



## **City of Frankfort, Kentucky**

**Project: Complete Street and Road Diet on Second  
Street Corridor**

**Classification: Rural**

**TIGER Request: \$7,990,000**

**Local Match: \$4,375,000**

**Total Project: \$12,365,000**

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## EXECUTIVE SUMMARY

The City of Frankfort, Kentucky, requests \$7,990,000 in U.S. Department of Transportation (DOT) Transportation Investment Generating Economic Recovery (TIGER) funding for a \$12,365,000 multimodal project that will put its Second Street Corridor (U.S. 60, a federal highway route) on a road diet and boost economic development in a distressed neighborhood separated from the downtown. Grant funds will be used to construct new or improve existing sidewalks and bike lanes, increase access for seniors and persons with disabilities, enhance the streetscape, and reduce stormwater runoff. As a small, rural community as defined by DOT, Frankfort's project aligns with the Trump Administration's goals to improve infrastructure condition, address public health and safety, promote connectivity, and facilitate competitiveness.

In 2012, Frankfort received technical assistance from the U.S. Environmental Protection Agency's (EPA) Greening America's Capitals Program to reimagine its Second Street Corridor. This important transportation route is challenging to pedestrians and bicyclists due to high speeds, narrow sidewalks, a wide roadbed, long crosswalks, illegal left turns, poor Americans with Disabilities Act (ADA) compliance, and limited bike accommodations. These deficient conditions are particularly risky for children accessing the Second Street Elementary School on the west end of the corridor. Residents have participated in visioning exercises to develop concepts that would calm traffic, promote walking and biking, support mixed-use development, and spur job growth.

Based upon Frankfort's planning efforts, the City seeks TIGER funds to:

- Better manage traffic on the Second Street Corridor by eliminating underused travel lanes, reducing turning radii and other traffic calming measures;
- Improve pedestrian and bicycle safety with wider sidewalks, shorter crosswalks and bike lanes;
- Expand access to bus transit facilities for low-income residents, senior citizens and persons with disabilities;
- Strengthen connections with the state capitol building and downtown to attract tourists and visitors to the commercial corridor on Second Street;
- Enhance streetscapes to encourage brownfields cleanup and mixed-use development;
- Separate the combined sanitary and stormwater system to reduce sewer overflows during heavy rainfalls; and
- Reduce stormwater runoff entering the drainage system to minimize impacts on the Kentucky River.



Frankfort's Second Street Corridor

Revitalization of the Second Street Corridor meets all of DOT’s TIGER criteria. The project will improve safety by creating pedestrian and biking accommodations where they do not currently exist, or improve existing ones that do not meet ADA requirements. Proposed improvements align with DOT “state of good repair” goals by prioritizing investment in existing infrastructure. Economic development in the neglected South Frankfort community is predicated on the planned transportation measures. Transportation enhancements along the corridor will promote environmental sustainability by encouraging alternative travel modes, reducing fuel consumption, curbing emissions, and decreasing stormwater runoff. Second Street upgrades will contribute to the neighborhood’s quality of life by increasing the convenience of non-motorized transportation options, where 23.9% of neighborhood residents are living in poverty, 13.7% of households have no access to a vehicle, 19.5% of persons are disabled, 13.8% of people are school age children between the ages of 5 and 17, and 16.8% of the population is 65 and over. The project demonstrates innovation within rural America through its sustainable design and incorporation of green infrastructure techniques to protect the Kentucky River. TIGER funding will also leverage significant local and private sector investment from partners, including support from the Commonwealth of Kentucky, Frankfort Plant Board, Frankfort Transit System, Frankfort Independent Schools, and local developers.

Frankfort has previously applied for TIGER funding. Based upon a debrief with DOT staff, the City’s application was rated “highly recommended” last year. Frankfort has updated its proposal this year and prioritizes transportation needs with the largest potential for community transformation. For this round, Frankfort has increased its match to 35.4% of total project funding. The City has advanced its planning efforts. Frankfort anticipates that it will be complete with preliminary design and engineering before TIGER award, with a line and grade plan (including utility redesign) submitted to the Kentucky Transportation Cabinet by mid-2018. The project areas are primarily in the public right-of-way. Only minor temporary and permanent easement acquisition is anticipated. National Environmental Policy Act (NEPA) compliance and other regulatory approvals will be achieved in mid-2018, as the project is slated for a Categorical Exclusion. TIGER funds will easily be obligated by the September 30, 2020 deadline.

## **I. PROJECT DESCRIPTION**

Frankfort, the capital of Kentucky, is a small town bisected by the Kentucky River. Based on population, it is the fourth-smallest state capital in the United States. Frankfort lies in a verdant landscape of bluegrass fields and forested hills. Located in the heart of bourbon, horse and wine country, it is a major regional engine of economic growth.



Frankfort's Second Street is a critical local corridor located between the historic downtown on the north and the state capitol building a few blocks to the south. The Second Street Corridor consists of a mix of commercial, residential and civic uses. Most buildings are from the late 19<sup>th</sup> or early 20<sup>th</sup> century and are two to three stories in height. This streetscape is scaled to people, consistent with its function as a neighborhood center. However, empty buildings, vacant storefronts and idle lots detract from the corridor's vibrancy.

The Second Street Corridor is prime for revitalization and will be where Frankfort grows. The city's downtown is built out and constrained by geography (Kentucky River and limestone bluffs). No empty lots remain in downtown Frankfort for new commercial activity. By necessity, that development will come across the river to South Frankfort, where much of the population lives. Transportation investment is critical to help manage that growth.

### ***Frankfort's Transportation Challenges***

The Second Street Corridor is challenging to pedestrians and bicyclists. Unsafe conditions on the roadway are particularly dangerous for children accessing the Second Street Elementary School on the west end. Elderly and disabled residents of South Frankfort are also constrained by poor connectivity across bridges to downtown Frankfort that are not compliant with ADA requirements, as well as by limited accessibility to bus transit facilities on the corridor. Frankfort's key transportation challenges include:

- **High Speeds:** Excessive speeding along Second Street and across the Capital Avenue Bridge creates the potential for conflict with pedestrians and bicyclists.
- **Narrow Sidewalks:** While Second Street has 4-foot wide intermittent sidewalks, and curb cuts, telephone poles and other obstacles impede walking. The southern edge of Second Street between Ewing and Conway Streets has no sidewalk, with perpendicular parking crossing the right-of-way where a pathway should be. These unsafe conditions are most worrisome for children who walk daily to the Second Street Elementary School.
- **Wide Roadbed:** Second Street is overdesigned for the traffic that it receives, with two travel lanes, one in each direction, and a central dedicated turning lane which is rarely used.
- **Limited Bike Accommodations:** Bike lanes in the Second Street Corridor are discontinuous, limiting bicycle circulation in the community.
- **Inadequate Pedestrian Crosswalks:** Intersections in the area are challenging to walk across safely because of long crossing distances, poorly marked crosswalks and/or the lack of traffic signals. For example, the intersection of Second Street and Bridge Street on the



No bikes lanes along stretch of Second Street

southeast corner of the school grounds is 70-feet long, presenting a challenge for both children and adults to cross safely.

- Illegal Left Turns: Illegal left turns into the school create dangerous conditions for drivers, pedestrians and bicyclists.
- ADA Non-Compliance: Elderly and disabled residents traveling between the Second Street Corridor and downtown are threatened by uneven sidewalks, poor transit access and unsafe stairs.
- Unappealing Streetscape: The Second Street Corridor lacks identity without uniform street lighting and landscaping. The existing streetscape discourages people from walking through the area and works against the community's goal of developing a vital commercial corridor.
- Stormwater Runoff: Second Street Corridor is nearly 100% impervious. During major storm events, Frankfort's combined sewer system has been overwhelmed, directly emptying untreated sewage into the Kentucky River.

### *Progress to Date*

Frankfort received EPA Greening America's Capitals technical assistance in 2012 to reimagine its Second Street Corridor. EPA's program helps communities consider ways to incorporate sustainable design strategies into their planning and development to create and enhance interesting, distinctive neighborhoods that have multiple social, economic and environmental benefits. A team of experts analyzed the corridor and found several points of conflict between cars and people in the public realm of Second Street and its intersecting streets. In particular, "roads were wider than necessary for traffic conditions, creating long crosswalks, and sidewalks were narrow and intermittent." A menu of potential remedies was developed, including reducing turning radii, eliminating underused travel lanes, and widening sidewalks to make it easier and safer for pedestrians and bicyclists to get around. These design concepts also included green infrastructure such as new street trees, rain gardens, and porous paving that would capture rain where it falls, reducing runoff volume and filtering it as it percolates into the groundwater.

