

FY2021 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 benefit by reconstructing deficient roadways, adding shared use pedestrian facilities, improving drainage, burying aging utilities, and redesigning streetscape.

Currently to access recreational and business areas within West Monroe there is a lack of multimodal transportation options. Due to the lack of sidewalks or deteriorating conditions access throughout the City is limited to vehicular travel. To create a safer environment for pedestrians and vehicular travel alike, the RAISE Grant proposal incorporates innovative design techniques such as road diets to repurpose previously less valuable right-of-way real estate. Through these improvements local residents and undeserved areas will gain vital access to goods and services.

Baseline Conditions

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

Pedestrians

Currently within the proposed project components sidewalks are either sporadic or nonexistent, lacking proper ramps at intersection crossings, in disrepair and narrow. The lack of pedestrian infrastructure disconnects local underserved communities from essential goods, services and resources that the city, businesses, and local organizations have to offer.

Bicycles

The city has made great efforts in the 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 good, 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 includes 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, February 2021, we determined the **Benefit Cost Ratio to be 1.02**. 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 prior 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 relocation of overhead utilities underground will prevent the future loss of necessities and vital services from 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 occur with utility poles. It is assumed that the relocation of the aerial utilities would reduce the incidents occurred with the utilities by 100%. These improvements would produce a safety savings of **\$116,814 annually**.

The installation and renovation of subsurface drainage structures would reduce accidents during wet weather and travel times. Using CMF Clearinghouse these improvements would result in a crash modification factor (CMF) of 0.85 to apply 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 **\$85,767 annually**.

Currently the lack of ADA compliant sidewalks creates an unsafe environment for pedestrian traffic within the project area. Using LACrash it is estimated that there is one pedestrian accident that occurs annually due to the deteriorated condition or lack of any existing sidewalk. The proposed sidewalk improvements are estimated to produce a safety savings annually of **\$237,461**.

According to the CMF Clearinghouse the conversion of an existing two-way street into a one-way results in a CMF of 0.53. According to LACrash the Downtown area currently experiences on average 13 crashes per year in the area to be redesigned. Utilizing the CMF the proposed improvement would reduce the annual crashed down to 7 a year. This proposed improvement is estimated to produce a safety savings of **\$278,772 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 **\$278,857 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

Although a monetary value was not quantified, the construction of the shared use paths and sidewalks alongside the other improvements as discussed in the Narrative would

improve the 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.

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 of West Monroe receives 2.99% of the annual \$1,600,000 adjusted gross sales. Starting in 2025 and extending through 2027 there is an average growth in tax revenue that then levelized throughout the rest of the analysis period. In addition to the anticipated rise is sales tax revenue from the existing businesses in the area the City of West Monroe anticipates up to 40 new business in the project area. Taking the average annual revenue from the existing businesses the new tax revenue has been incorporated into years 2028-2031.

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 would 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 multi modal transportation options to local areas will reduce vehicular traffic by local residents.
- The new infrastructure would encourage new businesses to move into the area creating job opportunities for residents in local underserved areas.

Costs

The proposed project is estimated to cost \$20,434,004 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 of West Monroe will pay \$2,434,499 (12%) of the total project cost.

	Non Discounted Totals	7% Discounted Totals
Total Benefits	\$ 50,261,818.38	\$ 17,902,123.10
Total Costs	\$ 22,305,536.49	\$ 17,623,039.61
Benefit-Cost Ratio	2.25	1.02

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, February 2021