

U.S. Department
of Transportation
FY 2018 BUILD
Transportation
Discretionary Grant
DUNS: 080595937000

City of Wagoner Cherokee Street Safety and Mobility Improvement Project

U.S. Congressional District OK-01

Applicant Type:
Rural Local Government
BUILD Funds Requested:
\$8,889,617



Submitted by:



Project Link
http://www.incog.org/Transportation/BUILD FY18_Wagoner.html

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City of Wagoner Cherokee Street Safety and Mobility Improvement Project

Project Name	Cherokee Street Safety and Mobility Improvement Project
Lead Applicant	City of Wagoner
Contact Information	Mr. Albert R. Jones Mayor – City of Wagoner Phone (918) 485-2554 - mayor@wagonerok.org
Project Type	Rural - Construction
Project Description	The City of Wagoner is seeking funding for a rural roadway transportation project that will improve mobility options and enhance safety for multimodal travelers along an approximately 3/4 mile stretch of the Cherokee Street/ Oklahoma State Highway 51 corridor in Wagoner, OK. The project consists of roadway resurfacing, installation of new and redesigned storm drainage systems, (including construction of a stormwater detention facility), construction of sidewalks, crosswalks, ADA accessible ramps, and off street side paths for bicyclists. The improvements will provide a safe multi-modal environment that supports access to employment and healthcare services while improving health through availability of alternate forms and transportation and access to the only grocery store in the city.
Project Cost	\$12,889,617
BUILD 2018 Funds Requested	\$8,889,617
Local Match Source(s) & Amounts	\$1 Million – City of Wagoner, through utility relocation costs funded by municipally-owned utility company \$1 Million – Oklahoma Department of Transportation \$2 Million – Wagoner County Health Department
NEPA Status	This project will be a categorical exclusion (CE). Wagoner is prepared to secure any necessary permits and approvals, including 404 permits.
Project Schedule	Design will be completed by April 27 th , 2020. Construction will commence in June 2020 and conclude in February 2022.
Project Benefits	Improved safety and mobility through access management, sidewalk and multi-use path construction, roadway surface improvements, and ADA compliant ramps. Enhance status of State of Good Repair through storm water improvements, extending lifecycle of roadway with pavement resurfacing and constructing curbs and sidewalks. Increase economic competitiveness by freight reliability improvements and reduced congestion during rain events, lowering cost of doing business with flood mitigation, and increased opportunity for employment. Improved health outcomes by improving access to health care services, providing safe alternative forms of transportation with sidewalks and multiuse path, and connecting Cherokee Street Corridor with the sole source of healthy food in City of Wagoner.
Benefit-Cost Analysis Results	7% discount rate: 1.27; 3% discount rate: 1.93
Innovative Elements	Innovative local match funding through municipally-owned utility company. Innovative problem solving through partner projects and funding.

CITY of WAGONER

P.O. Box 406 Wagoner, Oklahoma 74477
City Offices: 485-2554 * City Clerk: 485-4586

July 12, 2018

Honorable Elaine Chao
Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Ave., SE
Washington, DC 20590

Dear Secretary Chao:


The City of Wagoner is pleased to submit this application for the Cherokee Street Corridor Project (State Highway 51). Our city is the county seat and economic hub of Wagoner County. According to the U.S. Census, in 2017, the estimated population of Wagoner was 8,904. As a rural community, we have taken strategic measures to improve our ability of ensuring a safe and economically thriving future. Examples of this endeavor are the updates to our development codes to ensure all future development and construction meets all safety and accessibility standards, thereby preventing an further sidewalk gaps or missing curb ramps. Wagoner is a community owned public power utility, enabling us to more effectively manage our cities future energy needs. Wagoner Public Works Authority will be contributing \$1 Million towards this project for utility relocation.

The Cherokee Street Corridor Project is a central piece to achieving our cities goals. Cherokee Street is the only designated truck route in the city and the hub of Wagoner County's commercial and economic activities. However the corridor is plagued by a variety of safety and funding issues that have resulted in our inability to make significant and sustainable improvements to the corridor. While the most apparent issues are a lack of safe and accessible sidewalks, the extensive ingress/egress vehicular access points, and severe flooding and storm water runoff., the central challenge has been the logistical and regulatory requirements that prevent project partners from addressing some (but not all) of the safety issues.

We are fortunate to have the Oklahoma Department of Transportation committing to reconstructing the roadway, however, the lack of ADA compliant ramps and sidewalks prevent ODOT from completing this project. As part of the BUILD grant we are able to address these legacy issues, combine local funds with ODOT and the Wagoner County Health Department to complete a defining project for our community. A project that will provide our citizens with a safe and accessible means of access to jobs, medical care, and the only source of fresh food in the city. This project will also improve our cities economic competitiveness through a reliable freight corridor and reduce flood hazards to our local businesses.

Wagoner sees this project as an essential means to improve our safety, state of good repair, economic competitiveness, and overall quality of life. We thank you and hope USDOT will recognize the need of improved capital infrastructure as proposed and make this project a reality.

Sincerely,


Albert Jones
Mayor, City of Wagoner



Project **OVERVIEW**

The City of Wagoner is seeking funding for a rural roadway transportation project that will improve mobility options and enhance safety for multimodal travelers along an approximately 3/4 mile stretch of the Cherokee Street/Oklahoma State Highway 51 corridor in Wagoner, OK. The project consists of roadway resurfacing, installation of new and redesigned storm drainage systems, (including construction of a stormwater detention facility), construction of sidewalks, crosswalks, ADA accessible ramps, and off street side paths for bicyclists. The improvements will provide a safe multi-modal environment that supports access to employment and healthcare services while improving health through availability of alternate modes of transportation and access to the only grocery store in the city.

In terms of demographics, the average residents living within the project area

is more economically challenged than either the average City of Wagoner resident or the average residents living in the Tulsa Metropolitan Statistical Area. Wagoner residents living within the project area have a median household income of \$32,740, according to 2017 Census estimates. That is 83% of the Median Household income for the City of Wagoner \$39,795 and 65% of the Median Household income for the Tulsa Metropolitan Statistical Area \$51,107. The project area also has a higher percentage of minority households (41.2%) than both the City of Wagoner (39.4%) and the Tulsa Metropolitan Statistical Area (30.6%). In addition, 10.6% of project area households do not own a vehicle.

This serves as validation that safe and accessible active transportation options on the Cherokee Street Corridor are essential to the long-term vitality of Wagoner. This project is essential for the City of Wagoner to ensure a safe, accessible, and economically competitive future for our city.

CHALLENGES

ADA Non-Compliance

The central challenge for this project is addressing the ADA non-compliance issues throughout the corridor.

Currently, the Oklahoma Department of Transportation (ODOT) has agreed to improve the roadway corridor, however, this cannot occur until the corridor has improved ADA compliance. The project would upgrade all ramps and install sidewalks to meet ADA requirements which would then allow ODOT to resurface the roadway.

Ingress/Egress

The corridor has numerous general accessibility challenges that include the absence of sidewalks and extensive ill-defined ingress/egress vehicular access points. This creates an environment that is challenging both to motorized and non-motorized travelers within the corridor. The project proposes a reduction in the number and lengths of curb cuts throughout the corridor that, as a result, will reduce the number of traffic collisions through better site views and increased protected sidewalks for pedestrians.