Based upon these recommendations, Frankfort residents have been engaged in planning exercises to develop concepts that would calm traffic, promote walking and biking, support mixed-use development, and spur job growth. Conceptual plans have been developed to:

- Better manage traffic on the Second Street Corridor by eliminating underused travel lanes, reducing turning radii and other traffic calming measures;
- Improve pedestrian and bicycle safety with wider sidewalks, shorter crosswalks and bike lanes;
- Expand access to bus transit facilities for low-income residents, senior citizens and persons with disabilities;
- Strengthen connections with the state capitol building and downtown to attract tourists and visitors to the commercial corridor on Second Street;
- Enhance streetscapes to encourage brownfields cleanup and mixed-use development;
- Separate the combined sanitary and stormwater system to reduce sewer overflows during heavy rainfalls; and

- Reduce stormwater runoff entering the drainage system to minimize impacts on the Kentucky River.

Frankfort has initiated design and engineering of the proposed Complete Street improvements; \$1.5 million has already been spent on efforts to advance the project’s readiness. Frankfort anticipates that it will be complete with preliminary design and engineering before TIGER award, with a line and grade plan (including utility redesign) submitted to the Kentucky Transportation Cabinet by mid-2018.

### ***Frankfort’s TIGER Solution***

Revitalization of the 3,700-foot section of Second Street, as well as pedestrian and ADA accessibility at the Capital Avenue and East Main Street intersection; is critical to Frankfort’s economic vitality. A Complete Street with new opportunities for pedestrians and bicyclists, as well as improved access to the downtown across the Capital Avenue Bridge, will help the low-income South Frankfort neighborhood grow businesses and create jobs. Specific improvements include:

- Widening sidewalks by removal of the unused center turning lane along Second Street, making room for street trees, street lights, street furnishings, and outdoor cafes, consistent with the community vision for a revitalized commercial street;
- Reducing crossing distances at intersections with curb bulb-outs and visually enhancing crosswalks, including the Bridge Street intersection which serves students and families of the Second Street Elementary School;
- Clearly-marked bike lanes throughout the Second Street Corridor;
- Full-depth pavement reconstruction – the Kentucky Transportation Cabinet’s 2014 pavement condition assessment generally rated Second Street as “poor”;
- New traffic signal replacements and ADA accessibility along Second Street and Capital Avenue;
- Streetscape enhancements and amenities to create an inviting environment for mixed-use development;



Design concept for Second Street

- Removal of stairways that prevent persons with disabilities traveling from East Main Street to downtown without crossing the Kentucky River twice, resulting in shortening the traveled distance by over a third of a mile;
- Replacing 100-year old cast iron water mains with new water services under the roadbed;
- Replacing 1,200 linear feet of aging combined sewer lines and up to 1,000 linear feet of the 21-inch asbestos cement combined sewer force main near the Second Street Elementary School that has a history of breaking and the potential to be an environmental hazard;
- Separating the combined storm sewer infrastructure and connecting the proposed infrastructure to existing outfalls;
- Overhead utility relocation to remove pole obstructions within the middle of the improved sidewalk along the south side of the roadway;
- Repaving on-street parking spaces on the north side of Second Street with porous materials to allow infiltration of stormwater before it reaches the Kentucky River;
- Separation of the combined sanitary and stormwater system along the corridor, which has a history of overflowing into the Kentucky River during significant rain events; and
- Green infrastructure such as new street trees and rain gardens that can capture rain where it falls, reducing runoff volume.

### *Expected Users*

Frankfort’s proposed transportation improvements will benefit a number of populations, including:

- South Frankfort residents who will benefit from increased economic development along the Second Street Corridor;
- Commuters who routinely walk and bike to work downtown, including residents who will seek jobs at the planned Blanton Landing development across the Kentucky River;
- Economically-disadvantaged residents who do not own a vehicle and depend upon safe streets, sidewalks and bike lanes to travel within the community;
- Frankfort Transit System users with poor access to bus facilities;
- Senior citizens and disabled residents who cannot effectively cross the Kentucky River dividing Frankfort;
- Elementary school children who currently travel upon unsafe sidewalks;
- Developers and business advocates who insist upon transportation improvements along the proposed corridor; and
- Tourists and other visitors who currently cannot easily access South Frankfort from downtown or the state capitol.

### *Project Outcomes*

DOT Secretary Elaine Chao has placed an emphasis on using federal transportation investment as a tool to help small and rural communities “improve infrastructure condition, address public health and safety, promote regional connectivity, or facilitate economic growth or competitiveness.” Frankfort’s proposed transportation project will repair a broken corridor, stimulate economic development, help residents improve the quality of their lives, and create pathways to expand the

region's middle class. TIGER investment will produce a variety of desired outcomes in Frankfort, including:

- Increased Transportation Choices: TIGER funding will enable Frankfort to reduce vehicle miles traveled (VMT) and increase the number of commuters who bike or walk to work and play.
- Safer Streets and Sidewalks: Essential repairs of streets and sidewalks will help reduce vehicular and non-vehicular accidents, making Frankfort a safer place to live and visit.
- Increased Density: Second Street revitalization will encourage development in South Frankfort and help the City build density, particularly for low-income residents who cannot afford to own a vehicle.
- Economic Growth: TIGER investment will help unleash significant economic growth and create jobs along the Second Street Corridor, as well as connect low-income South Frankfort residents to good-paying employment opportunities downtown.
- Rural Resurgence: TIGER funding helps support rural America, where infrastructure investment has been lacking.
- Improved Environment: Investments in walkability and bikeability will help to improve air quality, decrease stormwater runoff and generate other significant environmental benefits.
- Healthier Community: Providing opportunities for increased walking and biking, as well as reducing environmental pollution, will help Frankfort become healthier.

### ***Local, Regional and National Significance***

The project is of local, regional and national importance. Locally, the project will help the City revitalize a struggling neighborhood disconnected from downtown. The project complements efforts in Frankfort to focus investment in a once thriving commercial district. The *Frankfort/Franklin County Comprehensive Plan Update 2010* encourages development of small area overlay plans for high priority areas, including Second Street. In 2011, the City launched a study to evaluate a form-based code for the Second Street Corridor that would encourage compact development, protect the area's historic character and help cultivate a sense of place. In addition, the Frankfort/Franklin County Tourist Commission has approved a *Kentucky River Development Plan* that includes redevelopment along the river in South Frankfort and a Riverwalk trail that would connect the neighborhood with downtown and surrounding cultural and natural resources. Developers are interested in reclaiming vacant buildings and idle lots on Second Street. Transportation investment in the corridor supports these planning efforts and will promote further revitalization in this part of the city.

Regionally, Frankfort is a major economic center of activity in Kentucky. As the economy of Frankfort improves, residents across rural Bluegrass country will benefit from new job opportunities. While larger cities across the country bounced back quickly from the nation's recession, small and rural communities like Frankfort have struggled to recover. TIGER investment will support Frankfort as it rebuilds critical infrastructure, revitalizes neighborhoods and helps lead regional growth.

