

CENTRAL CORRIDOR TRANSIT ENHANCEMENT AND JOB ACCESS PROGRAM

St. Louis, Missouri

TIGER GRANT APPLICATION



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All supporting documentation is available at <http://cmt-stl.org/cortexmid-town-metrolink-station-study/>.

PROJECT TITLE:

Central Corridor Transit Enhancement and
Job Access Program



PROJECT LOCATION:

St. Louis City, Missouri (Congressional District 1)

TYPE OF APPLICATION:

Capital

APPLICANT ORGANIZATION NAME:

Bi-State Development Agency (dba Metro Transit)

TYPE OF APPLICANT:

Transit Agency

REQUESTED TIGER FUNDING AMOUNT

\$10,300,000 (Total Project Cost: \$12,900,000)

**AMOUNT OF DIRECT ADDITIONAL INVESTMENT
CATALYZED BY PROJECT:**

\$140,000,000



I. PROJECT DESCRIPTION

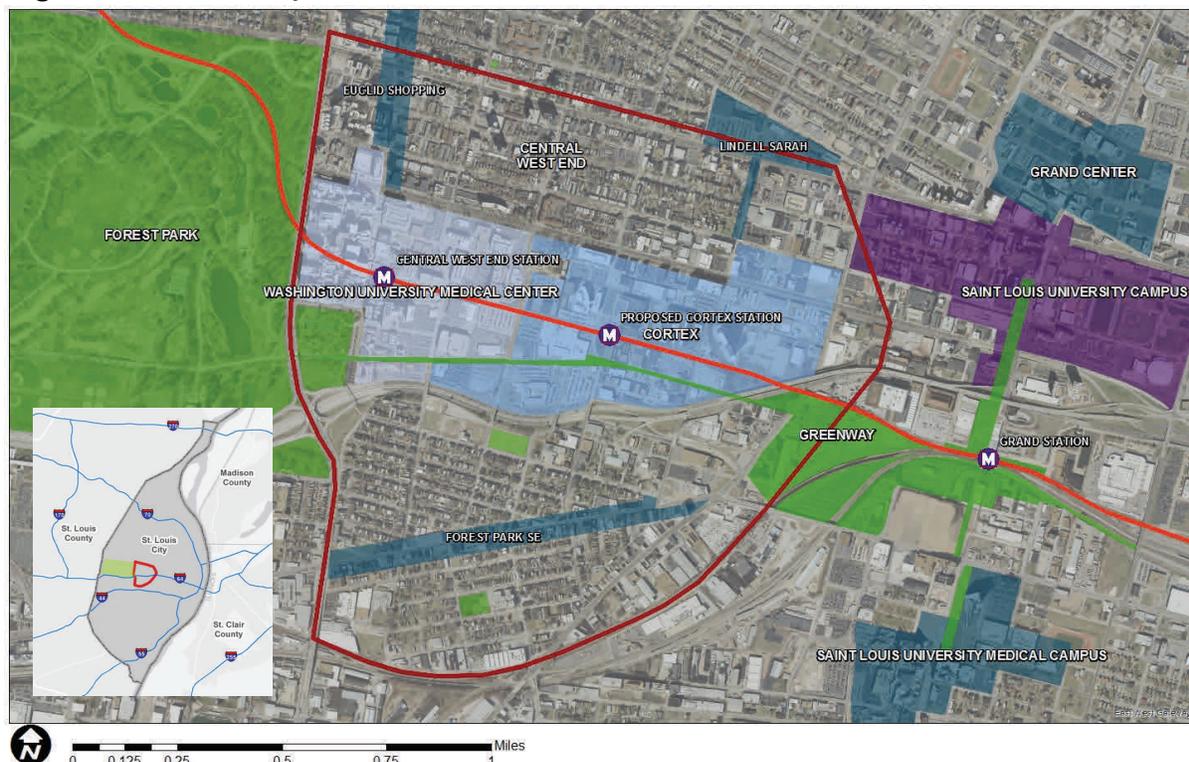
A. Project Details

The *Central Corridor Transit Enhancement and Job Access Program* includes three major components in the Central Corridor of St. Louis City:

1. Construction of a **new in-line light rail station, Cortex Station**, (X: -90.252167, Y: 38.633814) in the emerging Cortex Innovation Community, a 200-acre redevelopment district in the heart of the City of St. Louis. The proposed location for the new station is roughly half-way between two existing stations: the Central West End station about two-thirds of a mile to the west, and the Grand Station about one mile to the east. The new at-grade station would be located in the heart of the Cortex innovation district and serve both this growing mixed-use community and the surrounding neighborhoods.
2. Significant investments to **increase the capacity of the existing Central West End light rail station** (X: -90.2627, Y: 38.636052). This station is the busiest in the entire MetroLink system and has overcrowding problems, which this project will alleviate. The station serves the BJC/Washington University Medical Campus, one of the region's largest employment centers with more than 21,000 jobs at all skill levels.
3. Development of the **first segment of a bike trail** to connect the new station to the regional Great Rivers Greenway trail network. When complete, this new trail will connect the new MetroLink station to Forest Park, BJC/Washington University medical center, Saint Louis University and, eventually, the Mississippi Riverfront. It will also link cyclists from the region's on-street bike network to the light rail station. (See Midtown Loop Report Excerpt–Exhibit A)

The project **will directly catalyze a private transit oriented development project** adjacent to the proposed Cortex station and new trail. The planned mixed-use project will create 700,000 square feet of new research, laboratory and residential development at an estimated cost of \$140 million.