Barriers to Employment/Essential Services/Fresh Foods

The thoroughfare is the main entry point to the central business district and employment center for the City as well as essential health services, including the regional hospital and county health department. The lack of sidewalks coupled with 10.6% of households without access to a vehicle, according to the American Community Survey 2016 5-year estimates, results in a diminished ability for citizens of Wagoner to safely get to work and healthcare services. Furthermore, U.S. Highway 69 acts as a barrier to employment as there are no defined crossings along the highway from one side to the other. Additionally, there is limited access to fresh foods and produce in Wagoner. Currently, Wal-Mart, located west of the US-69, is the only location to purchase such goods. The proposed intersection improvements will provide a clearly defined area for pedestrians and bicyclists to cross the busy highway.

Flooding

The corridor is in need of an updated storm sewer system and stormwater maintenance facilities. During periods of moderate to heavy rainfall the outside lanes become inundated with water, effectively making the corridor a two lane highway. This phenomenon increases the likelihood of congestion and therefore traffic collisions. The flooding issues are a result of inadequate and undersized storm drains and the lack of a stormwater detention facility north of the Cherokee Street corridor. This project addresses these issues through proposed upgrades to the storm sewer system and construction of a stormwater detention facility. Implementing the stormwater detention facility prevents degradation of roadway conditions through effective stormwater runoff while also providing a trailhead for an off street bike trail along the corridor. Additional benefits of the detention facility include the removal of over 42 residential structures, the Wagoner County Health Department, and the Civic Center from the statutory floodplain.

State of Good Repair

Clearly the limited ability for ODOT to proceed with a complete resurfacing of the roadway has created issues related to the state of good repair of the corridor. Though the corridor has received minor maintenance over the past few years to extend the roadway life, the road has reached a point where major improvements are necessary. Stormwater upgrades, ADA compliance, and ODOT's commitment to appropriately resurface and improve the roadway will ensure that the state of good repair of the corridor will be realized long into the future.

Cherokee Street

CORRIDOR CHALLENGES



1 No Sidewalk



2 Bridge - No Sidewalk



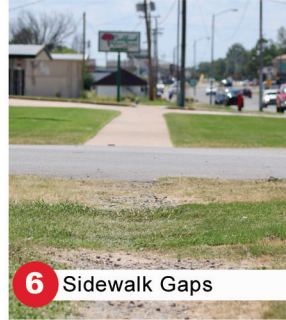
3 Park - No Sidewalk



4 "Goat" Path



5 Bikes on "Goat" Path



6 Sidewalk Gaps



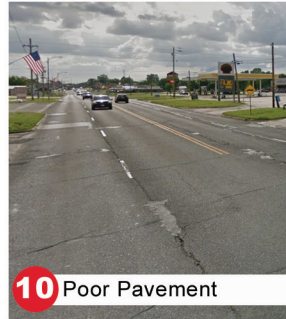
7 Kids with No Crossing



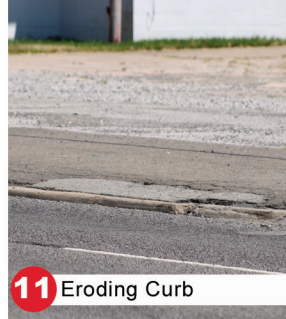
8 Unsafe Ped Crossing



9 No Curb Ramps



10 Poor Pavement



11 Eroding Curb



12 No Bike Crossing



Merit Criteria 1

Safety

The Cherokee Street corridor has a number of safety concerns for motorized and non-motorized traffic. From 2012-2016, there have been a total of 258 reported traffic collisions within the project area, with multiple fatality collisions. This also includes multiple reported pedestrian collisions, including one pedestrian fatality. Further crash analysis conducted by a transportation safety professional with the regional MPO, INCOG, determined that the contributing causes leading to these fatality collisions were direct issues that this project seeks to address: a lack of safe and accessible roadway infrastructure and crossings for the pedestrians, inadequate pavement condition, and unsafe roadway design and access management.



The goal of this project is to reduce total number of project area fatalities by 50%, reduce the number of flood-related collisions by 33%, and reduce all remaining collision totals by 10%. These project goals will be achieved by:

- Reducing number and length of curb cuts
- Construction of ADA-compliant sidewalks, ramps and off-street bike paths

- Pavement resurfacing
- Mitigated impacts of rain and flood events by storm drainage repairs
- Installation of a defined crosswalk at the intersection of US-69 and SH-51
- Installation of crosswalks at appropriate intersections along the project area.

These improvements will greatly impact the safety for all transportation users of the corridor. Reducing and limiting ingress/egress points will minimize the uncertainty for vehicular traffic making turns while also providing pedestrians shorter distances to cross the ingress/egress access points. Crosswalks at intersections will reduce the number of

mid-block crossings by providing clearly defined locations to safely cross the street. Off-street bike paths create multi-modal options that segregate cyclists from vehicular and pedestrian traffic, improving safety for all modes of traffic. ADA compliance ensures

that the corridor will allow individuals with disabilities the ability to safely maneuver the thoroughfare. ADA compliance will also facilitate the roadway surface to be improved by ODOT and brought up to standard condition and a state of good repair. Lastly, storm water infrastructure improvements will allow the use of four lanes during rain events reducing the occurrence of hydroplaning and other flood related traffic incidents.

Pavement surface condition can include multiple traffic safety variables: friction (i.e., skid resistance), roughness (i.e., ride quality), and rutting are all factors that can improve or hinder a motorists' ability to cause or safely respond to the actions of another roadway user. Maintaining pavement conditions at acceptable levels is part of the City of Wagoner's pavement management activity to provide a safe and economically viable transportation system.

Evidence supports the notion that weather and flooding play a significant role in collisions on Cherokee Street. When studying all 258 project area crashes,

13% reported "wet" or "flooding" roadway conditions, with over 20% of all crashes occurred during non-clear weather conditions (rain, snow, etc.) Additionally, it was found that roadway flood conditions resulted in at least one single-car, injury collision in which the vehicle left the roadway and struck a utility pole. Given the role that weather, pavement condition, and curbing play in a motorist's ability to safely maintain control of their vehicle, it is reasonable to assume that improving the roadway surface conditions (pavement, flood mitigation, curbing, etc.) would reduce the number of collisions occurring under abnormal weather conditions.

Cherokee Street Collision Statistics			
2012-2016			
	Number of Collisions	Avg. Annual Crashes	Crash Rates per 100 MVMT
All Collisions	258	51.6	1611.05
<i>Injury</i>	69	13.8	430.86
<i>Fatality</i>	1	0.2	6.24
<i>Property Damage Only</i>	188	37.6	1173.95
All Pedestrian Collisions	4	0.8	24.98
<i>Pedestrian Injury</i>	1	0.2	6.24
<i>Pedestrian Fatality</i>	1	0.2	6.24
All Flood Related Collisions	33	6.6	206.06
<i>Flood Related Injury</i>	6	1.2	37.47
Cherokee Street Traffic Data			
AADT	11,700		
Days/Year	365		
Million Vehicles	4,270,500		
Million VMT	3,202,875		
# of Years of Crashes	5		

Merit Criteria 2

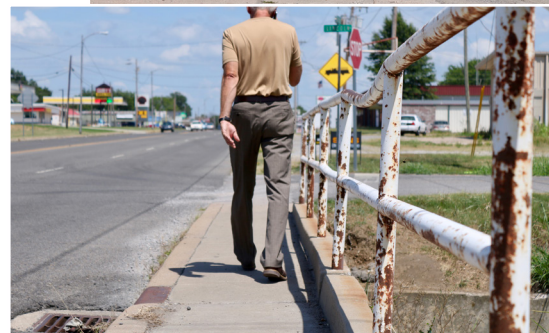
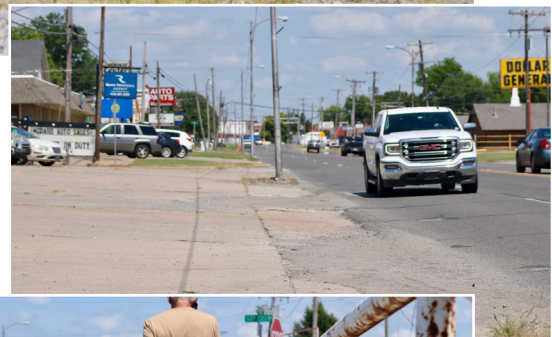
State of Good Repair

Cherokee Street has a variety of state of good repair issues. As it stands today, the current pavement and surface conditions of Cherokee Street are in need of major improvements. Minor maintenance and temporary repairs have been routinely conducted to extend the service life of the roadway. This approach has been of limited value, however, and is now no longer cost effective for the future. In addition to this, the corridor has numerous sidewalk gaps with few ADA-compliant sidewalks, no sidewalk curb ramps, eroding curbs, and decaying and undefined driveway access points. Though the city has recently updated municipal codes to require sidewalks and more defined access in new development, much of the existing development along Cherokee Street stems from legacy issues, predating these code changes.