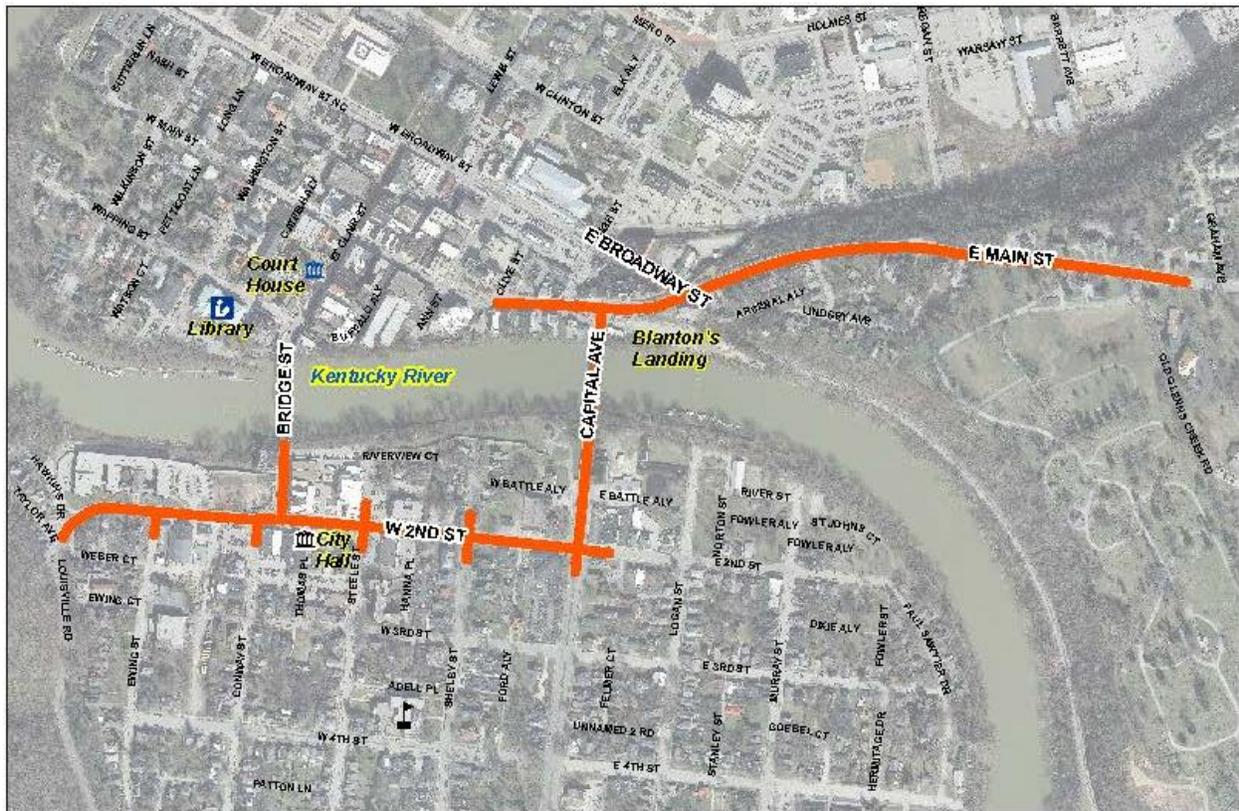
The project will also have significant national implications. As a state capital, visitors from across the nation and globe regularly visit Frankfort. EPA's Greening America's Capitals Program

recognizes this fact by working with capital cities to become models for sustainable design. The proposed TIGER improvements will showcase for how an important rural community can prosper economically with Complete Streets, improved streetscapes and green infrastructure.

## II. PROJECT LOCATION

Frankfort (population: 25,527), located astride a double curve in the Kentucky River in the central portion of the state, is the capital city of the Commonwealth of Kentucky.<sup>1</sup> As the seat of state government, Frankfort’s workday population increases significantly with a large number of commuting employees. Known for its iconic capitol building, bourbon distilleries and small town charm, Frankfort is awash with history. *Forbes* magazine rated Frankfort as one of the best small cities in the United States to raise a family, and *Livability* ranked the city in the top ten places for African Americans.<sup>2,3</sup> The city enjoys a business-friendly environment, skilled workforce and extraordinary quality of life. Not surprisingly in the state capital, public administration is the city’s largest industry. Education, health, social services, manufacturing, and retail trade are also significant sectors of Frankfort’s economy.

Frankfort is a compact, dense community with 11,140 households, 6,053 families and 1,746.3



<sup>1</sup> U.S. Census Bureau, 2010 Census

<sup>2</sup> Forbes, “2010 Best Cities for Families,” 2010

<sup>3</sup> Livability, “Best Cities for African Americans,” 2016

people per square mile.<sup>4</sup> The city is ethnically-diverse, with a significant African American population (16.5% compared to 12.6% nationally).<sup>5</sup> Approximately 15% of Frankfort’s population is school age (5-17) and 15.0% of residents are 65 years or over.<sup>6</sup> A large proportion of Frankfort’s elderly population suffers with a disability (47.3% compared to 36.3% within the United States).<sup>7</sup> Between 2011 and 2015, the median household income in Frankfort was \$41,101 (compared to \$43,740 in Kentucky and \$53,889 nationally) and 19.1% of the city’s residents lived below the poverty line (compared to 18.9% statewide and 15.5% across America).<sup>8</sup> More than 50% of housing units in Frankfort are renter-occupied, compared to 32.8% in Kentucky and 36.1% throughout the country. No vehicles are available to 7.5% of Frankfort’s population.<sup>9</sup>

The South Frankfort neighborhood (located in Census Tract #705), which the proposed TIGER project directly supports, is more diverse and low-income than the city as a whole. The area is 29.5% minority.<sup>10</sup> Approximately 14% of South Frankfort’s population is school age (5-17) and 16.8% of residents are 65 years or over.<sup>11</sup> Nearly 20% of the neighborhood’s population is disabled (64.7% of residents 65 years and over).<sup>12</sup> The median household income in South Frankfort is \$38,582, significantly below national, state and local levels. Approximately 24% of residents in Census Tract #705 live in poverty. Over 14% of South Frankfort’s population receives Food Stamps and Supplemental Nutrition Assistance Program (SNAP) benefits, compared to 13.2% nationally.<sup>13</sup> Approximately 14% of South Frankfort’s occupied housing units do not own a vehicle.<sup>14</sup>

	<b>South Frankfort</b>	<b>City of Frankfort</b>	<b>Kentucky</b>	<b>United States</b>
<b>Median household income</b>	\$38,582	\$41,101	\$43,740	\$53,889
<b>Poverty</b>	23.9%	19.1%	18.9%	15.5%
<b>Renters</b>	71.6%	50.2%	32.8%	36.1%
<b>No vehicle</b>	13.7%	7.5%	7.8%	9.1%
<b>School Age (5-17)</b>	13.8%	14.6%	16.8%	17.0%
<b>Age 65 and Over</b>	16.8%	15.0%	14.4%	14.1%

Approximately 3% of Frankfort’s workers and 9.0% of South Frankfort individuals 16 years and over commute by walking, compared to 2.4% statewide and 2.8% nationally. In addition, 0.6% of city residents and 1.4% of neighborhood commuters bike to work, compared to 1.3% in Kentucky.<sup>15</sup> Alternative transportation options are particularly important to schoolchildren, low-

<sup>4</sup> U.S. Census Bureau, 2010 Census

<sup>5</sup> Ibid.

<sup>6</sup> U.S. Census Bureau, 2011-2015 American Community Survey, “Age and Sex”

<sup>7</sup> U.S. Census Bureau, 2011-2015 American Community Survey, “Selected Economic Characteristics”

<sup>8</sup> Ibid.

<sup>9</sup> U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates, “Selected Housing Characteristics”

<sup>10</sup> U.S. Census Bureau, 2011-2015 American Community Survey, “ACS Demographic and Housing Estimates”

<sup>11</sup> U.S. Census Bureau, 2011-2015 American Community Survey, “Age and Sex”

<sup>12</sup> U.S. Census Bureau, 2011-2015 American Community Survey, “Selected Social Characteristics”

<sup>13</sup> U.S. Census Bureau, 2011-2015 American Community Survey, “Selected Economic Characteristics”

<sup>14</sup> U.S. Census Bureau, 2011-2015 American Community Survey, “Selected Housing Characteristics”

<sup>15</sup> U.S. Census Bureau, 2011-2015 American Community Survey, “Selected Economic Characteristics”

income residents and people who do not own vehicles in Frankfort. Public transportation ridership is comprised of 10.6% of South Frankfort workers living at or below the poverty level, compared to 7.7% citywide and 7.0% in Kentucky. Exactly 100.0% of South Frankfort transit system customers do not own a vehicle.<sup>16</sup> Maintaining an efficient transportation system with reliable buses, safe streets, bike lanes, and sidewalks is imperative to these transit-dependent populations.

The Second Street Corridor project is critical to a major revitalization effort in South Frankfort. Significant mixed-use development is planned. Approximately 18,800 square feet of retail space is available in the project area. TIGER support is necessary to meet user demand on Second Street.

The proposed project is not located in an Urbanized Area and is considered rural by DOT TIGER standards.