Figure 1: Overview of Project Area



B. Expected Users of the Project

The proposed and improved MetroLink stations will serve area employees travelling to work in the Central Corridor from residential areas throughout the region; residents of Cortex and the surrounding neighborhood, as well as those connecting to the light rail system via bus, who will travel to work in other regional employment centers; bike commuters and recreational cyclists; and park-and-ride users utilizing transit for work or recreation.

The Cortex Station will attract 900 daily boardings upon opening and up to 2,000 daily boardings in 20 years. Many of these users will reside in low-income and zero-vehicle households in economically disadvantaged areas near the station. Based on Census data, 15 percent of the households within one-half mile of the station are zero-vehicle households and 25 percent are low income. Residents of the Forest Park Southeast neighborhood will comprise 100 of the opening year boardings, and residents of the Central West End neighborhood will contribute 200 of the opening year boardings.

The Cortex Station will help connect these neighborhoods to centers of employment, education, and services served by the transit system. By connecting disadvantaged residents to transit, the project will provide access to opportunity and help expand the middle class.

Likewise, the project will also connect job centers in Cortex with populations outside of the Central Corridor. A sizable percentage of the jobs within Cortex will be open to those with less than a college education. As such, there will be tremendous opportunity for low income and disadvantaged populations to gain employment in Cortex. This project will allow these populations to be connected to the Cortex job center via transit, as the existing MetroLink system serves several low income and economically disadvantaged communities in the region.

Analyses using the regional travel demand model estimate that 200 daily riders to Cortex will board MetroLink at stations located in low income areas. This project holds promise not only to bolster economic development in Cortex but also to ensure that disadvantaged populations have the ability to participate in the developing labor force in Cortex and benefit from the growth that is occurring.

More detail is available in the draft Central Corridor Transit Access Study (Exhibit B).

C. Transportation Challenges Project Will Address

The three components of this project will address: 1) limited access to the light rail system from the Cortex area and surrounding neighborhoods through the addition of a new stop in the heart of the growing innovation district, 2) limited platform capacity at the busy Central West End station by extending its length to relieve congestion, and 3) limited connections to the regional bike trail network to the Central Corridor and the MetroLink system through the construction of the first segment of a new trail.



Central West End MetroLink Station

The Central Corridor: A Regional Engine for Economic Growth

The pace of investment in the Central Corridor during the past several years has been virtually unprecedented in St. Louis. Between the investments by the institutions of the medical center (BJC Healthcare, Washington University, College of Pharmacy and Shriners) and the many development projects coming to fruition in the Cortex Innovation Community, this roughly 350-acre swath of land in the heart of the city is undergoing a true transformation and creating new opportunities for the surrounding area.

Ten years ago, the proposed new Cortex station was not needed because there were few jobs and residents in its immediate service area. Today, growth in the half-mile radius of the proposed site—new job opportunities, services, residences, and shopping alternatives—make this new transit option vital for the Central Corridor’s continued growth and sustainability.

“Anchors and Transit Spur Growth of St. Louis Corridor”

This recent headline on the front page of the St. Louis Post-Dispatch (1/26/14) trumpets the accelerating pace of investment and job creation in the heart of the St. Louis region, “led by a boom in life-science research and health care.” The anchors of the headline include major employers such as BJC and Washington University, growth centers such as the emerging Cortex Innovation Community, cultural centers such as Forest Park and Grand Center, residential neighborhoods such as the Central West End and Forest Park Southeast, and commercial centers such as the recently announced IKEA store coming to the corridor. The key transit reference of the article is the MetroLink light rail system, which connects this corridor from east to west (linking downtown St. Louis to the east all the way to the Clayton business center and Lambert St. Louis Airport to the west, with the BJC/Washington University medical campus and Cortex at the center), and serving as the spine to support the extensive regional Metro Transit connecting bus network.— See Exhibit C, pp 1-4 for full article.

Medical Center (served by the existing Central West End MetroLink station):

The BJC/Washington University Medical Center is one of the St. Louis region’s most important centers for employment, health care, and research. The combined employment total for the medical center institutions is 21,600. The center receives nearly a million outpatient visits each year and 68,000 hospital admissions. Today, all of the institutions are making major investments to their facilities to ensure that they remain competitive for decades to come.

- Washington University School of Medicine is one of the nation’s top medical schools and is a major research center. The school serves 1,364 students and continues to invest heavily in new research, clinical and office facilities on the 164-acre medical campus that it shares with BJC Healthcare. (See Washington University School of Medicine Facts 2013 in Exhibit C, pp. 5-11).
- BJC is in the midst of a long-term project to renew the medical center campus. Over the next 10 years, the campus will be transformed through renovations and new construction. The first phase of this project is expected to add 600 new jobs to the campus. (See WUMC Campus Renewal Project in Exhibit C, pp. 12)
- The College of Pharmacy covers eight miles within the medical center and serves 1,350 students, and is also undergoing major campus investments with construction of a new, six-story classroom and research facility underway.
- Shriners Hospital for Children is currently building a new, \$50 million facility in the medical district, marking the hospital’s return to the City after 50 years in the suburbs.

