

Submitted by: Eastgate Regional Council of Governments

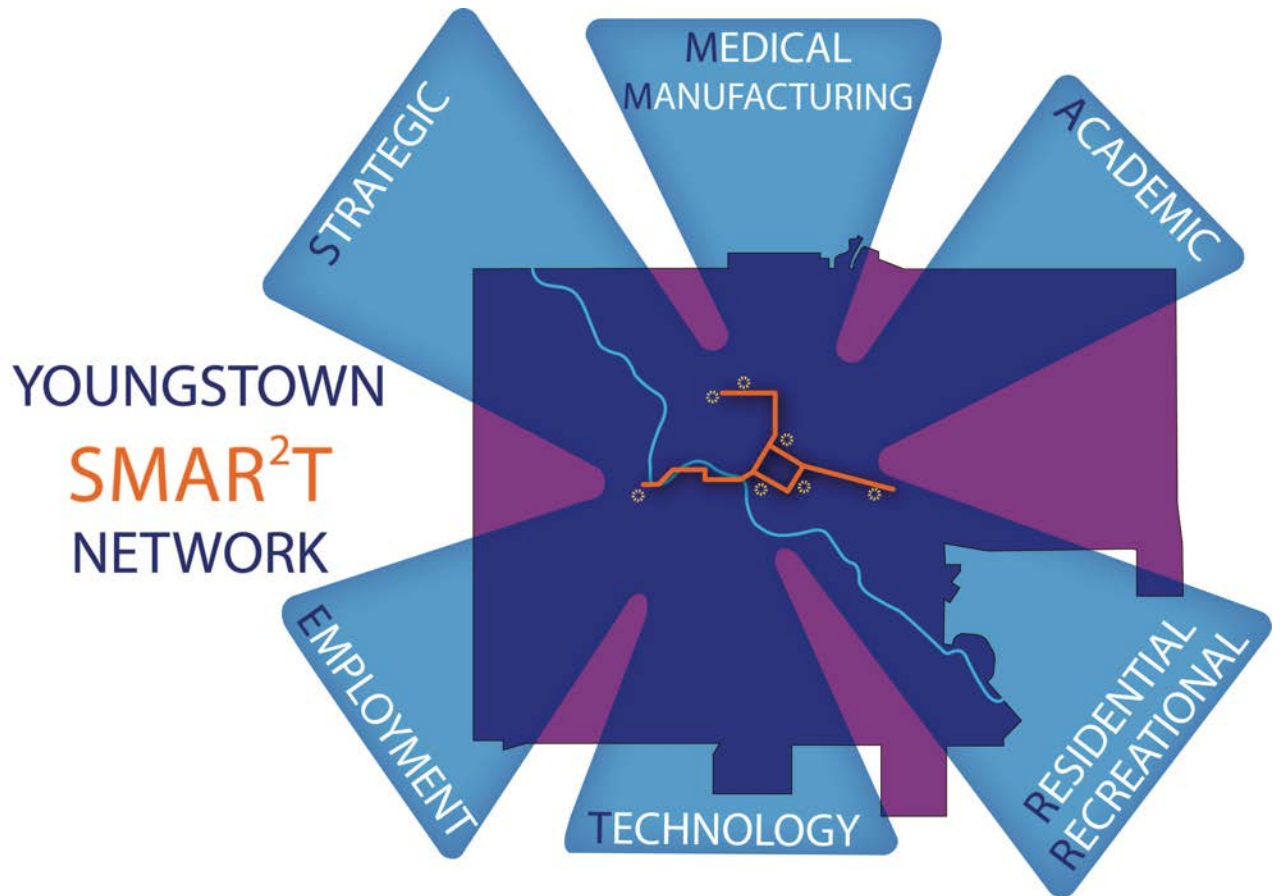


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Application Snapshot

Project Title:	Youngstown SMAR ² T Network
Application Type:	Urban
Applicant:	Eastgate Regional Council of Governments
TIGER Funds Requested:	\$10,249,000.00
Application Contact:	James G. Kinnick, P.E. Executive Director 100 East Federal Street, Suite 1000, Youngstown, OH 44503 Office phone: (330) 779-3800
Organizational DUNS	118903827
Tax ID Number	34-1286978

A. PROJECT OVERVIEW

In the core of the Mahoning Valley, the **Youngstown SMAR²T Network** will connect Strategic, Medical, Manufacturing, Academic, Residential, Recreational, Technology, and Employment centers in our regional heart and downtown Youngstown, positively transforming our region, communities, people, and lives. The Youngstown SMAR²T Network proposal for this TIGER application builds upon more than ten years of planning and coalition building by the project partners, resulting in a transition of an Appalachian community’s economy to one reliant on high value-added services and advanced manufacturing. The proposal is greatly enhanced from last year’s “highly rated” TIGER proposal, building upon an even larger economic and construction momentum, an expanded scope, with increased partnership, providing greater impact, and offering significantly increased cost share and private investment.

Complete street elements will be applied to five streets including **Fifth Avenue, Rayen Avenue, Front Street, Commerce Street, and Park Avenue** to provide safe pedestrian and bicycle-friendly access for residents, workers, and visitors. As seen in **Exhibit 1**, reconstructing the roadways for complete streets will repair aging infrastructure and improve access for all modes of travel. Improvements include replacing existing stormwater drainage, striping bike lanes, adding a median, restoring sidewalks, delineating bus stops and crosswalks, installing street lighting, and planting landscaping.

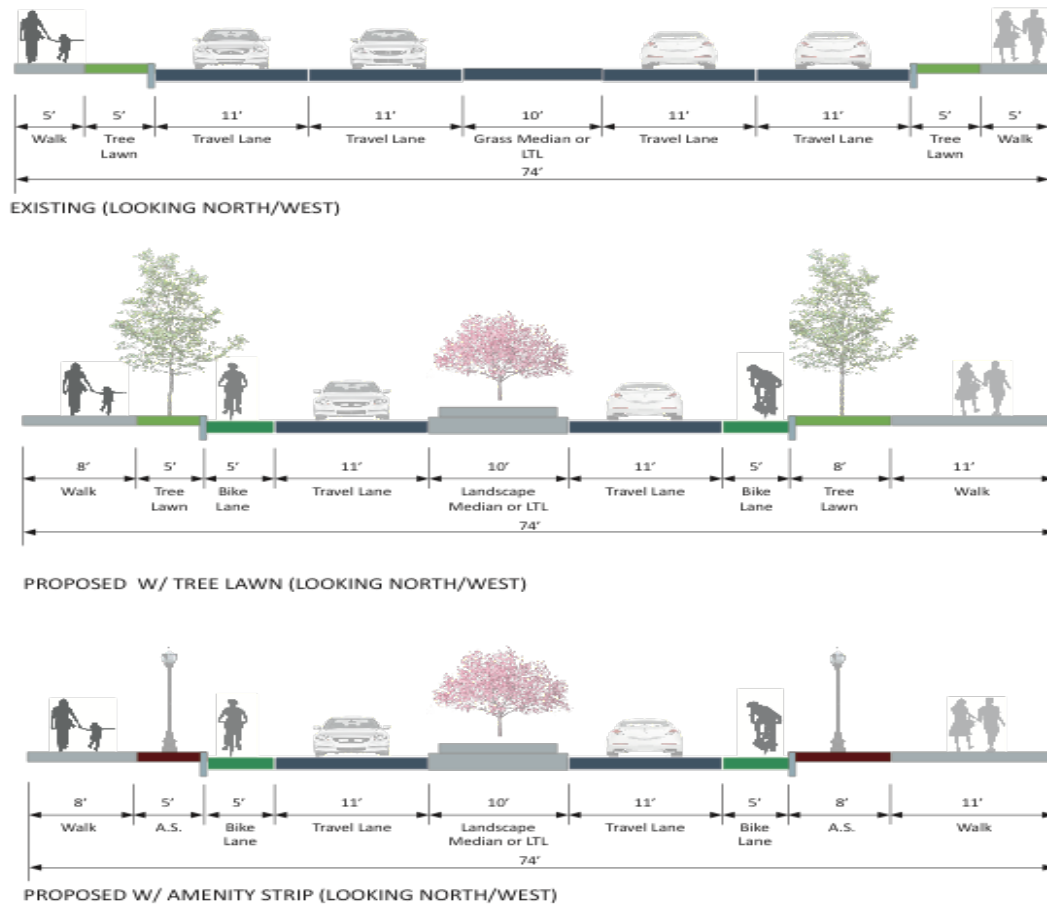


Exhibit 1: The SMAR²T Network will make complete and green street the standard for local transportation investments as seen in a typical section above.

The following streets are the core roadways that make up the SMAR²T Network:

Fifth Avenue is the spine of the Network, connecting downtown Youngstown, Youngstown State University (YSU), and Mercy Health to the central business district, technology block, residential development, and recreational trails and park opportunities along one-mile of roadway.

Rayen Avenue connects educational institutions including Eastern Gateway Community College (EGCC), YSU, and the Youngstown City School District with employment on the near east end of downtown at the new privately constructed West Coast Chill Manufacturing, Research, and Development Center (WCC).

Front Street and Commerce Street serve as the main east-west collectors in the downtown, connecting mixed-use residential and retail development to the technology block which is home to five Youngstown Business Incubator (YBI) buildings, and the planned site for the Mahoning Valley Innovation and Commercialization Center (MVICC), which was recently funded an additional \$2 million to develop a new center for commercialization and innovation on Commerce Street and Fifth Avenue, two primary arterials that make up the SMAR²T Network.

Park Avenue is an east to west thoroughfare that connects the entire Mercy Health campus and distressed residential neighborhoods to the greater SMAR²T network.

\$600 million dollars of private and public investment has been made over the past decade within the SMAR²T Network’s project area. Nearly 20%, or \$107 million dollars has occurred within the last year, further validating the momentum and opportunity of the SMAR²T Network.

- \$32.1 million in renovation for a new hotel on Commerce and Wick Avenue
- \$7.0 million in reconstruction of Wick Avenue and Lincoln Avenue
- \$20.0 million for the construction of a manufacturing, research, and development facility on Rayen Avenue –WCC
- \$16.0 million in new mixed-use student-oriented development along Wick Avenue
- \$7.6 million in new mixed-use student-oriented development along Fifth Avenue
- \$7.0 million affordable housing complex for those with behavioral disorders
- \$6.2 million renovation of public housing
- \$5.7 million in construction of an incubation space for additive manufacturing
- \$5.0 million in facilities renovation for the YMCA on Commerce Street
- \$0.6 million in renovation of a special-needs workforce training facility along Fifth Avenue

Funding provided by the Transportation Investment Generating Economic Recovery (TIGER) program is essential to continue this momentum by completing gaps in the SMAR²T Network.