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<sup>16</sup> U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates, "Means of Transportation to Work by Selected Characteristics"

### III. PROJECT PARTIES

<b>Organization</b>	<b>Project Roles</b>	<b>Match/Leverage</b>
City of Frankfort	The City of Frankfort will administer the TIGER project. The City’s project roles will include: <ul style="list-style-type: none"> <li>• Reconstruction of Second Street into a Complete Street, with new traffic signal replacements, ADA accessibility and streetscape enhancements;</li> <li>• Bike lanes and ADA compliance measures on Capital Avenue Bridge; and</li> <li>• Green infrastructure improvements in the corridor.</li> </ul>	\$3.2 million match committed
Commonwealth of Kentucky	The Commonwealth of Kentucky has been a key supporter of the project and will contribute state resources for Second Street’s full-depth pavement reconstruction. Kentucky Transportation Cabinet officials will work with the City to expeditiously complete NEPA and other regulatory requirements.	\$750,000 match committed
Frankfort Plant Board	The Frankfort Plant Board, the area’s water and electric utility, will replace 100-year old cast iron water mains and relocate overhead utility poles to make way for wider sidewalks during the project period.	\$425,000 match committed
Frankfort Transit System	The Frankfort Transit System will work with the City to improve access to bus stops along the Second Street Corridor.	Leveraged transit funds
Frankfort Independent Schools	Frankfort Independent Schools will engage in efforts to calm traffic and improve safety for children near the Second Street Elementary School.	Leveraged school funds
South Frankfort Neighborhood Association	Neighborhood leaders will participate in project implementation, including sharing information with community residents.	Not applicable
Local Developers	TIGER investment along the Second Street Corridor will be leveraged with revitalization efforts of private developers seeking to reclaim empty buildings, vacant storefronts and idle lots.	Leveraged business investment

### IV. GRANT FUNDS AND SOURCES/USES OF PROJECT FUNDS

Frankfort has already contributed significantly to the proposed transportation project. To date, the City has invested \$1.5 million in the Second Street Corridor to prepare the project’s readiness, including for design and engineering.

Frankfort seeks \$7,990,000 in TIGER funding to support a multimodal project that will put its Second Street Corridor on a road diet and boost economic development in a distressed neighborhood separated from the downtown. The total cost of the project is \$12,365,000. TIGER support represents 64.6% of the total project. Frankfort and its partners have committed to match TIGER funds with \$4,375,000 in non-federal money, which represents 35.4% of the total project. Local match includes \$3.2 million from the City, \$425,000 from the Frankfort Plant Board and \$750,000 in non-federal Kentucky Transportation Cabinet funding.

Description	Cost	TIGER Request	Matching Funds	Matching Source
<b>Second Street Construction</b>				
Final Design	\$640,000	\$440,000	\$200,000	City of Frankfort
Right-of-Way Acquisition	\$200,000	\$200,000	\$0	
Construction	\$6,250,000	\$6,000,000	\$250,000	Kentucky Transportation Cabinet
<b>Subtotal</b>	<b>\$7,090,000</b>	<b>\$6,640,000</b>	<b>\$450,000</b>	
<b>East Main Street Construction</b>				
Construction	\$2,000,000	\$0	\$2,000,000	City of Frankfort, Frankfort Plant Board, Kentucky Transportation Cabinet
<b>Subtotal</b>	<b>\$2,000,000</b>	<b>\$0</b>	<b>\$2,000,000</b>	
<b>Utilities</b>				
Water Main Replacements	\$475,000	\$150,000	\$325,000	Frankfort Plant Board
Storm Sewer Separation	\$1,500,000	\$0	\$1,500,000	City of Frankfort
Overhead Utility Relocation	\$300,000	\$300,000	\$0	
<b>Subtotal</b>	<b>\$2,275,000</b>	<b>\$450,000</b>	<b>\$1,825,000</b>	
<b>Contingency</b>				
Fee	\$1,000,000	\$900,000	\$100,000	City of Frankfort
<b>Subtotal</b>	<b>\$1,000,000</b>	<b>\$900,000</b>	<b>\$100,000</b>	
<b>Total Project Cost</b>	<b>\$12,365,000</b>	<b>\$7,990,000</b>	<b>\$4,375,000</b>	

<b>Total Project Cost</b>	<b>\$12,365,000</b>
<b>Total Local Match</b>	<b>\$4,375,000</b>
<b>Total TIGER Funds Requested</b>	<b>\$7,990,000</b>
<b>Percentage of TIGER Funds in Project</b>	<b>64.6%</b>
<b>Percentage of Local Match in Project</b>	<b>35.4%</b>

There are no restrictions on the use of any of Frankfort's matching funds. They are available to support the project as described.

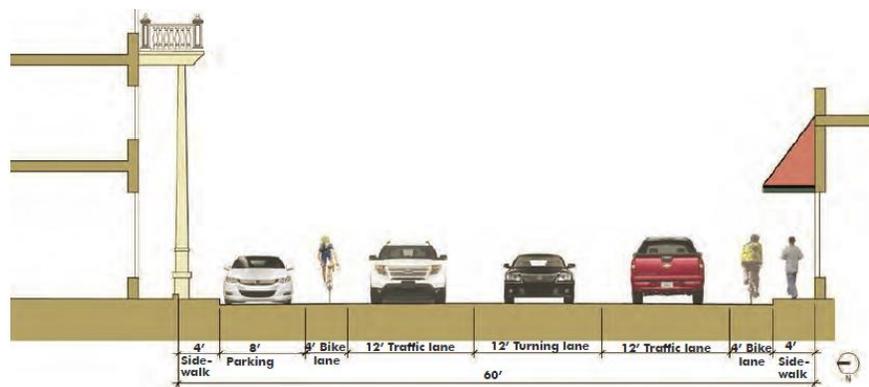
## V. MERIT CRITERIA

### i. Primary Selection Criteria

#### a. Safety

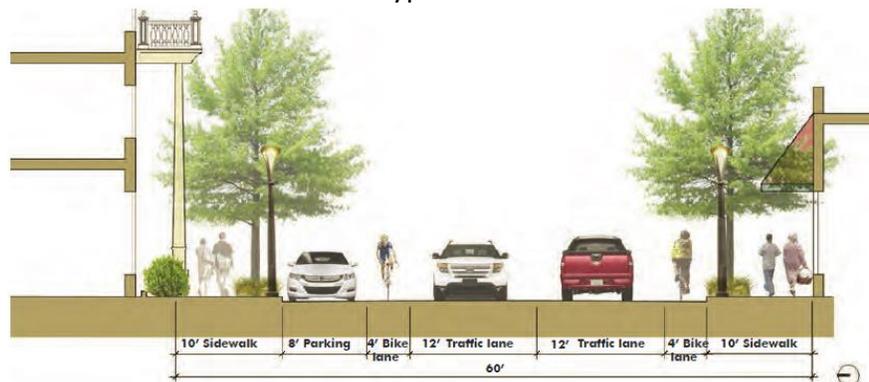
One of the Frankfort’s primary goals with the proposed TIGER improvements is to ensure the safety of all citizens utilizing Second Street. The City seeks to improve pedestrian and bicycle accommodations along the corridor. There are currently several points of conflict between cars and people in the public realm of Second Street and its intersecting streets. The typical streetscape along Second Street includes two travel lanes, one in each direction and a central dedicated turning lane; narrow, intermittent 4-foot-wide sidewalks; on-street parking on the north side of the street; and marked bicycle lanes on each side of the road. The area along the south side of Second Street has been subsumed by perpendicular parking for businesses, contributing to an unsafe walking environment. Second Street intersections are challenging to walk across safely because of long crossing distances, poorly marked crossings, and the lack of traffic signals. These factors contribute to a very challenging pedestrian and bicycle experience, especially for students attending Second Street Elementary School.

On the west end of the corridor, the intersection of Second Street and Bridge Street on the southeast corner of the school grounds is an important juncture for traffic moving between South Frankfort and downtown Frankfort on Bridge Street. It is also a key intersection through which children pass each day on their way to the Second Street Elementary School. The crosswalk at this intersection is 70-foot long and is a challenge for both children and adults to cross safely. In addition, some areas west of the intersection have no sidewalk, further hampering safe walking.



Typical cross section of Second Street

At the intersection of Capital Avenue and Second Street, the road widens to six lanes with dedicated turn lanes. The crosswalk at the intersection is 72-foot long with no refuge and is a challenge for pedestrians to cross safely. Removing two



Design concept cross section of Second Street

travel lanes on Capital Avenue, one in each direction, will reduce the crosswalk to 48 feet, improving pedestrian safety. Removing the travel lanes will also allow room for 5-foot bicycle lanes and a wide sidewalk with rain gardens and street lighting to create a safer pedestrian environment.

Visually enhanced crosswalks at each intersection will keep pedestrians safer by making the crossing more visible. On the north side of the street where on-street parking would be, curb bulb-outs at the intersections will reduce crosswalk length, which also helps protect pedestrians.



Long crosswalk on Second Street

Traveling north from Second Street, Capital Avenue is the main transportation artery between the state capitol complex and downtown Frankfort. The Capital Avenue Bridge has three travel lanes and narrow, 5-foot sidewalks on each side of the bridge. These sidewalks are immediately adjacent to fast-moving lanes of traffic. The Capital Avenue Bridge meets Main Street on the north shore of the Kentucky River in downtown Frankfort. The intersection is scaled more like a highway interchange than a city street intersection, featuring wide turning angles for vehicles traveling on Main Street to enter the bridge and for vehicles turning from the bridge onto Main Street. Because of the wide turning radius, many cars travel at high speeds as they move through the intersection. The high speeds and lack of infrastructure to protect pedestrians make it dangerous for pedestrians trying to cross the bridge and enter downtown. Neither street has bicycle lanes, so the intersection is equally challenging for bicyclists to navigate. There is a painted median in the middle of the intersection, but it offers little real relief from the passing cars.

