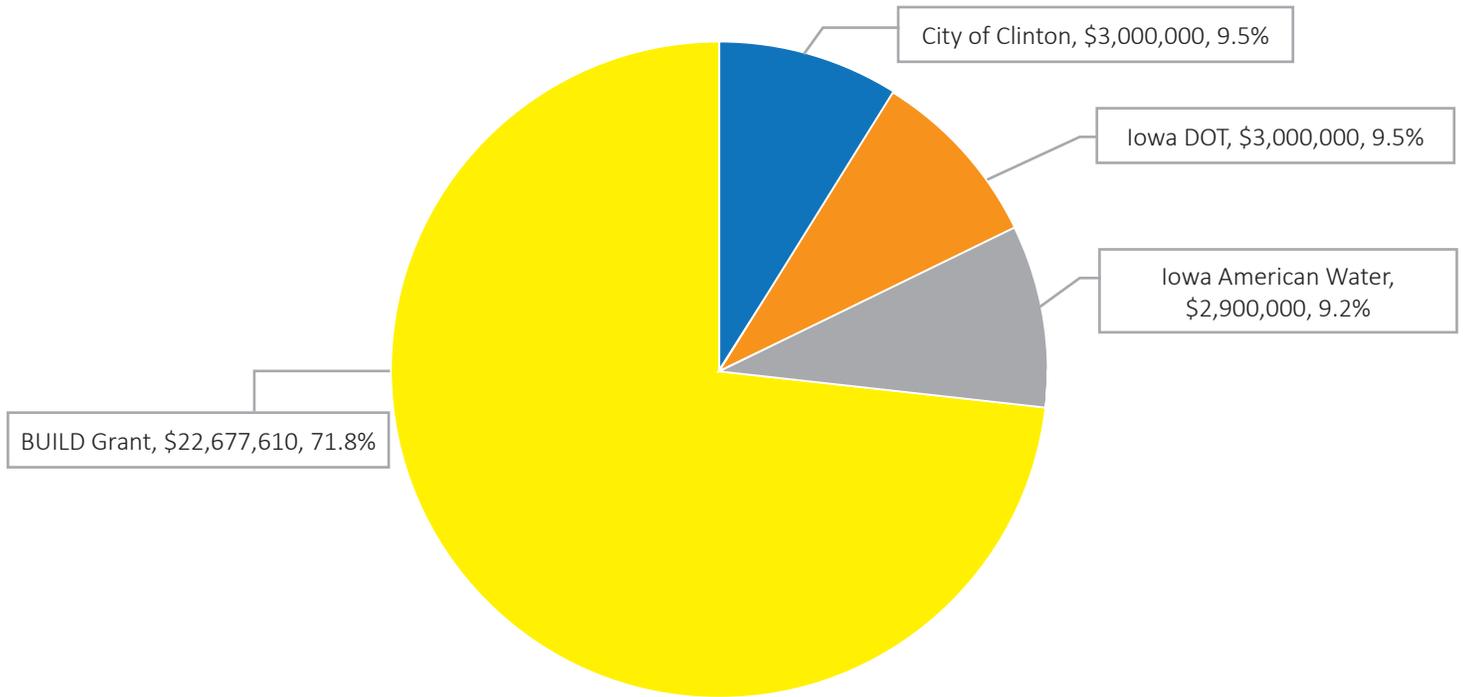


Figure 4 – Percentage of Funding Sources

Below is the budget showing the breakdown of the \$31,577,610 project cost by each category.

DRIVE TO PROSPERITY - MANUFACTURING DRIVE + BLUFF BOULEVARD PROJECT EXPENDITURES										
Fund Source	FY 2020*		FY 2021*		FY 2022*		FY 2023*		Total	
Right-of-Way	\$800,000	25.6%		0.0%		0.0%		0.0%	\$800,000	2.5%
Design Engineering	\$2,323,000	74.4%		0.0%		0.0%		0.0%	\$2,323,000	7.4%
Construction Engineering		0.0%	\$290,400	4.8%	\$1,161,500	9.1%	\$871,100	9.1%	\$2,323,000	7.4%
Construction		0.0%	\$5,803,950	95.2%	\$11,615,810	90.9%	\$8,711,850	90.9%	\$26,131,610	82.8%
<b>TOTAL</b>	<b>\$3,123,000</b>		<b>\$6,094,350</b>		<b>\$12,777,310</b>		<b>\$9,582,950</b>		<b>\$31,577,610</b>	

Figure 5 - Expenditures by Categories

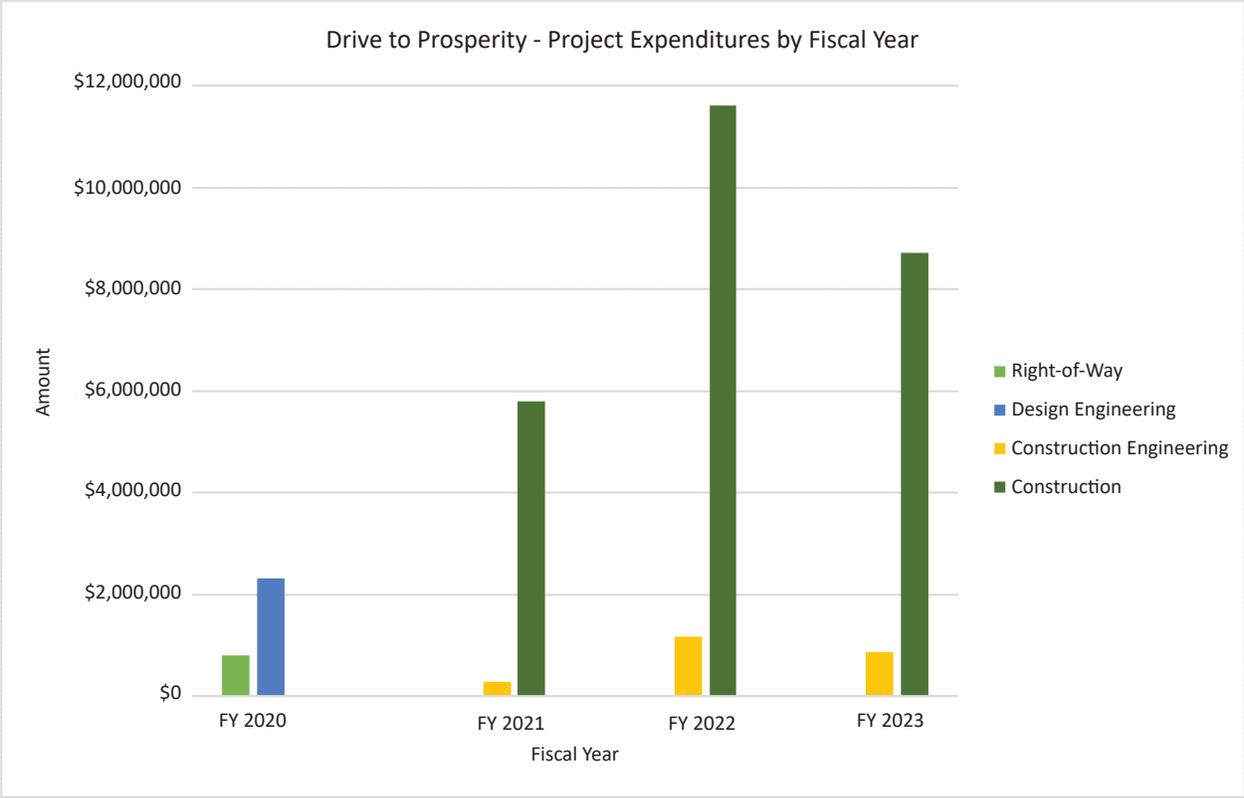


Figure 6 - Expenditures by Fiscal Year

The estimate of probable costs can be seen [here](#). Both the Iowa DOT and our regional planning association (ECIA) have pledged their support to the project and will work with the City to amend the State Transportation Improvement Program to include the BUILD grant in the program.

These costs do not include costs for improvement committed by Mediacom and Alliant Energy. Mediacom has committed to provide all labor and materials for installation of conduit duct system for existing and future fiber optic facilities. Alliant Energy will partner with the City to concurrently install underground electrical infrastructure in concrete vaults.

## 6. Selection Criteria

The **Drive to Prosperity** is a multifaceted project meeting all eight criteria in the BUILD Grant.

### 6.1 Safety

Over the past 5 years, there have been [384 traffic](#) crashes along the Manufacturing Drive and Bluff Boulevard corridor. The location of these crashes can be observed in Figure 7. The project goal is to reduce the number of crash for the safety of those who travel this road. The improvements proposed as part of **Drive to Prosperity** project can decrease the crash rate by up to 47% based on information available from FHWA ([https://safety.fhwa.dot.gov/road\\_diets/](https://safety.fhwa.dot.gov/road_diets/)).

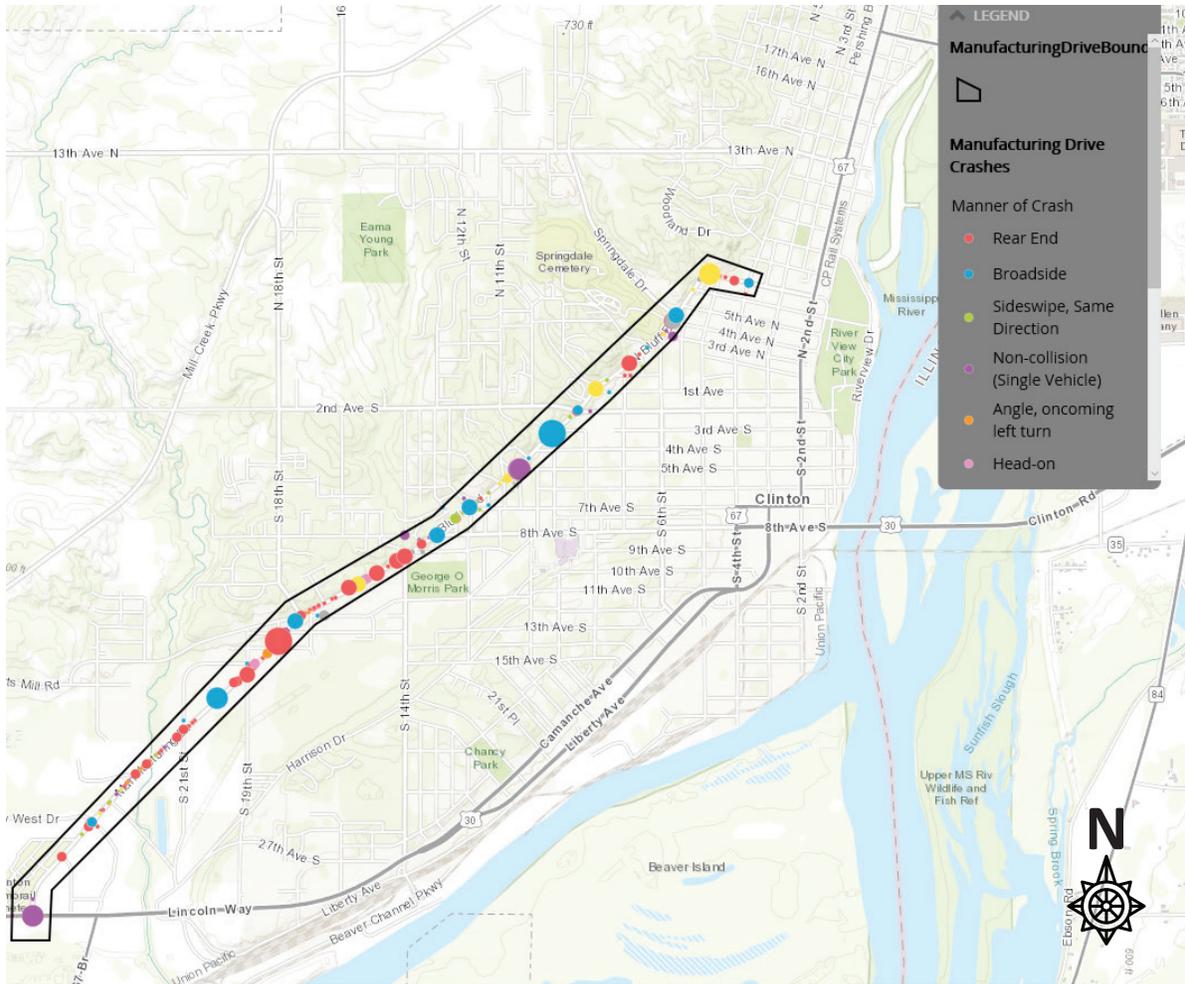


Figure 7 – Crash Map

**Vehicle Safety:**

- Converting the roadway from 4-lane to 3-lane will drastically reduce the amount of crashes on the roadway. Four lane undivided roadways in urban areas can experience a degradation of service for numerous reasons. The existence of turning vehicles within through lanes causes congestion and vehicle crashes, which can be mitigated by inclusion of a dedicated through lane. With turning traffic removed from the through lanes, vehicles can move unencumbered throughout the corridor until they reach their destination. Further, for traffic volumes up to 17,000 vehicles per day, one through lane is all that is needed to properly convey traffic provided left turning vehicles are removed from this lane. For these reasons, among others, it is desirable to construct the entire corridor as a 3-lane roadway. This will improve safety and capacity of both Manufacturing Drive and Bluff Boulevard. Studies by Federal Highway Administration (FHWA) have found a crash reduction of up to 47 percent can be achieved by converting a roadway to 3-lanes.
- Installing a roundabout at Valley West Drive will significantly reduce serious read-end, head on, and sideswipe collisions.



*Manufacturing Drive and Valley West Drive*

- The project will straighten of the reverse curves on Bluff Boulevard between Woodland Avenue and 4th Avenue South. The roadway width is narrow and water from the bluff drains onto the roadway carrying mud at times onto the roadway. Eliminating these curves will increase sight distance and provide an appropriate roadway width.



*Reverse curve between Woodland Ave and 4th Ave South*

- Most of the residential side streets intersections will be re-aligned from skewed to 90-degree intersections. This will improve sight distance at these intersections.



*90-degree intersections at 18th Street and S. Bluff Boulevard*

**Pedestrian/Bicycle Safety:** There will be a 5-foot wide sidewalk installed the complete length of the corridor. The sidewalk will be setback from the edge of the roadway to provide safer accommodations. In addition, a bicycle path will be installed between US Route 30 and South 14th Street where it will tie into a future bike path. This path will allow bicyclist of all skill levels and abilities to ride along Manufacturing Drive.



Existing sidewalk north of 2nd Ave South (looking north)



Existing sidewalk north of 8th Ave S (looking north)

**Emergency Response:** *Emergency response times will be improved with this project.* All traffic signals on this project will include emergency preemption which will allow emergency responders to drive safely while not having to slow down at each traffic signal and intersection. This will also allow vehicles to move away from the intersection in the direction the emergency vehicle is traveling making it safer for the responders, so they do not have to cross into opposing traffic. Currently the south end of the project is two-lane and emergency responders must weave between opposing traffic since there is no room to pull over. The addition of a third center turn lane will allow for more room for vehicle to get out of the way of the responders thus increasing response times and reducing potential crashes due to unsafe movements.

## 6.2 State of Good Repair

Manufacturing Drive and Bluff Boulevard is the second busiest roadway in the City of Clinton, yet there are certain stretches of the road that are lacking in good repair and capacity. While the City of Clinton has enhanced funding to the pavement management program over the past several years, the City has focused primarily on residential and collector streets. ***The City has allocated future spending along Manufacturing Drive and Bluff Boulevard but lacks the capital funds and borrowing capacity to improve the network to a condition consistent with the needs of the community.***

Development along the Valley Bluff commercial district where Wal-Mart, Kohls, and other commercial business are located and industrial development in the Manufacturing Meadows tech park has increased the vehicle traffic throughout this corridor. While the development is certainly welcome and appreciated, the City was not prepared financially for this change in traffic. A total reconstruction of the corridor is in order and will be possible with the BUILD Grant.

Currently, the City of Clinton Street Division of the Public Works Department has six personnel responsible for maintaining and repairing approximately 145 center-line miles of streets in the City. Construction contract are executed when large maintenance projects are needed to be completed. Every day operations which city staff complete include street sweeping, repairing small sized roadways including maintenance and repair of seals, potholes, concrete, gravel and asphalt roads, alleys, cleaning, sign maintenance including retro-reflectivity requirements, and flood control. With the reconstruction of Manufacturing Drive and Bluff Boulevard, the City of Clinton can continue to spend its resources on other residential and collector streets, thereby improving the entire city street network.