The SMAR²T Network is an integrated investment in multimodal improvements to facilitate greater connectivity between rural and urban economic anchors of the Mahoning Valley. The SMAR²T Network connects Youngstown’s urban core, which is home to nearly 15,000 employees to education and employment centers such as; Mercy Health Youngstown Region

(Mercy Health), which **employs 4,600 people**, supports **365,000** physician practices, services **33,000 non-emergency, 40,000 ambulatory, and 155,000 emergency visits per year**; YSU which **employs 1,200 people and educates 12,500 students**; the YBI, employing **35 people** and serving **55 incubator** companies, and recently launched Additive Manufacturing incubator, projected to create an additional **400 employees and 5-10 companies**; EGCC, **employing 225 people and educating 3,100 students**, the Central Business District that employs nearly **7,000 total people**, and advanced manufacturing facilities such as WCC that will **employ more than 250 people**. The SMAR²T Network enables greater mobility by completing a citywide circuit that connects individuals to strategic **medical, manufacturing, academic, residential, recreational, technology, and employment opportunities**. **Exhibit 2** illustrates the physical relationship between economic anchors, past and proposed investments. Key project elements include:

- Reconstruction of roadways into safe and **complete streets**: Address design deficiencies by creating complete streets that reduce conflicts and injury to drivers, pedestrians, and cyclists.
- Introduction of a **transit circulator and mini-hubs, as well as a main-transit up dedicated for the Mercy Health campus**: Mobilize distressed and unemployed neighborhoods by increasing frequency and reliability of public transportation.
- Reclamation of the **public realm**: Improve pedestrian facilities and urban vibrancy by re-establishing the public right-of-way and introducing Bike Share.

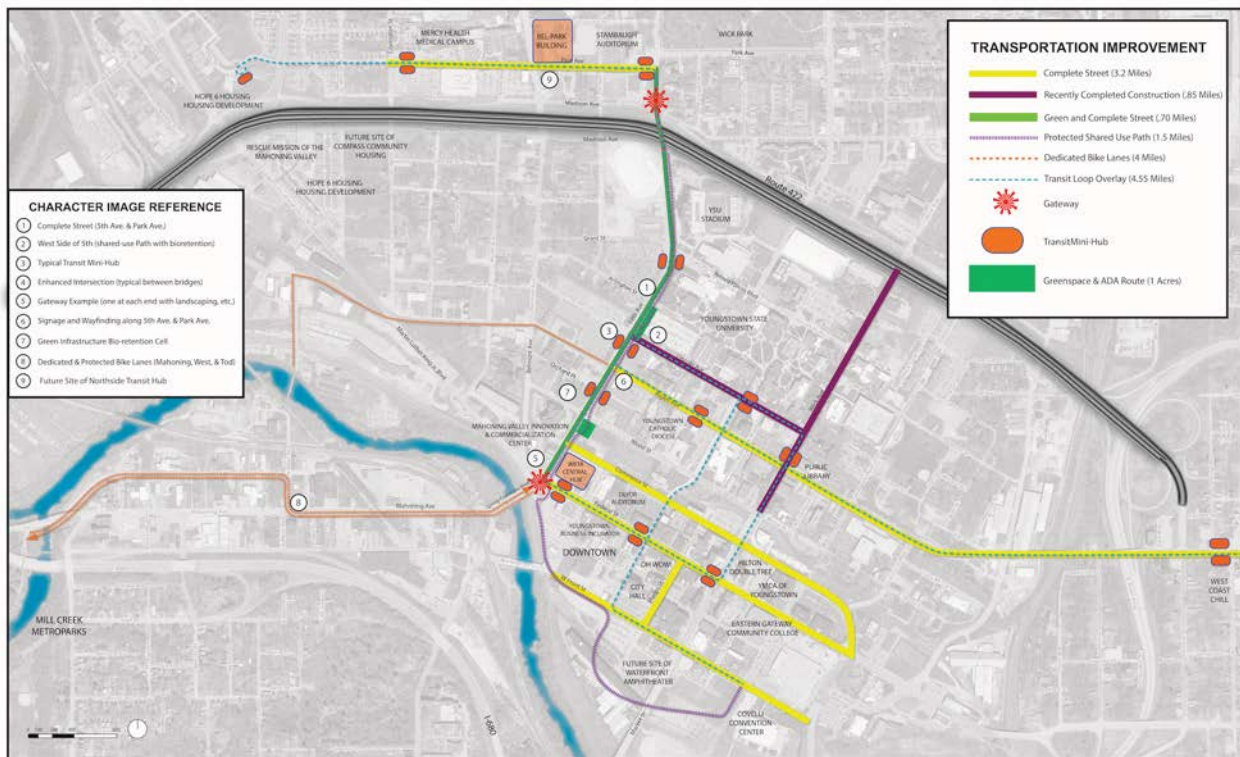


Exhibit 2: The SMAR²T Network and Its Connections to the City and Existing/Committed Transportation Investment

These investments are designed with respect to one another and the physical landscape in which they operate. Roadway improvements are designed to best facilitate movement and site readiness.

With dedicated operations and capital investment funding from the Western Reserve Transit Authority (WRTA), the transit circulator will provide service at fifteen-minute headways, connecting Mercy Health, YSU, the Central Business District and EGCC, and downtown advanced manufacturing facilities such as America Makes, YBI, and WCC. In addition to private employers in banking, finance, insurance, and government, the Central Business District is also home to cultural assets, social services, entertainment venues, and other amenities. The strategic connection of these sites will overcome decades of physical separation due to twentieth-century planning that disconnected neighborhoods and incentivized individual driving through free parking.

Mercy Health is a federally-designated Rural Referral Center and includes a Rural Residency Training program for dental residents to expand access to oral health services to disadvantaged and underserved residents in rural counties adjacent to the metro area. The transit circulator will feature a main transit-hub at Mercy Health that is being planned concurrently with a new ambulatory care and dental clinic. The transit circulator will also include a community facing mini-hub on a formerly vacant and blighted Bel-Park office, an eye-sore on the project route. This will provide increased access to Mercy Health’s campus, increase general welfare through blight elimination and greening, investments in and access for residents, students, employees, and patients to multi-modal infrastructure and streetscape amenities, and an overall increase in pedestrian safety and accessibility. These hubs will also enhance access to health services for multi-modal transit-dependent patients, while at the same time, supporting the academic needs of students pursuing clinical rotations. The SMAR²T Network will resolve service gaps for those patients who depend upon mass transit and are currently limited in accessing care because of fixed bus schedules and headways. Increased patient access via transit hubs relieves demand for non-emergency healthcare.

In addition to the mini-hubs, bus shelters and pedestrian improvements will be added throughout the SMAR²T Network. All WRTA buses will be equipped with bike racks to address issues associated with the “last mile” of travel. Concurrently, WRTA is launching state-of-the art Computer Aided Dispatch/Automatic Vehicle Location technology, providing customers with real-time information to track transit stop locations, departure times, and routes.

The SMAR²T Network also enables the resolution of the U.S. Environmental Protection Agency’s consent decree upon the City of Youngstown by increasing the stormwater storage capacity. Sewer separation under Fifth Avenue will provide a much-needed drainage area to redirect rainfall runoff from adjacent impervious surfaces. By establishing nearly 5,000 square yards of bioretention cells, the city will have an additional 22,000 cubic feet of rainwater storage.

The SMAR²T Network strengthens and connects the transportation system in the greater downtown area, linking opportunities effectively through all primary north, south, east, and west corridors. Ultimately, this creates the SMAR²T Network that connects medical, employment to the north; steel supply and residential density to the west; employment and research opportunities to the east, and technological and recreational opportunities to the south.

1. Transportation Challenges and How They are Addressed

For more than a half century, Youngstown’s transportation planning was based on projections of continued growth. Earlier designs to address traffic congestion called for adding capacity through new lanes and access roads, which were later followed by intelligent transportation systems and travel demand management strategies. Youngstown does not fit traditional models of transportation planning, given the drastic depopulation that has occurred over the last fifty years. In Youngstown, the transportation challenge is to right-size the transportation network after decades of population and employment loss, and to redesign the transportation network to support and accelerate emerging new development.

Youngstown’s transportation network was built to accommodate a population that peaked at nearly 165,000 residents in 1950, and was designed to support an economy concentrated in heavy manufacturing (particularly steel manufacturing and related products). By comparison, Youngstown’s population today stands at 65,000 residents. The City’s core has more and higher-capacity roads than are needed, as the existing transportation network was designed for a physical economy that has long since changed. The core of the City’s existing transportation network was originally designed around an industrial district to accommodate large-scale rail and truck movement. For a comparison, the section of Front Street that is included in the SMAR²T Network had an average daily traffic (ADT) count of 15,700 in 1967. In its most recent count from 2015, the ADT was 3,756, or 23.9% of its use compared to nearly fifty years ago.

Such an economic shift requires a new infrastructure that emphasizes the connection of people rather than the efficient movement of products that might otherwise segregate land uses and people. The SMAR²T Network plays an integral role in revitalizing the City’s core by connecting key anchors of opportunity and employment. As one example, YSU and the City evolved independently for over fifty years during the industrial boom due to a lack of a convenient geographic relationship. This division was further exacerbated when freight rail lines that formerly dissected the Central Business District from YSU were removed, resulting in vast vacant and abandoned space along a steep slope. The SMAR²T Network includes the reconstruction of Commerce Street, which runs along the Central Business District’s northern edge and which was historically a service road for Downtown deliveries. A reconstructed Commerce Street will enable a viable multi-modal transition with new frontage that will erase this former divide, reduce vehicular speeds, and increase safety for pedestrians and bicyclists through complete and green street implementation, which will address the more than 20% drop in ADT over the last fifty years.