The intersection of Capital Avenue and Main Street will be improved by reducing the curb radii and creating a more compact crosswalk that pedestrians could more safely navigate. In addition, the bicycle lanes will follow the sidewalk and connect to Main Street away from the intersection.

The project will help the City avoid surface-transportation related crashes, injuries and fatalities, and achieve significant safety benefits. The proposed improvements will help Frankfort shift traffic modes from personal vehicles to even greater walking, biking and transit activity. The existing conditions create unsafe conditions for bikers and pedestrians. Second Street has some of the highest rates of crashes in the entire Frankfort area. There were approximately 103 crashes (13 of which resulted in injuries) along the project corridor from January 1, 2010 to December 31, 2016, which amounts to 17 crashes per year. While the project is unlikely to eliminate all future crashes, the Federal Highway Administration (FHWA) has demonstrated that road diet projects can slow vehicular traffic, shorten pedestrian crossings and ultimately help prevent crashes for motorists and pedestrians. Widening sidewalks, reducing crosswalk lengths, improving lighting, and enhancing bike accommodations will reduce areas of conflict. Essential street repairs on Second

Streets and its sidewalks will also reduce damage to vehicles, including deployed airbags, popped tires, damage to vehicle struts, as well as people reporting pedestrian harms from trip hazards.

Frankfort's Benefit-Cost Analysis (BCA), prepared by Michael Baker International, estimates that the community will save approximately \$138,000 in crashes per year, beginning in 2020. When discounted over 24 years (7% rate), this amounts to a \$1.6 million benefit.

#### **b. State of Good Repair**

The conditions on the Second Street Corridor have not been completely modified in decades. Sidewalks, street amenities and lighting are much the same as they were 30 years ago. A 3,700-foot section of Second Street, from Taylor Street to Capital Avenue, has fallen into extreme disrepair. Likewise, disinvestment in Capital Avenue, which connects South Frankfort to the downtown, has thwarted economic development efforts in the neighborhood. Revitalization of the Second Street Corridor will improve the conditions of existing transportation facilities and infrastructure. The project is in complete alignment with DOT's "fix it first" approach.

Frankfort seeks TIGER funding to improve a key corridor in the community. The road is located in an economically-distressed portion of the city, with 23.9% of the neighborhood living in poverty. The proposed improvements will help move traffic efficiently around South Frankfort and minimize wear and tear of the roadways. Frankfort seeks to develop Complete Streets on Second Street and Capital Avenue. The Second Street Corridor currently serves pedestrian, bike, transit, and personal vehicle traffic. However, it was not designed for these mixed uses. Sidewalks are narrow and intermittent, parking restricts pedestrian flow, and long crosswalks threaten safety. Project elements include reconstruction of the roadway, wider sidewalks and bike lanes, appropriate pedestrian-scale street lighting, improved crossings, and realignment of traffic control devices. Complete Street improvements will provide better functionality on Second Street and Capital Avenue, improve mobility along these thoroughfares and help the City save money by matching the needs of the roadway with its actual design. Proposed upgrades invest in existing infrastructure, help to minimize deterioration of the roadway and extend the life cycle of Frankfort Transit System's rolling stock investments.

The Second Street Corridor project is consistent with existing local and regional plans to maintain transportation facilities and systems in a state of good repair. TIGER funding will complement other efforts in Frankfort to focus investment in the once thriving commercial district of the South Frankfort neighborhood. The *Frankfort/Franklin County Comprehensive Plan Update 2010* encourages development of small area overlay plans for high priority areas, including Second Street. Second Street revitalization aligns with the comprehensive plan by:

- Encouraging mixed use and the re-use of vacant and underutilized land;
- Implementing development principles that encourage alternate modes of transportation, connectivity to other uses and walkable neighborhoods; and
- Preserving neighborhoods while enhancing the community quality and character.

In the fall of 2011, Frankfort launched a study to evaluate a form-based code for the Second Street Corridor that could help encourage compact development, protect the neighborhood's historic

character and help cultivate a sense of place. In addition, the Frankfort/Franklin County Tourist Commission developed a *Kentucky River Development Plan* that includes redevelopment along the river in the South Frankfort neighborhood and a Riverwalk trail that would connect the neighborhood with downtown and surrounding cultural/natural resources. Building on that momentum, Frankfort applied for and received EPA Greening America's Capitals technical assistance in 2013. A design team, including consultants from Parker Rodriguez and CARMAN, helped to develop concepts to improve the existing road network to safely accommodate bicycling, pedestrian and transit uses.

Without the proposed strategic transportation investments, the City will have difficulty spurring economic development in the South Frankfort neighborhood. Developers have begun to reclaim empty buildings, vacant storefronts and idle lots. However, this revitalization will not be fully realized if the community's multimodal transportation network does not work.

The project is appropriately capitalized up front. Frankfort has considered how the project's long-term operations and maintenance costs will be met. Economic growth along the corridor will create significant additional fees and tax revenues that can offset costs associated with maintaining the Second Street Corridor infrastructure. Transit improvements will also increase Frankfort Transit System ridership and associated fares, and create efficiencies that will save money.

The Second Street Corridor's pavement was last maintained in 2009 and is scheduled for maintenance approximately every 14 years, with the next maintenance effort scheduled for 2023 (the following date would be 2037). Given that the project includes extensive roadway rehabilitation and streetscaping (reflected in the costs), this maintenance can be deferred until 2035 (14 years after project completion). When discounted over 25 years (at 7% rate), this deferred maintenance provides a modest benefit of \$160,500.

### **c. Economic Competitiveness**

The project area is located along the southern bank of the Kentucky River. The Kentucky River separates the Second Street Corridor from downtown Frankfort. Two key outcomes of the proposed transportation improvements are to:

- Create jobs along the Second Street Corridor; and
- Connect low-income South Frankfort residents to good-paying employment opportunities downtown.

Hence, revitalization efforts along Second Street are paramount to connecting both parts of the City.

With the completion of a bypass, Frankfort experienced a decline of downtown traffic. This led to the closings of historic structures along



Redevelopment opportunity in corridor

Second Street. Empty buildings, vacant storefronts and idle lots detract from the continuity of the corridor. Most residents and tourists utilize the Second Street as a thoroughfare, never slowing or stopping to patronize the local businesses. Redevelopment of these underutilized areas is hindered by a lack of pedestrian traffic.

The Second Street Elementary School, City of Frankfort offices, and police and fire stations add a strong civic presence and employment base to the corridor. A neighborhood grocery store at the corner of Steele and Second Streets is well used and could anchor additional retail in the area. Across the street from the grocery is an apartment building for senior citizens, providing a population of potential customers. If the corridor was more appealing to pedestrians and bicyclists, this potential customer base would be more likely to shop at existing business and encourage additional commercial activity to locate along Second Street.

The publicity of Frankfort’s Greening America’s Capitals technical assistance brought some much-needed attention to the corridor. Following these planning efforts, there was new ownership of the buildings at 115-121 Bridge Street and approximately \$500,000 of private investment in this block.

The proposed TIGER project will help to unlock South Frankfort’s economic potential. Just one-half mile from the capitol complex, Complete Street improvements will help to grow foot traffic and bicycle use in the area. This area is prime for revitalization; approximately 18,800 square feet of commercial space is available immediately. Downtown Frankfort is built out with no remaining empty lots. Economic development is expected to shift to South Frankfort as the downtown is



Immediate commercial opportunities on Second Street corridor

constrained by limestone bluffs and the Kentucky River. Traffic calming measures will enable drivers to slow down and appreciate new commercial, retail and outdoor café opportunities in the Second Street Corridor. Low-income residents will enjoy employment opportunities in their backyard. Land values will also rise along the improved corridor. According to the BCA, when discounted at 7%, the total property value benefit is approximately \$3.7 million.

The surge of economic development that TIGER funding will help Frankfort to unleash will also

create significant local fees and taxes. New economic development on Second Street is expected to generate new annual City tax revenues. Several development projects in South Frankfort are contingent on transportation improvements, including the redevelopment of the former Frankfort Lumber site. However, developers of these projects have indicated that they will not proceed without better transportation access.