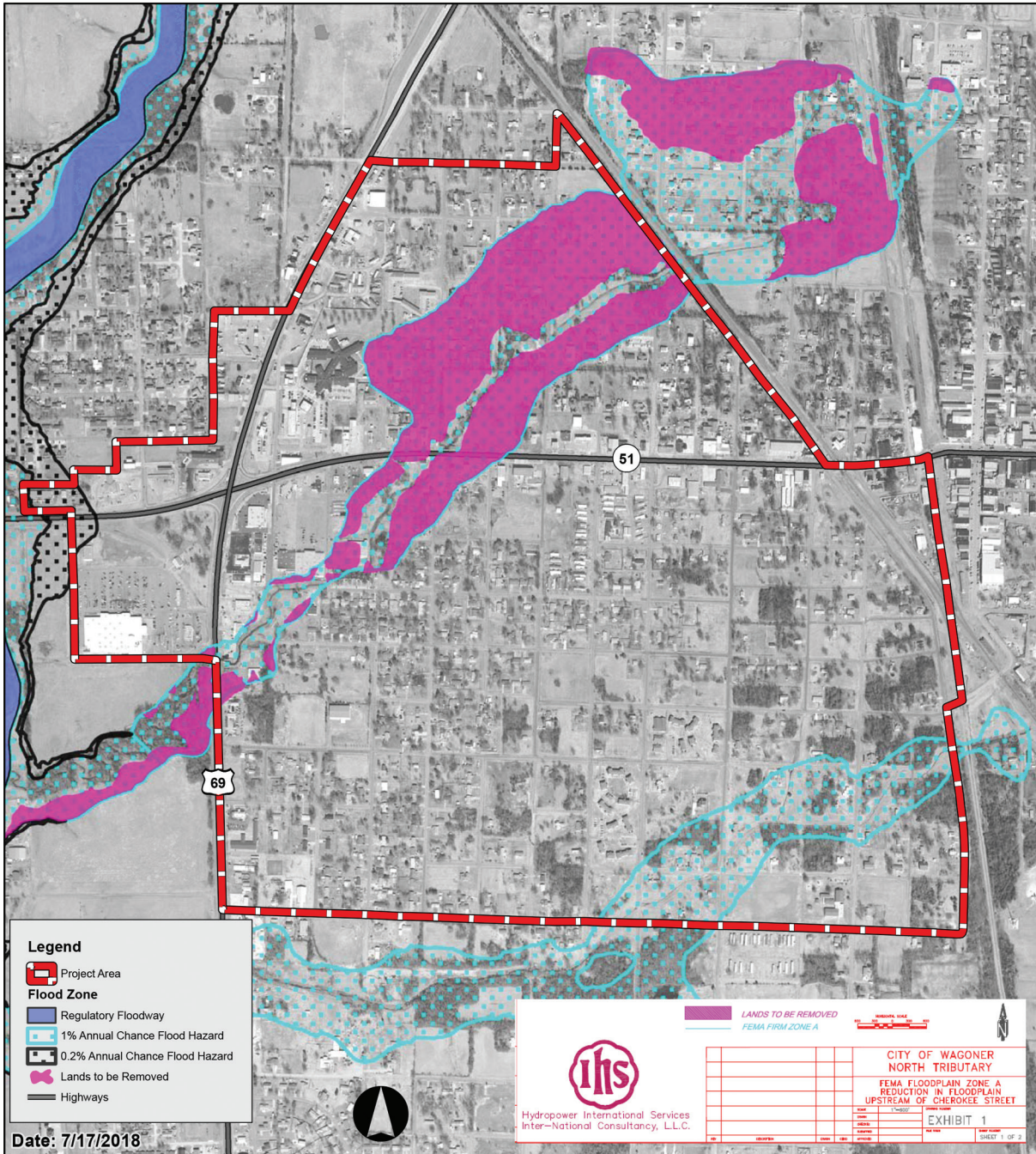
Compounding the already decayed state of the corridor's infrastructure, these concerns are exacerbated by frequent, corridor-wide flooding. As shown in the flood map below, much of the project area falls within the FEMA 100-Year Flood Zone. Cherokee Street experiences a significant level of flooding, even during mild rain storms. This results

from decaying and undersized drainage infrastructure prevalent throughout the corridor.

This has culminated in the recurring degradation of not only the roadway surface and the few existing sidewalks, but also the roadway base, subgrade, and existing drainage channel.



City of Wagoner Project Area FLOODPLAIN MAP

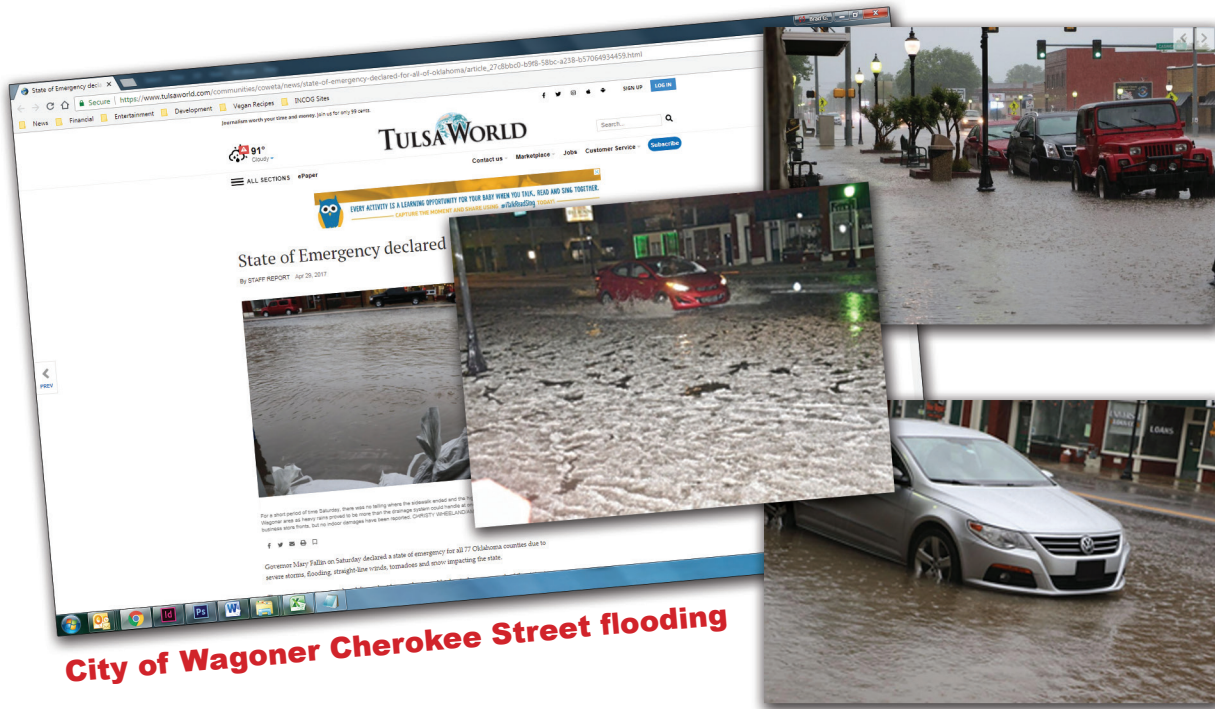


Storm water improvements are an essential component to mitigating flooding of the roadway, which shortens its anticipated lifecycle. This is vital to achieving and maintaining a long-term status of state of good repair. Any corridor improvements that fail to address the persistent flood hazards will not result in a long-term state of good repair.