Youngstown’s 60% decrease in population has resulted in a sharply reduced tax base that has limited capacity to adequately fund infrastructure that was built for a city projected to be four-times its current size. The SMAR²T Network addresses this lack of funding for infrastructure maintenance by right-sizing the system and updating it to ADA compliance. There are early indications that Youngstown’s urban core is stabilizing. Between 2014 and 2016, the number of workers in the Downtown increased by one third. Additionally, the city employs one in five (20%) of the workers who reside in Columbiana County—a rural-designated county located directly to the south of the SMAR²T Network. Downtown is also home to more than 3,000 residents, experiencing between a 10-15% increase each of the past three years.

Although manufacturing continues to be the prevalent industry of the Mahoning Valley with large facilities such as GM Lordstown, Vallourec, and Fireline Inc., the region’s future economic

opportunities are in education and in the development of advanced manufacturing technologies such as software and material development. A highly-skilled workforce requires a built environment with the infrastructure that supports dynamic interaction in an accessible **live, work, and play** community. Regional leadership is addressing this multi-pronged workforce challenge through the development of amenities and pathways. Given the loss in population density, and isolation because of demolition and abandonment, increased public and private investment in redevelopment activity is poised to accelerate with the completion of the SMAR²T Network.

The SMAR²T Network addresses these challenges on multiple dimensions as shown in **Exhibit 3**. First, it adjusts the City’s transportation network to meet the needs of a reinvented region by rightsizing road capacity. Moreover, the system of complete streets and the introduction of the SMAR²T Network and Bike Share redefine the urban core of the metropolitan region by providing a new footprint, while simultaneously reducing future roadway maintenance costs. Second, an enhanced transportation network that enables circulation and mobility between the region’s anchor institutions supports Youngstown’s emerging education, research, and technology economy, each of which will benefit from the exchange of ideas and collaboration of people. The transit circulator, and bicycle and pedestrian investments support create a walkable and accessible physical environment, connecting the following:

- Medical: multimodal access to healthcare for patients and enhanced transportation options for healthcare employees and medical students,
- Manufacturing: upgraded roadways for market access and workforce preparedness
- Academic: safe flowing passages between educational institutions and on-the-job learning opportunities,
- Residential: reliable transportation options for connecting neighborhood residents to services, employment, and other amenities,
- Recreation: defined routes to greenspaces, including to and from one of the largest inner-city park systems in the nation,
- Technology: linked pathways to centers of technological advancement and development
- Employment: dependable network with frequent delivery to job-creators

Collectively the willingness of private developers to invest in a once depleted market is a signal for what is to come as the urban core can attract a diverse student population and a highly-educated workforce connected to advanced manufacturing and technology development through anchors such as America Makes, YBI, EGCC, and YSU. The investments outlined in this application help to accelerate and solidify private investment by:

1. Rightsizing the city’s transportation network
2. Retooling infrastructure for a knowledge-based economy
3. Reinforcing physical connections and synergies between economic anchors and amenities

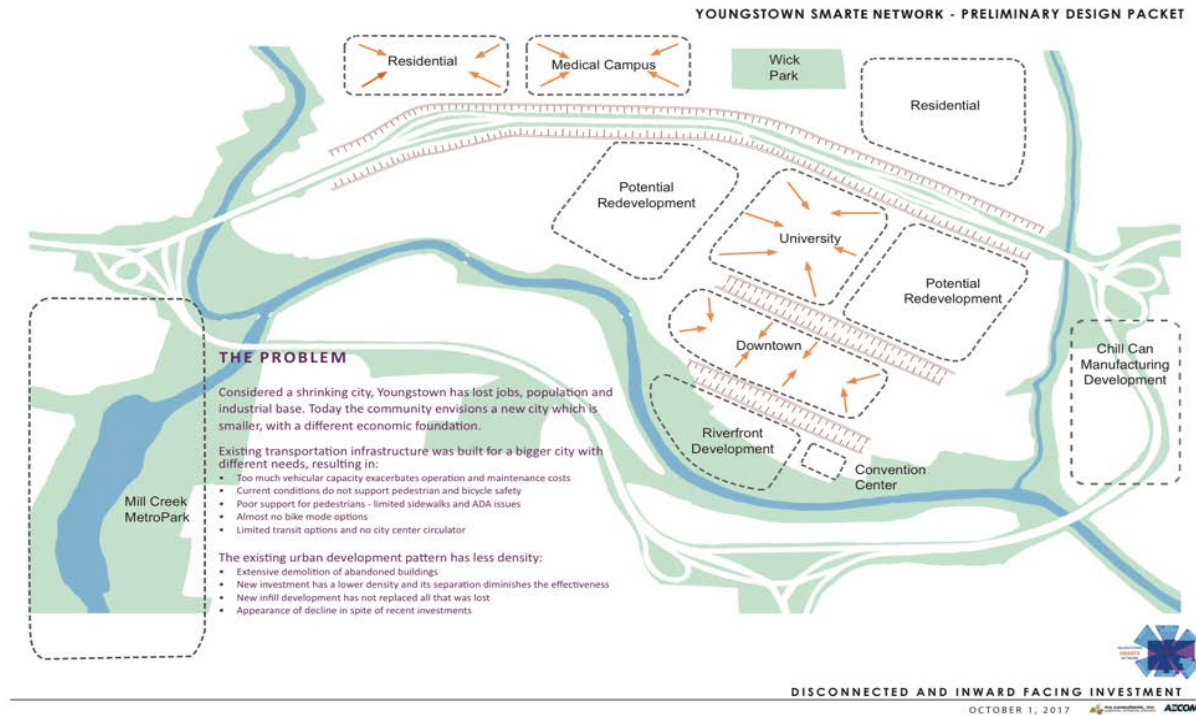


Exhibit 3: Illustration of the Transportation Challenge—Disconnected and Inward Facing Investment

The physical redefinition of the downtown core will significantly catalyze redevelopment by improving connections to new and planned investment in the downtown as illustrated by **Exhibit 4**. By physically connecting Youngstown’s smaller urban center, the SMAR²T Network will help shape and focus new investment coming into the downtown core by establishing a strategic urban pattern and sense of place consistent with the City’s emerging economy.

Over the past ten years, private investment has begun to flow into the downtown area. Construction is near completion for the Hilton DoubleTree, the first downtown hotel in forty years, while private multifamily student and market-rate residences have also developed. Each of the anchor institutions, including YSU, YBI, EGCC, and America Makes, Turning Technologies (an education technology firm), and WCC (a high technology self-chilling beverage container manufacturer) are collectively bolstering the local employment base. America Makes serves plays a particularly strong role in attracting regional investment. In 2014, General Electric (GE) announced a \$32 million investment in a new 3D printing research facility in nearby western Pennsylvania, specifically citing the advantages of locating near America Makes.

The SMAR²T Network will increase these types of economic opportunities and investments, supporting the movement and collaboration of people.

Youngstown is transitioning to a more technically based and diverse economy, focused on establishing a broad economic base. Transportation infrastructure and convenient downtown connections will help to attract and retain residents to the downtown and serve the city’s surrounding neighborhoods and suburbs. Contrary to a typical shrinking city, the Youngstown/Warren/Boardman MSA has increased its share of young adults (aged 25 to 34) with a bachelor’s degree or higher—

rising 5% between 2000 and 2013.¹ These are highly desirable workers for Youngstown’s emerging knowledge and service economy; providing transportation infrastructure, enabling accessibility, and developing an attractive and walkable community are critical to retaining them. The enhanced transit, bike, and pedestrian connections enhance the quality of life for downtown residents, providing access to attractive amenities such as the region’s extensive park system and the planned riverfront development.

There are early indications that downtown Youngstown is stabilizing. While too soon and nascent to be considered a rebound, employment and population have increased in the last 18 months. In 2014, about 12,000 people worked in the downtown and nearly 1,500 lived there. This year, employment estimates report about 15,000 downtown workers (primarily commuters) and nearly 3,000 residents (this includes market rate, affordable and student housing of which over 50% (1,600) are permanent non-student residents).² This data is not yet captured in U.S. Census data that relies on statistical models for intercensal estimates. The count comes from local sources and is continually tracked due to ongoing private investment interest related to the downtown historic building stock, the utilization of state and federal historic tax credits, and a growing student enrollment for both YSU and EGCC.

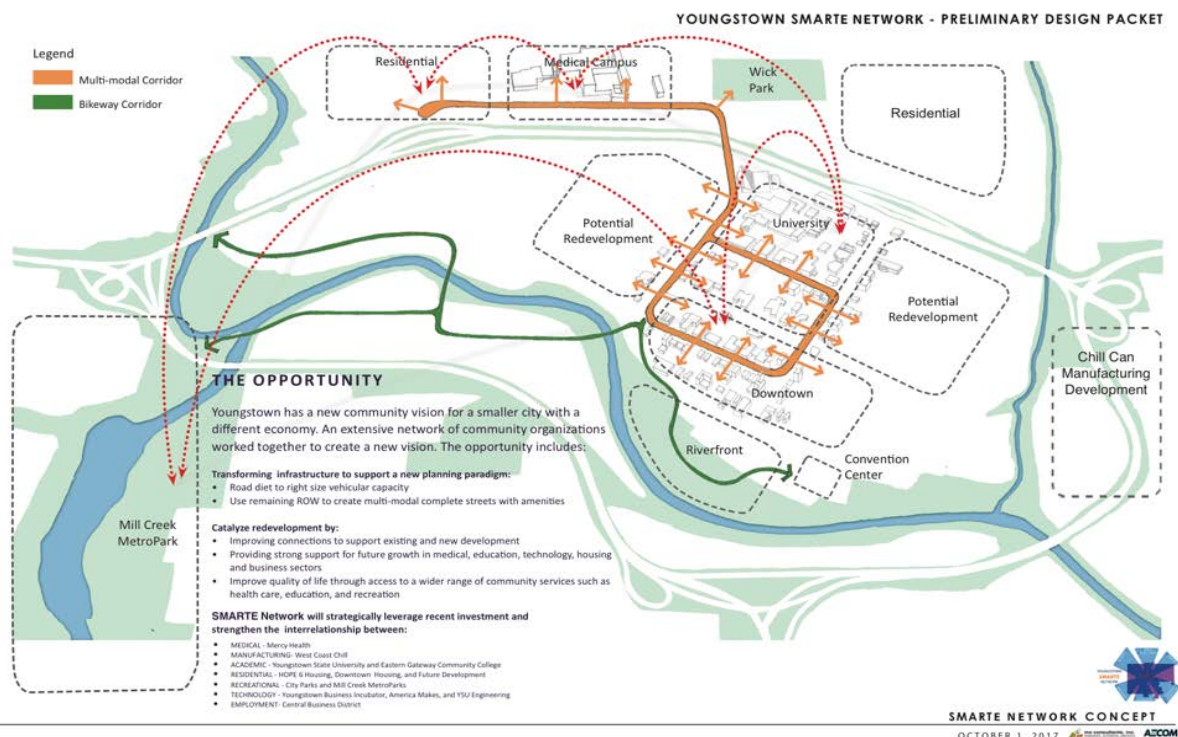


Exhibit 4: Illustration of How the SMAR²T Network Addresses the Transportation Challenge

¹ Aaron Renn. “Brain Gain in America’s Shrinking Cities,” Civic Report No. 102, Center for State and Local Leadership at the Manhattan Institute, August 2015.