## 6.3 Economic Competitiveness

The Manufacturing Drive and Bluff Boulevard roadway has 116 total business within 1 block of the road as shown by the zoning map in Figure 8. The total number of businesses are divided and organized into 18 Manufacturing and 98 Service/Retail. In addition, there are 6,065,511 square feet of commercial, retail, and manufacturing space being utilized on 548 acres of land with 3,604 employees. ***This grant will provide the current businesses a safe and environmentally sound roadway that will not only optimize the transportation needs of these businesses but increase the possibility for expansion leading to additional jobs and increasing the economic competitiveness of the City.***

The Manufacturing Drive and Bluff Boulevard corridor is a major artery through the heart of Clinton serving commuters to businesses and commercial parks on the west end of Clinton. The road services businesses with direct access to Manufacturing Drive, such as Nestle Purina, among many other businesses. Improvement of this roadway will increase the overall efficiency of movement of people and goods to these businesses, allowing the City of Clinton to save money and stimulate further development of the area where possible. This will also provide an alternative freight route to industries on South 19th Street and South 21st Street. Overall well-being of commuters and employees will be improved by simultaneous enhancements to the safety and capacity of the corridor.

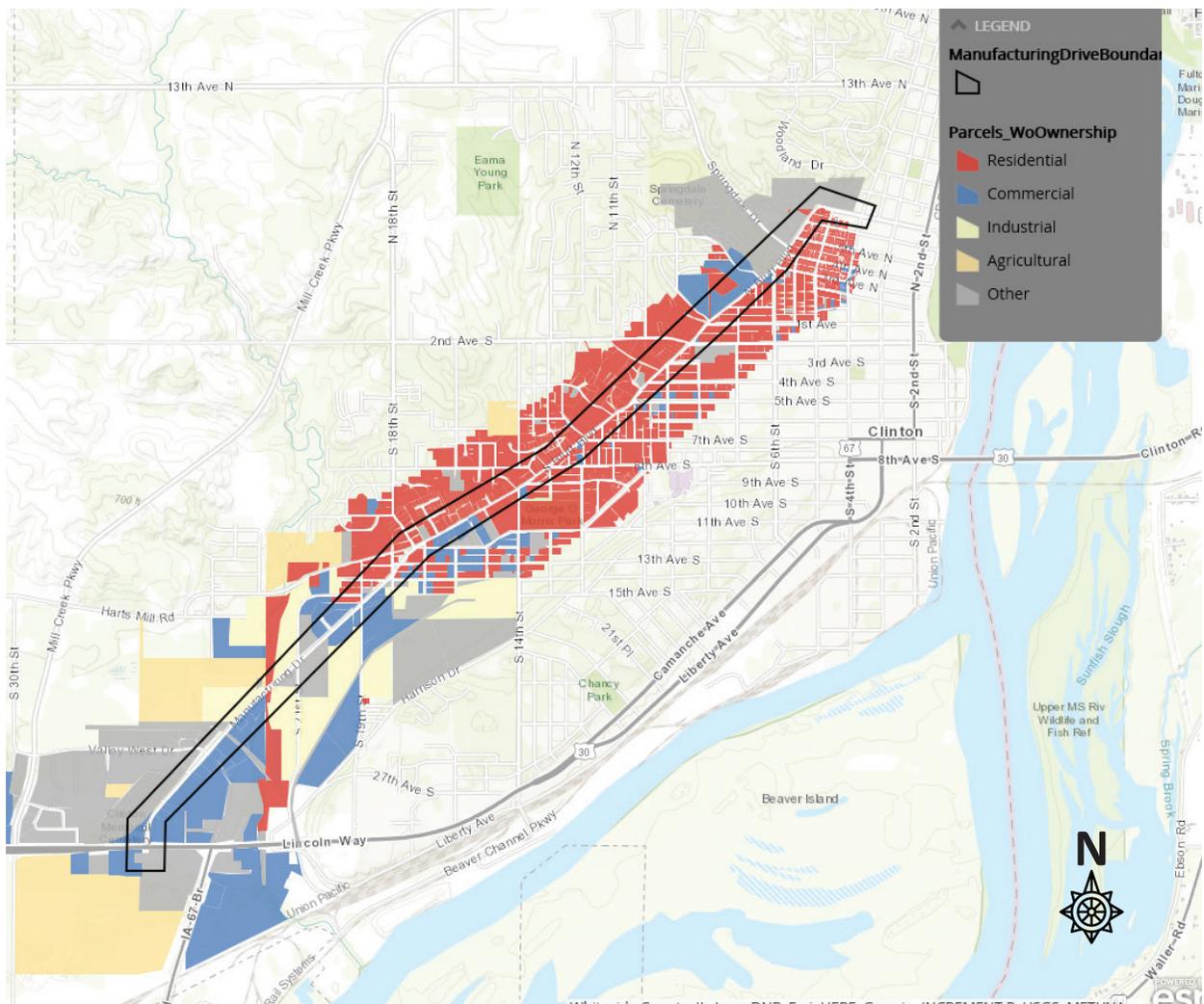


Figure 8 - Zoning Map

The US Department of the Treasury recently designated a portion of the area served by Bluff Boulevard as an [Opportunity Zone](#). Clinton’s Opportunity Zone is one of 62 zones designated in the State of Iowa. The limits of the opportunity zone are seen in Figure 9.

The northern boundary of Clinton’s Opportunity Zone is Bluff Boulevard from S 14th Street to 7th Avenue. Reconstruction of Bluff Boulevard will allow this area to spur investment and regrowth which is a primary goal of the Opportunity Zone. **Regrowth is important to this area since the City of Clinton has seen a 4.3 percent decline in population since the 2010 census according to the Iowa Data Center. This is a loss of about 1,200 residents.**

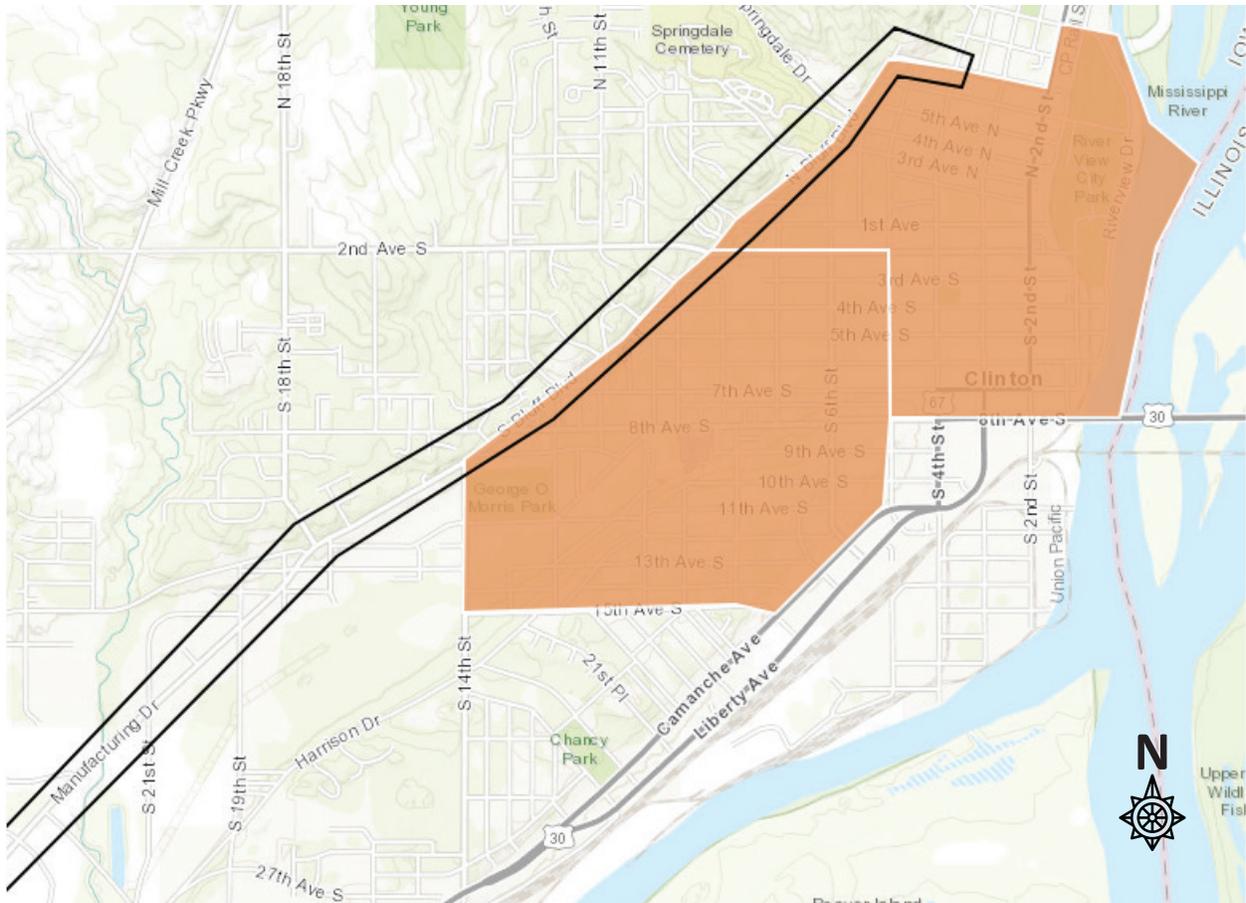


Figure 9 - Limits of Clinton's Opportunity Zone

## 6.4 Environmental Protection

The **Drive to Prosperity** project will promote the environment through several specific improvements.

**Treating Storm Water Runoff:** The design will include construction of Bioretention cells, Bioswales, permeable pavement, underground filtration rock chambers, among other practices aimed at improving quality of the storm water runoff and thereby decreasing harmful pollutants to the Mississippi River receiving waters. Specific bioretention areas and underground chambers will be aimed at collecting and treating runoff before transmission to the trunk storm sewers and eventually to the Mississippi River. The tributary area to the Drive to Prosperity project shown in Figure 10 is approximately 600 acres. ***All proposed green infrastructure components will be constructed such that the quality of effluent waters from this drainage basin is substantively and quantifiably improved.***



Figure 10 - Manufacturing Drive/Bluff Boulevard Tributary Area

**Sanitary Sewer Separation:** The City of Clinton would separate the storm and sanitary sewers that are currently combined along Bluff Boulevard between 8th Avenue South and 7th Avenue North. This will assist the City with its objective of the reduction of basement backups throughout the Basin 6 area. With this funding opportunity, the City could more easily reconstruct storm and sanitary sewer networks in this area. In addition to reducing basement backups from the combined sewer system, innovative storm sewer design will eliminate street ponding and flash flooding at the lowest areas of Bluff Boulevard. The Iowa DNR specifies the following designated uses for the Mississippi River segment: primary contact recreation (Class A1), warm water wildlife and aquatic life uses (Class B (WW-a)), and human health (Class HH). The most recent Section 305(b) report included this segment of the Mississippi River as “not supporting” for the Class B(WW-1) designation due to violations of Iowa’s chronic criterion for aluminum and cadmium in water. As a result, this Mississippi River Segment is now included in Iowa’s EPA approved Section 303 (d) Impaired Water List. The contaminants causing this status of impairment over the years include: organic enrichment, bacteria, metals, and nutrients. It is a goal of the City of Clinton to do its part to improve the discharges to the Mississippi River. The City has included storm water BMPs in all its sewer separation and storm sewer improvement projects.

As part of a large drainage and sewer basin known as “Basin 6”, this project is a crucial element to the City’s Long-Term Control Plan for Combined Sewer Overflow, which has been approved by consent decree with the Iowa DNR. Per the consent decree, the City is presently under enforcement practices to separate all sewers within Basin 6. The project, which is under way, will continue until 2037 and includes parts of Bluff Boulevard, which will be designed and constructed by this project. The project will include all new storm sewer intakes and conveyance system, which will provide adequate storm drainage of the project area directly to the large diameter storm sewers on 3rd Avenue South and 7th Avenue North, which will also limit overflow of combined sewers in and around Bluff Boulevard.

**The new storm sewer system paralleling Bluff Boulevard will improve the quality and control the quantity of storm water runoff and reduce combined sewer overflows.** The proposed **Drive to Prosperity** project will implement a variety of storm water Best Management Practices to reduce the contaminant concentrations and volume of storm water runoff from the Bluff Boulevard Drainage Basin. In doing so, it will also reduce the quantity of storm water entering the City's combined sewer system, and correspondingly the volume of raw sewage overflows to the Mississippi River. The reduced organics, solids, metals, bacteria, and nutrients discharges to the Mississippi River accompany reductions of storm water and combined sewer discharges.

As outlined in the [Economic Profile of the Upper Mississippi River Region](#), March 1999, "the Mississippi River is critical to our economic well-being. Individuals and businesses have come to rely on the river for transportation, water, food, recreation, and a variety of other goods and services. As a result, the regional economies surrounding the river, as well as the national economy, benefit from careful conservation and management of the Mississippi." As such, the proposed **Drive to Prosperity** project is consistent with efforts to mitigate annual pollutant loads to this important river.

**Creek Flooding:** As a part of the **Drive to Prosperity** project, the bridges over Harts Mills Creek and Mill Creek will be raised, lengthened, and the widened to provide more hydraulic area. This design can be seen in the plan and profiles [here](#). This will reduce flooding incidents impacting the road and surrounding business. The project will be coordinated with Nestle Purina whom is planning additional flood control on their property.



*Flooding at Nestle Purina July 2017*

**Vehicle Emissions:** There are several components of this project which will reduce vehicle emissions to the environment, mainly by decreasing delays at all intersections and key private access points. This includes a potential roundabout in place of the signalization at Valley West Drive, re-alignment of several street intersections, constructing dedicated right and left turn lanes at intersections throughout the corridor, and installing fiber to coordinate all the traffic signals.

**LED Lighting:** The project will use solar powered LED street lights. LED lights will replace the current lamps and provide a more direct and dark-sky friendly approach to lighting our pedestrian and vehicular paths along this corridor. This will provide a more pleasant walking experience at night while reducing kilowatt hours and greenhouse gas emissions.

**Recycled Pavement:** All pavement that is removed will be recycled and used as base and backfill on the project. This will reduce greenhouse gas emissions by reducing the shipment of materials to the site.

## 6.5 Quality of Life

The **Drive to Prosperity** project will include the reconstruction and enhancement of the second busiest transportation corridor in Clinton. The project will increase access to commercial areas of Clinton for all residents by increasing capacity and safety of the corridor. It is likely that traffic volume will increase after project completion, as residents will see the newly enhanced roadway as a convenient and pleasing route to major destinations on the west end of Clinton. Common destinations on the west end of Clinton include Walmart, Wild Rose Casino, Hobby Lobby, Kohl's, Aldi, and at least 40 other businesses tailored to daily commercial uses. Manufacturing Drive and Bluff Boulevard serve as the main arterial route to these locations for at least half of the town, stretching from 13th Avenue North past the downtown to the Bluff Boulevard and Manufacturing Meadows districts.

In addition to commercial access, Manufacturing Drive is home to one of the largest employers in the City, Nestle Purina. ***At certain times of the day, Manufacturing Drive becomes the busiest street in town for 15 to 30 minutes at shift change, causing an unsafe and slow period of travel along Manufacturing Drive.*** Adding turn lanes and other enhancements along the street will alleviate this congestion, which will vastly reduce commute time for workers and all motorists during this time.

***Bluff Boulevard includes direct access to numerous schools including Bluff Elementary, the new STEM campus for the Clinton Community School District and Clinton Community College. As a major bus transportation corridor, it is important for the quality of life of our student citizens that this project receives a much-needed improvement.***

There are many health care destinations with direct access from Manufacturing Drive and Bluff Boulevard such as the Medical Associates Urgent Care, the Mercy South hospital, and few other local clinics. Enhanced access to these destinations will improve the health and vitality of the community. ***Manufacturing Drive is also a major ambulance and fire route to many areas of town, which necessitates a wider than 2-lane road for emergency access.***

In addition to the above quality of life enhancements related to vehicle traffic, it is expected that the entire Manufacturing Drive and Bluff Boulevard corridor will receive pedestrian enhancements as part of the reconstruction project. As discussed, a recreational path will be constructed along the entirety of Manufacturing Drive. This is important because currently there is virtually zero pedestrian access connecting these populated areas to the existing businesses at the west end of Clinton. In addition, a wider sidewalk will be constructed all along Bluff Boulevard, which further connects the neighborhoods in the center of Clinton to the Manufacturing Drive area. All these improvements will be ADA compliant so that all citizens of Clinton will receive maximum pedestrian access to all improvements and the surrounding areas.