A long-term solution is needed, both in the improvement of the roadway and drainage improvements along the corridor to mitigate flood waters from deteriorating existing and future infrastructure improvements. This project provides long-term solutions by delivering needed infrastructure that reduces future costs associated with maintenance. The central issue is flooding along the roadway corridor. The project addresses these issues by installing adequate

storm sewer systems that can tolerate moderate to heavy rain events. Improving this alone will help move water off the road surface, preventing deterioration of infrastructure. To add, the project provides ADA compliant sidewalks which allow for the City of Wagoner to partner with ODOT to install news curbs and resurface the roadway.

Additionally, this project provides a component of resiliency for the surrounding business and residential neighborhood. The installation of a trailhead with a stormwater detention facility removes a significant amount of structures from the floodplain. These include the Wagoner County Health Department, an elderly care facility, commercial businesses, and over 42 residential structures.



City of Wagoner Cherokee Street flooding

Merit Criteria 3

Economic Competitiveness

Cherokee Street is the gateway into Wagoner's central business district (CBD). It is also a designated truck route through the city. The project area lies between US-69 and the Wagoner Central Business District in the original townsite of Wagoner. The US-69 corridor is a major freight corridor and a part of the National Highway System. The city of Wagoner is currently implementing a Transportation Alternatives Program grant to improve sidewalks and streetscaping within in the Wagoner CBD. This BUILD project will extend sidewalks and improve the pedestrian and bicycle connections from the CBD to the commercial/shopping corridor at the intersection of SH-51 (Cherokee Street) and US-69. Additionally, two Union Pacific rail lines cross Cherokee Street within the project area (the Van Buren Subdivision and the Wagoner Subdivision).

It is this combination of factors that impact the Cherokee Street corridor. However this issue is exacerbated by a lack of pedestrian and bike infrastructure, automobile collisions, and flooding.

An example of this was recently highlighted by a local news agency: a wheelchair-bound pedestrian is regularly forced to operate his motorized wheelchair in the roadway when crossing the Lincoln Avenue bridge/culvert, and is forced to violate the law or prevented from traveling beyond this point. The Lincoln Avenue bridge is a pinch point in the roadway where wheelchair-bound pedestrians are required to enter the roadway due to non-existing or inaccessible sidewalks and ramps.



The mobility of freight, automobile travel, and pedestrians are further compromised as a result of flooding, rain events that force the four-lane thoroughfare down to two lanes (one lane in either direction), thereby increasing congestion, hindering travel time, diminishing safety, and impairing mobility for all users.

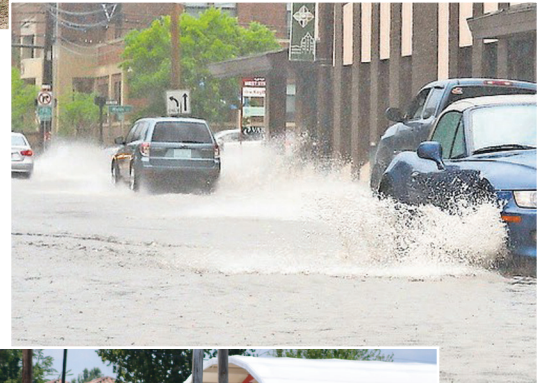
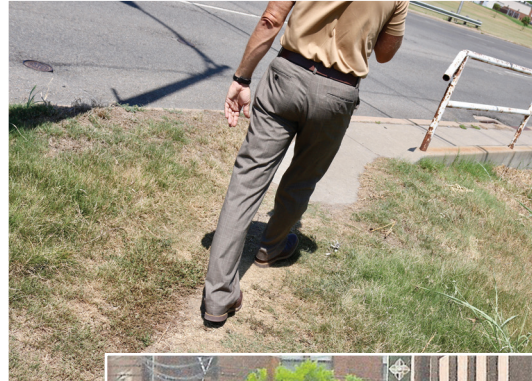
Improving congestion and flood conditions on the SH-51 freight corridor, Wagoner's designated truck route, is key to the long-term economic competitiveness of the City of Wagoner.

The project improvements address the causes of flooding and reduce the likelihood of congestion, not only improving freight movement through the city and improving traffic flow for all commuters, but drastically improving travel time reliability, which is especially important to freight traffic.

In addition to traffic and congestion impacts, flooding contributes directly to the cost of doing business within the city, such as increasing overhead costs associated with insurance claims, additional flood coverage, etc. This project removes 15 commercial structures and over 42 residential structures (some multi-family) from the statutory FEMA 100 Year Floodplain. These include regional destinations and critical components to the municipal infrastructure such as the Wagoner County Health Department, Wagoner Fire Department, and the Civic Center.

Lastly, the project improves connectivity and eliminates service gaps along the corridor. The proposed multimodal options provide safe and convenient alternatives to driving. The improved connectivity increases opportunities for employment

as well as makes businesses along the corridor and west of US-69 more accessible.



Merit Criteria 4

Environmental Protection

Flood mitigation is a key element to the environmental protection aspect of this project. The detention pond and storm drainage improvements will reduce the peak rate of runoff, alleviate flooding and reduce the exposure of flood waters to roadway contaminants, and improving water quality. While capturing and retaining runoff during heavy rain events, detention ponds control stormwater quantity as well as utilize physical, biological, and chemical processes to filter sediment and remove pollutants.

In addition to controlling stormwater flow and improving water quality, this project will increase the presence of vegetation along the corridor with street landscaping and trees. This attribute will improve stormwater runoff quality and quantity.

Furthermore with the mobility and connectivity improvements through sidewalk and multiuse path construction, it is possible that some Wagoner residents would choose to walk and bike to perform daily tasks, rather than use their vehicle. This would result in a reduction in energy consumption, pollution,

and greenhouse gases. Though no studies have been completed in the city to measure local interest in choosing to walk or bike, according to the American Community Survey 2016 5-year estimates 10.6% of Wagoner households do not have access to a vehicle and 4% of residents over the age of 15 “walk” as their means of transportation to work. This provides some insight into the minimum usage of these facilities. This later percentage has also seen a significant increase over the past six years. As less than 1% of survey residents walked to work in 2010, according American Community Survey 2016 5-year estimates.

In terms of project implementation, this project will be a categorical exclusion (CE) and the city will secure any necessary permits and approvals, including 404 permits.



Merit Criteria 5

Quality of Life

Access to fresh foods and having safe and viable transportation options are central tenets to one's quality of life. This project improves the quality of life for all citizens and individuals living in and passing through Wagoner. The project increases transportation choices to meet the needs of the community and ensures the safe movement of people, including those with disabilities. The trail head and multi-use path near the detention facility, coupled with the sidewalks on the corridor, provide additional opportunities for outdoor fitness.