² Statistics compiled by Youngstown/Warren Regional Chamber, March 2016.

Collectively, the willingness of private developers to invest in downtown Youngstown, a growing share of educated workers, and gains in employment and population suggest that the City’s core economy is consistently gaining strength. The investments outlined in this TIGER application help to accelerate and solidify each of these trends by:

- (1) **rightsizing** the city’s transportation network
- (2) **retooling** the infrastructure to support a knowledge-based and service economy,
- (3) **reinforcing** physical connections to support the economic synergy between the City’s economic anchors, and
- (4) **reconnecting** downtown residents with the region’s amenities to support quality of life.

The SMAR²T Network enables further public and private investment. **Exhibit 5** summarizes current and future investment in Downtown Youngstown, the core of the metropolitan area. Incremental **private** investments in the downtown began years ago and have steadily continued, growing to the most recent construction of a new \$30 million hotel and \$20 million manufacturing, research, and development center. Exhibit 5 lists current and future investment in downtown Youngstown.

Term	Name	Investment (millions)	Type
Recent	Hilton DoubleTree Hotel	\$30	Private
Recent	West Coast Chill-Can Manufacturing, R & D	\$20	Private
Future	16 Commerce (Mixed-Use Residential/Commercial)	\$10	Private
Recent	YMCA Recreational and Community Service	\$5	Public
Recent	YSU Enclave Student Apartments	\$10	Private
Future	Public Library	\$14	Public
Future	Marian Commons Affordable Housing	\$7	Public & Private
Future	Gallagher Building Mixed-Use Residential/Retail	\$4	Private
Recent	International Tower Residential Apartments	\$6	Public & Private
Future	235 Rayen - Market Rate Housing	\$15	Private
Recent	Lincoln Avenue Road Project	\$2	Public
Recent	Wick Avenue Road Project	\$19	Public
Current	Riverfront Amphitheatre Park Recreation	\$10	Public & Private
Current	Wastewater Treatment Project	\$13	Public & Private
Current	West Division St Sanitary Sewer Project Phase	\$12	Public & Private
Recent	YSU Edge Student Apartments	\$8	Private
	TOTAL	\$185	

Exhibit 5: Recently completed, current, and future public and private investments in the SMAR²T Network



Exhibit 6 (a): Current view of Fifth Avenue and Lincoln Avenue intersection, looking northbound toward YSU Football Stadium.



Exhibit 6(b): Proposed 5th and Lincoln Avenue intersection, north toward YSU Sports Facilities and Main Stadium. This and all intersections in the proposal are planned as complete and green streets with circulator route and stops, shared use path, and enhanced pedestrian crossings



Exhibit 6(c): Current View and Proposed Rayen Avenue improvements, looking west toward Beeghly Hall and YSU student housing complex.



Exhibit 6(d): Current View and Proposed Commerce Street improvements, looking east towards recent investment and Federal Bankruptcy Court.



2. Workforce Advantage

While there are tangible signs that Youngstown’s and the Mahoning Valley’s economy is strengthening, prolonged disinvestment and underemployment represent generational loss of wealth. In 2017, Youngstown was named the most distressed small and/or medium-sized city in the United States by the Economic Innovation Group’s Distressed Communities Index. Low

educational-attainment rates, high poverty rates, high unemployment, limited business development, and housing vacancy have led to great distress. If the Mahoning Valley’s economy had not suffered the ill effect of severe postindustrial chronic abandonment and subsequent vacancy, it would be in a much different position today. In 2015, the median income of households located within a quarter mile of the Network was \$27,000, compared to the U.S. median house income of \$53,600– more than double. The share of households in the Network living on an income that fell at or below the poverty line was 46%. By contrast, the U.S. poverty rate was 14.8%, - three times less than the region.

Transportation costs financially impact households. According to the H+T Affordability Index, households should spend 15% of their budget on transportation. In Youngstown, households spend 27% of their budget on transportation, nearly double the recommended amount of their household budget on transportation according to the H+T Index. In Youngstown, nearly 20% of households do not own a vehicle, compared to nearly 9% in the urbanized area. The SMAR²T Network is critical for lessening this burden by providing more frequent transit headways and safer active transportation options such as Bike Share.

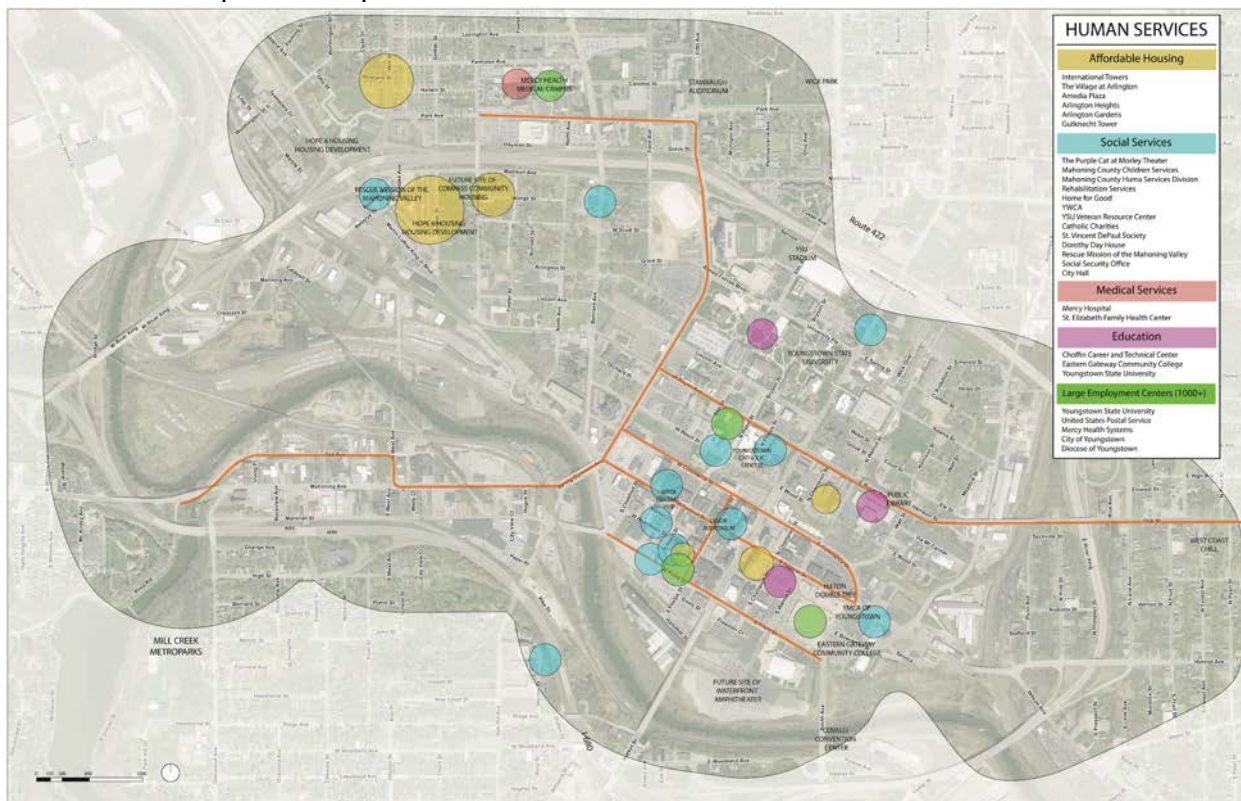


Exhibit 7: Connecting residents with the safety new of human, social, medical, and educational service
As illustrated in Exhibit 7, the SMAR²T Network connects to numerous subsidized, low-income and affordable housing complexes; social and human services; medical services; educational providers; and several major employers. Completed in 2011, the U.S. Housing and Urban Development funded mixed-income and subsidized single – and multi-family housing units in the newly created Arlington Heights neighborhood. The Arlington Penrose Recreation Center is the western terminus of the transit circulator. Residents will have convenient transit service to jobs at major employers including the new 21-plus acre WCC Manufacturing, Research, and Development Center, healthcare at Mercy Health and related facilities, education and training at

YSU and EGCC, social services in downtown Youngstown, and additional connectivity to expansive recreational options throughout the Network and beyond. New bike lanes, Bike Share, and improved sidewalks and crossings offer additional choices for active and healthy transit. Furthermore, the transit circulator will directly connect users to all parts of the metropolitan region through WRTA’s centralized Federal Station.

An example as to the critical role of the SMAR²T Network is the emerging Mahoning Valley Innovation and Commercialization Center (MVICC) that will be located at the corner of Commerce Street and Fifth Avenue. Upon completion of \$30 million-dollar facility, the MVICC will be an entrepreneurial hub for workers seeking training in advanced manufacturing methods using modern equipment such as 3D printers and CNC machines. Training at the MVICC will be provided through a partnership with the business community, YSU, EGCC, local high and technical schools. The region has developed successful pathways for disadvantaged individuals to enter and succeed in manufacturing, and is expected to create more than 300 jobs over the first five years, with an emphasis on incubation for companies and entrepreneurs who have potential to be significant job-creators.



Exhibit 8: Conceptual rendering of MVICC, modern design features to promote innovation, collaboration, and entrepreneurship located along Commerce and 5th Avenue –near the WRTA’s main transit station in the central business district

YSU granted \$2 million for advanced manufacturing center

By WYTV Staff

Published: October 11, 2017, 6:46 pm



YOUNGSTOWN, Ohio (WYTV) – The U.S. Department of Economic Development awarded a \$2 million grant to Youngstown State University to help create the Mahoning Valley Innovation and Commercialization Center in downtown Youngstown.