Cortex Innovation Community (to be served by the proposed new Cortex MetroLink station):

Cortex is a 200-acre innovation district located immediately east of the medical campus. It was founded in 2002 to establish an innovation district in an underutilized industrial area in order to leverage the tremendous research assets located in the City’s Central Corridor and create new jobs and investment. (See Cortex Background, Exhibit D -1)

Wexford Science & Technology is a key private development partner in Cortex. A leading developer of life science and technology research parks, Wexford has invested more than \$100 million in the district so far, with substantial and exciting plans for future projects discussed below. (See Wexford TOD Background, Exhibit E)

The efforts of Cortex and its partners are paying off – see the table below for a summary of investment and jobs created in Cortex in each phase from projects completed and now under construction (Phases I, II, and III) to projects currently in planning (Phase IV and V). (For details, see Cortex Background, Exhibit D-1).

Table 1. Timeline of Investment in Cortex Innovation Community

Phase	Time Period	Cost	Size SF	Jobs	
				Const.	Perm.
Phase I	1998-2012	\$164.3m	689,500 SF	1,611	950
Phase II	Under construction	\$158.0m	398,500 SF	1,883	1,400
Phase III	Summer 2014	\$110.0m	380,000 SF	500	300
Phase IV	Fall 2014	\$47.0m	143,000 SF	499	85
Phase V	2015-2018	\$140.0m	700,000 SF	1,725	1,800
Grand Total		\$619.3m	2,311,000 SF	6,218	4,535

Surrounding Community (connecting to both Central Corridor MetroLink stations):

The benefits of direct investments in the medical center and Cortex are expanding to the surrounding community with an extensive list of new residential and commercial projects underway (See Neighborhood Development Update, Exhibit C, pp. 13-14). All of these new developments will increase the number of potential transit riders and expand opportunities for the community.

Future Growth Depends on Transit Investments Today

Collectively, the many investments underway in the Central Corridor will have a transformative impact. The infusion of high-skilled, technology-oriented jobs in a previously blighted area that is accessible from all neighborhoods in the City and beyond creates tremendous new opportunities for disadvantaged communities with limited transportation options. The new and expanded MetroLink stations proposed in this application will better connect communities to these vital and growing centers of employment, education and services, and will stimulate continued, long-term job growth in this formerly distressed area. With the range of quality jobs being created at Cortex and the medical center, the project will strengthen opportunities to expand the middle class.

The need for enhanced light rail and bicycle connections for Cortex and the medical center is particularly strong because of the types of workers who work in the innovation economy. These companies and workers seek urban communities and proximity to research centers, and they highly value sustainability. In considering locations, they will be considering the Cortex and the Central Corridor as compared to other innovation districts around the nation and the world. To keep the benefits of local research in the St. Louis economy and expand the range of job opportunities in the community, the Central Corridor must be competitive and create the transportation alternatives and amenities valued by knowledge workers. The investment in the proposed transportation project will grow this vital innovation district and enable a dense, urban transportation-oriented development.

