

FY2022 RAISE Grant

City of West Monroe

BENEFIT COST ANALYSIS SUMMARY

Introduction

The proposed West Monroe RAISE Grant will create connectivity throughout the six primary components of the West Monroe Revitalization Project. The local commercial and residential areas will receive substantial benefits from reconstructing deficient roadways, adding shared use pedestrian facilities, improving drainage, burying aging utilities, and redesigning streetscapes.

Currently, the City lacks multimodal transportation options to access recreational and business areas throughout the City. Due to a lack of sidewalks, or the deteriorating conditions of existing sidewalks, and insufficient lighting and pedestrian amenities, access to key destinations throughout the City is largely limited to vehicular travel. The City is seeking funding to create greater connectivity and a safer environment for both pedestrians and vehicular travelers, by innovative design techniques such as road diets and the “complete streets” concept to rehabilitate roadways, construct lighted sidewalks, and improve pedestrian crossings. . Through these improvements local residents, visitors, and businesses will gain increased mobility and access to goods and services throughout the City. In addition, the infrastructure improvements will remove transportation barriers impacting underserved areas and provide greater livability and connectivity within the City.

Baseline Conditions

The completion of the West Monroe RAISE Grant is vital to create safe and efficient travel options for multimodal transportation throughout West Monroe. As described in the Narrative, many of the project components are beyond their service life or lacking the necessary facilities, creating unsafe travel conditions for all modes of transportation.

Pedestrians

Currently, the proposed project components lack sidewalks or contain existing sidewalks that are sporadic, lacking proper ADA compliant accessibility, in disrepair and narrow. The lack of pedestrian infrastructure disconnects local, underserved communities from essential goods, services and resources offered by the city, businesses, and local organizations.

Bicycles

The city has made great efforts in recent years to incorporate shared use paths wherever possible. Currently, there are no dedicated shared use paths and anyone who opts to commute via bicycle must ride in the roadway creating hazards for both the cyclist and vehicular traffic. The Highland Park component of this project is the beginning of the planned connectivity the shared use paths would create throughout the city to safely connect the local communities to goods, services, and recreational activities.

Vehicles

Multiple areas within the project components have roadways and subsurface infrastructure that are beyond their service life. Subsurface infrastructure failures lead to unsafe, delayed travel conditions during wet weather. The lack of proper pedestrian facilities creates hazards for vehicular commuters while navigating the roadways.

Proposed Improvements

1. Highland Park

Highland Park has been a high priority project for the city for several years to address flooding, incorporate shared use paths, and develop commercial and residential property within to benefit the surrounding community. The surrounding roadway improvements were identified as priority projects in the city's 2045 Metropolitan Transportation Plan. The proposed improvements will bring about better connectivity and safer multimodal transportation opportunities for non-vehicular traffic traveling to and from the commercial centers and recreational amenities.

2. Trenton Street Corridor

Providing connectivity between Highland Park and Downtown West Monroe, the Trenton Street Corridor improvements include road rehabilitation, drainage improvements, aesthetic lighting, and a new shared use path with environmentally

sustainable green buffers. The improvements throughout this corridor will greatly increase safety for pedestrians and vehicular travel alike. Over the last 10 years approximately every other year a pedestrian is struck by vehicular traffic due to walking in the roadway.

3. Downtown

The Downtown component is located along Trenton Street and including parts of Commerce Street, Cotton Street, Natchitoches Street, Wood Street, and North Riverfront Street. The proposed improvements include road rehabilitation, undergrounding utilities, infrastructure rehabilitation, pedestrian-friendly and environmentally sustainable streetscape design, ADA compliant sidewalks and crossings, parking, street lighting, and signage.

4. Stella/Mill Gateway

The Stella/Mill Gateway serves as a major entry point into the heart of West Monroe. The proposed improvements include a new 7' sidewalk with ADA compliant curb ramps and street lighting. These additions to this component will safely connect both vehicular and non-vehicular traffic to downtown and the rest of the project components.

5. Natchitoches Street

The proposed improvements along Natchitoches Street include enhancements to pedestrian facilities and aesthetic lighting. Although less traveled, Natchitoches Street serves as another entryway for vehicles exiting I-20 and would create a safer environment for all modes of transportation entering Downtown West Monroe.

6. Coleman Corridor

The proposed improvements along Coleman Avenue include roadway, sidewalk, and utility rehabilitation. The proposed sidewalk improvements would install a 10' shared use path connecting the currently underserved Riverbend Community to Downtown West Monroe.

Benefits

Using the Benefit-Cost Analysis for Discretionary Grant Programs, March 2022, we determined the **Benefit Cost Ratio to be 1.10**. The proposed improvements will produce quantitative benefits in multiple aspects. The connectivity of the bicycle and pedestrian facilities will promote safer travel for all modes of transportation and provide connectivity for underserved communities that previously had reduced access to goods and services. The new and rehabilitated subsurface drainage systems will alleviate persistent flooding that causes accidents and traffic delays. The undergrounding of overhead utilities will increase resiliency and significantly reduce the future interruption of vital services due to power outages.