Exhibit 9: Local news article regarding investment into Mahoning Valley Innovation and Commercialization Center

B. PROJECT LOCATION

Downtown Youngstown has the highest density of jobs per area in the metropolitan region. The City of Youngstown is the population and economic center of the Urbanized Area that includes Mahoning and Trumbull counties in Ohio and Mercer County in Pennsylvania. In fact, Youngstown has nearly 36,000 jobs, nearly a 33% higher concentration of jobs compared to the next largest employing municipality in the region. The SMAR²T Network infrastructure investment is particularly **critical** given it is the only place-type projected to have job growth between the present and 2040, with a 14.1% increase according to state employment data.

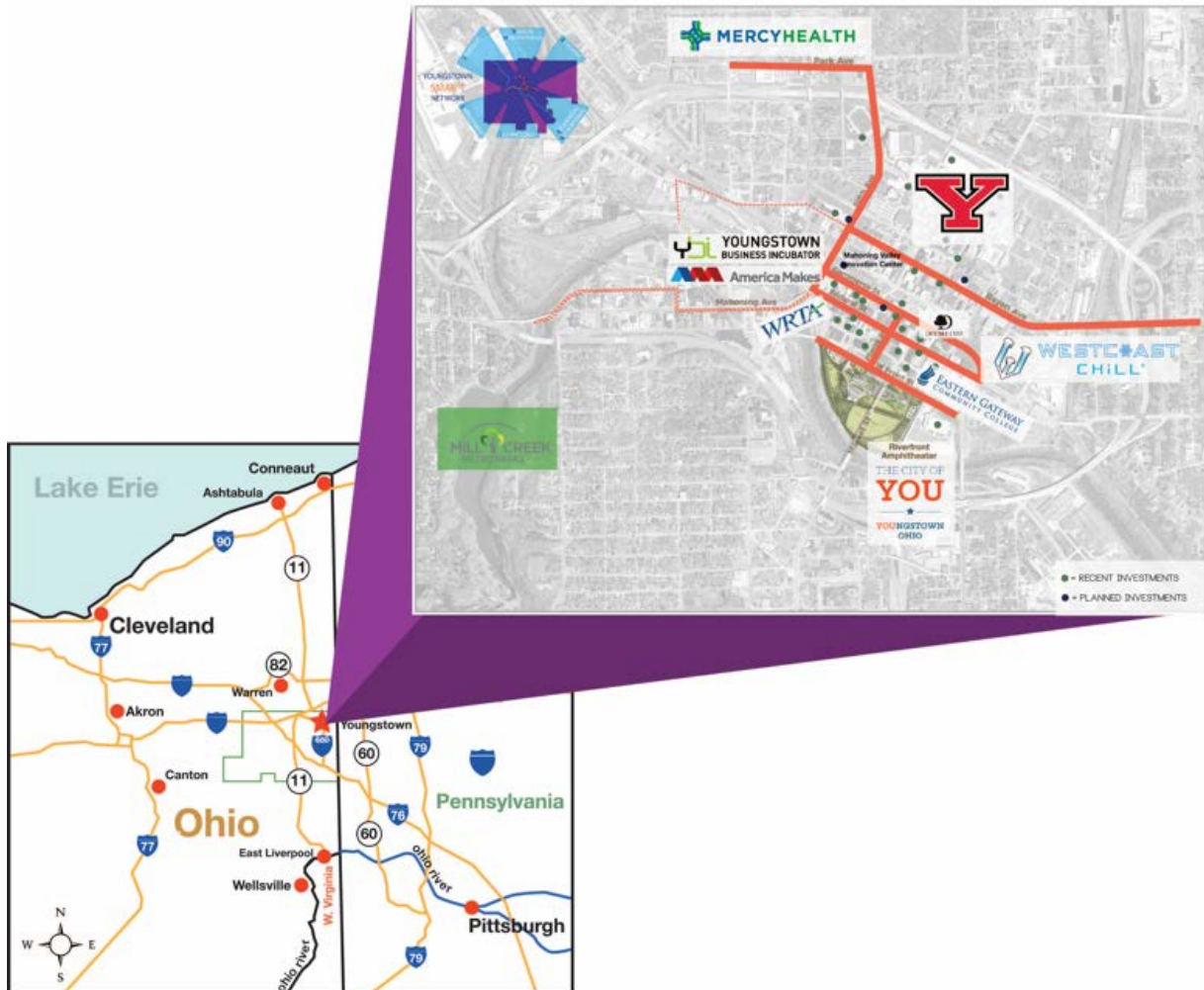


Exhibit 10(a): Regional Context SMAR²T Network Map, located equidistant between Cleveland & Pittsburgh and New York & Chicago along Interstate-80 and Interstate-76

The SMAR²T Network is in the core of Youngstown, Ohio—a Midwestern swing state. According to StatsAmerica, the City is equal-distant between New York City and Chicago, with access to over 51 million people within a 300-mile radius. **Exhibit 10(a)** identifies the Project location within the region and **Exhibit 10(b)** illustrates the over \$600 million in public and private investment that has been made within the Project’s scope. The proposed TIGER investments thus leverage and reinforce these past investments. Looking forward, the

redefinition of the downtown core will help shape and concentrate future investment, allowing for greater revitalization impact.

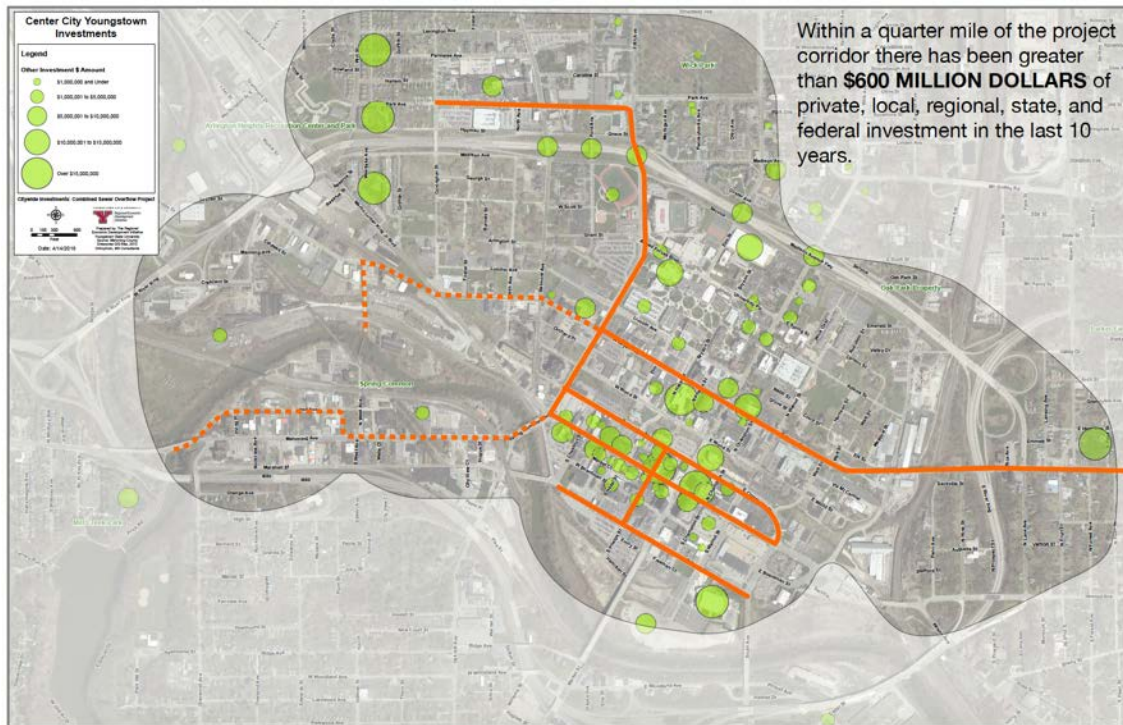


Exhibit 10(b): Recent Investments within One Quarter Mile of the SMAR²T Network

C. PROJECT PARTIES

The SMAR²T Network will complete the strategic investments funded through a robust public and private partnership among the following parties. All parties have signed a Letter of Funding Commitment regarding contributions and responsibilities to advance the Project. Copies of the letters are provided as supplementary information.

1. Eastgate Regional Council of Governments (Eastgate) – State Public

Eastgate is the Metropolitan Planning Organization for Mahoning and Trumbull counties, providing regional leadership to local communities. The MPO's role in the Project include:

- Fiscal Agent: Serve as the Grantee for any funds awarded to the Project and responsible for reporting requirements on behalf of the Project funders. Eastgate annually administers Federal grants to the amount of \$14 million dollars between the Appalachian Regional Commission, Economic Development Administration, Federal Highway Administration, and Federal Transit Administration
- Funding Commitment Partner: \$10,000 in cash



2. City of Youngstown, OH – Local Public

The City of Youngstown has a population of 65,000 residents. Although the City has been in decline, it is aggressively pursuing opportunities that will support its redevelopment to reverse

population and employment outmigration with an annual budget of \$185 million in 2016. The City’s role in the Project include:

- Owner of pedestrian and bicycle facilities
- Construction manager
- Funding Commitment Partner
 - \$500,000 cash
 - 6,296,826 in-kind



3. Community Foundation of the Mahoning Valley – Local Private

The Community Foundation of the Mahoning Valley is a leader and advocate for strategic philanthropy, partnering with donors to anchor a permanent and growing endowment making investments in the Mahoning Valley that improve the quality of life for all residents. The Foundation’s role in the project include:

- Funding Commitment Partner:
 - \$50,000 in cash towards \$200,000 bike share system in partnership with other local place-based foundations



4. Eastern Gateway Community College – State Public

EGCC is an accredited institution that offers associate degrees and certificates in dozens of career areas. The Youngstown Campus offers free tuition to qualifying students through the Gateway Grant. The College’s role in the Project include:

- Funding Commitment Partner:
 - \$10,000 in cash



5. Mercy Health – Local Private

Mercy Health is the largest healthcare provider in the state of Ohio and in Youngstown provides a teaching, tertiary care hospital with the most advanced technology and services in the Mahoning Valley. Mercy Health is also the largest employer in the Mahoning Valley. Mercy Health offers more than 400,000 hours annually of training programs for medical school graduates and those pursuing careers in pharmacy and nursing. Mercy Health’s role in the Project include:

- Funding Commitment Partner:
 - 500,000 cash
 - \$1,105,000 in-kind



6. Mercy Health Foundation Mahoning Valley – Local Private

The Mercy Health Foundation Mahoning Valley continues the mission of the Sisters of the Humility of Mary who originally opened the



hospital’s doors by improving access to care, advancing care, and building healthier communities. The Foundation’s role in the Project include:

- Funding Commitment Partner:
 - \$50,000 in cash towards \$200,000 bike share system in partnership with other local place-based foundations

7. Mill Creek MetroParks – Local Public

Mill Creek MetroParks maintains a park of nearly 4,400 acres within the City of Youngstown, making it among the largest metropolitan-owned parks with the city limits of any city in the United States. The MetroParks provide numerous facilities and recreational activities. The MetroPark’s role in the Project include:



- Funding Commitment Partner: \$500,000 in-kind

8. The Raymond John Wean Foundation – Local Private

The Raymond John Wean Foundation empowers residents to create a healthy, vibrant, equitable and economically stable Mahoning Valley through the strategic priorities of community revitalization, economic opportunity, educational opportunity, and public sector leadership. The Foundation’s role in the Project include:



- Funding Commitment Partner:
 - \$50,000 in cash towards \$200,000 bike share system in partnership with other local place-based foundations

9. Western Reserve Transit Authority –Local Public

WRTA provides wrap-around mobility services to residents of Mahoning County and provides regional connections through Federal Station. Today WRTA provides twenty-one fixed-route services six days a week, including six nightline routes. The YSU White/Red Loop connects students to the campus and residential areas. WRTA’s role in the Project include:



- Funding Commitment Partner:
 - \$600,000 cash
- SMAR²T Network Transit Circulator service operator
- Owner and maintainer of transit assets

10. Youngstown Foundation – Local Private

The Youngstown Foundation is the largest and oldest community foundation in the area, addressing needs of the community through its various funds. The Foundation’s role in the Project include:



- Funding Commitment Partner:
 - \$50,000 in cash towards \$200,000 bike share system in partnership with other local place-based foundations

11. Youngstown State University – State Public

YSU is a public university with approximately 14,000 students enrolled in over 135 undergraduate and graduate programs. Located just north of downtown Youngstown, YSU is a major employer and economic engine of the Mahoning Valley. YSU's role in the Project include:



- Funding Commitment Partner:
 - 500,000 cash
 - \$27,000 in-kind

D. GRANT FUNDS, SOURCES, AND USES OF PROJECT FUNDS

The following outlines the funding strategy for the Project.

1. Amount of Grant Funding Requested

Eastgate, on behalf of its funding partners including the Eastgate Regional Council of Governments is requesting **\$10,208,000 of FY2017 TIGER Discretionary Grant funds to complete the implementation of the Youngstown SMAR²T Network.**

2. Availability/Commitment of Funds Sources and Uses of All Project Funds

A non-federal match of \$10,248,826 is committed as outlined in Exhibit 11, below. The non-federal match for the full project represents 50.1% of the total project. The partners leveraged an additional \$1 million dollars in privately funded match for this year's project application.

FUNDING PARTNER	AMOUNT OF COMMITTED FUNDS		
	CASH	IN-KIND	DESCRIPTION
City (1)	\$500,000	\$800,000	Fifth Ave Sewer Separation and Green Infrastructure (Non-General Fund Revenues)
City (2)		\$500,000	Vallourec Trail Extension (General Fund Revenues)
City (3)		\$800,000	Amphitheater & Park Transportation Improvements
City (4)		\$373,000	Shared-Use Path connecting downtown to MetroParks
City (5)		3,524,000	Fully-funded roadway projects (State and Local funds)
City (6)		300,000	Acquisition, demolition of vacant office building into transit hub (local funds in partnership with Mercy Health)
YSU	\$500,000	\$27,000	ROW Donation and Non-profit Foundation
Mercy Health (1)	\$500,000	\$1,105,000	Private construction for main transit hub and acquisition, demolition for construction of mini-transit hub (Private Cash)
WRTA	\$600,000		Local Capital Budget
Mill Creek MetroParks		\$500,000	Local Capital Budget.
EGCC	\$10,000		Local Capital Budget
Local Foundations	\$200,000		Non-profit Foundations
Eastgate	\$10,000		Local Capital Budget
Total	\$2,320,000	\$7,929,000	\$10,249,000

Exhibit 11: Summary of Non-TIGER Funding Partners - Amounts and Sources

3. Operations and Maintenance

Operations and maintenance costs for the Project are included in the total costs considered in the Benefit-Cost Analysis. Operations and maintenance are divided into three realms: roadways, transit, and enhancements. Given that the City’s roadway infrastructure is built for a population four times its current size, there is excess road capacity available for the conversion to other uses. About 1.8 miles of roadway are removed from the road network and adapted for less intensive bike use through the SMAR²T Network. Working closely with Eastgate, the City is adopting best practices in asset management through capital improvement planning and performance-based design. Transit elements are will continue to be operated and maintained by WRTA, which has an aggressive capital improvement plan and replacement schedule. WRTA will also continue its commitment to bus shelters and both new transit hubs and mini-hubs. WRTA has a dedicated funding source for operations, receiving local funding from a one quarter percent county sales tax. WRTA and partners have the capacity to absorb the additional cost of the circulator’s operation, estimated at \$555,000. Enhancements and maintenance to infrastructures such as bicycle lanes and pedestrian amenities will be managed by the City of Youngstown Public

Works, Parks and Recreation, and the Street Department, in partnership with local non-profit organizations.

4. Total Project Costs

The full Project’s total capital cost **\$20,457,000.00** (in 2017 dollars). **Exhibit 12** summarizes the major cost categories. Detailed cost information is provided with the supplementary information to the application at <http://eastgatecog.org/transportation/tiger2017>

Cost Category	Full Project
Transit Equipment	\$2,608,000
Site work and Special Conditions	\$13,287,000
ROW	\$1,350,000
Professional Services	\$2,238,000
Contingency	\$974,000
TOTAL	\$20,457,000

Exhibit 12: Summary of Capital Costs by Major Project Elements & Full Project

E. SELECTION CRITERIA

This section discusses the primary and secondary selection criteria.

The SMAR²T Network will generate a variety of benefits for Youngstown. Some of these benefits are quantifiable, while some are not. Before discussion of each long-term outcome, **see Exhibit 13** provides an overview of how the SMAR²T Network aligns with evaluation criteria.

Criteria	Long-term Outcome	How the Project Satisfies the Proposal Evaluation Criteria
Primary	Safety	Reduces roadway width to limit excessive vehicular speeds and other factors to vehicular, pedestrian, bicycle conflicts and severe crashes through road diets, complete street design principles and standards, and pedestrian scale investments.
	State of Good Repair	Redesigns right-of-way to limit excessive vehicular speeding and other contributing factors to vehicular, pedestrian, and bicycle conflicts including severe crashes.
	Economic Competitiveness	Revitalizes depreciated property values in the employment hub of the region through enhancements and private investment.
	Environmental Sustainability	Repurposes right-of-way through plantings and sewer separation to benefit air and water quality.
	Quality of Life	Reconnects one of the most socio-economically divided cities in Ohio through reliable connections to medical, academic, residential, recreational, technological, and employment opportunities.
Secondary	Innovation	Redesigns public/private partnerships for the Mahoning Valley and integrates new user-interface technology.

	Partnership	Rebuilds trust between anchors and residents.
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Exhibit 13: Evaluation Criteria Narrative Matrix

1. Primary Selection Criteria

The SMAR²T Network generates numerous and impactful benefits across long-term outcomes.

a. Safety

The SMAR²T Network delivers on new safety measures as defined under the FAST Act’s Performance Measures, which are in the process of being adopted by Eastgate through the Ohio Department of Transportation. Given the current right-of-way is designed for vehicular movement that was to surpass volumes double what they were fifty years ago, current roadways in the

Network have capacity at five to seven times the amount needed today. This excess capacity leads to speeding and careless driver activity that increases vehicular, pedestrian, and bicycle crashes. **Additionally, poor intersection design for pedestrians, cyclists, and transit-users is demonstrated through a concentration of crashes at or near intersections in the Project area. Complete Streets design guidelines adopted by the MPO and City of**

Youngstown address these conflicts. FHWA cites that upgraded pedestrian facilities such as crosswalks and signals decrease pedestrian injuries and fatalities. The installation of **High-Intensity Activated Crosswalk (HAWK)** and preempted signals in addition to street plantings will improve pedestrian safety and predictability. Improved bicycle facilities such as bike lanes will also raise drivers’ awareness for bicyclists. **Youngstown’s residents will enjoy a safer place to walk and bike, resulting in lives saved, reduced potential for injury, enhanced ADA conditions, and improved quality of life resulting from avoided crashes over the long term. Applying U.S. DOT guidance and discounted at 7% the estimated value of crashes avoided is \$11.51 million.**



October 5, 2017

Crosswalk Issues Cause Potential Danger

▲ Posted By Jambar Contributor / ● 182 Views / ● 0 Comment

Jambar Contributor

By Courtney Hibler

Being in the middle of a city means the students and faculty of Youngstown State University must cross dangerous intersect traffic lights.

Exhibit 14: Article in YSU Student Newspaper discussing the dangerous pedestrian walkability conditions



Exhibit 15: Map of Bicycle and Pedestrian Traffic Crashes



Exhibit 16: Crash at the intersection of 5th Avenue and Commerce Street, October 5, 2017

b. State of Good Repair

The SMAR²T Network’s pavement condition ranking in 2015 range from Poor to Fair. Poor roadways include Commerce Street, Front Street, and Fifth Avenue. Fair roadways include Rayen Avenue, Phelps Street, and Federal Street. Eastgate and its communities, including the City of Youngstown, are in the process of development asset management strategies to maintain pavements, bridges, and culverts at a Fair or greater rating to comply with Performance Measures in development under the FAST Act. This project is timed in tandem with the City’s resurfacing schedule. The City of Youngstown in partnership with Eastgate and the Ohio Department of Transportation are further crafting strategies for maintaining an over-sized system. An estimated 3.3 miles of road will be converted to bike lanes, generating a savings in repair and maintenance. Additionally, increased travel demand strategies such as walking, biking, and using transit will reduce daily wear and tear. **WRTA is aggressive in maintaining and replacing its assets, including a significant reduction in the average age of its fixed-route fleet, from 11.8 years in 2013 to 4.1 years in 2017, a 65% reduction.** WRTA’s Asset Management Plan insures a fleet of fixed-route and paratransit buses that meet or exceed State-of-Good repair standards. Partners are in discussion to obtain permanent and sustainable revenue sources for long-term operations and maintenance of Project components including pedestrian amenities and a Bike Share system. Current pedestrian amenities such as sidewalks, crosswalks, and signals are outdated, in disrepair, and/or are not ADA compliant. Lastly, green infrastructure improvements will reduce stormwater related costs, including flooding. Discounted at 7%, the estimated state of good repair benefits (inclusive of the residual) are \$3.7 million.