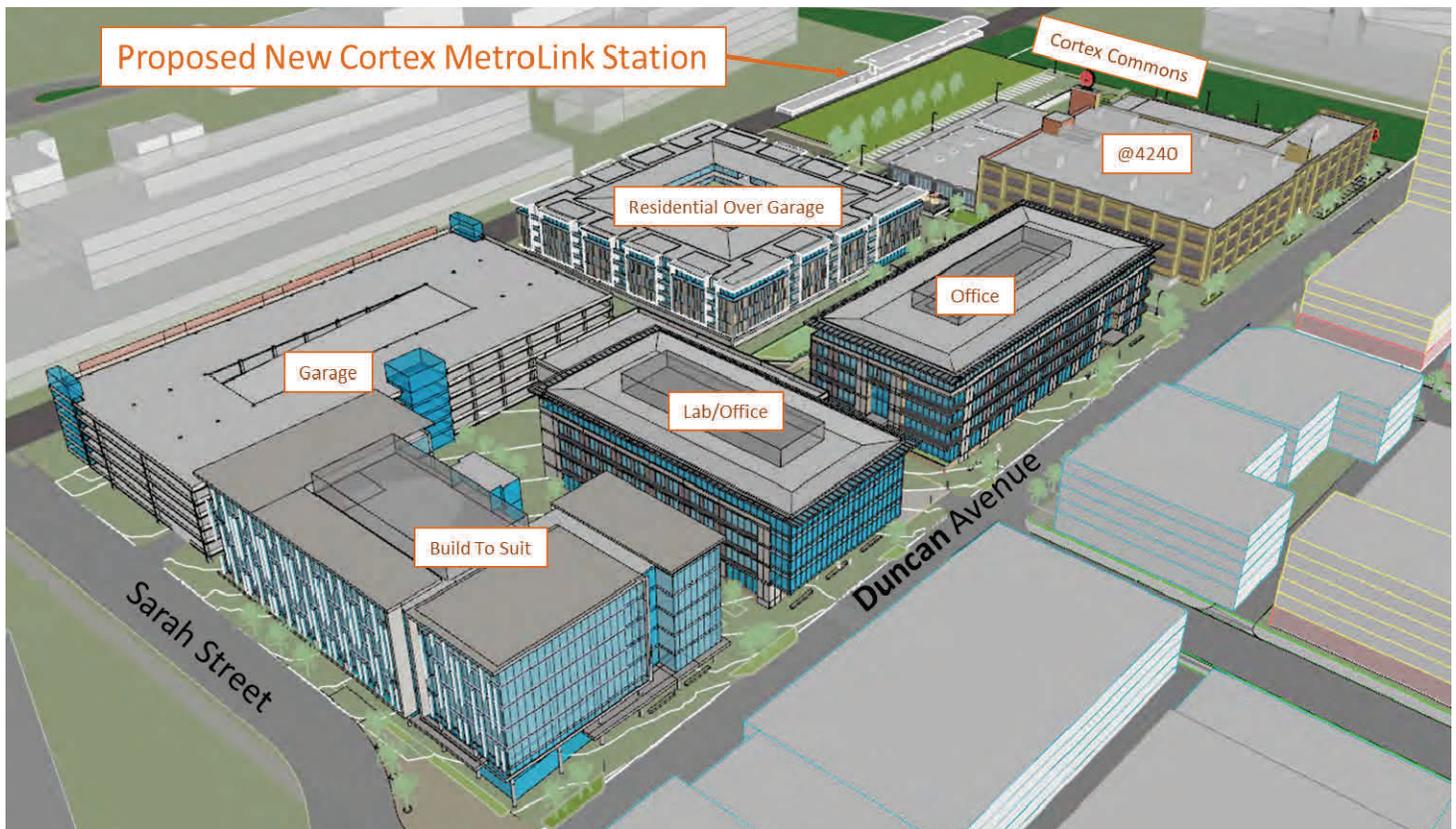
Catalyzed Investment: Planned TOD at Cortex MetroLink Station

The *Central Corridor Transit Enhancement and Job Access Program* will directly translate into substantial private investment on property adjacent to the proposed Cortex station. Building on its earlier investments at Cortex, Wexford Science & Technology recently purchased the 6.7 acre site immediately northeast of the proposed new station. Wexford purchased the site because it saw the potential that the proposed new station and new bike trail would create for a successful mixed use transit oriented development. Today, Wexford is planning an approximately **\$140 million investment**

through a 700,000 square foot commercial office, laboratory and residential TOD project adjacent to the proposed Cortex MetroLink station. A conceptual site plan is shown in Figure 1, below.

This TOD project has the potential to create over 600 construction jobs and house over 1,800 full time jobs when complete - but it will not be possible unless the new MetroLink station is constructed. **Without the new station the project benefits will be sharply reduced because Wexford will need to significantly increase the allocation of parking and reduce the office and laboratory space.** See the support letter from Wexford included with Exhibit E.

Figure 2: Wexford TOD Conceptual Plan



Conceptual Site Development Plan for Wexford Science & Technology Property Adjacent to Proposed New Cortex MetroLink Station

II. PROJECT PARTIES

This project is the result of extensive collaboration among public and private partners at the local, regional and state levels. Direct contributors to this application include:

- **Metro Transit**, the region's public transit agency, is the applicant and future operator of both MetroLink stations.
- The bike path will be funded with local match dollars from **Great Rivers Greenway**, the public organization leading the development of the region-wide system of high-quality greenways, parks and trails known as The River Ring.
- **Cortex Innovation Community**, a private not-for-profit established to capture the commercial benefits of university and regional corporate research for St. Louis, is committing \$2 million in funds generated through an established tax increment financing district (explained fully in Section III) in order to ensure that the area has needed public transit infrastructure to continue to support the growth of a vibrant, urban, mixed-use center for technology and innovation. Cortex is itself the product of five founding partner institutions: Washington University, Saint Louis University, University of Missouri-St. Louis, BJC Health Systems, and the Missouri Botanical Garden. Each of these institutions has contributed materially to the development of the innovation district.
- **BJC Healthcare** and **Washington University**, major institutions in the Central Corridor and the region's 1st and 3rd largest employers, respectively, have pledged funds to support the operations in the early years of the proposed new Cortex MetroLink station.
- The **St. Louis Development Corporation**, the economic development organization for the City of St. Louis, has committed to \$10,000 in local match dollars because of the vital importance of this project for the continued growth of the Central Corridor and the City overall.
- **Citizens for Modern Transit**, a 501(c)3 organization, led the effort to develop the draft feasibility study (completed on 4/22/14) supporting the station investments in this application and continues to be a key partner in leading efforts to enhance public transit options throughout the region.
- Two private companies making major investments in the Central Corridor—**IKEA** and **Wexford Science & Technology**—have written letters of support indicating the importance of this project for their ongoing business interests.
- Additional letters of support provided by:
 - ◇ **Senator Claire McCaskill**, US Senator for Missouri
 - ◇ **Mayor Francis G. Slay**, City of St. Louis
 - ◇ **Missouri Department of Transportation**
 - ◇ **East-West Gateway Council of Governments**

See Exhibit F for all support letters. Letters (including any received after the date of this application) will also be available at <http://cmt-stl.org/cortexmid-town-metrolink-station-study/>.