Lastly, it is expected that any necessary communication infrastructure will be included as part of this project. Currently, there is fiber optic in the western commercial area along Manufacturing

Drive and US Route 30 at the south end of this project. The City of Clinton will take the lead on installing fiber optic ductwork and conduits as part of this project, which will serve as the backbone for future implementation of a high-speed fiber and broadband network. This will positively affect the quality of life of residents and businesses in Clinton for years to come.

## **6.6 Innovation**

Innovative design, construction materials, and contracting methods will be evaluated and used in the **Drive to Prosperity** project.

### **6.6.1 Design**

- A roundabout is planned at the intersection of Manufacturing Drive & Valley West Drive.
- Several intersections will be re-aligned along the corridor to improve intersection site distance.
- The intersection of South 19th Street, South 14th Street, 7th Avenue South, and 2nd Avenue South are planned to be signalized and will be interconnected with fiber. This will allow for the traffic signal progression along the corridor to help reduce congestion. In addition, emergency preemption will be added to each of these traffic signals to help with public safety.
- Solar Powered pedestrian walkway and roadway LED lighting will be evaluated.
- The City will also be using innovative storm water treatment strategies as discussed in Section 6.4 to filter harmful pollutants from the storm water runoff before entering local streams.

### **6.6.2 Construction Materials**

- Permeable pavement will be evaluated and used on all residential side streets, particularly on South 18th Street, 12th Avenue South, and the many cul-de-sacs. The City is experienced with the design and installation of permeable pavers. Permeable pavement was recently installed on 25th Ave North.
- Pipe and conduits will be specified to use recycled plastic where possible.
- Lightweight cellular concrete will be used as backfill at the bridge excavation and retaining walls throughout the corridor.
- The concrete pavement will be reused as pipe backfill and road base for the project.

### **6.6.3 Contracting**

The City of Clinton would like to consider Federal Highway Administration (FHWA) Special Experimental Projects No. 14 (SEP-14) – Alternative Contracting guidelines to speed up the construction process. This provision allows for cost-plus-time-bidding which fits well with the Iowa DOT A+B bidding process. Therefore, the City would use the Iowa DOT A+B bidding process to select the contractor and allow an incentive/disincentive for completing the project based a set amount of time for construction.

## 6.7 Partnership

For the **Drive to Prosperity** project the City of Clinton has collaborated with the Iowa DOT, Iowa American Water, Nestle Purina, and Alliant Energy. Along with the City of Clinton, these partners have committed to fund \$8,900,000 or 28 percent of the project cost.

- **City of Clinton:** The City will contribute \$3,000,000 in support of this project. The project is in the heart of the City of Clinton and is truly the main artery connecting the City to business, retail, and residential neighborhoods. The City of Clinton will be the project sponsor and funding partner in this project. The Engineering Department has successfully completed urbanized Federal-aided Surface Transportation (STP) projects.
- **Iowa DOT:** The state DOT will contribute \$3,000,000 investment towards the project. The project has the support from the Director of Iowa DOT, Mark Lowe, as can be found in [Appendix A](#).
- **Iowa American Water:** The water district has pledged \$2,900,000 for the installation of a new pump station and replacement of the 100-year-old watermains along the project corridor. Manufacturing Drive is home to their local headquarters, their largest distribution water main, and an important booster station located at South 19th Street & Manufacturing Drive. The letter of support outlining Iowa American Water's commitment to the project can be found in [Appendix A](#).
- **Nestle Purina:** This facility is fully supportive of the project especially in reducing flooding that is caused by the Harts Mill Creek and Mill Creek. Nestle Purina is planning on partnering on flood prevention infrastructure near their plant.
- **Alliant Energy:** Manufacturing Drive and Bluff Boulevard is an important corridor for the electrical and gas service provided by Alliant Energy. Alliant Energy will partner with the City to concurrently install underground electrical infrastructure in concrete vaults.

## 6.8 Non-Federal Revenue for Transportation Infrastructure Investment

The City of Clinton's Capital Improvement Project (CIP) for FY2020 has allocated a total of \$3,000,000 along with another \$3,000,000 from Iowa DOT.

This BUILD Grant will not only repair one of the most traveled roads in the city but allow momentum to repair the remaining roads in the City. The City of Clinton remains committed to expending \$3,000,000 per year toward the pavement management plan.

## 7. Project Readiness

### 7.1 Technical Feasibility

The City of Clinton hired McClure Engineering Company to develop preliminary plans for the project corridor. [Design criteria](#) was established for both Manufacturing Drive from US Route 30 to South 19th Street and for Manufacturing Drive and Bluff Boulevard from South 19th Street to North 5th Street in accordance with Iowa DOT and SUDAS guidelines. A topographic survey

was obtained to assist with design development. NEPA environmental review as completed as can be found in Section 7.3.1. A [geotechnical review](#) as also completed to determine expected conditions along the corridor to assist with the project cost estimate. Utility maps have been obtained and reviewed to evaluate underground conflicts.

A strip map, detailed plan sheets including typical section, select cross sections, and select profile sheets found [here](#) have been produced for the project. These preliminary plans validate that the design criteria can be met for the project. Quantities were calculated for major items of work and detailed cost estimates were prepared for the project based on unit prices from the Iowa DOT BidEx databases. As the design is preliminary and there are still several unknowns a 20 percent contingency was added to the cost.

As can be seen in Section 7.2, the proposed project schedule provides adequate time to meet the BUILD Grant expenditure requirements.

## 7.2 Project Schedule

The City intends to start the preliminary design by July 1, 2019 and be complete by December 2019. Right-of-way acquisition may take a few months after this, but a reasonable bid letting date will be October 2020 with construction performed in stages starting May 2021 and the total project completed by November 2022 which will be well in advance of the September 30, 2025, expenditure deadline for the BUILD grant. The project schedule which includes key milestones are shown in Figure 11 and [here](#). This schedule meets the timing requirements for an Iowa DOT bid letting. It is to be noted that the project schedule has been established assuming a conventional Design-Bid-Build process. The City intends to utilize the Iowa DOT’s A+B bidding process which meets the requirements of the FHWA’s Special Experimental Projects No. 14 (SEP-14) – Alternative Contracting guidelines which will further reduce the construction period.

### Drive to Prosperity: Manufacturing Drive/Bluff Blvd. Reconstruction (US 30 to 7th Avenue N.)

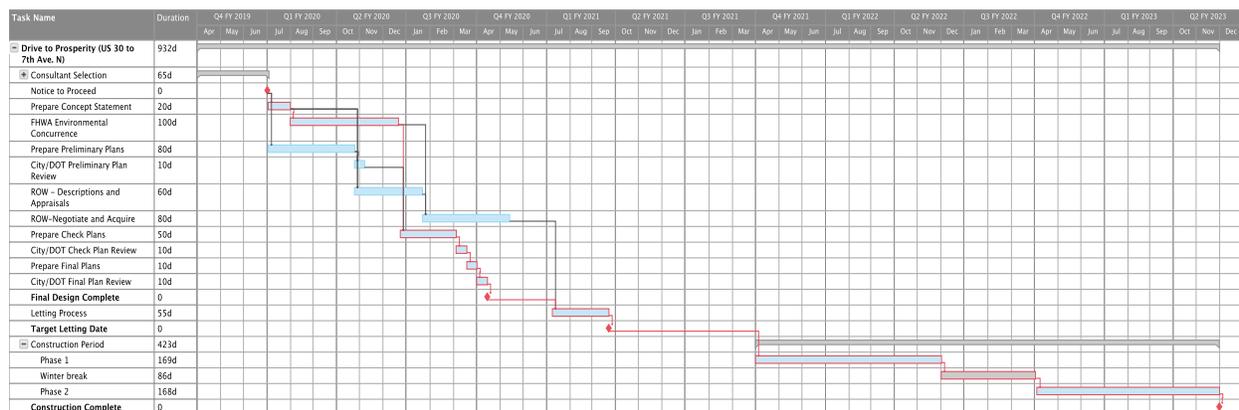


Figure 11 - Project Schedule

## 7.3 Required Approvals

### 7.3.1 Environmental Permits and Review

To meet the NEPA requirements for the BUILD Grant application, an environmental review of the project corridor was completed June 2018 using available databases. The NEPA review included the following 18 items as presented in the checklist on the following page.

#### NEPA Checklist

#### **Manufacturing Drive/S. Bluff Boulevard from U.S. 30 to North 5<sup>th</sup> Street Clinton, Iowa**

	Resource Area	Potential Effect	
		Yes	No
<b>1</b>	Woodlands: Will there be areas of significant impacts to woodlands over 2 acres?		<b>X</b>
<b>2</b>	Threatened & Endangered Species: Will there be impacts to T & E species or their habitat?		<b>X</b>
<b>3</b>	Right-of-Way and Displacements: Will right-of-way be acquired? Homes displaced?	<b>X<sup>1</sup></b>	
<b>4</b>	Cultural Resources (National Register of Historic Places and Archaeological Resources: Will there be impacts to significant cultural resources?		<b>X</b>
<b>5</b>	Floodplains and Water Quality: Is the project located in a 100-year floodplain?	<b>X<sup>2</sup></b>	
<b>6</b>	Wetlands: Are wetlands present in the project corridor?	<b>X<sup>3</sup></b>	
<b>7</b>	Farmland: Is farmland present in the project corridor?		<b>X</b>
<b>8</b>	Parks and Section 6(f) Lands: Are parks present in the project corridor? Do any of these parks fall under Section 6(f)?	<b>X<sup>4</sup></b>	
<b>9</b>	Regulated Materials Sites: Is there high risk of encountering regulated materials sites within the project corridor?		<b>X</b>
<b>10</b>	Noise Impacts: Will adjacent properties experience a noise impact from the project?		<b>X</b>
<b>11</b>	Pedestrian and Bicycle Facilities: Will the project negatively impact pedestrian and bike facilities?		<b>X</b>
<b>12</b>	Air Quality: Will the project have an adverse effect on air quality?		<b>X</b>
<b>13</b>	Environmental Justice Communities: Will the project have an adverse impact on EJ populations?		<b>X</b>
<b>14</b>	Visual Impacts: Will there be significant negative visual impacts due to the project?		<b>X</b>

15	Construction/Detour Impacts: Will traffic delays and detours occur during construction of the project?	X <sup>5</sup>	
16	Safety: Will safety be <b>improved</b> as a result of this project?	X	
17	Utilities: Will there be significant impacts to utilities in the corridor?		X
18	Mitigation Measures: Will mitigation be undertaken as part of the project?	X <sup>6</sup>	
<sup>1</sup> Some minor strip right-of-way will be acquired but minimized as much as possible; up to 2 homes may be acquired near intersections.			
<sup>2</sup> The project includes replacing the bridges over Hart Mill Creek and Mill Creek. They will be designed to a no-rise condition and appropriate permits will be obtained prior to construction.			
<sup>3</sup> Wetland delineations will be conducted to determine exact impacts. If wetlands are unavoidable, mitigation as appropriate will be done.			
<sup>4</sup> Neubauer Park is located at S. Bluff Blvd and 7 <sup>th</sup> Ave S; avoidance and minimization alternatives will be analyzed. No Section 6(f) lands in the project corridor.			
<sup>5</sup> Construction will be phased to minimize traffic delays and detours to the extent possible.			
<sup>6</sup> Mitigation related to property acquisition, wetlands or any other resources will be conducted as appropriate.			

The NEPA Summary in [Appendix C](#) provides more information about each resource listed in the checklist. Impacts due to the Manufacturing Drive project in Clinton are expected to be minor and this project will be consistent with federal, state and local law relating to the environment and with community plans. Overall, this project will benefit those living and working near Manufacturing Drive as well as the community of Clinton as a whole.

### 7.3.2 State and Local Approvals

This project is included in East Central Intergovernmental Association’s [Transportation Improvement Program \(TIP\)](#) and [2040 Long Range Transportation Plan](#) for the reconstruction on Manufacturing Drive between the Union Pacific Railroad crossing to Manufacturing Drive & S. Bluff Boulevard intersection. Once additional federal funds are secured, the complete reconstruction and resurfacing shown in the grant will be included in the appropriate long-range plans and TIP.

This project is consistent with the City’s goals, initiatives, and strategies. Local and regional support for the project is expressed as shown in Section 4, Project Parties, and by the numerous support letters included in [Appendix A](#).

The City has conducted one public information meeting on June 11, 2018 during preliminary plan preparation efforts to gather feedback from local residents. A second public information meeting has been scheduled on July 19th. The City is pleased that feedback and support from local

residents and citizens has been overwhelmingly positive. More information on these meetings can be seen [here](#).

### 7.3.3 Federal Approvals

No federal approvals are anticipated at this time to advance this project. While the City fully expects a programmatic categorical exclusion per the NEPA, the proposed project schedule allows for a full NEPA evaluation and approval process.

## 7.4 Assessment of Project Risk and Mitigation Strategies

The project presents minimal risk. The risks that we anticipate can be managed and are shown below:

**Environmental unknowns:** The City and consultants will conduct the environmental assessment to determine any impact to the project. Any environmental concerns will be evaluated, and the project impact assessed. Extra field evaluation will be performed if necessary.

**Right-of Way and Easement Acquisition:** Right-of way acquisition is a minor component and will not affect the schedule. Plenty of time is built in the design schedule to enter the condemnation process if necessary. Many of the businesses that will provide Right-of-way and easements are supporters of the project.

**Flooding:** The existing project is vulnerable to flooding due to its proximity to the Mississippi River. The risk will be mitigated by having most of construction scheduled out of the flood season. The City of Clinton has developed quick and efficient methods of utilizing the levy system placing in the gates prior to the river rising above 16.5 inches, to ensure limited delays will not affect the schedule.

## 7.5 Benefit-Cost Analysis

A Benefit-Cost Analysis was performed for this project. The proposed project will result in a total cost of \$28,678,000 (2018), including pavement, drainage, earthwork, bridges, retaining walls, traffic signals, Right of Way, and bicycle paths. The total benefits to the project, including travel time savings and safety benefits, are estimated to be \$51,713,000. ***This results in a Benefit Cost Ratio of 1.84.*** Further detail is presented [here](#). All costs are in 2018 dollars.

- 1. Travel Time Savings:** Using the current and future build and no-build synchro models, the projected travel-time savings is approximately 17 hours in 2020, and 27 hours in 2040. Assuming a benefit of \$15.24 per person-hour, this results in a total benefit of \$2,542,700.
- 2. Safety Benefits (Corridor):** Converting the current facility to two lanes with a two-way left-turn lane results in approximately 36% reduction in crashes for the corridor. This results in a possible reduction in over 132 crashes in the first five years. Extrapolating those benefits over a 20-year period, this results in a total benefit of \$47,120,000.

**3. Safety Benefits (Major Intersections):** The project includes modifications at two intersections; Bluff Blvd. and 7th Avenue South/Thorwaldson, and Manufacturing Drive and Valley West Drive. When investigating cost modification factors (CMF), using the CMF clearinghouse, factors shown typically have a “Quality” rating that coincides with the data. This provides the evaluator a level of confidence in the data as it’s used. Unfortunately, the available data on crash modification rates for similar types of improvements (minor realignments, and conversion to two-lane two-way left turn lane) does not have very high quality ratings (3 out of 5 stars). CMF’s range from 0.54 to 0.76. Therefore, for this analysis, it was assumed that the CMF for the intersection was the same for the corridor, or 0.64. This results in a possible reduction of an additional 22 crashes in the first five years. Extrapolating those benefits over a 20-year period, this results in a total benefit of \$2,050,000.

## **8. Federal Wage Rate Certification**

The City of Clinton will comply with the requirements stated in Subchapter 31 of Title 40 of the United States code of Federal Wage Requirements.