Health statistics from the Oklahoma State Department of Health show a high level of obesity among adults. Diseases associated with inactivity and obesity are

a leading cause of death for the State and Region. Health outcomes will be improved by providing the community with access to the only source of fresh food and produce in Wagoner by installing crosswalks at the intersection of US-69 and SH-51. Quality of life for Wagoner will be further improved by providing access to destinations such as employment centers, healthcare services, parks and civic centers.



Merit Criteria 6

Innovation

The City of Wagoner is unique in that it owns the Wagoner Public Works Authority, which operates the electric distribution system for the City of Wagoner, rather than a private utility company. This allows Wagoner to utilize project utility relocation costs as local match funds for the BUILD Federal grant. The city will utilize city-owned equipment and manpower to relocate the necessary

aforementioned utilities. This project will provide a local match in the amount of \$1,000,000 (7.7% of total project costs). This strategy will also improve the efficiencies of the project as bidding procedures and contractor identification will not be required for this portion of the project. Another innovative strategy are the partnerships established with the Wagoner County Health Department

and the Oklahoma Department of Transportation. These partners offer unique funding strategies that set the project apart from others. Wagoner County Health Department has committed \$2 million toward the construction of the trailhead and stormwater detention facility in Dunbar Park, immediately adjacent to Cherokee Street (SH-51) Within the park, a multi-use path will be constructed that will serve as the trailhead for a city-wide trail system to be implemented in future projects. This multi-use path will have a direct connection to the improved Cherokee Street sidewalks and serve all Wagoner residents as a safe, accessible, and separated cross-town multi-use path that connects various destinations, such as the Wagoner County Health Department and the Civic Center, the Cross Timber Multifamily Housing, Walmart Supercenter, and several commercial establishments.

The ODOT partnership is two-fold. They have committed a total of \$1 million for two phases of the project. The first are the upgrades to the US-69 and SH-51 intersection that includes safe crossings for pedestrians and traffic safety improvements. This \$500,000 project is currently on the ODOT's Eight Year Plan. The second ODOT component is an additional \$500,000 commitment to resurface the Cherokee Street corridor once the pedestrian facilities are upgraded to meet ADA requirements. As it stands today, though ODOT has the funds

to resurface Cherokee Street and desires to do so, it is unable to complete this improvement without the ADA sidewalk and ramps issues prevalent throughout the corridor. Unfortunately, ODOT does not have funds to complete both and is forced to wait for the City of Wagoner to perform corridor-wide ADA improvements; of which it does not currently have the capital resources to do so.

However with federal assistance through the BUILD grant, the City of Wagoner will be able to leverage its own funds, partner with ODOT and the Health Department to accomplish their goal in improving the safety, state of good repair, and economic competitiveness of the Cherokee Street corridor, while also improving the quality of life of its residents.

It is these innovative funding strategies that make this project so competitive, though dependent on a successful BUILD grant award. Being a BUILD grant recipient is essential to the overall success of the project. Though the ODOT project at SH-51 and US-69 intersection improvements will still occur, as will the Health Department trailhead construction and detention pond, these projects alone will not improve the corridor-wide safety concerns for pedestrians and access management, nor will they adequately alleviate the flooding and drainage that cause unsafe travel conditions and economic disadvantage to all residents and business and the city at-large.

Merit Criteria 7

Partnership

For any project, partnerships are key to ensure timely development and the availability of necessary resources. The City of Wagoner has partnered with ODOT and Wagoner County Health Department to secure \$3 million towards the development of this project. This partnership allows each entity to accomplish its own individual, short-term goals while furthering the larger, long-term mission of each entity.

- *“The mission of the Oklahoma Department of Transportation is to provide a safe, economical and effective transportation network for the people, commerce and communities of Oklahoma.”* - Oklahoma Department of Transportation, Mission Statement

- *“To protect and promote health, to prevent disease and injury, and to cultivate conditions by which Oklahomans can be healthy”* – Oklahoma State Department of Health, Mission Statement

- *“Wagoner has so much to offer to its retail business owners and citizens. We want to make sure we are giving our city every opportunity that we can to thrive and to grow. I believe Dunbar Park will be a “welcome mat” for the city, not only in the beauty that it will create, but also in the potential relief for the citizens who pay flood insurance.”* – Albert Jones, City of Wagoner Mayor (speaking on Cherokee Street safety and flood hazard concerns.)

Entity	Form of Support
City of Wagoner	<ul style="list-style-type: none"> • Local Match Funding of \$1,000,000 though city-owned utility relocation • Project planning and management and grant recipient
Oklahoma Department of Transportation	<ul style="list-style-type: none"> • Local Match Funding for SH - 51 and US - 69 Intersection improvements (\$500,000) • Local Match Funding for Cherokee Street resurfacing (\$500,000)
Rogers County Health Department	<ul style="list-style-type: none"> • Local Match Funding for detention pond and multi-use path trailhead (\$2,000,000) • Local Leverage funding with additional \$2,000,000, through increments of \$500,000 annual for next four years to expand multi-use trail
INCOG	<ul style="list-style-type: none"> • Assistance with GIS, mapping, public meetings, analysis, etc.

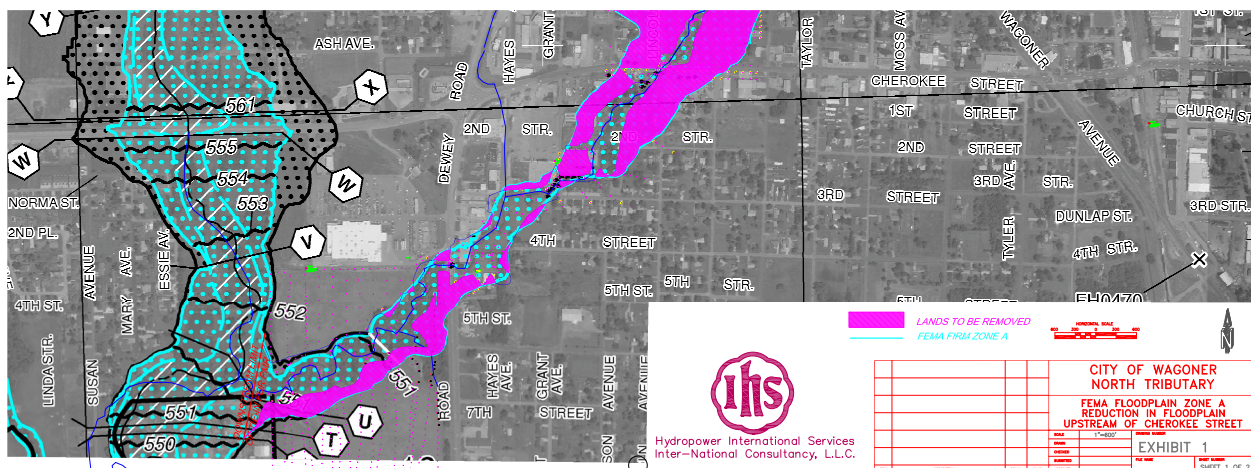
Project Readiness

The City of Wagoner serving as its own utility authority for the power company is capable of moving the power lines as required for the project. The project is under design and is scheduled to be at 90% in six months. NEPA process will be completed in one year from the award. Because of the nature of the roadway ownership under the Oklahoma Department of Transportation and adjacent land, park and structures in the city, the City of Wagoner will secure all necessary permits and approvals, including the 404 permit. This project will be a categorical exclusion (CE).

The City of Wagoner will manage the bid process, design, and construction of sidewalks, ramps, storm drainage, including all utility relocation. The City of Wagoner will also manage the bid

process, design, and construction of the detention pond and multiuse path trailhead located in Dunbar Park. Once these improvements are complete, ODOT will proceed with the resurfacing of Cherokee Street, as evidenced by the attached ODOT support letter. The intersection of US-69 and SH-51 is scheduled to be completed in 2023 according to the ODOT 8-Year Plan.