Exhibit 17: Example of bike share being used

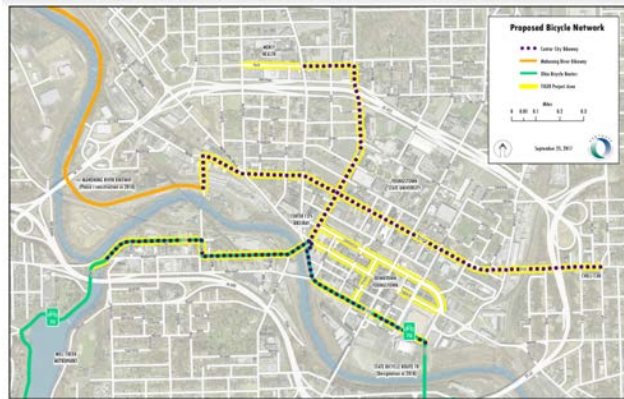


Exhibit 18: Proposed bicycle network

c. Economic Competitiveness

The SMAR²T Network increases the region’s economic competitiveness in three very important ways. First, it *strategically* connects key economic engines of the Mahoning Valley including the *medical* system (Mercy Health), *manufacturing* (connection to City’s industrial business parks to the East and West, in particular the WCC Manufacturing, Research, and Development Center) *academic* institutions (EGCC, YSU, and City Schools K-12), *residential* (student, low-income, market-rate, and senior housing) *recreational* (city parks, MetroParks, and the under-construction riverfront park amphitheater), *technological* (America Makes, YBI, YSU, MVIIC), and *employment* in the region’s area with the highest density of jobs. Second it stabilizes property values through the completion of a complete streets network that has been proven by Smart Growth America and municipal studies to reduce vacancies by upwards of 60% and

double retail sales. According to Walk Score, increased walkability and bicycle friendliness by a mere point increases home values by \$500-\$3,000. Public and private investment in the SMAR²T Network will lead to new wealth, business retention and growth, and move vibrant streets to help additional private investment. Without improving the aging infrastructure, the region's economic engines may not be able to compete and grow. In addition, nationally, more than one-fourth of all trips taken are less than a mile in length; nearly one-half of all trips are within three miles, a reasonable distance to bike for many. Taking these trips by foot or bike result in real savings in household budgets and healthcare costs. Efficient access to jobs through multimodal choice will provide the region's workforce with transportation alternatives to reach major employment centers, further reducing congestion-related expenses. **The current analysis assumes the removal of more than 171,000 vehicle miles travelled annually. Applying a discount rate of 7%, the total property premium gains are \$7.89 million over the analysis period. Travel cost savings contribute another \$61,000 to local budgets over the analysis period.**

d. Environmental Sustainability

The implementation of the Project will benefit the environment in a variety of quantifiable and qualitative ways. First, air quality will benefit through the planting of additional trees and green spaces that mitigate heat islands. Second, air quality benefits as the additional trees remove pollutants. Collectively, the surrounding environment is cooler and cleaner. Auto emissions are also reduced due to active transportation, providing air quality benefits. Emission reductions will assist Eastgate in maintaining its attainment status with the Ohio Environmental Protection Agency and US EPA. Finally, green infrastructure will expand permeable surface and provide water filtration by reducing stormwater runoff, benefitting the watershed. LED Lighting will replace high-pressure sodium lamps. Lastly, sewer separation will assist in compliance with the U.S EPA's consent decree to reduce combined sewer overflow. **Applying U.S. DOT's guidance for the pollutant factors and discounted at 7%, the estimated value of the improved air quality associated with auto diversions is \$70,000 annually.** Active transportation will also reduce vehicular miles traveled, further reducing emissions.

e. Quality of Life

Although some elements cannot be monetized directly, the Project will benefit the quality of life of residents and employees in downtown Youngstown, surrounding neighborhoods, and the region. More choices in transportation within the community will enhance access to social services, healthcare, education, employment, and entertainment. Residents will have a greater range of recreational amenities accessible through new and improved multi-modal connections to places such as the MetroParks and newly redeveloped riverfront. Collectively, these quality of life enhancements support the Mahoning Valley's economic competitiveness by creating an attractive place for people to live, work, and play. It also reconnects disconnected and fragmented neighborhoods to these amenities. This vibrancy is critical for Youngstown and the region to retain and attract skilled and educated labor that will help diversify the economic base. An educated workforce is necessary for the new knowledge and service-oriented economy that is bubbling through software and advanced manufacturing development.

2. Secondary Selection Criteria

The Project will implement the innovative characteristics are described below.

a. Innovation

The SMAR²T Network builds on a decade of planning work to identify strategies that support a vibrant community without as many resources as a medium or large-sized city that can leverage more internal and external dollars for growth and development. It is important to note how the SMAR²T Network is innovative in attracting philanthropic dollars. Implementation of this project will inform efforts elsewhere in Appalachia and the Midwest where shrinking cities are prominent. The most innovative aspect of the SMAR²T Network is the introduction and deployment of Computer Aided Dispatch/Automatic Vehicle Location (CAD/AVL) technology through the *MyValleyStop* smartphone application, deployed for the first time in the Mahoning Valley by WRTA. This technology will afford riders to know when they can catch a transit circulator bus. They will know when to leave their location (work, school, medical) to catch a bus at a specific stop in the SMAR²T Network. The project also will incorporate preemptive signals and other innovative pedestrian amenities. Additionally, the Project illustrates a best practice for transportation planning in the context of a shrinking city.

b. Partnerships

The SMAR²T has and will continue to rebuild trust between anchor institutions, residents, and the community at large. This Project did not originate out of a board room, but is the outcome of a multi-year effort to engage people through numerous planning processes including public meetings and charrettes. This process has led to a genuine response on how to rebrand Youngstown and the Mahoning Valley by having quality places and opportunity for employment. SMAR²T is a result of a myriad of public, private, non-profit, educational, institutional, and community partners that are committed to working in tandem with each other on project delivery.

D. RESULTS OF BENEFIT-COST ANALYSIS

The SMAR²T Network Project generates benefits across a variety of long-term outcomes: **safety, state of good repair, environmental sustainability, economic competitiveness, and quality of life.** Over 20 years, the benefits of the Project exceed the costs by a factor of 1.13 to 1.00 when discounted at 7%. This ratio rises to 1.42 to 1.00 when benefits and costs are discounted at 3%. Not included in this assessment are the health and recreational benefits associated with a regional bike and pedestrian network.

Exhibit 19 summarizes the benefit cost analyses for both the full project. The supplementary materials provided with this application include the workbook with all calculations for this benefit cost analysis, as well as a technical memorandum that describes the assumptions and methods used. Supplemental materials are available at <http://eastgatecog.org/transportation/tiger2017>

	20 Year Analysis Period (2022-2041)	
	Values stated in 2017 \$M	
	Discounted at 7%	Discounted at 3%
Costs		
Capital Costs	\$16.04	\$18.39
Total Costs	\$16.04	\$18.39
Benefits		
Safety Benefits		
Reduced Highway Fatalities and Crashes	\$2.58	\$4.27
Reduced Bike and Pedestrian Crashes	\$8.93	\$14.60
Sub-Total Safety Benefits	\$11.51	\$18.87
State of Good Repair		
Roadway Maintenance Savings	\$1.33	\$2.19
Residual Value	\$2.38	3.97
Sub-Total State of Good Repair	\$3.70	\$6.16
Environmental Sustainability		
Emissions Savings (auto less bus)	\$0.01	\$0.03
Sub-Total Environmental Sustainability	\$0.01	\$0.03
Economic Competitiveness		
Travel Cost Savings	\$0.61	\$1.01
Sub-Total Economic Competitiveness	\$0.061	\$1.01
Quality of Life		
Property Premium	\$8.87	\$10.72
Sub-Total Quality of Life	\$7.89	\$9.53
O&M Costs	\$6.57	\$10.84
<i>Reduced Pavement O&M (Cost Offset)</i>	<i>\$0.07</i>	<i>\$0.11</i>
Net O&M	-\$6.51	-\$10.73
Total Benefits	\$18.19	\$26.05
BC Ratio	1.13	1.42
Net Benefits	\$2.15	7.66

Exhibit 19: Summary of Quantifiable Long-term Benefits and Costs

E. PROJECT READINESS

This section includes planning approvals, NEPA and other environmental reviews/approvals, including information on permitting, legislative approvals, state and local planning, and project partnership/implementation agreements. The SMAR²T Network Project will proceed to obligation by the statutory deadline (September 30, 2019) as evidenced by the following:

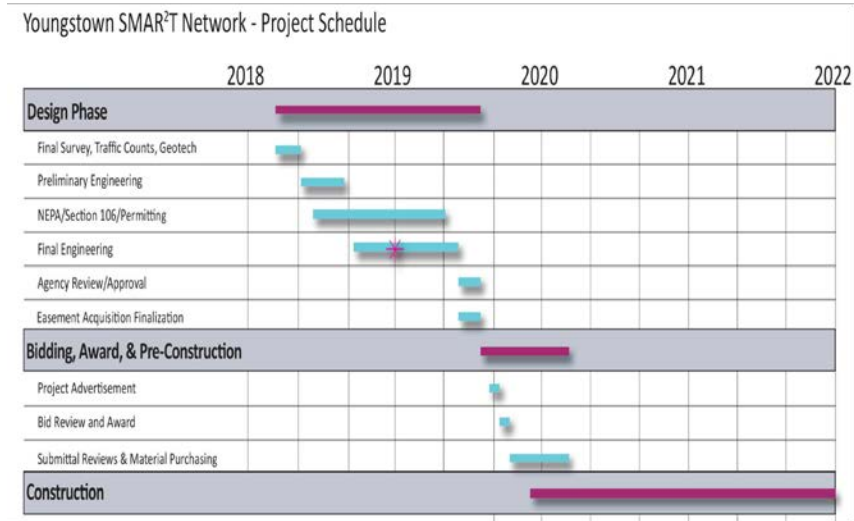


Exhibit 20: Project Schedule Assuming Expedition Obligation of Funds

1. Technical Feasibility

The SMAR²T Network Project is technically feasible; there are no risks to project delivery from a technical perspective. Because the Project entails completing the remaining gaps in the larger-citywide system of complete streets, bike and pedestrian facilities, the Project draws on the reservoir of technical experience and lessons learned in constructing and delivering the existing facilities. Moreover, the community’s progress in delivering the existing bike and pedestrian lanes demonstrates its ability to undertake the remaining segments to complete the system.