**APPENDIX A**  
PROJECT SUPPORT LETTERS

**RESOLUTION NO. 2018-318**

**APPROVING AND AUTHORIZING THE APPLICATION FOR A DEPARTMENT OF TRANSPORTATION BUILD DISCRETIONARY GRANT FOR THE DRIVE TO PROSPERITY: MANUFACTURING DRIVE/BLUFF BLVD RECONSTRUCTION PROJECT**

**WHEREAS**, the Consolidated Appropriations Act of 2018 made available \$1.5 billion for National Infrastructure Investments, otherwise known as “BUILD Transportation Discretionary” grants, through September 30, 2020; and,

**WHEREAS**, for this round of BUILD Transportation grants, the maximum grant award is \$25 million, and no more than \$150 million can be awarded to a single State, as specified in the FY 2018 Appropriations Act. At least 30 percent of funds must be awarded to projects located in rural areas; and,

**WHEREAS**, the Drive to Prosperity: Manufacturing Drive/Bluff Blvd Reconstruction project is a surface transportation project that satisfies many of the selection criteria identified in the grant, including: located in a rural area, safety benefits, state of good repair, economic competitiveness, environmental protection, quality of life, innovation, partnership and demonstrated project readiness; and,

**WHEREAS**, project development including initial work required to comply with the National Environmental Policy Act and the National Historic Preservation Act has been done; and

**WHEREAS**, the City of Clinton City Administrator and Engineering Department are preparing a grant application to construct the Drive to Prosperity: Manufacturing Drive/Bluff Blvd Reconstruction project; and,

**WHEREAS**, the total project cost is estimated to be \$25 million, with the BUILD grant application amount of \$19 million, and including \$6 million budgeted local and state funds; and,

**WHEREAS**, the City Engineer recommends that the City Council authorize the Drive to Prosperity: Manufacturing Drive/Bluff Blvd Reconstruction project for the Department of Transportation National Infrastructure Investments, also known as BUILD Transportation Discretionary Grants.

**THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CLINTON, IOWA** that the City Engineer or his designee is authorized to submit the above described grant application in the amount \$19 million on behalf of the City of Clinton to the United States Department of Transportation.

**BE IT FURTHER RESOLVED BY THE CITY COUNCIL OF THE CITY OF CLINTON, IOWA** That the Mayor and City Clerk are hereby authorized and directed to execute said application and required certifications for and on behalf of the City of Clinton, Iowa.

  
\_\_\_\_\_, **MAYOR**

**ATTEST:**

  
\_\_\_\_\_  
**CITY CLERK**

**ADOPTED: June 26, 2018**

REPLY TO:

- 135 HART SENATE OFFICE BUILDING  
WASHINGTON, DC 20510-1501  
(202) 224-3744  
www.grassley.senate.gov
- 721 FEDERAL BUILDING  
210 WALNUT STREET  
DES MOINES, IA 50309-2106  
(515) 288-1145
- 111 7TH AVENUE, SE, BOX 13  
SUITE 6800  
CEDAR RAPIDS, IA 52401-2101  
(319) 363-6832

## United States Senate

CHARLES E. GRASSLEY  
WASHINGTON, DC 20510-1501

June 15, 2018

REPLY TO:

- 120 FEDERAL BUILDING  
320 6TH STREET  
SIOUX CITY, IA 51101-1244  
(712) 233-1860
- 210 WATERLOO BUILDING  
531 COMMERCIAL STREET  
WATERLOO, IA 50701-5497  
(319) 232-6657
- 201 WEST 2ND STREET  
SUITE 720  
DAVENPORT, IA 52801-1817  
(563) 322-4331
- 307 FEDERAL BUILDING  
8 SOUTH 6TH STREET  
COUNCIL BLUFFS, IA 51501-4204  
(712) 322-7103

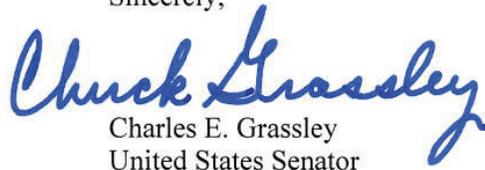
Matt Brooke  
City Administrator  
City of Clinton, Iowa  
611 South 3<sup>rd</sup> Street  
Post Office Box 2958  
Clinton, Iowa 52732-2958

Dear Mr. Brooke:

I have contacted Secretary Chao of the U.S. Department of Transportation regarding the BUILD application submitted by the City of Clinton for Drive to Prosperity: Manufacturing Drive and Bluff Boulevard. I asked that this application be given all due consideration. Should I receive a response from the U.S. Department of Transportation, I will relay the necessary information to you.

Thank you for allowing me to be of assistance to you. If you have any further questions regarding this, or any other federal matter, please do not hesitate to contact me again.

Sincerely,

  
Charles E. Grassley  
United States Senator

CHAIRMAN,  
JUDICIARY

Committee Assignments:

AGRICULTURE  
BUDGET  
FINANCE

CO-CHAIRMAN,  
INTERNATIONAL NARCOTICS  
CONTROL CAUCUS

PRINTED ON RECYCLED PAPER

## United States Senate

Dear Mr. Trombino,

Thank you for contacting me to request assistance with your 2018 BUILD grant application. I am excited about the proposed Drive to Prosperity reconstruction project in Clinton, Iowa, and appreciate the detail you provided to demonstrate how these grant funds would be utilized.

In order to be most helpful, I have contacted Department of Transportation Secretary Elaine Chao directly and requested her full consideration of your grant application. As your United States Senator, it is an honor to ensure both our rural and urban Iowa areas are considered for federal grants.

Thank you again for reaching out with your request. If you have any questions, please do not hesitate to contact Amy Ryan in my Des Moines office at 733 Federal Building, 210 Walnut Street, Des Moines, IA or by phone at (515) 284-4574. Amy may also be reached by email at [Amy\\_Ryan@ernst.senate.gov](mailto:Amy_Ryan@ernst.senate.gov).

Sincerely,



Joni K. Ernst  
United States Senator



DAVID LOEBSACK  
2ND DISTRICT, IOWA

COMMITTEE ON  
ENERGY AND COMMERCE

**Congress of the United States**  
**House of Representatives**  
**Washington, DC 20515-1502**

June 14, 2018

WASHINGTON OFFICE:  
1527 LONGWORTH HOUSE OFFICE BUILDING  
WASHINGTON, DC 20515  
(202) 225-6576

DISTRICT OFFICES:  
125 SOUTH DUBUQUE STREET  
IOWA CITY, IA 52240  
(319) 351-0789

209 West 4th Street, #104  
Davenport, IA 52801  
(563) 323-5988  
1 (866) 914-IOWA

The Honorable Elaine L. Chao  
Secretary of Transportation  
US Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

RE: Support for the City of Clinton's **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction** BUILD Grant Application

Dear Secretary Chao:

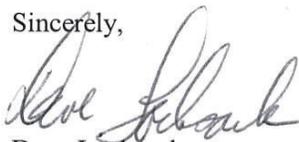
I am proud to support the 2018 BUILD grant application submitted to you by the City of Clinton. The City's proposed **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction** project will enhance access to essential services, including multiple healthcare providers, provide a safe route for students from Clinton STEM Academy's Campus to the high school, bolster pedestrian and bicyclist amenities, and support increased community vibrancy and better health outcomes.

I had the opportunity to receive an in-person overview of this wonderful project and was able to drive the entire 4.5 miles stretch with local officials. I can say from firsthand experience that this roadway is an important component to Clinton's infrastructure, connecting the north and south parts of the community. The nearly 100 years old roadway is now stressed with capacity constraints and safety concerns, with nearly 400 crashes in just the last five years alone in addition to severe flooding incidents over the last few years. This project includes the complete reconstruction of Manufacturing Drive and Bluff Boulevard from US Route 30 to 7th Avenue North. It includes numerous safety and environmental improvements to bring this road up to modern standards.

This project does not just improve the roadway surface but improves the quality of life for residents and businesses along the corridor by including the infrastructure necessary for future implementation of a high-speed fiber and broadband network. I understand that this infrastructure will position the City of Clinton to be a 21<sup>st</sup> century leader and serve as a primary gateway to the area that has been identified as an "**Opportunity Zone**" by the US Department of the Treasury.

The **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction** project is a necessary and worthwhile investment which will have a profound effect on the future viability of the area. Consistent with the goals of the BUILD grant program, this project will improve safety, provide good a state of repair, foster innovation and provide a much-needed boost to economic vitality for not only the City but the surrounding region as well. For these reasons I fully support this project.

Sincerely,



Dave Loeb sack  
Member of Congress

ROD BLUM  
1ST DISTRICT, IOWA

COMMITTEE ON  
OVERSIGHT AND GOVERNMENT REFORM

COMMITTEE ON SMALL BUSINESS  
CHAIRMAN, SUBCOMMITTEE ON AGRICULTURE,  
ENERGY, AND TRADE

**Congress of the United States**  
**House of Representatives**  
**Washington, DC 20515-1501**

1108 LONGWORTH HOUSE OFFICE BUILDING  
WASHINGTON, DC 20515  
(202) 225-2911

1050 MAIN STREET  
DUBUQUE, IA 52001  
(563) 557-7789

308 3RD STREET SE, SUITE 200  
CEDAR RAPIDS, IA 52401  
(319) 364-2288

515 MAIN STREET, SUITE D  
CEDAR FALLS, IA 50613  
(319) 266-6925

June 28, 2018

The Honorable Elaine L. Chao  
Secretary of Transportation  
US Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Secretary Chao:

I am writing in support of the 2018 BUILD grant application submitted to you by the City of Clinton. The City's proposed Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction project will enhance access to essential services, including multiple healthcare providers, provide a safe route for students from Clinton STEM Academy's campus to the high school, bolster pedestrian and bicyclist amenities, and support increased community vibrancy and better health outcomes.

This project is an important component to Clinton's infrastructure, connecting the north and south parts of the community. The nearly 100-year-old roadway is now stressed with capacity constraints and has seen almost 400 crashes in just the last five years alone, as well as severe flooding incidents over the previous years. This project includes the complete reconstruction of Manufacturing Drive and Bluff Boulevard from US Route 30 to 7th Avenue North. It includes numerous safety and environmental improvements to bring this road up to a good state of repair.

This project does not just fix the roadway surface but improves the quality of life to residents and businesses along the corridor by including the infrastructure necessary for the future implementation of a high-speed fiber and broadband network.

The Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction project is a necessary and worthwhile investment which will have a profound effect on the future viability of the area. Consistent with the goals of the BUILD grant program, this project will improve safety, foster innovation and provide a much-needed boost to economic vitality for not only the City of Clinton but the surrounding region as well.

I respectfully request that you give this application full consideration. Thank you for your attention to this matter.

Sincerely,



Rod Blum  
Member of Congress

[WWW.BLUM.HOUSE.GOV](http://WWW.BLUM.HOUSE.GOV)



# CONGRESS OF THE UNITED STATES

**DAVID YOUNG**  
Congressman  
3rd District, Iowa

July 11, 2018

The Honorable Elaine Chao  
U.S. Department of Transportation  
Office of the Secretary  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Chao:

*Sec. Chao*

I am writing in regard to the city of Clinton's application to the Better Utilizing Investment to Leverage Development (BUILD) grant program.

According to Clinton, this grant would assist with construction of the Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction project and enhance access to essential services by completely reconstructing the roadways that connect the north and south parts of the community.

**CONSTITUENT SERVICES OFFICES:**

**Council Bluffs**  
501 5th Avenue  
Council Bluffs, Iowa 51503  
712-325-1404

**Creston**  
208 West Taylor Street  
Creston, Iowa 50801  
641-782-2495

**Des Moines**  
Capitol Center  
400 East Court Avenue, Suite 346  
Des Moines, Iowa 50309  
515-282-1909

**Washington**  
240 Cannon House Office Building  
Washington, DC 20515  
202-225-5476

[Young.House.Gov](http://Young.House.Gov)

Thank you in advance for giving this grant proposal your full and fair consideration. Please keep me apprised as you move forward with this process with any questions or concerns you may have.

Sincerely,

David Young  
Member of Congress

*Thank you for your leadership and service to Iowa and the country.  
Dey*

**Congress of the United States**  
House of Representatives  
Washington, DC 20515-1504

COMMITTEES:

AGRICULTURE

JUDICIARY

SMALL BUSINESS

June 27, 2018

The Honorable Elaine L. Chao  
Secretary of Transportation  
U.S. Department of Transportation  
1200 New Jersey Avenue Southeast  
Washington, D.C. 20590

Dear Secretary Chao,

I am proud to support the 2018 BUILD grant application submitted to you by the City of Clinton. The City's proposed Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction project will enhance access to essential services, including to multiple healthcare providers and businesses. Improving this roadway will also expand access to integral destinations such as Wal-Mart, the Wild Rose Casino and Aldi's (one of Clinton's largest employers) via sidewalks, bike trails, and bus stops. It will additionally provide a safe route for students traveling from the Clinton STEM Academy's campus to the high school, bolster pedestrian and bicyclist amenities, and support increased community vibrancy and better health outcomes.

This project includes the complete reconstruction of Manufacturing Drive and Bluff Boulevard from US Route 30 to 7th Avenue North. It encompasses numerous safety and environmental enhancements to bring this roadway into a good state of repair.

As the second-busiest street in Clinton, this roadway is an important component of Clinton's infrastructure, connecting the north and south parts of the community. The nearly 100 year-old roadway is now stressed with capacity constraints and has seen nearly 400 crashes in the last 5 years, as well as suffered damage from the negative impacts of multiple flooding incidents over the last few decades.

This project not only improves the roadway surface, but also improves the quality of life of residents and businesses along the corridor in its inclusion of the infrastructure necessary for the future implementation of a high-speed fiber and broadband network. This infrastructure will position the City of Clinton to be a 21st century leader and serve as a primary gateway to the area, which the U.S. Department of the Treasury has identified as an "Opportunity Zone."

The Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction project is a necessary and worthwhile investment that will have a profound beneficial effect on the future viability of the area. Consistent with the goals of the BUILD grant program, this project will improve safety, foster

AMES OFFICE  
1421 S. BELL AVENUE, SUITE 102  
AMES, IA 50010  
(515) 232-2885  
FAX: (515) 232-2844

FORT DODGE OFFICE  
723 CENTRAL AVENUE  
FORT DODGE, IA 50501  
(515) 573-2738  
FAX: (515) 576-7141

MASON CITY OFFICE  
2020 1ST STREET SE, SUITE 126  
MASON CITY, IA 50401  
(641) 201-1624  
FAX: (641) 201-1523

[HTTP://WWW.STEVEKING.HOUSE.GOV](http://www.steveking.house.gov)

SIoux CITY OFFICE  
320 6TH STREET  
ROOM 112  
SIoux CITY, IA 51101  
(712) 224-4692  
FAX: (712) 224-4693

SPENCER OFFICE  
P.O. BOX 650  
SPENCER, IA 51301  
(712) 580-7754  
FAX: (712) 580-3354

WASHINGTON, D.C. OFFICE  
2210 RAYBURN  
WASHINGTON, D.C. 20515  
(202) 225-4426  
FAX: (202) 225-3193

STEVE KING  
4TH DISTRICT, IOWA

# Congress of the United States

House of Representatives

Washington, DC 20515-1504

COMMITTEES:

AGRICULTURE

JUDICIARY

SMALL BUSINESS

innovation, and provide a much-needed boost to economic vitality for the City of Clinton and the surrounding region. For these reasons, I fully support this project.

Sincerely,



Steve King  
Member of Congress

SK\VS

AMES OFFICE  
1421 S. BELL AVENUE, SUITE 102  
AMES, IA 50010  
(515) 232-2885  
FAX: (515) 232-2844

FORT DODGE OFFICE  
723 CENTRAL AVENUE  
FORT DODGE, IA 50501  
(515) 573-2738  
FAX: (515) 576-7141

MASON CITY OFFICE  
2020 1ST STREET SE, SUITE 126  
MASON CITY, IA 50401  
(641) 201-1624  
FAX: (641) 201-1523

[HTTP://WWW.STEVEKING.HOUSE.GOV](http://WWW.STEVEKING.HOUSE.GOV)

SIOUX CITY OFFICE  
320 6TH STREET  
ROOM 112  
SIOUX CITY, IA 51101  
(712) 224-4692  
FAX: (712) 224-4693

SPENCER OFFICE  
P.O. BOX 650  
SPENCER, IA 51301  
(712) 580-7754  
FAX: (712) 580-3354

WASHINGTON, D.C. OFFICE  
2210 RAYBURN  
WASHINGTON, D.C. 20515  
(202) 225-4426  
FAX: (202) 225-3193

**Director's Office**  
800 Lincoln Way | Ames, IA 50010  
Phone: 515-239-1111

June 12, 2018

The Honorable Elaine L. Chao  
Secretary, United States Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

**SUBJECT: Support for the City of Clinton's Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction BUILD Grant Application**

Dear Secretary Chao:

I would like to extend my support to the City of Clinton's application for the BUILD Discretionary Grant (BUILD Grant). The City's proposed project, known as the **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction**, is vital to the transportation connectivity and economy of not only the city but of the entire region.