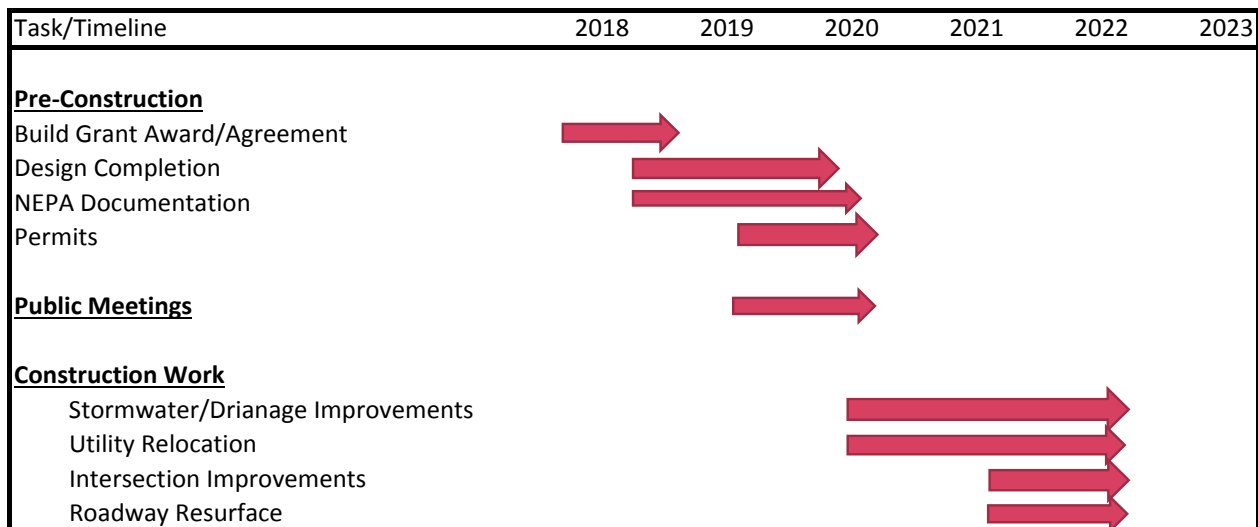
The project is being coordinated for the development of County Health Department trailhead and park, that is a partner with local matching funds for the comprehensive development along with the detention area, trail connectivity and underpasses. The city as a lead agency is better positioned to complete this multi-faceted work.



Project Schedule

Task	Duration	Start	Finish
Submit Build Grant	1 day	Monday, July 16, 2018	Monday, July 16, 2018
Build Grant Review	150 days	Tuesday, July 17, 2018	Monday, February 11, 2019
Build Grant Award	1 day	Tuesday, February 12, 2019	Tuesday, February 12, 2019
Grant Paperwork	90 days	Wednesday, February 13, 2019	Tuesday, June 18, 2019
Solicitation For Design	60 days	Tuesday, March 26, 2019	Monday, June 17, 2019
Award Design	7 days	Tuesday, June 18, 2019	Wednesday, June 26, 2019
Detailed Design	255 days	Tuesday, July 30, 2019	Monday, July 20, 2020
Civil - Stormwater	180 days	Tuesday, November 12, 2019	Monday, July 20, 2020
Utility Relocation	120 days	Tuesday, December 03, 2019	Monday, May 18, 2020
Architectural - Landscape	150 days	Tuesday, October 22, 2019	Monday, May 18, 2020
ODOT Roadway	150 days	Tuesday, July 30, 2019	Monday, February 24, 2020
Environmental Permitting	180 days	Tuesday, August 20, 2019	Monday, April 27, 2020
Construction Bids	30 days	Tuesday, April 28, 2020	Monday, June 08, 2020
Bidding and Award	30 days	Tuesday, April 28, 2020	Monday, June 08, 2020
Construction Phase	445 days	Tuesday, June 09, 2020	Monday, February 21, 2022
Demolition & Traffic Control	90 days	Tuesday, June 09, 2020	Monday, October 12, 2020
Storm Drainage Improvements	210 days	Tuesday, June 09, 2020	Monday, March 29, 2021
Utility Relocation	120 days	Tuesday, June 09, 2020	Monday, November 23, 2020
Architectural - Landscape	300 days	Tuesday, October 13, 2020	Monday, December 06, 2021
ODOT Roadway - Cherokee	120 days	Tuesday, March 30, 2021	Monday, September 13, 2021
Intersection Improvements	100 days	Tuesday, March 30, 2021	Monday, August 16, 2021
Cleanup	45 days	Tuesday, December 07, 2021	Monday, February 07, 2022
Demobilization	10 days	Tuesday, February 08, 2022	Monday, February 21, 2022

PROJECT SCHEDULE



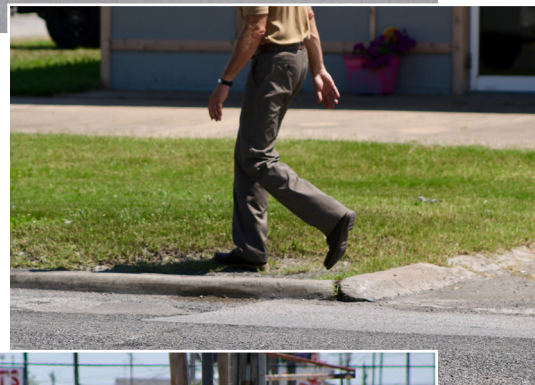
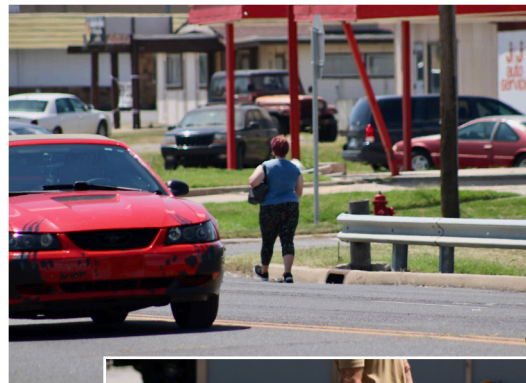
Assessment of Risk & Mitigation Strategies

There are relatively minor risks associated with the project implementation. The risks are mitigated in large part because of the multiple sponsorship of the project. The Wagoner County Health Department project related to the trailhead and the trail connection and the stormwater detention is already committed as match and the City's Memorandum of Understanding with the Health Department shows that committed partnership.

The roadway section is owned and operated by the Oklahoma Department of Transportation and it has a history of responsiveness to the needs of local communities, including rural community such as the City of Wagoner. The City of Wagoner is a member of the Regional Council of Governments, INCOG, with committed leadership which is drawing resources to coordinate and help with know-how of the project implementation.

Therefore, the schedule presented and costs shown with contingencies mitigate any propensity for risks. The one risk might be a project timeline to shift by a few months, if the Corps of Engineers 404 permit is delayed. But having the experience of currently involved flood

mitigation experts overseeing this project has been very helpful with cost estimates for the project and also in working with other federal agencies. The experience in working with federal agencies has been beneficial for the project and the region.



Assessment of Benefits & Cost Analysis

The Benefits-Cost Analysis (BCA) resulted in a ratio of 1.93 for the 3% discount rate and a 1.27 ratio for the 7% discount rate. The BCA includes four categories of benefits: (1) fatalities and injuries for crash reductions, (2) flood mitigation benefits to structure, (3) state of good repair, and (4) park and trailhead benefits. In terms of benefits, the project area experienced 1 fatality collisions and 69 injury collisions within years 2012-2016. All collision numbers used for this calculation were obtained from the Oklahoma Department of Transportation SAFE-T Collision Database. Crashes were monetized using the values and procedure described in Benefit-Cost Analysis Guidance for Discretionary Grant Programs – June 2018. According to these values, the total costs of these collisions was \$25,673,600.