In addition, the proposed TIGER project will help connect unemployed and underemployed workers in South Frankfort to downtown job and educational opportunities. For example, more than \$1.5 million of commercial activity is planned at the Blanton Landing development across the Kentucky River. Pedestrian and ADA compliance measures will help connect disadvantaged South Frankfort residents. This is critical to an economically-distressed portion of the city (23.9% of the population lives in poverty).

Finally, the Second Street project will help residents and commuters avoid the cost of owning a car, particularly low-income households in South Frankfort. According to AAA, owning and operating a car costs \$8,469 per year.<sup>17</sup> Each vehicle that the project helps an individual avoid owning or using means significant funds are available for other expenses. Providing transportation choices such as improved transit, better walkability and bike lanes helps residents decide to forgo owning a personal vehicle, and generates significant local purchasing power.

#### **d. Environmental Sustainability**

Another important goal of the Second Street Corridor initiative focuses on environmental protection. The project will demonstrate how investing in pedestrian improvements and biking can generate multiple environmental benefits, including reduced dependence on foreign oil, curbed emissions, improved air quality, decreased stormwater runoff, brownfields redevelopment, smart growth, and green infrastructure enhancements. Each of these benefits will contribute significantly to the sustainability of the region and country.

Making sidewalks and streets safer for biking and walking will increase the number of residents who use non-vehicular modes to commute to work. Shifting trips in the city from single occupancy vehicles to bus transit, walking and biking will significantly reduce fuel consumption. Those energy savings will generate meaningful reductions of carbon and other air pollutants.

Frankfort lies within the Ohio River watershed. The Kentucky River, a key tributary of the Ohio River, bisects the city. The river has carved a deep channel through the limestone of the region, creating a steep, 30-foot river bank on the south side. The city lies on a relatively flat plateau flanking the river. Second Street runs along a ridgeline on the south side of the Kentucky River from east to west. The stormwater runoff from Second Street flows slowly from this ridgeline, draining to a combined sanitary and stormwater sewer system. During normal conditions, the majority of runoff is pumped through sewer lines to a treatment plant across the river. However, during major storm events, overflow pipes convey some of the runoff directly into the river, along with untreated sewage.

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<sup>17</sup> AAA's 2017 *Your Driving Costs* study

Reducing the amount of stormwater entering the combined sewer system is critical to mitigate this health hazard and improve the river's water quality. Frankfort proposes to separate its combined sewer lines on Second Street, as well as plant green infrastructure to capture rainwater where it falls. New street trees, rain gardens and porous paving will reduce runoff volume and filter water as it percolates into the ground. When discounted over 25 years (at 7% rate), these stormwater diversions and savings are expected to provide a \$5.7 million benefit.

More than 75% of Second Street does not have street trees. The lack of trees increases temperature of the developed area relative to its rural surroundings and discourages walking during hot weather because of a lack of shade. Increasing the tree canopy along Second Street and will not only improve the aesthetic character of the corridor but also improve local air quality by reducing ozone and particulate matter pollution.

The Second Street Corridor also has several potential brownfields sites that are seriously threatening the health of residents and the general economic development of Frankfort's core. A legacy of riverfront activities has left the riverbanks marred with sand and gravel pits, a lumber yard (former Frankfort Lumber), numerous scrap yards, a liquor distillery, and even two sunken boats. Part of this waterfront area floods frequently, inundating the area with up to 25 feet of water and likely releasing contaminants into the river. The Kentucky River is a source of the city's drinking water. Brownfields cleanup, supported with EPA grants, is already underway in the community. TIGER investment will help to encourage additional remediation of contaminated sites.

The project also includes the replacement of existing incandescent street lights on the rebuilt Complete Streets with energy efficient LED street lights, which will save electricity, reduce costs and curb emissions.

#### **e. Quality of Life**

The Second Street Corridor project is the result of a comprehensive planning effort. The project's elements were identified through a series of planning processes, including the *Frankfort/Franklin County Comprehensive Plan Update 2010* and the City's involvement in EPA's Greening America's Capitals technical assistance. Community participation in these planning processes included numerous public meetings, surveys and interviews with stakeholders. Key concerns included:

- Speeding, short sight distances and illegal left turns into the Second Street Elementary School create dangerous conditions for drivers and pedestrians;
- Crossing Second Street at Conway Street and Ewing Street is challenging for pedestrians;
- Many tourists come through the area to visit the state capitol building, but wayfinding signage is poor and could be improved;
- Better lighting, benches and street furniture would make the area more appealing for pedestrians; and
- Safe bike routes throughout Frankfort, especially across the Capital Avenue Bridge, are important for making biking a viable transportation option.

Frankfort's project will improve quality of life in the region by:

- **Providing more transportation choices.** The project was conceived to provide safe, reliable and economical transportation choices. Complete Streets and pedestrian improvements along Second Street will provide safe opportunities for walking and biking. ADA compliance across the Capital Avenue Bridge will provide easier opportunities for seniors and persons with disabilities to cross the Kentucky River. The project is expected to significantly decrease household transportation expenses. By expanding transportation choices, more Frankfort households will be able to forego car ownership, or maintain one vehicle rather than two or more. For residents with low- and moderate-incomes in particular, the cost of car ownership is a significant economic burden.
- **Improving connectivity to jobs, health care and other critical destinations.** TIGER investment is critical to helping connect people with employment, education, health care, and other important destinations. The economic prosperity of a community is dependent on its ability to move people and goods. However, that mobility is constrained in Frankfort by narrow sidewalks, a wide roadbed, long crosswalks, illegal left turns, poor ADA compliance, and limited bike accommodations. The proposed improvements will enable rural Frankfort residents to safely move about the community, and save time and money along busy streets.
- **Lowering transportation costs.** The Center for Neighborhood Technology, which urges families to spend no more than 45% of a household budget on housing and transportation costs, measures the Frankfort region at 46% on its Housing + Transportation Affordability Index. Car ownership is expensive and often unaffordable to lower income populations. Eliminating the need for personal vehicles has the potential to drastically reduce the cost of living in Frankfort.
- **Promoting neighborhood revitalization.** The project has the potential to completely revitalize the struggling Second Street Corridor. Like many communities, South Frankfort has been hit by the downturn in the economy. If the City does not complete this project, it is likely that more storefronts will close. Transportation improvements will help to leverage planned mixed-use development.

Travel time savings will also contribute to quality of life. Less time spent behind the wheel will provide residents with greater opportunities to enjoy leisure activities. Approximately 70 pedestrians would cumulatively save 2,205 hours per year by taking the shorter trip across the Capital Avenue Bridge, as opposed to detouring across the Kentucky River on Bridge Street. When discounted over 24 years (at 7% rate), this travel time savings equates to a \$286,000 benefit.

## ii. Secondary Selection Criteria

### a. Innovation

Frankfort's project incorporates innovation to improve its transportation system. Specifically, the project includes:

- Complete Streets: The City will transform poorly functioning streets and implement streetscape improvements along the Second Street Corridor. Wider sidewalks and other streetscape improvements will support transit, walking and biking.
- LED Street Lighting: The project includes the replacement of existing incandescent street lights on the rebuilt Complete Street with energy efficient LEDs, which will save electricity, reduce costs and curb emissions.
- Green Infrastructure: Green infrastructure approaches will be used to improve water quality and manage the quality and quantity of stormwater runoff from road surfaces.

As a state capital, these sustainable design innovations will serve as a model to other rural Kentucky communities, as well as visitors from across the nation and globe.

### b. Partnership

Frankfort has worked with many key partners to develop the project. For its Greening America's Capitals engagement, the City formed a team of many local, regional and state stakeholders. Participants included the City of Frankfort, Second Street Elementary School, Frankfort Plant Board, Frankfort/Franklin County Tourist & Convention Commission, South Frankfort Neighborhood Association, Walk/Bike Frankfort, Kentucky Heritage Council, Kentucky Department of Environmental Protection, Kentucky Division of Forestry, local property owners, and residents. Representatives of these organizations attended design workshops and provided feedback on proposed transportation solutions.

Partners crucial to the implementation of the proposed TIGER elements include:

- City of Frankfort – will administer the TIGER project and has committed \$3.2 million in match
- Commonwealth of Kentucky – will contribute \$750,000 in non-federal state resources for Second Street's full-depth pavement reconstruction and acquisition
- Frankfort Plant Board – providing \$425,000 to replace water mains and support East Main Street construction
- Frankfort Transit System – TIGER funds will leverage Second Street transit investment
- Frankfort Independent Schools – will engage in efforts to calm traffic and improve safety near the Second Street Elementary School
- South Frankfort Neighborhood Association – will participate in project implementation, including sharing information with community residents
- Local Developers – TIGER investment along the Second Street Corridor will be leveraged with revitalization efforts of private developers

See Section III. Project Parties for a description of the partners' roles and financial commitments.