Completing the Manufacturing Drive and Bluff Boulevard reconstruction project – a total reconstruction and enhancement of the alignment from US Route 30 to 7th Avenue North – will ensure the safe, efficient movement of people and goods for decades to come. It will also serve as the primary gateway to the area identified as an **“Opportunity Zone” by the US Department of the Treasury**.

Project benefits include:

- Maintain community access to jobs
- Restores a major truck route
- Restores structural integrity of key creek crossings to mitigate flooding incidents
- Enhances multi-modal transportation and promotes walkability and safe bicycling route throughout the corridor
- Provides safe route for students from the Clinton STEM Academy's Campus to the high school
- Supports a growing downtown residential community, including low income housing
- Improving connectivity to neighborhoods and communities throughout the metro area and beyond
- Includes innovative and sustainable green infrastructure improvements that will reduce storm water impacts, maintenance costs and avoid a significant increase in electricity costs.

I am pleased to support the City of Clinton's BUILD Grant application for the **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction**. This project is important to the economic vitality of the region; it will improve the quality of life and allow the City to improve the condition of key infrastructure.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Lowe". The signature is fluid and cursive, with the first name "Mark" and last name "Lowe" clearly distinguishable.

Mark Lowe  
Director



Alliant Energy  
200 First Street SE  
P.O. Box 351  
Cedar Rapids, IA 52406-0351

1-800-ALLIANT (800-255-4268)  
alliantenergy.com

The Honorable Elaine L. Chao  
Secretary of Transportation  
US Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

RE: Support for the City of Clinton's Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction BUILD Grant Application

Dear Secretary Chao:

Alliant Energy enthusiastically supports the City of Clinton's application for funding through the US Department of Transportation's BUILD Transportation Discretionary Grant Program.

A strong transportation network is imperative to our success. Completing the Manufacturing Drive and Bluff Boulevard reconstruction project – a total reconstruction and enhancement of the alignment from US Route 30 to 7th Avenue North – will ensure the safe, efficient movement of people and goods for decades to come.

The BUILD-supported reconstruction project will allow the City of Clinton to simultaneously enhance the safety and capacity of the corridor all while making several environmental enhancements in the area. The project will enhance access to essential services, including multiple healthcare providers, a safe route for students from Clinton STEM Academy's Campus to the high school, and will bolster pedestrian and bicyclist amenities, supporting both increased community vibrancy and better health outcomes. Furthermore, the project will include the infrastructure necessary for future implementation of a high-speed fiber and broadband network, which will position our community to be a 21st century leader and serve as a primary gateway to the area that has been identified as an "Opportunity Zone" by the US Department of the Treasury.

Alliant Energy believes the BUILD-supported reconstruction project will assist in the efficient movement of our vehicles around the community as we provide safe and reliable service to our customers in Clinton. We also feel improved traffic flow will assist our customers and bring economic vitality to the area.

We are pleased to support the City of Clinton's BUILD Grant application for the Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction. This project is important to the economic vitality of the region; it will improve the quality of life and allow the City to improve the condition of key infrastructure.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Shupp", written in a cursive style.

Steve Shupp  
Senior Economic Development Manager  
Alliant Energy



IOWA  
AMERICAN WATER

June 22, 2018

The Honorable Elaine L. Chao  
Secretary of Transportation  
US Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Randy Moore  
President  
5201 Grand Avenue.  
Davenport, IA 52807  
Randy.Moore@amwater.com  
P 563.468.9218  
F 563-322-4325

RE: Support for the City of Clinton's Drive to Prosperity: Manufacturing Drive/Bluff Blvd Reconstruction BUILD Grant Application

Dear Secretary Chao:

Iowa American Water fully supports the City of Clinton's BUILD Grant application for reconstruction of Manufacturing Drive/Bluff Boulevard from Valley West Drive to 7<sup>th</sup> Avenue North.

Iowa American Water routinely partners with the City of Clinton to replace aging water infrastructure during City street reconstruction projects. These partnering projects allow us to gain cost and time efficiencies and provide the least amount of disturbance to residents and businesses that we serve. In addition to numerous residential City street projects, we have also collaborated on highway and major corridor projects such as Liberty/Camanche Avenue (Highway 30) and 19<sup>th</sup> Avenue North.

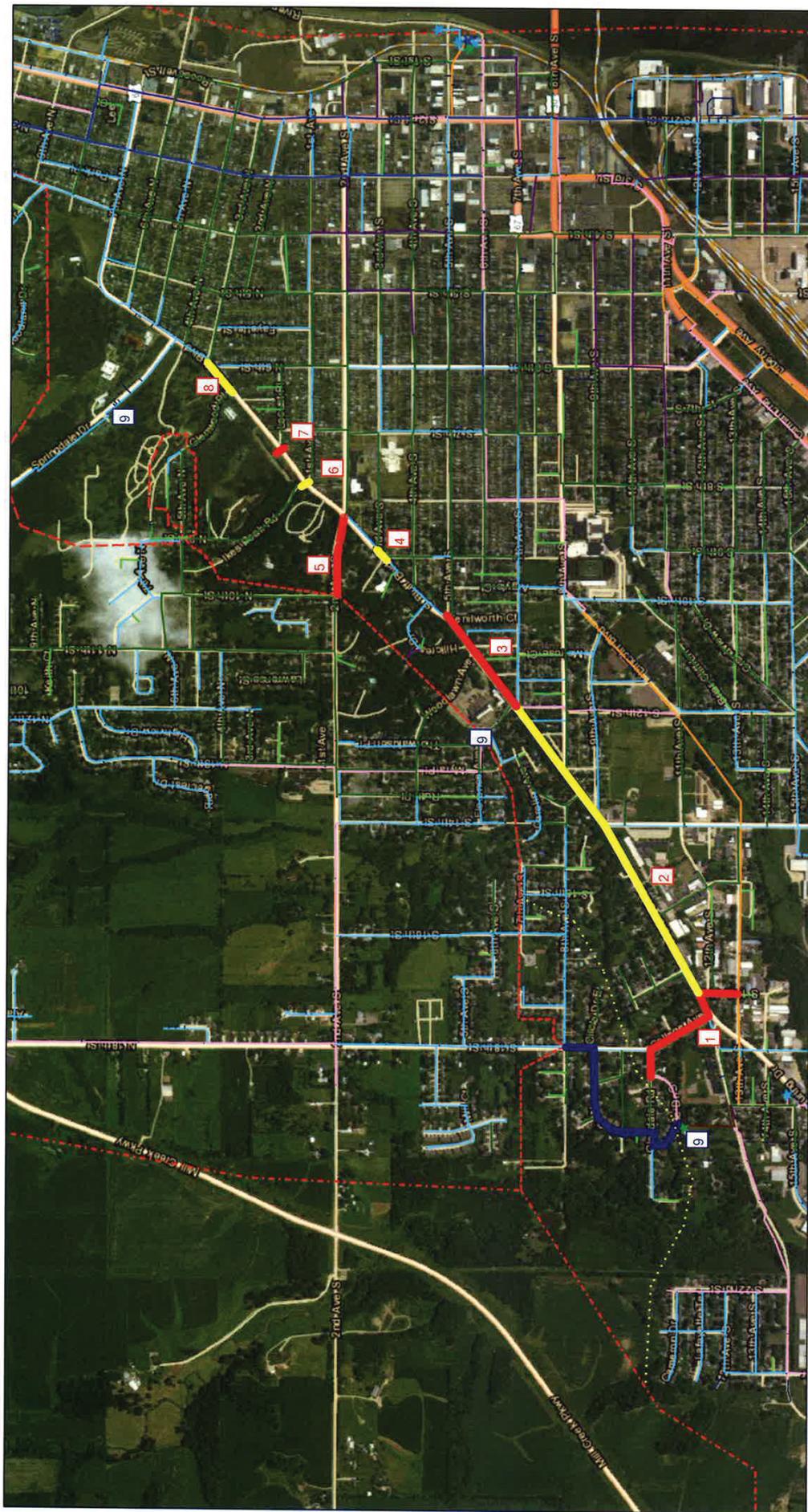
The Manufacturing Drive/Bluff Boulevard project allows us a unique opportunity to replace aging infrastructure in a highly congested corridor of our service system in a safe and coordinated manner. Much of the water mains and service lines in this corridor of the system are 100 years old. Frequent breaks on these lines contribute to the already congested nature of this street. In addition to the water infrastructure directly within the Bluff Boulevard right of way, Iowa American Water has elevated storage and two booster stations that will indirectly be affected by the Bluff Boulevard project. Upgrade of these facilities would also be planned during the work in this area.

Attached is a preliminary plan, which depicts the location of proposed water projects that will directly benefit by partnering with the City for completion during the Bluff Boulevard reconstruction project. Total estimated cost of these improvements is nearly \$2.9M. These projects include replacement of over two miles of water main and replacement of two aged booster stations with a new pump station. These improvements will significantly improve pressure and service reliability in a critical area of Iowa American Water's service area for the City of Clinton.

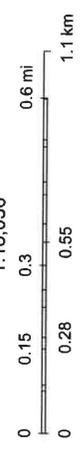
Iowa American Water is excited about the opportunity to collaborate with the City on this critical project for the benefit of the entire Clinton community.

Sincerely,

Randy Moore  
President Iowa American Water



1:18,056



Iowa American Water  
Bluff Boulevard Preliminary Plan 6-15-18

**Iowa American Water - Clinton District  
Bluff Blvd Improvement Plan  
6/14/2018**

1	College Avenue Secondary Feed to Bluff Tank - College Avenue from Bluff to Circle Drive - Replace 1100 lf of 6" CI Main (1919) with 12" DI - Bluff Blvd from College to S 19th - Replace 260 lf of 8" CI Main (1919) with 12" DI - S. 17th from Bluff to 13th Ave S - Replace 200 lf of 6" CI (1957) and extend additional 250 lf of 12" DI to connect to 16" main	\$407,250
2	Bluff Blvd from S 17th to 7th Ave S - Replace 4000 lf of 6" CI (1919) with 8" DI	\$800,000
3	Bluff Blvd from 7th Ave S to 5th Ave S - Replace 1300 lf of 6" CI (1919) with 8" DI	\$260,000
4	2nd Ave S from S 10th to Bluff - Replace 600 lf of 6" CI (1961) east of S 10th - Abandon 400 lf of 6" CI (1961) west of Bluff	\$135,000
5	Bluff Blvd from S 9th to 3rd Ave S - Replace 160 lf of 6" CI (1919) with 8" DI	\$32,000
6	Bluff Blvd and Ike's Peak Road - Replace 80 lf of 6" CI (1964) at Ike's Peak crossing Bluff Blvd	\$20,000
7	202 Bluff Apartment Service - Replace 2" service to apartments with addition of 8" main crossing Bluff Blvd and hydrant	\$20,000
8	Bluff Blvd from Glenwood Place to 3rd Ave N - Replace 400 lf of 6" CI (1919) with 8" DI	\$80,000
9	New Bluff Booster Station - Abandon 50 year old underground Springdale Booster Station - Abandon 60 year old Rock Creek Booster Station - Construct new above grade booster station with generator at Bluff Tank - Replace 2300 lf of 2", 6", and 8" main from 8th Avenue South to Bluff Tank Booster with 12" DI - Extend High Pressure Zone to discharge of new booster station	\$1,117,500
Project Total		\$2,871,750



July 12<sup>th</sup>, 2018

The Honorable Elaine L. Chao  
Secretary of Transportation  
US Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

RE: Letter of Support and Proposed Partnership for the City of Clinton's **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction** BUILD Grant Application

Dear Secretary Chao:

The City of Clinton's proposed **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction** is a major project for the region, and Mediacom is excited to commit a private investment towards the project as part of our long term partnership with the City of Clinton.

Mediacom has occupied the right-of-way along this corridor for over forty years, and has a vested interest in providing an increased level of service to all of our commercial and residential customers along this route. Our participation in this project would provide an opportunity to enhance our existing fiber-optic broadband network to the community, as the proposed route cuts right through the heart of Clinton, Iowa.

We have discussed with city officials the possibility of extending our fiber-optic network along several segments of the proposed project corridor. Our commitment would be to provide all labor and materials for installation of conduit duct system for existing and future fiber optic facilities. The conduit duct system would be laid into a trench excavated by the City of Clinton as part of the proposed project. As the demand grows, we would install fiber optic lines and equipment to better serve the region of Clinton. These commitments will require significant future private investment by Mediacom.

As a necessary improvement to customers along the corridor, a high-speed fiber and broadband network will enhance the quality of life of the citizens of Clinton for years to come. Mediacom is committed to our partnership with the City of Clinton for Manufacturing Drive and Bluff Blvd, and give our support for the vision of interconnected broadband service throughout Clinton that is made possible by this project.

Sincerely,

Todd Curtis  
Group Vice President  
Eastern IA, IL, IN & KY  
Mediacom Communications Corp.

Mediacom Communications Corporation  
3900 26<sup>th</sup> Avenue, Moline, IL 61265



## AMVETS POST #28

William J. Forsee Post

1317 South 17<sup>th</sup> Street

Clinton, IA 52732



6/21/18

The Honorable Elaine L. Chao  
Secretary of Transportation  
US Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

RE: Support for the City of Clinton's **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction** BUILD Grant Application

Dear Secretary Chao:

I am proud to support the 2018 BUILD grant application submitted to you by the City of Clinton. The City's proposed **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction** project will enhance economic development in our rural Clinton community, provide access to essential services to include broadband, fiber optics, enhanced storm water drainage and most of all provide a safe route, bolster pedestrian and bicyclist amenities, and support increased community vibrancy and better health outcomes. This project does not just improve the roadway surface but improves the quality of life to residents and business to include ensuring the older Veterans can travel safely to the place they can find comfort and solace.

The ability to improve this nearly 100 years old roadway that has been witnessed to more than 400 crashes in just the last 5 years alone, including an accident my father was in which resulted in his death. In addition, there have been several severe flooding incidents, for these reasons and more it is vital for improvements to be made to this roadway. As the Commander of the AMVETS Post 28, which has been located off Manufacturing Drive and Bluff Blvd for over 70 years, it is important that our Veterans population have a safe road to travel. The accessibility, with the completion of the project, will definitely have a positive impact on the number of veterans that would join and attend functions. We have over 400 members currently and have events almost daily to support our veterans. Military Veterans know the value of not only good roads, proper drainage but most of all accessibility.

The **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction** project is a necessary and worthwhile investment which will have an incredible impact on the future viability of the area. Consistent with the goals of the BUILD grant program, this project will improve safety, provide good a state of repair, foster innovation and provide a much-needed boost to economic vitality for not only the City but the surrounding region as well. For these reasons, I fully support this project.

Sincerely,

Cindy Hufford  
AMVETS Post #28 Commander



COMPANIES  
*Staffing • Trucking • Warehousing*

June 19, 2018

The Honorable Elaine L. Chao  
Secretary of Transportation  
US Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

RE: Support for the City of Clinton's **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction**  
BUILD Grant Application

Dear Secretary Chao:

I am proud to support the 2018 BUILD grant application submitted to you by the City of Clinton. The City's proposed **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction** project will enhance access to essential services, including multiple healthcare providers, provide a safe route for students from Clinton STEM Academy's Campus to the high school, bolster pedestrian and bicyclist amenities, and support increased community vibrancy and better health outcomes.

My company has been located off Manufacturing Drive for 25+ years and know firsthand what a game changer completing this project will be. Our fleet of 50 semi-trucks and 75+ employees are constantly on the move traversing both 21<sup>st</sup> Street and Manufacturing road. We know the value of not only good roads but proper drainage. Our property constantly gets storm water runoff and it adversely affects our business. The ability to improve this nearly 100 years old roadway that has been witnessed to more than 400 crashes in just the last 5 years alone in addition to severe flooding incidents over the last few years. This project includes the complete reconstruction of Manufacturing Drive and Bluff Boulevard from US Route 30 to 7th Avenue North

This project does not just improve the roadway surface but improves the quality of life to residents and business to include mine along the corridor by including the infrastructure necessary for future implementation of a high-speed fiber and broadband network. This infrastructure, which will position the City of Clinton to be a 21<sup>st</sup> century leader. . It includes numerous safety and environmental improvements to bring this road up to a good state of repair.

The **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction** project is a necessary and worthwhile investment which will have an intense impact on the future viability of the area. Consistent with the goals of the BUILD grant program, this project will improve safety, provide good a state of repair, foster innovation and provide a much-needed boost to economic vitality for not only the City but the surrounding region as well. For these reasons I fully support this project.