The City’s engineering department has detailed information on subsurface utility location from its ongoing operations and maintenance work and is ready to hand off this information to the firm selected to start the design activities. Detailed engineering costs, renderings and the Preliminary Design Packet are included in the supplemental materials provided with this application, available at the following link: <http://eastgatecog.org/transportation/tiger2017>

2. Financial Feasibility

All sources and uses of the funds needed to implement this Project have been identified and secured. (See Section III for additional details on project commitments and costs.) The substantial amount of planning work accomplished to date, as well as experience constructing other sections of the transportation network, reduce the potential for unexpected costs to arise as the Project advances. For the transit circulator portion of the project, WRTA has a dedicated source of operating funds; WRTA and the Project partners have the capacity to cover the operating costs of the transit circulator. Documentation of this operating source of funds is provided in the Supplemental Materials.

3. Project Schedule

The SMAR²T Network Project can begin construction immediately upon receipt of TIGER funds. Pre-construction activity is already underway and is expected to be completed 2019, well in advance of the obligation deadline. All Project limits are within the right-of-way under agency control. A

detailed project schedule is available in the attachments and on project website. Exhibit 20 outlines the schedule for completion.

4. Required Approvals

This section includes the necessary approvals and reviews to implement the SMAR²T Network.

Environmental Permits and Reviews: The SMAR²T Network Project will be built entirely within the existing right-of-way, which is already under agency control with no significant environmental effects to streams, wetlands, endangered species, cultural and historic resources, or environmentally sensitive areas. The Project team anticipates that a Categorical Exclusion (CE) will be required based on the experience delivering complete streets elsewhere in the City. Based on preliminary environmental review and analysis, the Project is well positioned for timely completion of environmental review and approval processes to ensure that the U.S. DOT is able to meet its statutory deadline for obligating TIGER grant funds. The FHWA is expected to be the lead federal agency for National Environmental Policy Act (NEPA) purposes, based on the expectation that FHWA would be charged with administering the grant for the Project. The Project would be classified as a Class II action in accordance with 23 Code of Federal Regulations (CFR) §771.115 because it is not expected to individually or cumulatively have a significant environmental effect. Documentation of the Project is expected to qualify it for a CE pursuant to 23 CFR §771.117(d). Project work will take place almost exclusively in the existing ROW in areas that are disturbed and have been extensively modified as result of past development activity.

No controversy is expected on environmental grounds and no land acquisition is proposed, except two Project partners have indicated support for easements over land they control adjacent to the existing ROW and totaling less than .75 acres to allow for construction of the transit hub and widened sidewalks and/or shared use paths. Therefore, no residential or non-residential displacements, or impacts to Section 4(f) resources would occur with the Project. Although the NEPA CE prepared for the project will need to address all applicable environmental resource topics, the topics discussed below are expected to be focus areas for analysis due to the nature and location of the Project. As outlined below, a preliminary environmental review and analysis conducted for the Project has not identified significant environmental effects, or issues of controversy associated with the project. Coordination activities that are expected to be completed as part of the NEPA process are also outlined for the environmental resource topics discussed below. Only limited agency coordination is expected to be required given the nature and location of the Project; agency coordination activities would be led by the Eastgate in partnership with the City of Youngstown's NEPA environmental consultant in coordination with FHWA staff. Similarly, the City of Youngstown anticipates that its NEPA environmental consultant would prepare the NEPA CE under FHWA's direction given the local consultant's knowledge of the environmental setting and developed agency contacts. This approach is expected to facilitate expedited completion of the NEPA process and any associated coordination activities, and enable the U.S. DOT to meet its statutory deadline for obligating TIGER grant funds.

Cultural Resources: Eastgate, in partnership with the City of Youngstown's NEPA environmental consultant anticipates that Section 106 consultation activities with the Ohio Historic Preservation Office (OHPO) would be completed in 6 months. This will involve the

completion of archival research and preparation of a letter report for FHWA review that can be used to initiate Section 106 consultation with the OHPO. The letter report will define proposed methodologies for the completion of a Phase I archaeological and historic architecture survey of the Project area. The letter report may reduce (and potentially eliminate) the need for archaeological field survey, if the areas of proposed ground disturbance can be demonstrated to contain no potential for containing archaeological resources. A list of the appropriate Native American tribes will also be assembled, and draft consultation letters for each federally-recognized tribal agency will be provided for FHWA review and use. Eastgate, in partnership with the City of Youngstown's NEPA environmental consultant has completed an initial review of archival data on the Ohio History Connection's online database. Regarding archaeology, there are very few inventoried archaeological resources within the Youngstown city limits generally, and the built urban landscape of the Project area suggests a low potential for encountering intact archaeological deposits.

Based on similar undertakings in Ohio, any archaeological resources are likely to be historic in character and likely impacted or destroyed by modern urban development and utility. While there is a limited potential for identifying significant archaeological resources within the Project footprint, a Phase I archaeological survey focused on areas of ground disturbance will be requested by the OHPO. Regarding the viewshed, the Ohio History Connection's online database indicates that there are National Register listed and eligible properties present either adjacent to or directly visible from the Project area, including the Arlington Avenue Historic District, the Wick Park Historic District, the National Register listed Stambaugh Auditorium, the eligible Baltimore Thru Truss, and National Register listed properties. The City of Youngstown's NEPA environmental consultant will evaluate potential visual impacts of permanent aboveground infrastructure to National Register listed or eligible properties and complete associated consultation with the OHPO.

Transportation and Traffic: The Project involves right-sizing the road capacity of the City's transportation network to the needs of a smaller Youngstown. Based on engineering review utilizing recent traffic studies, no significant transportation/traffic effects are anticipated. Upon commencing final engineering, updated traffic studies will be completed.

Biological Resources: The Project is not expected to involve in-water work and initial site reconnaissance has not identified sensitive plants, wildlife, wetlands, or other habitats in the area.

State and Local Planning:

The SMAR²T Network evolved from a generation of thoughtful and thorough planning at both the municipal and regional levels. The community has worked collaboratively and deliberately to define new ways of improving the viability of the Mahoning Valley. The execution of the SMAR²T Network will satisfy the recommendations of several planning initiatives as outlined below. The SMAR²T Network is rightsized and multimodal, linking the largest employers with the most innovative academic and research centers in the region. The SMAR²T Network provides opportunities for low income residents by providing convenient and reliable transportation that is comprehensive and safe.

The SMAR²T Network has been identified in the Eastgate 2040 Metropolitan Transportation Plan which requires support from the two-county area. This SMAR²T Network project team and regional leadership have shown a proactive approach to leveraging public and private investments for high impact and transformative transportation investment. The applicant, Eastgate Regional Council of Governments, is the designated Metropolitan Planning Organization (MPO) for Mahoning and Trumbull Counties of Ohio. The SMAR²T Network was sponsored by the General Policy Board of Eastgate to connect recent and planning investments by completing a multi-modal network that links resources that are critical to an overall economic resurgence of the region. This submission exemplifies all facets of smart investments of public funds, and will promote economic development, more efficient transport, a clearer environment, and improved safety.

The SMAR²T Network will satisfy redevelopment and infrastructure goals of the following:

- Eastgate *2040 Metropolitan Transportation Plan Update*, 2018
- Team NEO's *Aligning Opportunities in Northeast Ohio*, 2017
- Center City Youngstown Complete Street Design Guide, 2017
- Fund for Our Economic Future's *Northeast Ohio Additive Manufacturing Cluster*, 2016
- City of Youngstown and Youngstown City School District's *Safe Routes to School Plan*, 2016
- Eastgate *Comprehensive Economic Development Strategy*, 2016
- City of Youngstown's *Economic Development Strategic Plan*, 2015
- City of Youngstown's *Downtown Vision and Action Plan*, 2015
- Northeast Ohio's Sustainable Communities Consortium's *Vibrant NEO 2040*, 2014
- City of Youngstown's *Neighborhood Conditions Report*, 2013
- Youngstown State University's *Campus Centennial Plan*, 2010
- City of Youngstown's *Youngstown 2010*, 2005

Each of the above plans are available through the following link:

<http://eastgatecog.org/transportation/tiger2017>

5. Assessment of Project Risks and Mitigation Strategies

There is essentially no risk to timely completion and delivery of the project, as the SMAR²T Network builds on experience gained through the successful completion of similar improvements in other locations in the city, there are few remaining variables complete the bike and pedestrian network. WRTA has operated a similar transit circulator service in the recent past.

Environmental Uncertainties: The Project limits are within the right-of-way controlled by the City.

Real estate easement acquisition costs: The Project has received letters of support from and donations of right of way to complete the project. **No additional ROW acquisition is required.**

F. FEDERAL WAGE RATE CERTIFICATION

Please see the signed federal wage rate certifications included with the supplemental materials.

G. COST SHARING OR MATCHING

Source	Full Project	%
TIGER	\$10,208,000	50%
Non-federal Match	\$10,249,000	50%
Total	\$20,457,000	100%

Exhibit 21: Summary of Cost Sharing

H. SUPPLEMENTARY MATERIALS

The following supplementary materials are included:

- 1.** Letters of Commitment
- 2.** Letters of Support
- 3.** BCA Tech Memo
- 4.** BCA Workbook
- 5.** Federal Wage Rate Certification
- 6.** Engineering Cost Estimates
- 7.** Eastgate MPO General Policy Board Resolution
- 8.** SMAR²T Network Project Schedule
- 9.** SMAR²T network Preliminary Design Packet
- 10.** WRTA Financial Audit
- 11.** WRTA Financial Capacity Memo