The project enjoys strong intergovernmental support from Mayor William May, the Frankfort City Commission, the Franklin County Board of Commissioners, the Kentucky Transportation Cabinet, Governor Matt Bevin, State Representatives Derrick Graham and James Kay, State Senator Julian Carroll, Representative Andy Barr, Senator Rand Paul, and Senator Mitch McConnell.

The Commonwealth of Kentucky is investing in Frankfort's transportation system. The City was awarded \$289,863 in Transportation Alternative Program funds in 2015 to improve wayfinding signage in the community. A bid package is currently under review by the Kentucky Transportation Cabinet. TIGER investment will leverage this state investment and help bring people from the downtown and capitol complex to the Second Street Corridor.

The City has also coordinated closely with its federal partners to plan for and develop the project. That interagency collaboration is already working. Frankfort received EPA Greening America's Capitals technical assistance to jumpstart its Second Street Corridor efforts. The community received EPA Brownfields Assessment funding in 2014 to remediate contaminated properties in the corridor. Frankfort also plans to pursue additional technical assistance from EPA's Office of Water to implement green infrastructure improvements to reduce stormwater runoff and seek an Our Town grant from the National Endowment for the Arts (NEA) to install public art downtown. TIGER funding will immediately leverage this federal support.

## **VI. PROJECT READINESS**

### **i. Technical Feasibility**

The Second Street Corridor project will easily meet the deadline to obligate funds by September 30, 2020. As previously stated, the City and design team have been working on this project since 2012. Design concepts have been completed and ongoing public input has ensured that the surrounding community is supportive of this project. A Request for Qualifications was issued in 2014 and the City has contracted with a design/engineering firm. Frankfort anticipates that it will be complete with preliminary design and engineering before TIGER award, with a line and grade plan (including utility redesign) submitted to the Kentucky Transportation Cabinet by mid-2018. The proposed budget is based upon consultations with contractors and previous experience with Compete Streets/streetscape improvements. Contingency costs have been built into the project's budget. Frankfort has the technical capacity to implement the proposed scope of work, as demonstrated by its on-time, on-budget construction of similar projects like the Wilkerson Boulevard Pedestrian and Bicycle Facilities funded through Transportation Enhancement funds. The project will be overseen by Frankfort Public Works Director Thomas Bradley and Community Relations/Grants Manager Rebecca Hall, who have extensive experience managing transportation infrastructure projects and meeting federal funding requirements.

The project areas are primarily located in the public right-of-way. Only minor temporary and permanent easement acquisition is anticipated during the project period. Frankfort has evaluated whether any aspects of the natural, social or economic environment would be affected by the

project. As the activities that comprise the project are replacement in-kind of existing facilities, no impacts are anticipated.

Frankfort has a AA credit rating for its General Fund and AA- status for its Sewer Fund. Furthermore, planned and proposed development in the community is expected to strengthen the City's finances. TIGER funding is expected to spur significant investment. This economic growth will create significant additional fees and tax revenues that can offset additional costs associated with maintaining the proposed infrastructure.

Frankfort has an exemplary record of managing federal grants, having received numerous EPA, HUD, and other federal grants over the years. Key to this effort is the development of a detailed work plan with clear milestones and responsibilities. Performance measures will be established in order to track progress. The City has never been cited for an adverse OMB Circular A-133 audit finding, and has never been required to comply with "high risk" terms or conditions under OMB Circular A-102.

### ***Statement of Work***

Following is a summary of the anticipated major tasks to implement the TIGER project:

#### **1. Overall Project Management**

- Hire Project Manager: The City will hire a TIGER project manager to supervise and implement the multi-phase project. Duties will include public outreach, project coordination, construction management, reporting, and compliance with all funder requirements.
- Execute Funding Agreements: Execute binding funding agreements with Kentucky Transportation Cabinet and other funders.
- Create Capital Project: Establish a capital project to secure debt financing for the full project cost. A bond anticipation note will be issued to fund projected expenses prior to receipt of grant reimbursement.
- NEPA: The project qualifies as a Categorical Excluded activity as it consists of reconstruction of existing public facilities without any significant increase in size or capacity. Following consultation on historic resources and endangered species, the project is expected to comply with all requirements.

#### **2. Community Engagement**

- Outreach: Communicate project impacts to residents and local businesses.

#### **3. Rebuild Second Street**

- Construction Easements: Secure temporary construction easements where grade changes/retaining walls will be installed.
- Construction Documents: Finalize construction documents and gain Kentucky Transportation Cabinet approval of design documents.
- Bid: Bid out and award construction contract.
- Construction Contract: Execute construction contract.
- Construction: Complete Street construction on Second Street.

- Initiate maintenance of traffic activities to maintain two-way vehicular traffic on the existing roadway and pedestrian access along the existing north curb line. Construction activities will be sequenced on a block by block basis to limit impacts to existing businesses and residences.
- Complete installation of separated drainage infrastructure along the roadway.
- Abandon existing drainage inlet connections to the existing combined sewer system.
- Replace the existing 100-year old water main.
- Install portions of the improved traffic signal infrastructure.
- Install decorative street lighting and conduits.
- Relocate the existing overhead utilities to be out of the middle of the improved walkway.
- Construct concrete curb, sidewalk and driveways along the south side.
- Shift maintenance of traffic activities to maintain two-way vehicular traffic on the south side.
- Construct remaining portions of the utility relocations as well as drainage, signal, and electrical infrastructure.
- Construct concrete curb, sidewalk and driveways along the north side.
- Through phased construction sequencing and off-peak lane closures, remove remaining portions of the roadway pavement and reconstruct full depth pavement section.

#### **4. Pedestrian and ADA Accessibility on Capital Avenue and East Main Street**

- Construction Documents: Prepare construction documents and gain Kentucky Transportation Cabinet approval as necessary.
- Bid: Bid out and award construction contract.
- Construction Contract: Execute construction contract.
- Construction: Implement improvements.
  - Initiate maintenance of traffic activities to reduce the existing lane widths and close the westbound dedicated right turn lane to allow construction of drainage and other utility infrastructure while maintaining existing traffic patterns.
  - Modify the maintenance of traffic plan to shift traffic to the south.
  - Utilize off-peak lane closures to construct concrete curb and sidewalk and remaining infrastructure along the north side.
  - Modify the maintenance of traffic plan to shift traffic to the north.
  - Utilize weekend and evening temporary lane closures to construct remaining improvements to the Capital Avenue approach and south side of East Main Street.

**ii. Project Schedule**

Frankfort can begin the proposed project quickly upon award of a TIGER grant and all funds will be spent expeditiously. A majority of the work will be conducted in the existing right-of-way. Only minor temporary and permanent easement acquisition is anticipated.

Project Element	2018				2019				2020				2021	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Second Street Preliminary Design (Pre-TIGER)	■	■												
Early Action East Main Street Construction			■	■	■	■								
Environmental Approval			■											
Phase 2 Design			■	■	■	■								
Utility Design				■	■									
Easement Acquisition						■	■							
Design and Bid Document Approval							■	■						
Bidding Phase									■					
Second Street Construction							■	■	■	■	■	■	■	■

**iii. Required Approvals**

**a. Environmental Permits and Reviews**

Frankfort is working closely with Paul Looney and Kimberly Tompkins at the Kentucky Transportation Cabinet to advance the proposed project’s readiness. The City has consulted with the state on NEPA. The project is classified as a Categorical Exclusion, pending documentation from the State Historic Preservation Office (SHPO) that historic resources will not be affected and from the U.S. Fish and Wildlife Service to confirm that no rare/endangered species will be affected. Frankfort fully expects this project to be compliant with all regulatory requirements and to pose no adverse impacts on historic resources. The City expects a final Categorical Exclusion decision for the project by mid-2018.

The project is the result of extensive public outreach. The community has hosted numerous public meetings gathering input on ways to improve pedestrian, bicycling and transit uses on Second Street. Key participants included the City of Frankfort, Second Street Elementary School, Frankfort Plant Board, Frankfort/Franklin County Tourist & Convention Commission, South Frankfort Neighborhood Association, Walk/Bike Frankfort, Kentucky Heritage Council,

Kentucky Department of Environmental Protection, Kentucky Division of Forestry, local property owners, and residents. Representatives of these organizations attended design workshops and provided feedback on proposed transportation solutions.