III. GRANT FUNDS AND SOURCES/USES OF PROJECT FUNDS

PROJECT BUDGET AND MATCHING FUNDS

A detailed financial feasibility plan was completed for this project as part of the draft Central Corridor Transit Access Study. The plan, included as Exhibit B to this application, identifies strategies for funding both capital and operating costs. The study was submitted to Metro Transit on April 22, 2014. Metro will finalize the report and submit to FTA by June 1, 2014.

The capital costs are estimated at \$12.9 Million in Year 2014 dollars. These costs will be funded by local sources, including Cortex, Great Rivers Greenway, and the City of St. Louis in the amounts indicated in *Table 2*. below. The remaining amount is the subject of this grant request.

Table 2. Funding Sources

Funding Source	Funding Amount
Cortex	\$2,028,319
Great Rivers Greenway	\$541,534
City of St. Louis	\$10,000
TIGER	\$10,339,129
TOTAL COST	\$12,918,982

Detailed cost estimates were prepared on the basis of unit costs for each item to be constructed. Design fees were estimated at 10 percent of construction costs. Additional lump sum costs were added for legal fees, permits, Metro work force reimbursements, and bus service during weekend closures of MetroLink for construction. Cost estimates are provided in Tables 6 through 9 later in this section.

A comprehensive review of all available funding sources conducted as part of the draft Central Corridor Transit Access Study has concluded that **a Federal discretionary grant through the TIGER program is absolutely essential to fulfill the capital costs of this project.** Funds available through other Federal programs such as CMAQ and STP-S are committed to supporting ongoing transit system

preservation and cannot be diverted without impacting the ability to maintain the existing transit system in a state of good repair. Similarly, Federal funding through the New Starts and Small Starts programs preclude funding for infill stations as they do not meet FTA's expectations for new fixed guideway systems or extensions of an existing system. State funding is not presently available for transit capital costs.

Local funding partners are unable to contribute funds in excess of the amounts stipulated in *Table 2*. The City of St. Louis is fiscally constrained and is currently operating without a dedicated revenue stream for transportation infrastructure capital improvements. Metro is similarly fiscally constrained and does not have funds available to contribute to this project.

As an organization established to oversee the creation of a regional trail system, Great Rivers Greenway funds may only be allocated to the trail portion of this project and cannot be used to support transit infrastructure investments. Great Rivers Greenway is funded by a one tenth of 1-cent sales tax approved by voters in 2000 and a three-sixteenth of 1-cent sales tax approved in 2013. Combined these revenue streams yield \$20 million in annual funding for the organization. The Great Rivers Greenway funding contribution will be provided from these stable and reliable taxing sources.

Given the significance of this project and its impact on the Central Corridor, Cortex is committing \$2,028,319 in tax increment financing (TIF) funds to the local match. In 2012, a City TIF overlay master plan was approved by the Board of Alderman to assist in the redevelopment of the Cortex district. While the majority of approved TIF funding is dedicated to incentivize development, a portion has been reserved for infrastructure and

PROJECT BUDGET AND MATCHING FUNDS (cont.)

public amenities. Cortex will direct \$2,028,319 of the infrastructure portion of the TIF to support this project. The first TIF bonds related to the District are being prepared for issuance in July 2014 and are committed to other projects. The match dollars for this project will be dedicated from the second TIF bond issuance that will be monetized by revenues from projects currently under development, including an IKEA store that is committed to a 2015 opening. IKEA projects over \$115 million in annual sales. The TIF captured from the IKEA sales will support a bond issuance that will result in debt proceeds needed as the local match. The commitment of IKEA ensures a stable and reliable revenue stream that can be monetized in 2015 by Cortex.

The project's operating costs are estimated at

Table 3. Projected Incremental Operations and Maintenance Costs

Project Component	Annual Costs
Cortex Station	\$835,000
Ped/Bike Trail	\$5,000
Central West End Station	\$25,000
TOTAL COST	\$865,000

\$865,000 annually, which includes costs to operate the Cortex Station, costs to maintain the pedestrian and bicycle trail, and incremental costs to maintain an expanded Central West End Station.

Annual operating costs for the Cortex Station amount to \$835,000 and include security, maintenance, and transit service.

Additional transit service operating hours will be incurred as a result of stopping trains at the Cortex Station. Based on scheduling provided by Metro, the Cortex Station adds 221 annual MetroLink service hours.

The operating costs funding strategy includes a variety of funding sources. Great Rivers Greenway will assume operating and maintenance costs for the trail, and Metro will assume the incremental

Table 4. Proposed Cortex Station Estimated Annual Operating Costs

Cost Component	Annual Costs
Security Costs	\$100,000
Maintenance Costs	\$200,000
Service Costs	\$535,000
Total Operating Costs	\$835,000

operating costs of the Central West End Station improvements from existing revenue sources. The incremental cost of operating the Cortex Station, which comprises the majority of this project's operating cost, will be funded by a combination of farebox revenues, incremental sales tax revenues, and short-term partner contributions.