This project assumes a 10% reduction in total crashes, including the two fatality collisions. INCOG safety data analysis determined that ADA and lack of pedestrian infrastructure resulted in 1 pedestrian fatality, wet roadway resulted in 13% of all crashes, and access management resulted in 1 fatality. This project includes a protected sidewalk and a separate multi-use path which removes pedestrians and bicycles from the roadway, reduce the possibility of an automobile collision.

The estimated mitigated pedestrian fatality is based on the assumption that this collision was a direct result of the existing conditions, a four-lane highway, with no sidewalks, no marked crosswalks, and no signage. Providing all of these accommodations as well as an accessible and protect median crossing at a near intersection, US-69 and SH51 should prevent this pedestrian fatality collision.

The flood mitigation benefits are derived from removing 42 residential structure (as determined by Hydropower International Services, Inter-National Consultancy) , the Wagoner County Health Department, and 3 apartment complexes from the FEMA 100 year floodplain. These values are derived from costs savings in flood insurance, claims, and damages. Both immediate benefits in years 2021 and 2022, with a recurring \$15,000 in damages savings annually. The state of good repair category produces \$50,000 in benefits annually with reduced life cycle costs from reduced flooding, reduced long-term maintenance costs, and reduced vehicle repairs due pavement condition improvements. The Dunbar Park trailhead and park is estimated to produce \$50,000 in benefits annually with improvements to healthy food options and medical services.

Benefit Cost Analysis - City of Wagoner Cherokee Street Safety and Mobility Improvement Project

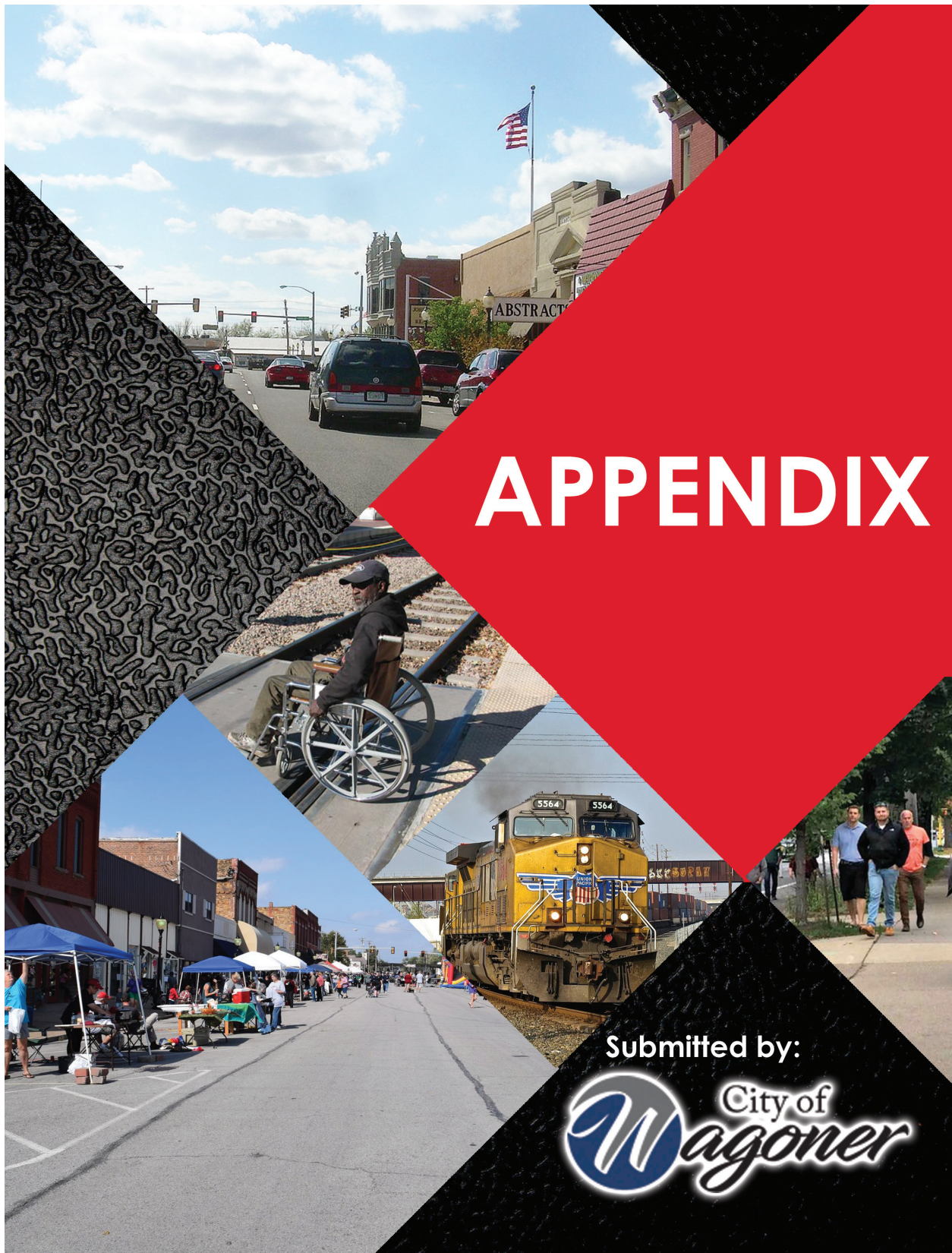
Costs		Benefits		Total		Benefit/Cost Ratio			
Net Present Value @ 3% Disc Rate	\$7,717,632.49	\$764,642.03	\$1,579,193.09	\$10,061,467.61	\$9,420,814.03	\$489,236.26	\$489,236.26	1.27	
Net Present Value @ 3% Disc Rate	\$8,614,820.00	\$862,985.66	\$1,751,095.83	\$11,228,901.49	\$17,229,890.33	\$2,763,330.33	\$838,591.50	1.93	
2018	\$ 500,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0		
2019	\$ 600,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0		
2020	\$ 2,950,000	\$ 500,000	\$ 1,000,000	\$ 4,450,000	\$ 1,400,000	\$ 1,400,000	\$ 50,000		
2021	\$ 2,950,000	\$ 500,000	\$ 1,000,000	\$ 4,450,000	\$ 1,400,000	\$ 1,400,000	\$ 50,000		
2022	\$ 2,900,000	\$ 500,000	\$ 1,000,000	\$ 4,400,000	\$ 1,350,000	\$ 1,350,000	\$ 50,000		
2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
2024	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
2025	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2026	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2027	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2028	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2029	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2030	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2031	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2032	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2033	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2034	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2035	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2036	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2037	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2038	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2039	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2040	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2041	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2042	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2043	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2044	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2045	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2046	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2047	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
2048	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,000	\$ 15,000	\$ 50,000		
Sub Totals	\$ 9,900,000	\$ 1,000,000	\$ 2,000,000	\$ 12,900,000	\$ 17,229,890.33	\$ 2,763,330.33	\$ 838,591.50	\$ 21,670,393.67	1.93

NOTES:

Cashes were monetized using the values and procedure described in Benefit-Cost Analysis Guidance for Discretionary Grant Programs - June 2018 (https://www.transportation.gov/sites/dot.gov/files/docs/mission/office-public/transportation-policy/284031/benefit-cost-analysis-guidance-2018_0.pdf)

Assuming reductions of:
 (1) 50% Cost Reduction of Fatality Collisions based on 5 Years of Crash Data 2012-2016 \$ 4,800,000
 (2) 33.33% of Food-Related Collisions \$ 131,100
 (3) 10% of All Remaining Collisions \$ 655,500
 \$ 5,586,600.00 \$ 1,117,320.00

See project website for BCA details.