Safety

The undergrounding of aerial utilities will alleviate the utility pole related accidents that occur every year. According to the LADOTD Highway Crash List (LACrash), over the last 10 years there have been approximately 2 accidents per year occurring with utility poles. It is assumed that the relocation of the aerial utilities would reduce the incidents occurring with the utility poles by 100%. These improvements would produce a safety savings of **\$124,874 annually**.

The installation and renovation of subsurface drainage structures would reduce accidents during wet weather and incidents involving the existing deep ditches. Using CMF Clearinghouse, these improvements would result in a crash modification factor (CMF) of 0.85 to be applied to the property damage only and injury accidents. Applying the CMF yields an annual savings of 1 accident per year during wet weather. These subsurface drainage improvements are estimated to produce a safety savings of **\$123,141 annually**.

Currently, the lack of ADA compliant sidewalks creates an unsafe environment for pedestrian traffic within the project area. Using LACrash data, it is estimated that there is one pedestrian accident that occurs annually due to the deteriorated condition or lack of an existing sidewalk. The proposed sidewalk improvements are estimated to produce a safety savings annually of **\$325,188**.

According to the CMF Clearinghouse, the conversion of an existing two-way street into a one-way street results in a CMF of 0.53. According to LACrash, the Downtown area currently experiences, on average, 11 crashes per year in the area to be redesigned. Utilizing the CMF, the proposed improvements would reduce the annual crashes to 5 per year. The proposed improvements are estimated to produce a safety savings of **\$218,870 annually**.

Environmental Sustainability

The improvements proposed along Trenton Street to the subsurface drainage would significantly alleviate localized flooding along the roadway during inclement weather. The reduction of localized flooding would reduce the travel time of daily commuters by approximately 2.5 minutes during the average 100 rain days that West Monroe receives every year. The estimated value of the travel times savings is **\$277,300 annually**. The reduced travel times will positively impact the environment by reducing the volume of air pollutants typically produced by automobiles. The resulting reduced emissions and the associated monetary value was not quantified.

Quality of Life

The construction of shared use paths and sidewalks alongside the other improvements as discussed in the Narrative would improve quality of life by increasing mobility options for all users. Local underserved communities will now have safe access to necessary goods and services within the area. Using the BCA Guidance, the quantified value of the facility benefits pedestrians and cyclists yields a value of **\$33,278 annually**. The addition of the paths will also create substantial health benefits for users choosing active transportation modes. The use of active transportation modes key health benefit is a reduction in mortality risks primarily for users in the 20-74 age range. The multimodal transportation options for users are estimated to produce a mortality benefit of **\$188,592 annually**.

Sales Tax Revenue

The infrastructure and streetscape improvements to the Downtown area are anticipated to bring a sales tax revenue increase of 10% to the City of West Monroe. Currently, the City receives 2.99% of the annual \$1,600,000 adjusted gross sales. Starting in 2026 and extending through 2028, there is an average growth in tax revenue that then levelized throughout the rest of the analysis period. In addition to the anticipated rise in sales tax revenue from the existing businesses in the area, the City anticipates up to 40 new businesses in the project area. Taking the average annual revenue from the existing businesses the new tax revenue has been incorporated into years 2029-2032.

Non-Quantified Benefits

- The relocation of aerial utilities and telecommunications will provide fewer service interruptions to local businesses and residents.
- Property values in the surrounding areas will increase due to the infrastructure improvements and the connectivity to local services and recreation.
- Aesthetic lighting will create safer environments for pedestrians and vehicular traffic.
- The multimodal transportation options to local areas will reduce vehicular traffic by local residents.
- The new infrastructure will encourage new businesses to move into the area and create job opportunities for residents in local underserved areas.

Costs

The proposed project is estimated to cost \$22,445,671 and have a 30-year life span. After construction is completed in net present value there will be \$30,000 of annual maintenance with \$200,000 of maintenance every 10 years. The City will pay \$4,489,134.20 (20%) of the total project cost.

	Non Discounted Totals	7% Discounted Totals
Total Benefits	\$ 62,733,061.94	\$ 22,992,399.69
Total Costs	\$ 26,398,124.77	\$ 20,958,011.73
Benefit-Cost Ratio	2.38	1.10

References

LADOTD Highway Crash List – Local Roads

Louisiana Department of Transportation and Development ADT
[La DOTD - Average Daily Traffic Counts](#)

CMF Clearing House
[Crash Modification Factors Clearinghouse \(cmfclearinghouse.org\)](http://cmfclearinghouse.org)

US DOT – Benefit-Cost Analysis Guidance for Discretionary Grant Programs, March 2022