Farebox revenues are based on ridership forecasts and an average fare paid of \$1.11. The IKEA store is expected to generate new sales tax revenues. To ensure that the sales figures applied to the station operating costs are net new and not existing revenues diverted from other retailers, the incremental tax revenues for *Table 5*, below, were calculated from projected taxable sales generated by shoppers residing from outside the Metro sales tax district, which is estimated at 58 percent of the total. The Metro sales taxes are not captured by the TIF and can be fully designated to this project, whereas the sales taxes from the City transportation tax are contributed at 50 percent, which is the portion not captured by TIF.



Central West End MetroLink Station

PROJECT BUDGET AND MATCHING FUNDS (cont.)

Table 5 summarizes the opening year funding provided by each source in 2014 dollars.

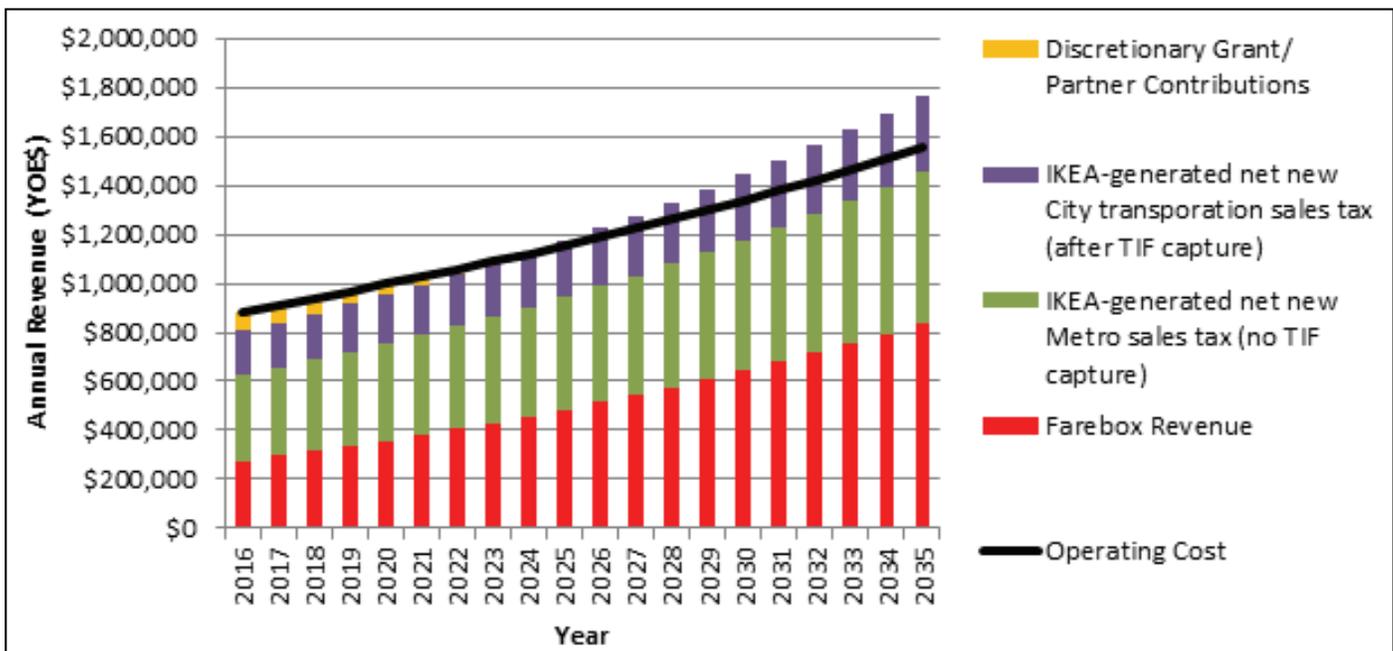
Figure 3, below, summarizes the projected annual sources and uses of funds for Scenario 1 in YOE dollars. Partner contributions are needed to plug the operating cost gap for the first 8 years of operation until such time that the gap is eliminated by increasing farebox and tax revenues. BJC Healthcare and Washington University have each agreed to contribute a one-time amount of \$200,000 for a total of \$400,000 to an escrow account designated for fulfilling the operating cost deficit during the station's initial years of operation. The cumulative amount of the deficit once farebox and tax revenues have been accounted for is projected to be \$326,000 in Year 2014 dollars, or \$370,000 in Year of Expenditure dollars. Consequently, the committed partner contribution amount is expected to satisfy the initial years' operating deficit.

Table 5. Operating Funding Sources and Commitments

Sources	Opening Year Funds (2014 dollars)	Percent of Total
Farebox Revenue	\$260,000	31%
IKEA-generated net new Metro sales tax (no TIF capture)	\$333,000	40%
IKEA-generated net new City transportation sales tax (after TIF capture)	\$166,000	20%
Partner Contributions	\$76,000	9%
Total	\$835,000	100%

Tables 6 through 9 on the following pages provide detailed capital cost figures for the *Central Corridor Transit Enhancement and Job Access Program*.