Sincerely,

A handwritten signature in blue ink that reads "Pete Clausen".

Pete Clausen  
Clausen Trucking

**Quality First. Safety Always.**

---

Phone 563-243-4995 | Fax 563-244-7421 | P.O. Box 67 | 2100 South 21<sup>st</sup> Street, Suite A | Clinton, IA 52733-0067

June 25, 2018

The Honorable Elaine L. Chao  
Secretary of Transportation  
US Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590



RE: **Support for the City of Clinton's Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction BUILD Grant Application**

Dear Secretary Chao:

On behalf of the Clinton Area Chamber of Commerce and the Clinton Progress Coalition, I offer our whole-hearted support of the City of Clinton's application for funding through the US Department of Transportation's BUILD Transportation Discretionary Grant Program.

The Chamber's mission is to be a voice for the business community in our region. Clinton Progress Coalition was formed to unite the various voices that represent our region - businesses, schools, industry, city and county governments, and social agencies. The Clinton Area Chamber of Commerce and the Clinton Progress Coalition are in agreement that the Manufacturing Drive and Bluff Boulevard reconstruction project - a total reconstruction and enhancement of the alignment from US Route 30 to 7<sup>th</sup> Avenue North to ensure the safe, efficient movement of people and goods for decades to come - is THE priority project for the City of Clinton.

Beyond improving safety and accessibility on this main artery, The BUILD-supported reconstruction project will allow the City of Clinton to make several environmental enhancements in the area. The project will enhance access to essential services, including multiple healthcare providers, a safe route for students from Clinton STEM Academy's Campus to the high school and will bolster pedestrian and bicyclist amenities, supporting both increased community vibrancy and better health outcomes. Furthermore, the project will include the infrastructure necessary for future implementation of a high-speed fiber and broadband network, which will position our community to be a 21<sup>st</sup> century leader and serve as a primary gateway to the area that has been identified as an "Opportunity Zone" by the US Department of the Treasury.

From our point of view, the BUILD-supported reconstruction project will improve safety on this main artery; offer our community the ability to provide state-of-the art telecommunications to existing and potential businesses and residents; diminish traffic congestion for the industries located on Manufacturing Drive; and create a more welcoming entrance to the center of our community.

We are a community focused on economic growth. The Clinton Area Chamber of Commerce and the Clinton Progress Coalition are pleased to support the City of Clinton's BUILD Grant application for the **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction**.

Sincerely,



Maureen Miller, President/CEO  
Clinton Area Chamber of Commerce



Robert Holesinger, Entrepreneur  
Clinton Progress Coalition

June 19, 2018

The Honorable Elaine L. Chao  
Secretary of Transportation  
US Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Re: Support for the City of Clinton's **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction** BUILD Grant Application

Dear Secretary Chao:

I would like to extend my support to the City of Clinton's application for the BUILD Discretionary Grant (BUILD Grant). The City's proposed project, known as the **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction**, is vital to the transportation connectivity and economy of not only the city but of the entire East Central Iowa region.

Completing the Manufacturing Drive and Bluff Boulevard reconstruction project – a total reconstruction and enhancement of the alignment from US Route 30 to 7th Avenue North – will ensure the safe, efficient movement of people and goods for decades to come. It will also serve as the primary transportation for multi-modal movement from the Confucius International Education Park to the Clinton High school.

In the initial year there will be up to 70 International students in the first year, however that number is set to grow to well over 300 in the coming years. In addition, we are working on actually hosting numerous STEM course at the campus which will see over 200 Clinton High School students taking Bluff Blvd back and forth between the two campuses.

Safety is vital to success of any educational endeavor and the more we can keep both local and International students safe the better. We are truly excited about this project to make movement between the two campuses safer but also assisting in storm water drainage that we have battled with the last several years as it comes down Springdale to Bluff Blvd.

I am pleased to support the City of Clinton's BUILD Grant application for the **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction**. This project is important to the economic vitality of the region; it will improve the quality of life and allow the City to improve the condition of key infrastructure.

Sincerely,

DocuSigned by:  
  
E8AA7B6C DCA94A0...

Brian Clem  
Clinton Catalyst

IOWA ECONOMIC DEVELOPMENT AUTHORITY

200 East Grand Avenue | Des Moines, Iowa 50309 USA | Phone: 515.725.3000  
iowaeconomicdevelopment.com



July 2, 2018

The Honorable Elaine L. Chao  
Secretary of Transportation  
US Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

RE: Support for the City of Clinton's **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction** BUILD Grant Application

Dear Secretary Chao:

On behalf of the Iowa Economic Development Authority (IEDA), it is my pleasure to submit this letter of support for the City of Clinton's application for funding through the US Department of Transportation's BUILD Transportation Discretionary Grant Program. The City of Clinton's BUILD Grant application is for the **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction**.

The IEDA's mission is to strengthen the economic and community vitality of communities across our state. A strong transportation network is imperative to our success. Completing the Manufacturing Drive and Bluff Boulevard reconstruction project – a total reconstruction and enhancement of the alignment from US Route 30 to 7<sup>th</sup> Avenue North – will ensure the safe, efficient movement of people and goods for decades to come.

The BUILD-supported reconstruction project will allow the City of Clinton to simultaneously improve the safety and capacity of the corridor all while making several environmental enhancements in the area. The project will also improve access to essential services, including multiple healthcare providers, a safe route for students from Clinton STEM Academy's Campus to the high school and will bolster pedestrian and bicyclist amenities, supporting both increased community vibrancy and better health outcomes. Furthermore, the project will include the infrastructure necessary for future implementation of a high-speed fiber and broadband network, which will position our community to be a 21<sup>st</sup> century leader and serve as a primary gateway to the area that has been identified as an "**Opportunity Zone**" by the US Department of the Treasury.

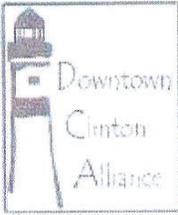
For the IEDA specifically, the BUILD-supported reconstruction project demonstrates the City of Clinton's commitment to creating an environment where its citizens and businesses can thrive. This project is important to the economic vitality of the region as it will improve the quality of life and allow the City to improve the condition of key infrastructure that is integral to economic development.

Sincerely,

A handwritten signature in blue ink, appearing to read "Debi Durham", with a large, sweeping flourish underneath.

Debi V. Durham  
Director





Downtown Clinton Alliance  
141 5<sup>th</sup> Avenue S.  
Clinton, IA 52732  
[Downtownclintonia@gmail.com](mailto:Downtownclintonia@gmail.com)  
(563) 321-2165

June 19, 2018

The Honorable Elaine L. Chao  
Secretary of the Department of Transportation  
1200 New Jersey Avenue, S.E.  
Washington, DC 20590

Dear Secretary Chao:

Our organization, the SSMID II (Self-Supporting Municipal Improvement District) for the downtown building owners support the City of Clinton's application for the BUILD Grant for Manufacturing Drive & Bluff Boulevard reconstruction.

We participated in our local planning session and it was such a positive meeting to see the cooperation and support of this project. The Downtown stakeholders and businesses see this opportunity to connect our downtown as Manufacture to Bluff will take you directly to the heart of our downtown. We have invested in bicycle lanes from downtown to Bluff and now with this project we can connect from Highway 30 to Manufacture/Bluff through the Downtown to the river front.

The benefits are more than just our Downtown, this project will support safety for school children, residents and overall traffic flow. The improvement to our flood controls, installation of high speed cable and will open doors to more businesses, housing and improved streets through-out the area.

We hope for your support for this significant transportation asset. This asset will benefit all of Clinton, especially we believe with regard to Downtown development and connectivity.  
Sincerely,

Timothy Clark  
President



To Whom It May Concern:

The Let's Live Healthy Lifestyle Coalition writes on behalf of supporting the Build Grant Project (BGP) involving the two major roadways; Manufacturing Drive and Bluff Boulevard. The LLHC coalition has a master plan including action plans in three areas – Move More, Eat Well and Feel Better. The BGP will benefit the quality of life specifically supporting the Move More action plans.

1. Sidewalk Maintenance Plan
  - a. Increase pedestrian and cyclist safety
  - b. Increase physical activity and improve fitness
2. Increase use of the bike network
  - a. Increase cyclist safety
  - b. Increase the number of people using the bike lanes/bike paths

The LLHC is made up of community leaders that are working to improve the health of the Clinton area. Members of the coalition consist of: ISU extension office, ASAC, Superintendent, City Manager, Assistant City Engineer, County Board, Public Health, Mercy Medical Center, YWCA, Clinton Community College, Clinton and Fulton Schools, PTO, and HyVee.

Respectfully submitted,

Andrea Barnett, MSHP, CWHC  
Community Health and Wellness Coordinator  
Mercy Medical Center  
1410 N. 4th St.  
Clinton, IA 52732  
[barnetta@mercyhealth.com](mailto:barnetta@mercyhealth.com)  
563-244-5801

Shannon Sander-Welzien  
YWCA Clinton, Executive Director  
(563)242-2110 x.101  
[ed@ywcaclinton.org](mailto:ed@ywcaclinton.org)

Michele Cullen RN,BS  
Community Health Manager  
(563) 244-4923  
fax (563) 242-7197  
[cullenm@genesishealth.com](mailto:cullenm@genesishealth.com)



The Lyons Business and Professional Association wholeheartedly supports the City of Clinton's BUILD application for Manufacturing Drive & Bluff Boulevard (MDBB).

First and foremost, the project perfectly fits the BUILD grant criteria. During a planning session, for every BUILD category, the MDBB project outranked, or tied, other projects because the project provides immediate, short term, and long term opportunities for the growth and development of Clinton.

Secondly, for the Association, the benefits are easily seen. By retaining business levels and growing businesses along MDBB, there are more consumers and residents. By building up housing, there are more consumers and residents with the added benefit of more housing for young professional families. By creating safety for thousands of school children, it brings families to town. The project provides a template for implementation of high speed cable. It also alleviates flooding and improves the environment. MDBB allows for countless other projects to develop along connecting corridors and side roads, i.e. permeable pavers which has transformed the Lyons District.

Finally, the template for why MDBB is perfect for BUILD becomes the template for the successful completion of Veteran's Memorial Drive. We want VMD to be developed to a similar state as MDBB, where for every category you can easily list the partners, the other grant matches, the public/private match, the development impact, the economic impact, the growth of quality of life, the bold and innovative engineering plans, etc... Like with MDBB, the council has started to grow VMD through commitments in the CIP and other means, which we thank the council for.

We are excited to support MDBB because we know it will transform the city and help open up development throughout the city.

Sincerely,

LBPA

PO Box 3214  
Clinton, IA 52732  
LBPAclintonIA@gmail.com  
[LBPAclintonIA.wixsite.com/LBPAclintonIA](http://LBPAclintonIA.wixsite.com/LBPAclintonIA)



## *Fleet & Transit Department*

---

Date: June 14, 2018

The Honorable Elaine L. Chao  
Secretary of Transportation  
US Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

RE: Support for the City of Clinton's **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction** BUILD Grant Application

Dear Secretary Chao:

As the Transportation Director for the City of Clinton's transit system Municipal Transit Administration(MTA), I am in full support of the 2018 BUILD grant application submitted to you by the City of Clinton.

The MTA has both fixed and para transit routes that utilize different sections of the proposed reconstruction area daily. The four (4) different fixed route buses are on this roadway at some point during their route every thirty(30) minutes throughout a twelve (12) hour day five (5) days a week and (7) seven hours on Saturdays.

Our transit passengers include students, adults, seniors and people with disabilities. These passengers maybe traveling from their homes to school, college, work, shopping and/or recreation, leisure. The fixed route buses are also equipped with bike racks as an added amenity for the bicyclists. Passengers are also able to download a bus app to see the location of the buses on the routes. Having bus shelters with technology throughout the proposed project area would also greatly enhance the transit system for the citizens of Clinton.

The City of Clinton's proposed project will provide safer routes for the MTA buses, new updated and modern bus shelter enhancements for transit riders, and provide a safe route for students from Clinton STEM Academy's Campus to the high school. The project is a necessary and worthwhile investment which will have a lasting and positive impact on the Clinton area. The project includes numerous safety and environmental improvements to bring this road up to a good state of repair.

Sincerely,

A handwritten signature in blue ink that reads "Dennis Hart". The signature is fluid and cursive.

Dennis Hart, Transportation Director

Phone: 563-242-3721  
Fax: 563-242-3793

<http://www.cityofclintoniowa.us/>

1320 South 2<sup>nd</sup> Street  
Clinton, Iowa 52732

6/18/18

The Honorable Elaine L. Chao  
Secretary of Transportation  
US Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

RE: Support for the City of Clinton's **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction**  
BUILD Grant Application

Dear Secretary Chao:

Nestlé Purina PetCare Company, which has operated a pet food manufacturing facility in Clinton since 1969, enthusiastically supports the City of Clinton's application for funding through the US Department of Transportation's BUILD Transportation Discretionary Grant Program.

Nestlé Purina's mission is to enrich the lives of pets and the people who love them, and this includes our employees and visitors to our facility, such as those who transport our products. A strong transportation network is imperative to our success. Completing the Manufacturing Drive and Bluff Boulevard reconstruction project – a total reconstruction and enhancement of the alignment from US Route 30 to 7<sup>th</sup> Avenue North – will ensure the safe, efficient movement of people and goods for decades to come.

The BUILD-supported reconstruction project will allow the City of Clinton to simultaneously enhance the safety and capacity of the corridor all while making several environmental enhancements in the area. The raising of the road over a foot and the widening of both bridges to allow for modification of both Mill and Harts Mill Creeks will be synchronized with Nestlé Purina's upcoming project to place a secondary dike on the north side of the property to help protect the plant from flooding. Furthermore, the project will include the infrastructure necessary for future implementation of a high-speed fiber and broadband network, which will position our community to be a 21<sup>st</sup> century leader and serve as a primary gateway to the area that has been identified as an "**Opportunity Zone**" by the US Department of the Treasury.

For Nestlé Purina specifically, the BUILD-supported reconstruction project will create a much safer entrance and exit to our location. We pride ourselves on the outstanding safety culture we have instilled in our factory for employees and visitors. This project, with the creation of the turn lanes, as well as the implementation of the roundabout near our entrance, will help alleviate unnecessary risk and aid in more efficient inbound and outbound truck traffic. We look forward to this reconstruction project and helping support it in any way we can.

We are pleased to support the City of Clinton's BUILD Grant application for the **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction**. This project is important to the economic vitality of the region; it will improve the quality of life and allow the City to improve the condition of key infrastructure.

Sincerely,



Roger Brecht  
Plant Manager  
Nestlé Purina  
Clinton, Iowa

To: Whom it may concern,

We would like to let you know that our entire group known as the Riverbend Bicycle Club unanimously supports this project. This route serves as a major transportation artery right in to the core of our community. To expand and improve this route to include and accommodate all forms of transportation from large trucks all the way down to pedestrians and cyclists can be nothing but a great thing for all of the people in this city. Thanks for giving this your consideration,

Chad Jensen

President,

Riverbend Bicycle Club

Owner,

The Bicycle Station



June 28, 2018  
The Honorable Elaine L. Chao  
Secretary of Transportation  
US Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

RE: Support for the City of Clinton's **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction** BUILD Grant Application

Dear Secretary Chao:

I am proud to support the 2018 BUILD grant application submitted to you by the City of Clinton. The City's proposed **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction** project will enhance access to essential services, including multiple healthcare providers, provide a safe route for students from Clinton STEM Academy's Campus to the high school, bolster pedestrian and bicyclist amenities, and support increased community vibrancy and better health outcomes.

The Sarah Harding Senior Living has been located on Bluff Blvd since the 1950's and know firsthand how important this would be to complete this project. Many residents at Sarah Harding continue to drive their vehicles. These vehicles are constantly traversing both Bluff Blvd and Manufacturing road. The ability to improve this nearly 100 years old roadway that has been witnessed to more than 400 crashes in just the last 5 years alone in addition to severe flooding incidents over the last few years. This project includes the complete reconstruction of Manufacturing Drive and Bluff Boulevard from US Route 30 to 7th Avenue North

This project does not just improve the roadway surface but improves the quality of life to residents of Sarah Harding the surrounding area to adding high-speed fiber and broadband network. This infrastructure, which will position the City of Clinton to be a 21<sup>st</sup> century leader. It also includes numerous safety and environmental improvements to bring this road up to a good state of repair.