#### **b. State and Local Approvals**

The Second Street Corridor project is consistent with existing local and regional plans to maintain transportation facilities and systems in a state of good repair. TIGER funding will complement other efforts in Frankfort to focus investment in the once thriving commercial district of the South Frankfort neighborhood. The *Frankfort/Franklin County Comprehensive Plan Update 2010* encourages development of small area overlay plans for high priority areas, including Second Street.

Work permits will be required from the Kentucky Transportation Cabinet for the signalization improvements. Representatives from the state have indicated that they will support this work and will move expeditiously to complete permitting requirements.

Other project components – ADA sidewalk improvements, benches and street lighting – will take place on land owned or controlled by the City. Frankfort will issue a building permit upon completion of environmental and site plan review.

#### **c. Federal Transportation Requirements Affecting State and Local Planning**

A portion of the project (construction of sidewalk improvements at the intersection of Bridge Street and West Second Street, including Second Street to Ewing Street) is already listed as a recommended project in the Kentucky's 2016 *State Transportation Improvement Plan (STIP)* covering 2017-2010. Transportation plans will be amended to include all of the Second Street improvements immediately upon TIGER award.

#### **iv. Assessment of Project Risks and Mitigation Strategies**

Frankfort's TIGER project is both timely and low-risk. Most of the improvements are located within existing right-of-way. Only minor temporary and permanent easement acquisition is anticipated.

Potential project risks and mitigation strategies include:

- NEPA delays: The City has already consulted with the Kentucky Transportation Cabinet, which administers NEPA reviews on behalf of DOT for federal aid projects. The project will receive a Categorical Exclusion, pending SHPO documentation that historic resources will not be affected and from the U.S. Fish and Wildlife Service to confirm that no rare/endangered species will be affected. The project areas are primarily in the public right-of-way. Only minor temporary and permanent easement acquisition is anticipated. Frankfort expects a final Categorical Exclusion decision for the project by mid-2018.
- Cost overruns: Contingency costs have been built into the budget.

## VII. RESULTS OF BENEFIT-COST ANALYSIS

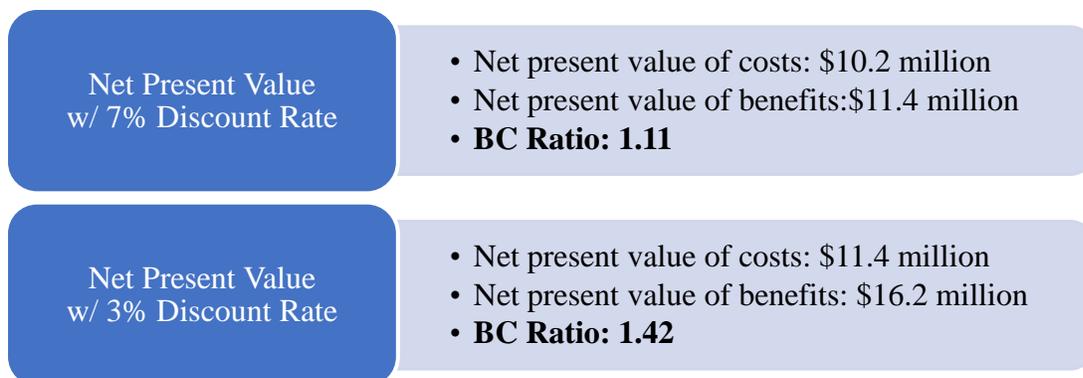
The Second Street Corridor Project offers tremendous opportunities for the City of Frankfort, Kentucky. The project is expected to help revitalize Second Street, Main Street and Capital Avenue, while improving safety for motorists and pedestrians through road diet/traffic calming enhancements. In addition, the project’s storm sewer separation will provide substantial environmental/stormwater benefits by reducing the overall burden placed on the City’s existing sewer system. The project’s costs and benefits are documented below and the assumptions used in the calculations can be found in the attached Excel Workbook.

The anticipated project costs and benefits in this BCA are expressed in constant 2016 dollars. In instances where estimates or valuations were expressed in past or future dollars, the DOT’s *Benefit-Cost Analysis Guidance for TIGER and INFRA Applications* was used to adjust them to 2016 values. This BCA uses 2043 as a horizon year, representing 26 years from the project’s start date. Per DOT guidance, all project benefits and costs are discounted to 2016 dollars using the recommended 7% discount rate and the alternative 3% discount rate.

A summary of the BCA results follows:

<b>Benefits</b>	<b>Total Benefits Undiscounted (2016 \$)</b>	<b>Total Benefits over 26-Year Period Discounted 3%</b>	<b>Total Benefits over 26-Year Period Discounted 7%</b>
Property Values	\$4,641,794	\$4,186,036	\$3,665,144
Environmental (Stormwater)	\$13,051,457	\$8,844,743	\$5,701,934
Crash Reduction	\$3,730,231	\$2,481,128	\$1,557,023
Maintenance	\$255,253	\$205,164	\$160,528
Time Travel	\$715,206	\$467,938	\$286,128
<b>Total</b>	<b>\$22,393,940</b>	<b>\$16,185,009</b>	<b>\$11,370,757</b>

The net present values and the corresponding benefit-cost ratios, comparing the project’s discounted benefits and costs, are summarized below.



**Error! Reference source not found.** table below provides an overview of the current conditions along the project corridor and summarizes some the project’s elements and associated benefits.

Current Status/No Build & Problem to be Addressed	Change to No Build/Alternatives	Types of Impacts	Population Affected by Impacts
Corridor has vacant or undeveloped parcels and areas that are considered blighted.	The project includes extensive streetscaping and accessibility elements.	Increased property values because of the extensive streetscaping and accessibility improvements.	Residents, business owners, and tourists will benefit.
Corridor has substantial amounts of impervious surface and rainfall currently runs off these surfaces into a combined storm sewer (CSS) system. This excess water places substantial strains on the existing sewer pipes.	The project separates the storm sewer functions.	Reduced burden on the sewer system, which will decrease treatment and maintenance costs and lower the capacity requirements for future pumps (which, in turn, will lower the replacement costs)	The City and the environment will benefit.
The Second Street corridor is dangerous and experienced approximately 120 crashes from 2000 to 2016, 10 of which resulted in injuries.	The project includes traffic calming measures on Second Street.	Fewer crashes. Wider sidewalks and curb extensions will increase pedestrian network connectivity and reduce the crossing distances for pedestrians.	All populations will benefit.
The current road and sidewalk infrastructure is crumbling and in need of immediate repair. However, extensive maintenance is not scheduled for the corridor until 2023.	The project includes substantial roadway and sidewalk rehabilitation.	Safer streets, better pavement quality, and opportunities for additional revitalization.	All populations will benefit.
Pedestrian accessibility and mobility is limited by the aging infrastructure, lack of ADA Accessible Design, and overall gaps in the sidewalk network. These gaps not only present a safety risk for pedestrians; they also often	The project replaces multiple turn lanes with one turn lane and utilizes signal phasing improvement. In addition, the	Reduced travel times for pedestrians wishing to cross the Kentucky River.	Pedestrians, cyclists, and those who use wheelchairs or motor-assisted scooters will benefit from the traffic calming and

force pedestrians to take circuitous routes across the Kentucky River.	project addresses gaps in the sidewalk network.		ADA improvements. Students will greatly benefit by the increased mobility and safety.
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**VIII. COST SHARE**

Frankfort has invested significantly in the proposed Second Street Corridor improvements. Planning efforts have been ongoing since 2012. TIGER dollars will leverage more than \$1.5 million of funding that the City and its partners have contributed to date.

The total cost of the project is \$12,365,000. Frankfort and its partners have committed to match TIGER funds with \$4,375,000 in non-federal money, which represents 35.4% of the project. Local match includes \$3.2 million from the City, \$425,000 from the Frankfort Plant Board and \$750,000 in non-federal Kentucky Transportation Cabinet funding. Frankfort’s match is significant for a rural community.

The City has considered how the project’s long-term operations and maintenance costs will be met. Significant economic development is either planned or proposed in the corridor, predicated upon the completion of needed transportation improvements. This increased economic activity will raise tax revenues and fees that Frankfort will devote to maintaining its transportation infrastructure. Transit improvements will also increase Frankfort Transit System ridership and associated fares, and create efficiencies that will save money.

## IX. Federal Wage Rate Certification

If awarded TIGER funding, the City of Frankfort will comply with all of the requirements of subchapter IV of chapter 31 of title 40, United States Code (federal wage rate requirements), as required by DOT.

October 15, 2017

\_\_\_\_\_  
Date

Cindy Steinhauser

\_\_\_\_\_  
Name

City Manager

\_\_\_\_\_  
Title



\_\_\_\_\_  
Signature