Figure 3: Scenario 1 Projected Annual Sources and Uses of Funds (in YOE Dollars)



CENTRAL CORRIDOR TRANSIT ENHANCEMENT AND JOB ACCESS PROGRAM

Table 6: Cortex METROLINK STATION CONSTRUCTION COSTS

ITEM	QTY	UNIT	UNIT COST	TOTAL COST	COST %	TIGER	LOCAL
EXCAVATION & FILL							
Excavation	561.2	CY	\$ 40	\$ 22,391	0.3%	\$ 22,391	
Rock Base under Footers	177.5	CY	\$ 34	\$ 6,069	0.1%	\$ 6,069	
				\$ 28,460	0.4%	\$ 28,460	
PLATFORM							
Concrete Platform	209.6	CY	\$ 713	\$ 149,308	1.9%	\$ 149,308	
Precast Concrete Warning Strip	733.3	SF	\$ 93	\$ 68,552	0.9%	\$ 68,552	
Security Camera	2.0	EA	\$ 1,140	\$ 2,280	0.0%	\$ 2,280	
Pole Lighting	4.0	EA	\$ 2,850	\$ 11,400	0.1%	\$ 11,400	
Windscreen with Bench	4.0	EA	\$ 1,140	\$ 4,560	0.1%	\$ 4,560	
Waste Receptacle	1.0	EA	\$ 741	\$ 741	0.0%	\$ 741	
Info Kiosk	1.0	EA	\$ 2,850	\$ 2,850	0.0%	\$ 2,850	
Light Sandblast Pattern	430.2	SF	\$ 23	\$ 9,809	0.1%	\$ 2,850	
Light Broom Finish	2,028.2	SF	\$ 1	\$ 2,312	0.0%	\$ 9,809	
				\$ 251,812	3.2%	\$ 252,350	
RAMP							
4ft Double Gate	2.0	EA	\$ 349	\$ 698	0.0%	\$ 698	
Concrete Ramp	167.0	CY	\$ 570	\$ 95,179	1.2%	\$ 95,179	
				\$ 95,876	1.2%	\$ 95,876	
CANOPY							
48" Drilled Piers	500.0	LF	\$ 855	\$ 427,500	5.4%	\$ 427,500	
Canopy Frames	5.0	EA	\$ 28,500	\$ 142,500	1.8%	\$ 142,500	
Canopy Fabric and Cables	4.0	Spans	\$ 9,500	\$ 38,000	0.5%	\$ 38,000	
				\$ 608,000	7.7%	\$ 608,000	
COMMUNICATIONS BUILDING							
CMU Walls	514.7	SF	\$ 11	\$ 5,867	0.1%	\$ 5,867	
Exterior Light Fixtures	2.0	EA	\$ 143	\$ 285	0.0%	\$ 285	
1/4" Aluminum Curved Perforated Roofing Panel	756	SF	\$ 17	\$ 12,928	0.2%	\$ 12,928	
Exterior Doors	2.0	EA	\$ 656	\$ 1,311	0.0%	\$ 1,311	
Chain Link Fence (8' high) with 2'6" Gate	7.3	LF	\$ 627	\$ 4,598	0.1%	\$ 4,598	
Perforated Screen	20.0	SF	\$ 31	\$ 617	0.0%	\$ 617	
600CFM HVAC System	1.0	EA	\$ 17,100	\$ 17,100	0.2%	\$ 17,100	
Electronic Equipment	1.0	LS	\$ 71,295	\$ 71,295	0.9%	\$ 71,295	
				\$ 114,000	1.5%	\$ 114,000	
TRACK REALIGNMENT							
Demolition Track	1,000.0	LF	\$ 57	\$ 57,000	0.7%	\$ 57,000	
Construct New Track	1,098.0	LF	\$ 570	\$ 625,860	8.0%	\$ 625,860	
Railroad Signals	4.0	EA	\$ 285,000	\$ 1,140,000	14.5%	\$ 1,140,000	
Direct Fixation Track at Station Concrete	98.0	CY	\$ 741	\$ 72,618	0.9%	\$ 72,618	
Direct Fixation Track at Station	1.0	LS	\$ 228,000	\$ 228,000	2.9%	\$ 228,000	
Earth Backfill	711.1	CY	\$ 7	\$ 5,269	0.1%	\$ 5,269	
Switches	4.0	EA	\$ 342,000	\$ 1,368,000	17.4%	\$ 1,368,000	
Crossing Modifications	1.0	LS	\$ 228,000	\$ 228,000	2.9%	\$ 228,000	
				\$ 3,724,747	47.4%	\$ 3,724,747	
OCS CATENARY SYSTEM							
OCS Catenary Foundation Concrete	27.5	CY	\$ 741	\$ 20,373	0.3%	\$ 20,373	
Tapered Tubular Pole	7.0	EA	\$ 15,960	\$ 111,720	1.4%	\$ 111,720	
Contact Wire	1,098.0	LF	\$ 1,077	\$ 11,829	0.2%	\$ 11,829	
Cantilever Assembly	7.0	EA	\$ 3,420	\$ 23,940	0.3%	\$ 23,940	
Messenger Wire	1,098.0	LF	\$ 1,739	\$ 19,089	0.2%	\$ 19,089	
Downguy Wire, Anchors, & Hardware	4.0	EA	\$ 2,024	\$ 8,094	0.1%	\$ 8,094	
Guy Guard (8ft length)	4.0	EA	\$ 108	\$ 433	0.0%	\$ 433	
				\$ 195,478	2.5%	\$ 195,478	

(Continued on next page)

CENTRAL CORRIDOR TRANSIT ENHANCEMENT AND JOB ACCESS PROGRAM

Table 6: Cortex METROLINK STATION CONSTRUCTION COSTS (cont.)