The **Drive to Prosperity: Manufacturing Drive/Bluff Boulevard Reconstruction** project is a necessary and worthwhile investment which will have an intense impact on the future viability of the area. Consistent with the goals of the BUILD grant program, this project will improve safety, provide good a state of repair, foster innovation and provide a much-needed boost to economic vitality for not only the City but the surrounding region as well. For these reasons I fully support this project.

Sincerely,

A handwritten signature in black ink, appearing to read "DH", is written over a red vertical bar that runs down the left side of the page.

Douglas Haridge  
Executive Director

308 South Bluff • Clinton, IA 52732  
(563) 243-1341

**APPENDIX B**  
BENEFIT COST ANALYSIS SUMMARY

# Benefit-Cost Analysis: Backup Data



[Skip to main content](#) | [Notice](#) | [Sign Up for our e-Newsletter](#) | [Home](#)

[About the CMF Clearinghouse](#) | [Using CMFs](#) | [Developing CMFs](#) | [Additional Resources](#)

---

Home > CMF / CRF Details

## CMF / CRF Details

**CMF ID: 583**

**Introduce TWLTL (two-way left turn lanes) on rural two lane roads**

**Description:**

**Prior Condition: No Prior Condition(s)**

**Category: Roadway**

**Study: Safety Evaluation of Installing Center Two-Way Left-Turn Lanes on Two-Lane Roads, Persaud et al., 2008**

Star Quality Rating: ★★★★★

Crash Modification Factor (CMF)

Value:	0.64
Adjusted Standard Error:	0.04
Unadjusted Standard Error:	0.03

Crash Reduction Factor (CRF)

Value:	36 <i>(This value indicates a decrease in crashes)</i>
Adjusted Standard Error:	4
Unadjusted Standard Error:	3

Applicability

Crash Type:	All
Crash Severity:	All
Roadway Types:	Not specified
Number of Lanes:	2
Road Division Type:	
Speed Limit:	



[Skip to main content](#) | [Notice](#) | [Sign Up for our e-Newsletter](#) | [Home](#)

[About the CMF Clearinghouse](#) | [Using CMFs](#) | [Developing CMFs](#) | [Additional Resources](#)

---

Home > CMF / CRF Details

## CMF / CRF Details

**CMF ID: 3017**

**Add Two-Way-Left-Turn-Lane (TWLTL) to the major approach of an unsignalized 4-leg intersection**

**Description: Add Two-Way-Left-Turn-Lane (TWLTL) to the major approach of an unsignalized 4-leg intersection**

**Prior Condition: unsignalized 4-leg intersection with no two-way left-turn lane on major road**

**Category: Access management**

**Study: The Group Least Absolute Shrinkage and Selection Operator "GLASSO" Technique: Application in Variable Selection and Crash Prediction at Unsignalized Intersections, Haleem and Abdel-Aty, 2010**

Star Quality Rating: ★★★★★ [\[View score details\]](#)

Crash Modification Factor (CMF)

Value:	0.66
Adjusted Standard Error:	
Unadjusted Standard Error:	

Crash Reduction Factor (CRF)

Value:	34 <i>(This value indicates a decrease in crashes)</i>
Adjusted Standard Error:	
Unadjusted Standard Error:	

Applicability

Crash Type:	All
Crash Severity:	All
Roadway Types:	Not Specified
Number of Lanes:	2 to 8

**Table A-1: Value of Reduced Fatalities and Injuries**

Recommended Monetized Value(s)				References and Notes
MAIS Level	Severity	Fraction of VSL	Unit value (\$2017)	<i>Guidance on Treatment of the Economic Value of a Statistical Life in U.S. Department of Transportation Analyses (2016)</i> <a href="https://www.transportation.gov/office-policy/transportation-policy/revised-departmental-guidance-on-valuation-of-a-statistical-life-in-economic-analysis">https://www.transportation.gov/office-policy/transportation-policy/revised-departmental-guidance-on-valuation-of-a-statistical-life-in-economic-analysis</a>
MAIS 1	Minor	0.003	\$28,800	
MAIS 2	Moderate	0.047	\$451,200	
MAIS 3	Serious	0.105	\$1,008,000	
MAIS 4	Severe	0.266	\$2,553,600	
MAIS 5	Critical	0.593	\$5,692,800	
Fatal	Not Survivable	1.000	\$9,600,000	
<b>KABCO Level</b>		<b>Monetized Value</b>		<b>Note:</b> The KABCO level values shown result from multiplying the KABCO-level accident's associated MAIS-level probabilities by the recommended unit Value of Injuries given in the MAIS level table, and then summing the products. Accident data may not be presented on an annual basis when it is provided to applicants (i.e. an available report requested in Fall 2011 may record total accidents from 2005-2010). For the purposes of the BCA, is important to annualize data when possible.
O – No Injury		\$3,200		
C – Possible Injury		\$63,900		
B – Non-incapacitating		\$125,000		
A – Incapacitating		\$459,100		
K – Killed		\$9,600,000		
U – Injured (Severity Unknown)		\$174,000		
# Accidents Reported (Unknown if Injured)		\$132,200		

**Table A-2: Property Damage Only (PDO) Crashes**

Recommended Monetized Value(s)	Reference and Notes
\$4,327 per vehicle (\$2017)	<i>The Economic and Societal Impact of Motor Vehicle Crashes, 2010 (revised May 2015), Page 12, Table 1-2, Summary of Unit Costs, 2000".</i>  Inflated to 2017 dollars using the GDP Deflator.

### Time Travel Savings

Travel Times Savings (Synchro)			
	No-Build (hr)	Build (hr)	Total Travel Times Savings (hr)
Travel Time* (2018)	129	113	16
Travel Time* (2040)	166	139	27

\*Based on Synchro results on Measure Of Effectiveness dated 7/02/2018 using network totals.

Hourly Value of Travel Time Savings	
Year	Travel Times Savings (\$/per/hr)
2017*	\$ 14.80
2018 (3% inflation)	\$ 15.24

\*Table A-3, Benefit-Cost Analysis Guidance for Discretionary Grant Programs (USDOT) (June, 2018)

Total Travel Time Savings			
Year	Travel Times Savings (hr)	Travel Times Savings (\$ per person-hr)	Travel Times Savings (\$)
2018	16.00		
2019	16.48		
2020	16.96	\$ 15.24	\$ 94,300
2021	17.43	\$ 15.24	\$ 97,000
2022	17.91	\$ 15.24	\$ 99,700
2023	18.39	\$ 15.24	\$ 102,300
2024	18.87	\$ 15.24	\$ 105,000
2025	19.35	\$ 15.24	\$ 107,700
2026	19.83	\$ 15.24	\$ 110,300
2027	20.30	\$ 15.24	\$ 113,000
2028	20.78	\$ 15.24	\$ 115,600
2029	21.26	\$ 15.24	\$ 118,300
2030	21.74	\$ 15.24	\$ 121,000
2031	22.22	\$ 15.24	\$ 123,600
2032	22.70	\$ 15.24	\$ 126,300
2033	23.17	\$ 15.24	\$ 128,900
2034	23.65	\$ 15.24	\$ 131,600
2035	24.13	\$ 15.24	\$ 134,300
2036	24.61	\$ 15.24	\$ 136,900
2037	25.09	\$ 15.24	\$ 139,600
2038	25.57	\$ 15.24	\$ 142,200
2039	26.04	\$ 15.24	\$ 144,900
2040	27.00	\$ 15.24	\$ 150,200.00
<b>Total Travel Time Savings =</b>			<b>\$ 2,542,700.00</b>

**Safety Benefits**  
**Manufacturing Dr. & Bluff Blvd (Hwy 30 to N. 4th St.)**

Safety Benefits (5 Yr)				
Crash Type	# Crashes	CMF*	Value of Reduced Fatalities and Injuries**	Total Safety Benefits (5 Yr)
No Injury	263	0.64	\$ 3,296.00	\$ 312,100.00
Possible Injury/Non-Incapacitating	95	0.64	\$ 97,283.50	\$ 3,327,100.00
Incapacitating	6	0.64	\$ 472,873.00	\$ 1,021,400.00
Killed	2	0.64	\$ 9,888,000.00	\$ 7,119,400.00
<b>Total Safety Benefits (5 Yr) =</b>				<b>\$ 11,780,000.00</b>

\*CMF Clearinghouse (TWLTL on Rural Two Lane Roads)

\*\*Table A-1, Benefit-Cost Analysis Guidance for Discretionary Grant Programs (USDOT) (June, 2018) (Adjusted 3% for 1 yr inflation)

Safety Benefits (20 Yr)	
5-Year Increment	Total Safety Benefits (5 Yr)
2020-2025	\$ 11,780,000.00
2025-2030	\$ 11,780,000.00
2030-2035	\$ 11,780,000.00
2035-2040	\$ 11,780,000.00
<b>Total Safety Benefits (20 Yr) =</b>	<b>\$ 47,120,000.00</b>

Intersection Data	
<p>Road Segment Safety Rating <span style="float: right;">#6</span></p> <p style="text-align: center;"><b>Manufacturing Drive &amp; Bluff Blvd</b>                      Highway 30 to North 4th Street</p> <p>Notes: 102/365 crashes included injuries                      Notes: 6 major injury crashes, 1 fatality</p> <p style="text-align: right;">5.08 / MVMT</p> <p>Estimated Collision Rate:</p>	<p>Pattern: 146/365 accidents are rear end collisions                      Sideswipe collisions on Bluff &amp; FTY through</p> <p>Recommendation: Consistent Road Cross Section would help                      Three Lane Conversion of Bluff Blvd                      Re-aligning all skewed intersections would help                      Widening of Manufacturing Drive is necessary                      Maintain a consistent speed limit of 35 MPH</p> <p>Action: Replace entire 4 mile corridor with a 3 Lane Road Section, including all intersection rebuilds</p>

**Safety Benefits**  
**Intersection (Bluff Blvd, 7th Ave. S., & Thorwaldson)**

Safety Benefits (5 Yr.)				
Crash Type	5-Yr Crash Ct.	CMF*	Value of Reduced Fatalities and Injuries**	Total Safety Benefits
No Injury/Possible Injury	39	0.64	\$ 34,556.50	\$ 485,200.00
<b>Total Safety Benefits (5 Yr.) =</b>				<b>\$ 485,200.00</b>

\*CMF Clearinghouse (TWLTL on Rural Two Lane Roads) (Only data for intersections is 0.66 for "unsignalized"; Use 0.64, same as for twltl)

\*\*Table A-1, Benefit-Cost Analysis Guidance for Discretionary Grant Programs (USDOT) (June, 2018) (Adjusted 3% for 1 yr inflation)

Safety Benefits (20 Yr.)	
5-Year Increment	Total Safety Benefits
2020-2025	\$ 485,200.00
2025-2030	\$ 485,200.00
2030-2035	\$ 485,200.00
2035-2040	\$ 485,200.00
<b>Total Safety Benefits (20 Yr) =</b>	<b>\$ 1,940,800.00</b>

Intersection Data	
<b>Intersection Safety Ranking:</b> #2  <b>Bluff Blvd, 7th Ave S, &amp; Thorwaldsen</b>  Notes: Many Accidents include minor injuries	<b>Pattern:</b> Many of these accidents are FTY or improper lane use  <b>Recommendation:</b> Increase signal phase timing Re-align intersection Convert Bluff to 3 Lane Update all Traffic Signal features  <b>Action:</b> Full Reconstruction of Intersection in 2020
<b>Estimated Collision Rate:</b> 1.64 / MEV	

Safety Benefits  
Intersection (Manufacturing Dr. & Valley West Dr.)

Safety Benefits (5 Yr.)				
Crash Type	5-Yr Crash Ct.	CMF*	Value of Reduced Fatalities and Injuries**	Total Safety Benefits
No Injury/Possible Injury	23	0.64	\$ 3,296.00	\$ 27,300.00
<b>Total Safety Benefits (5 Yr.) =</b>				<b>\$ 27,300.00</b>

\*CMF Clearinghouse (TWLTL on Rural Two Lane Roads) (Only data for intersections is 0.66 for "unsignalized"; Use 0.64, same as for twltl)

\*\*Table A-1, Benefit-Cost Analysis Guidance for Discretionary Grant Programs (USDOT) (June, 2018) (Adjusted 3% for 1 yr inflation)

Safety Benefits (20 Yr.)	
5-Year Increment	Total Safety Benefits
2020-2025	\$ 27,300.00
2025-2030	\$ 27,300.00
2030-2035	\$ 27,300.00
2035-2040	\$ 27,300.00
<b>Total Safety Benefits (20 Yr) =</b>	<b>\$ 109,200.00</b>

Intersection Data	
<b>Intersection Safety Ranking:</b> #9  <b>Manufacturing Drive &amp; Valley West Dr</b>  Notes: Most Accidents are property damage only	<b>Pattern:</b> Not an extreme pattern  <b>Recommendation:</b> Drive 4 to 3 Lane conversion Manuf Roundabout if demand increases
<b>Estimated Collision Rate:</b> 1.10 / MEV	<b>Action:</b> Three Lane Conversion on Manuf Dr. 2020 – with reconstruction project

Intersection Crash Rates							
Intersection	Entering Per Day	MEV Per Year	5 Yr Crash Ct	Intersection	Crashes Per MEV	Signal Present	Warranted
Mill Creek Parkway & 16th St NW	8044	2.93606	30	Mill Creek Parkway & 16th St NW	2.043554968	No	No
7th Avenue S, Bluff Blvd, & Thorwaldsen	13065	4.768725	39	7th Avenue S, Bluff Blvd, & Thorwaldsen	1.63565733	Yes	Yes
7th Avenue S & S 4th St	9394	3.42881	28	7th Avenue S & S 4th St	1.633219688	Yes	Yes
19th Ave N & N 3rd St	10275	3.750375	27	19th Ave N & N 3rd St	1.439856014	Yes	Yes
8th Avenue South & South 4th Street	11208	4.09092	6	8th Avenue South & South 4th Street	1.466662756	Yes	Yes
2nd Ave S & S 11th St	6883	2.51220375	6	2nd Ave S & S 11th St	1.194170656	No	No
Main Avenue & North 3rd Street	14276	5.21074	30	Main Avenue & North 3rd Street	1.15146793	Yes	Yes
13th Avenue North & N 11th St	12866	4.69609	27	13th Avenue North & N 11th St	1.149892783	Yes	Yes
Manufacturing Drive & Valley West Dr.	11506	4.19969	23	Manufacturing Drive & Valley West Dr.	1.09531894	Yes	Yes
Mill Creek Parkway & 13th Ave N	10544	3.84856	21	Mill Creek Parkway & 13th Ave N	1.091317272	No	Yes
Lincolnway & Mill Creek Parkway	14609	5.332285	25	Lincolnway & Mill Creek Parkway	0.937684314	Yes	Yes
Lincolnway & South 14th Street	19477	7.109105	33	Lincolnway & South 14th Street	0.928386907	Yes	Yes
Lincolnway & Highway 67	23709	8.653785	40	Lincolnway & Highway 67	0.924450977	Yes	Yes
19th Ave N & N 2nd St	18685	6.8198425	23	19th Ave N & N 2nd St	0.67450238	Yes	Yes
South 14th St & Bluff	16600	6.059	20	South 14th St & Bluff	0.660174946	Yes	Yes

**CITY OF CLINTON ENGINEERING DEPARTMENT**  
**MANUFACTURING DRIVE / BLUFF BLVD RECONSTRUCTION**  
**ORIGINAL PRELIMINARY COST ESTIMATE**