APPENDIX

Submitted by:



CITY OF WAGONER
BUILD GRANT APPLICATION
STREETScape AND BEAUTIFICATION PROJECT
INTERSECTION OF SH 51 AND 69 TO EAST SIDEW OF RAILROAD TRACKS
Estimate of Probable Cost

June 27, 2018

ITEM	UNIT	QUAN.	UNIT \$	EXTENDED
HARDSCAPE (SIDEWALKS, DRIVEWAYS, CURB RAMPS, RETAINING WALLS ETC.)	LF	11,000	\$85	\$935,000
STORM DRAINAGE IMPROVEMENTS	LSUM	1	\$2,877,604	\$2,877,604
PEDESTIAN BRIDGE	EA	2	\$90,000	\$180,000
LANDSCAPING AND BEAUTIFICATION	LSUM	1	\$215,000	\$215,000
STREET TREES	EA	147	\$900	\$132,300
ORNAMENTAL TREES	EA	250	\$500	\$125,000
IRRIGATION	LSUM	1	\$200,000	\$200,000
GATEWAY MONUMENT (SH 51 AND 69 INTERSECTION)	LSUM	1	\$225,000	\$225,000
UTILITY RELOCATION (OVERHEAD ELECTRICAL UNDERGROUND)	LSUM	1	\$1,000,000	\$1,000,000
ROADWAY AND PEDESTRIAN LIGHTING	EA	90	\$12,000	\$1,080,000
STREETScape AMENITIES (BENCHES, LITTER RECEPTICLES, AND BIKE RACKS)	LSUM	1	\$61,200	\$61,200
RAILROAD CROSSINGS	EA	2	\$20,000	\$40,000
DEMOLITION	LSUM	1	\$175,000	\$175,000
SIGNAGE	LSUM	1	\$25,000	\$25,000

SUBTOTAL	\$7,271,104.00
20% CONTINGENCY	\$1,454,220.80
CONSTRUCTION TOTAL	\$8,725,324.80
TOPOGRAPHIC SURVEY	\$30,000.00
DESIGN FEE (8%)	\$698,025.98
CONTRACT ADMINISTRATION (5%)	\$436,266.24
TOTAL	\$9,889,617.02

CITY of WAGONER

P.O. Box 406 Wagoner, Oklahoma 74477
City Offices: 485-2554 * City Clerk: 485-4586

July 12, 2018

Honorable Elaine Chao
Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Ave., SE
Washington, DC 20590

Dear Secretary Chao:

The City of Wagoner is pleased to submit this application for the Cherokee Street Corridor Project (State Highway 51). Our city is the county seat and economic hub of Wagoner County. According to the U.S. Census, in 2017, the estimated population of Wagoner was 8,904. As a rural community, we have taken strategic measures to improve our ability of ensuring a safe and economically thriving future. Examples of this endeavor are the updates to our development codes to ensure all future development and construction meets all safety and accessibility standards, thereby preventing an further sidewalk gaps or missing curb ramps. Wagoner is a community owned public power utility, enabling us to more effectively manage our cities future energy needs. Wagoner Public Works Authority will be contributing \$1 Million towards this project for utility relocation.

The Cherokee Street Corridor Project is a central piece to achieving our cities goals. Cherokee Street is the only designated truck route in the city and the hub of Wagoner County's commercial and economic activities. However the corridor is plagued by a variety of safety and funding issues that have resulted in our inability to make significant and sustainable improvements to the corridor. While the most apparent issues are a lack of safe and accessible sidewalks, the extensive ingress/egress vehicular access points, and severe flooding and storm water runoff., the central challenge has been the logistical and regulatory requirements that prevent project partners from addressing some (but not all) of the safety issues.

We are fortunate to have the Oklahoma Department of Transportation committing to reconstructing the roadway, however, the lack of ADA compliant ramps and sidewalks prevent ODOT from completing this project. As part of the BUILD grant we are able to address these legacy issues, combine local funds with ODOT and the Wagoner County Health Department to complete a defining project for our community. A project that will provide our citizens with a safe and accessible means of access to jobs, medical care, and the only source of fresh food in the city. This project will also improve our cities economic competitiveness through a reliable freight corridor and reduce flood hazards to our local businesses.

Wagoner sees this project as an essential means to improve our safety, state of good repair, economic competitiveness, and overall quality of life. We thank you and hope USDOT will recognize the need of improved capital infrastructure as proposed and make this project a reality.

Sincerely,



Albert Jones
Mayor, City of Wagoner



Wagoner County Health Department
Creating a State of Health

July 17, 2018

To Whom It May Concern,

As a Regional Director for the Oklahoma State Department of Health covering Wagoner, Creek, Osage, Rogers, Washington, and Nowata Counties I am happy to write this letter of support for the City of Wagoner and the development of Dunbar Park. The Wagoner County Health Department is proudly willing to provide an initial investment of 2 million dollars toward this project as it will greatly enhance the city's ability to grow by reducing the flood zones throughout the city. The project is exciting because it will create water detention ponds which will reduce the flood zones. Also, a trail head and walking trails will provide safe access to healthy food options and healthcare facilities for those without vehicle transportation. Businesses and industry will be attracted to the city due to the decrease of flood incidents and increased housing opportunities. This project will grow the economy of the entire area which in turn will create more revenue for city growth and higher wages for area citizens.

This project helps every citizen of Wagoner and will impact the entire county. Many health benefits will be gained with the construction of walking trails, green space, and play areas. Families will be able to enjoy these outdoor spaces without fear of traffic and other dangers.

Again, the Wagoner County Health Department is proud to be a partner with the City of Wagoner in creating a state of health for our citizens.

Sincerely,

Larry Bergner
Regional Director
Wagoner, Osage, Washington, Rogers, Creek, and Nowata Counties
(918) 636-9830

212 North Pierce
Wagoner, OK 74467
(918) 485-3022

28596 E. 141st ST. South
Coweta, OK 74429
(918) 486-2845



July 17, 2018

Honorable Elaine Chao
Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Ave., SE
Washington, DC 20590

Dear Secretary Chao:

I am pleased to submit a letter of support for the City of Wagoner's Cherokee Street Safety and Mobility Improvement Project. This collaborative project addresses the BUILD program priorities in improving transportation infrastructure, safety, economic competitiveness, and quality of life particularly for rural Americans.

This project addresses safety and state of good repair issues in this corridor. Lack of adequate stormwater drainage causing street flooding and lack of sidewalks has compromised travel safety for motorists and pedestrians alike. Unfortunately, the cost of improvements is beyond the ability of the City of Wagoner at this time and without improvements addressing stormwater and ADA issues the Oklahoma Department of Transportation is unable to maintain the highway in a state of good repair.

The Cherokee Street (SH51) corridor connects Wagoner's CBD with a commercial area at a major highway crossroads (US69 and SH51) and is a vital piece to the economic, social, physical, health and safety of the City of Wagoner. The project area is home to numerous residents, jobs, emergency services, public facilities, a regional hospital, and the only grocery store in the city.

Our nation's transportation infrastructure needs continued investment to remain economically competitive. I fully support the City of Wagoner in its endeavor to modernize the Cherokee Street Corridor with BUILD funding and urge USDOT to partner the City of Wagoner to move this project forward.

Sincerely,

A handwritten signature in black ink that reads "Rich Brierre". The signature is written in a cursive, flowing style.

Rich Brierre
Executive Director