ITEM NO.	ITEM CODE	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	EXTENTION
<b>Manufacturing Dr - US 30 to UPRR Crossing</b>						
1		2" Resurfacing Overlay	Ton	1,500	\$ 100.00	\$ 150,000.00
2		7-9" PCC Street Pavement on 12" Sub-Base	SY	6,358	\$ 60.00	\$ 381,480.00
3		4" PCC Sidewalk	SY	1,413	\$ 35.00	\$ 49,455.00
4		5" PCC Trail	SY	2,769	\$ 35.00	\$ 96,915.00
5		Remove Pavement	SY	6,358	\$ 10.00	\$ 63,580.00
6		Earth Excavation	CY	5,750	\$ 12.00	\$ 69,000.00
7		Strip, Stockpile, Respread Topsoil	CY	750	\$ 20.00	\$ 15,000.00
8		RCP Storm Sewer	LF	2,790	\$ 60.00	\$ 167,400.00
9		Storm Intake	EA	20	\$ 3,000.00	\$ 60,000.00
10		6" Longitudinal Subdrain	LF	5,200	\$ 8.00	\$ 41,600.00
11		Seeding, Fertilizing, & Mulching	Acre	1.3	\$ 7,500.00	\$ 9,750.00
12		Subgrade Stabilization	Ton	500	\$ 30.00	\$ 15,000.00
13		Pavement Markings	LF	10,160.0	\$ 1.00	\$ 10,160.00
14		Roadway Lighting	EA	17	\$ 5,000.00	\$ 85,000.00
15		Fiber Ductbank	LF	2,601	\$ 35.00	\$ 91,035.00
16		Traffic Control	LS	1	\$ 25,000.00	\$ 25,000.00
17		Erosion & Sedimentation Control	LS	1	\$ 25,000.00	\$ 25,000.00
18		Bio Features, Bio Cells, Trees, Bushes	LS	1	\$ 50,000.00	\$ 50,000.00
19		Mobilization (5%)	LS	1		\$ 70,300.00
Subtotal Construction Cost						\$ 1,405,375.00
<b>Manufacturing Dr - Valley W Ct Intersection</b>						
1		7-9" PCC Street Pavement on 12" Sub-Base	SY	2,493	\$ 60.00	\$ 149,580.00
2		4" PCC Sidewalk	SY	235	\$ 35.00	\$ 8,225.00
3		5" PCC Trail	SY	343	\$ 35.00	\$ 12,005.00
4		Remove Pavement	SY	2,493	\$ 10.00	\$ 24,930.00
5		Earth Excavation	CY	750.0	\$ 12.00	\$ 9,000.00
6		Strip, Stockpile, Respread Topsoil	CY	100.0	\$ 20.00	\$ 2,000.00
7		RCP Storm Sewer	LF	100.0	\$ 60.00	\$ 6,000.00
8		Storm Intake	EA	2	\$ 3,000.00	\$ 6,000.00
9		6" Longitudinal Subdrain	LF	635	\$ 8.00	\$ 5,080.00
10		Seeding, Fertilizing, & Mulching	Acre	0.2	\$ 7,500.00	\$ 1,500.00
11		Subgrade Stabilization	Ton	50	\$ 30.00	\$ 1,500.00
12		Roadway Lighting	EA	2	\$ 5,000.00	\$ 10,000.00
13		Fiber Ductbank	LF	317	\$ 35.00	\$ 11,095.00
14		Traffic Control	LS	1	\$ 25,000.00	\$ 25,000.00
15		Erosion & Sedimentation Control	LS	1	\$ 25,000.00	\$ 25,000.00
16		Bio Features, Bio Cells, Trees, Bushes	LS	1	\$ 50,000.00	\$ 50,000.00
17		Mobilization (5%)	LS	1		\$ 17,300.00
Subtotal Construction Cost						\$ 346,915.00

Manufacturing Dr - UPRR Crossing to College Ave						
1		7-9" PCC Street Pavement on 12" Sub-Base	SY	35,490	\$ 60.00	\$ 2,129,400.00
2		4" PCC Sidewalk	SY	4,393	\$ 35.00	\$ 153,755.00
3		5" PCC Trail	SY	5,138	\$ 35.00	\$ 179,830.00
4		Remove Pavement	SY	35,490	\$ 10.00	\$ 354,900.00
5		Bridge Construction	LF	376.0	\$ 5,750.00	\$ 2,162,000.00
6		Earth Excavation	CY	12,500.0	\$ 12.00	\$ 150,000.00
7		Strip, Stockpile, Respread Topsoil	CY	1,600.0	\$ 20.00	\$ 32,000.00
8		RCP Storm Sewer	LF	6,308	\$ 60.00	\$ 378,480.00
9		Storm Intake	EA	44	\$ 3,000.00	\$ 132,000.00
10		6" Longitudinal Subdrain	LF	11,190	\$ 8.00	\$ 89,520.00
11		Seeding, Fertilizing, & Mulching	Acre	2.6	\$ 7,500.00	\$ 19,500.00
12		Subgrade Stabilization	Ton	1,000	\$ 30.00	\$ 30,000.00
20		Traffic Signalization	EA	2	\$ 150,000.00	\$ 300,000.00
21		Rail Road Crossing	LS	1	\$ 125,000.00	\$ 125,000.00
22		Pavement Markings	LF	21,000	\$ 1.00	\$ 21,000.00
23		Roadway Lighting	EA	37	\$ 5,000.00	\$ 185,000.00
24		Fiber Ductbank	LF	5,595	\$ 35.00	\$ 195,825.00
25		Bus Stop	EA	1	\$ 20,000.00	\$ 20,000.00
26		Traffic Control	LS	1	\$ 50,000.00	\$ 50,000.00
27		Erosion & Sedimentation Control	LS	1	\$ 50,000.00	\$ 50,000.00
28		Bio Features, Bio Cells, Trees, Bushes	LS	1	\$ 150,000.00	\$ 150,000.00
29		Mobilization (5%)	LS	1		\$ 345,400.00
Subtotal Construction Cost						\$ 6,908,210.00
Bluffs Blvd - College Ave to North 5th Street						
1		7-9" PCC Street Pavement on 12" Sub-Base	SY	74,652	\$ 65.00	\$ 4,852,380.00
2		4" PCC Sidewalk	SY	8,137	\$ 35.00	\$ 284,795.00
3		5" PCC Trail	SY	2,125	\$ 35.00	\$ 74,375.00
4		Remove Pavement	SY	74,652	\$ 10.00	\$ 746,520.00
5		Retaining Walls	SF	8,480.0	\$ 100.00	\$ 848,000.00
6		Earth Excavation	CY	27,500.0	\$ 12.00	\$ 330,000.00
7		Strip, Stockpile, Respread Topsoil	CY	3,300.0	\$ 20.00	\$ 66,000.00
8		RCP Storm Sewer	LF	13,180	\$ 60.00	\$ 790,800.00
9		Storm Intake	EA	90	\$ 3,000.00	\$ 270,000.00
10		6" Longitudinal Subdrain	LF	22,920	\$ 8.00	\$ 183,360.00
11		Seeding, Fertilizing, & Mulching	Acre	5.3	\$ 7,500.00	\$ 39,750.00
12		Subgrade Stabilization	Ton	2,000	\$ 30.00	\$ 60,000.00
20		Traffic Signalization	EA	3	\$ 150,000.00	\$ 450,000.00
21		Pavement Markings	LF	42,630	\$ 1.00	\$ 42,630.00
22		Roadway Lighting	EA	76	\$ 5,000.00	\$ 380,000.00
23		Fiber Ductbank	LF	11,460	\$ 35.00	\$ 401,100.00
24		Bus Stop	EA	1	\$ 20,000.00	\$ 20,000.00
25		Traffic Control	LS	1	\$ 100,000.00	\$ 100,000.00
26		Erosion & Sedimentation Control	LS	1	\$ 100,000.00	\$ 100,000.00
27		Bio Features, Bio Cells, Trees, Bushes	LS	1	\$ 150,000.00	\$ 150,000.00
28		Mobilization (5%)	LS	1		\$ 509,500.00
Subtotal Construction Cost						\$ 10,699,210.00
A		SUBTOTAL CONSTRUCTION COST				\$ 19,359,710.00
B		CONTINGENCY (20%)				\$ 3,871,900.00
C		<b>TOTAL CONSTRUCTION COST</b>				<b>\$ 23,231,610.00</b>
D		RIGHT-OF-WAY ACQUISITION				\$ 800,000.00
E		DESIGN ENGINEERING (10%)				\$ 2,323,000.00
F		CONSTRUCTION ENGINEERING (10%)				\$ 2,323,000.00
G		<b>TOTAL PROJECT COST</b>				<b>\$ 28,677,610.00</b>

## Benefit Cost Analysis

Total Benefits	
Time Travel Savings	\$ 2,543,000.00
Safety (Roadway Segment)	\$ 47,120,000.00
Safety (Intersections)	\$ 2,050,000.00
<b>Total Benefits =</b>	<b>\$ 51,713,000.00</b>

Total Costs	
Cost Estimate	\$ 28,678,000.00
<b>Total Benefits =</b>	<b>\$ 28,678,000.00</b>

**Benefit/Cost = 1.84**

**APPENDIX C**  
NEPA SUMMARY

**NEPA STATUS**

To meet the NEPA requirements for the BUILD Grant application, an environmental review of the project corridor was completed using available databases. The NEPA review included the following:

- Woodlands
- Threatened/Endangered Species
- Right-of-Way and Displacements
- Cultural Resources (National Register of Historic Places and archaeological resources)
- Floodplains and Water Quality
- Wetlands
- Farmland
- Parks and Section 6(f) Lands
- Regulated Materials Sites
- Noise Impacts
- Pedestrian and Bicycle Facilities
- Air Quality
- Environmental Justice Communities
- Visual Impacts
- Construction/Detour Impacts
- Safety
- Utilities
- Mitigation Measures

1. **Woodlands:** Wooded areas are located along the bluff beginning just south of 14th Street and extending north to the end of the project at 7th Ave North. Wooded areas in excess of 2 acres are protected by Iowa law and would require mitigation. In addition, cutting trees would have to be done in compliance with the Migratory Bird Act to minimize impact to migrating birds. Given the small amount of right-of-way anticipated for this project, impacts to woodlands are expected to be minor.
2. **Threatened/Endangered Species:** A total of 80 state and federally-listed species are shown on Iowa DNR’s Natural Areas Inventory for Clinton County, Iowa. Coordination with Iowa DNR and USFWS will be conducted to obtain a more project-specific list as the project moves forward. However, given the urban setting of this project, along with the small amount of right-of-way anticipated to be needed, it is unlikely that threatened or endangered species will be encountered. Appropriate mitigation measures will be taken if protected species or their habitat are encountered.
3. **Right-of-Way and Displacements:** The exact amount of right-of-way is not known at this time but the project will be done within existing right-of-way limits as much as possible to minimize impacts to adjacent properties. Two homes may be displaced at intersections where it is necessary to realign the intersecting side streets to improve safety and engineering geometrics. These intersections are South Bluff Blvd and Manufacturing Drive; and 4th Ave North and North Bluff Blvd. Compensatory mitigation for property acquisitions will be based on fair market value and will be given without discrimination.
4. **Cultural Resources:** A Phase 1A Cultural Resources review was conducted in June, 2018 by the Office of the State Archaeologist. Based on this review, a National Register of Historic Places listed district, the Castle Terrace Historic District was noted. If right-of-way is required north of Bluff Blvd and/or 8th Ave S, then consultation with the State Historic



Preservation Office (SHPO) will be required. Given the size of the project and relatively high potential for containing archaeological deposits, a Phase 1 archaeological survey is recommended. The Phase 1A Cultural Resources Evaluation is [here](#).

- 5. Floodplains and Water Quality:** Two streams are located at the southern end of the project: Harts Mill Creek and Mill Creek. From Lincoln Way (U.S. 30) to approximately S. 19th Street, Manufacturing Drive EPA's NEPAassist shows FEMA 100-year floodplain and the floodway related to these creeks (Figure 1). The bridges over both creeks are proposed to be replaced as part of this project. The bridges will be designed so that there is no rise in the surface elevation of the streams. An Iowa DNR Floodplain Development Permit and Section 404 Permit will be obtained during final design. Best practices will be employed during construction to minimize temporary impacts to water quality during construction. A National Pollutant Discharge Elimination System (NPDES) permit will be obtained from Iowa DNR and a Stormwater Pollution Prevention Plan (SWPPP) will be prepared as part of the NPDES.
- 6. Wetlands:** Waters of the US include wetlands, streams, rivers, etc and are regulated by the US Army Corps of Engineers (USACE). For impacts over 0.1 acre, a Section 404 permit is required. Using USFWS Wetland Mapper, forested wetlands were shown adjacent to Mill Creek (Figure 2). Field delineations will be conducted as the project moves into final design to determine wetland impacts. Permitting and any required mitigation will be done in coordination with Iowa DNR and USACE.
- 7. Farmland:** There is no farmland in the project corridor.
- 8. Parks and Section 6(f) Lands:** One park is located adjacent to the project corridor. Neubauer Park, a city-owned park, located at 7th Ave S and S Bluff Blvd, is 1.1 acres and has a gazebo and playground. Efforts will be made to avoid this park since it would fall under Section 4(f). According to Iowa DNR's Land and Water Conservation Fund webpage, this park nor any other land along the corridor falls under Section 6(f).
- 9. Regulated Materials Sites:** Using Iowa DNR Facility Explorer, a total of six leaking underground storage tanks were found along the project corridor. All but one have received a No Action Required closure from Iowa DNR. The sixth site has been designated as low risk. Impacts to these properties will be determined as the project is developed and appropriate acquisition recommendations will be made as necessary. Should any contaminated material be encountered during construction, it will be handled in accordance with state and federal regulations.
- 10. Noise Impacts:** Projects to increase capacity of a roadway require a noise analysis. This will be done using the most recent FHWA TNM software as the project is developed. It is not anticipated that significant noise impacts will occur warranting mitigation measures such as a noise wall.
- 11. Pedestrian and Bicycle Facilities:** This project proposes to construct recreational trail along the entire length. The bike trail would connect residential area of Bluff Blvd to Valley Bluff commercial shopping district. Sidewalk would be reconstructed on the south side of the roadway. This enhancement would improve access to Bluff Elementary School and bike trail along Manufacturing Drive.

- 12. Air Quality:** This project is not expected to have significant impact on air quality and will comply with both Iowa's current State Implementation Plan for attaining the national ambient air quality standards (which contains no transportation control measures), and with the conformity requirements for the Clean Air Act Amendments of 1990. Short-term air quality impacts associated with dust and equipment emissions during construction are controlled by standard contract and equipment specifications.
- 13. Environmental Justice (EJ) Communities:** EJ populations are protected from disproportionate impacts due to a project. Using US Census Bureau and EPA's EJ Screen, populations of minority, low income and older (over 64 years) persons were identified (Figures 3-5). In the northeast portion of the project area (1st Ave N to 7th Ave N, east of N Bluff Blvd), there is a population of low income persons. In the bluff area of the project, west of S Bluff Blvd, there is a high population of persons over 64 years of age. Although there are these areas as well as other pockets of EJ populations, this project would not have a disproportionate impact on them. This project would improve the existing roadway and add pedestrian accommodations to the transportation facility which would benefit these populations as well as the community as a whole. In addition, an Opportunity Zone overlaps the project area (Figure 6). Opportunity Zones, a new tax advantage program through the US Treasury, are created in low income areas to spur economic growth and investment through private development. The improvement of Manufacturing Drive would be one element or step towards encouraging development in the designated Opportunity Zone.
- 14. Visual Impacts:** No detrimental impacts to the viewshed are anticipated. A new roadway with bike trail and sidewalk would be a benefit to the visual appeal of Manufacturing Drive.
- 15. Construction/Detour Impacts:** Traffic flow on Manufacturing Drive will be restricted throughout the construction period in order to accommodate a phased construction method. The use of a phase construction method eliminates the need for road closures during construction. Access to adjacent businesses will be available throughout construction to minimize impact to them.
- 16. Safety:** Improving Manufacturing Drive is expected to reduce crash rates. A new 3-lane roadway with a center turn lane as well as right turn lanes at key intersections would help with peak hour traffic congestion. Several skewed intersections would be realigned so that they are at 90 degrees which would improve sight distance and safety. Also adding bike trail and sidewalks would allow pedestrians to safely use the corridor.
- 17. Utilities:** This project will require coordination with a number of utilities including: Alliant Energy; Iowa Hospital Association; CenturyLink; Iowa American Water Company (IWC); MidAmerican Energy; Windstream Communications; Iowa Communications Network; Unite Private Networks, LLC; Mediacom Broadband, LLC; and city of Clinton. This project also includes separation of storm and sanitary sewer which will benefit local residents by reducing potential basement backups. During design, utility relocation plans will be developed in coordination with utility providers to accommodate their presence and minimize disruptions.

**18. Mitigation Measures:** No specific mitigation measures have been identified or developed at this time. As the project moves into design, there could be need to mitigate wetlands, woodlands, and parks may be needed. Compensatory mitigation will be based on fair market value for right-of-way acquired as part of the project. Depending on the depth and extent of excavation for the proposed improvements, it is possible that chemical and/or petroleum contaminated soils could be encountered. Any contaminated soils that are disturbed should be segregated and stockpiled until it can be transported to an appropriate landfill. Other construction contractors will be expected to follow standard Best Management Practices (BMPs) throughout construction.