ITEM	QTY	UNIT	UNIT COST	TOTAL COST	COST %	TIGER	LOCAL
MISCELLANEOUS							
Electrical System	1.0	LS	\$ 114,000	\$ 114,000	1.5%	\$ 114,000	
Telecom System	1.0	LF	\$ 114,000	\$ 114,000	1.5%	\$ 114,000	
Ticketing Machine	2.0	LF	\$ 28,500	\$ 57,000	0.7%	\$ 57,000	
				\$ 285,000	3.6%	\$ 285,000	
PEDESTRIAN PLAZA							
Landscape	7903.0	SY	\$ 46	\$ 360,377	4.6%	\$ 360,377	
Trees	65.0	LF	\$ 399	\$ 25,935	0.3%	\$ 25,935	
Concrete - Walkways	9440.0	SF	\$ 11	\$ 107,616	1.4%	\$ 107,616	
Segmental Block Wall	727.6	LF	\$ 29	\$ 20,736	0.3%	\$ 20,736	
8ft Ornamental Screen Gate	1.0	LS	\$ 2,280	\$ 2,280	0.0%	\$ 2,280	
Stormwater Rain Garden	676.4	LF	\$ 57	\$ 38,555	0.5%	\$ 38,555	
Scuptural Element	1.0	LF	\$ 34,200	\$ 34,200	0.4%	\$ 34,200	
Decorative Pavement	9800.0	SF	\$ 14	\$ 134,064	1.7%	\$ 134,064	
Seat Walls	150.0	LF	\$ 114	\$ 17,100	0.2%	\$ 17,100	
Wayfinding Kiosk	1.0	LF	\$ 28,500	\$ 28,500	0.4%	\$ 28,500	
Benches, Misc Furnishings	1.0	LS	\$ 34,200	\$ 34,200	0.4%	\$ 34,200	
Irrigation	71127.0	SF	\$ 1	\$ 93,247	1.2%	\$ 93,247	
Pedestrian Lighting	20.0	EA	\$ 5,700	\$ 114,000	1.5%	\$ 114,000	
				\$ 1,010,810	12.9%	\$ 1,010,810	
CONSTRUCTION ADMINISTRATION							
Metro Force Work				\$ 200,000	2.5%	\$ 200,000	
Metro Bus Bridge (2 Weekends)				\$ 150,000	1.9%	\$ 150,000	
				\$ 350,000	4.5%	\$ 350,000	
Construction Total				\$ 6,664,184	85%	\$ 6,664,722	\$ -
PLANNING & DESIGN							
Environmental Review						Excluded from Application	
AE Fees (10% of Construction)				\$ 666,418	8.5%		\$ 666,418
Legal and Accounting				\$ 150,000	1.9%		\$ 150,000
Planning & Design Total				\$ 816,418	10%	\$ -	\$ 816,418
Subtotal				\$ 7,480,602	95%	\$ 6,664,722	\$ 816,418
Contingency 5%				\$ 374,030	5%		\$ 374,030
Total				\$ 7,854,633	100%	\$ 6,664,722	\$ 1,190,449

CENTRAL CORRIDOR TRANSIT ENHANCEMENT AND JOB ACCESS PROGRAM

Table 7: CENTRAL WEST END METROLINK STATION EXPANSION COSTS

ITEM	QTY	UNIT	UNIT COST	TOTAL COST	COST %	TIGER	LOCAL
EXCAVATION & FILL							
Excavation	301.2	CY	\$ 40	\$ 12,122	0.3%	\$ 12,122	
Rock Base under Footers	95.2	CY	\$ 34	\$ 3,257	0.1%	\$ 3,257	
				\$ 15,379	0.4%	\$ 15,379	\$ -
PLATFORM							
Concrete Platform	84.9	CY	\$ 713	\$ 60,486	1.4%	\$ 60,486	
Precast Concrete Warning Strip	293.3	SF	\$ 93	\$ 27,421	0.6%	\$ 27,421	
Security Camera	1.0	EA	\$ 1,140	\$ 1,140	0.0%	\$ 1,140	
Pole Lighting	1.0	EA	\$ 2,850	\$ 2,850	0.1%	\$ 2,850	
Windscreen with Bench	1.0	EA	\$ 1,140	\$ 1,140	0.0%	\$ 1,140	
Waste Receptacle	1.0	EA	\$ 741	\$ 741	0.0%	\$ 741	
Light Sandblast Pattern	172.1	SF	\$ 23	\$ 3,924	0.1%	\$ 3,924	
Light Broom Finish	811.3	SF	\$ 1	\$ 925	0.0%	\$ 925	
				\$ 98,626	2.3%	\$ 98,626	\$ -
RAMP							
4ft Double Gate	1.0	EA	\$ 349	\$ 349	0.0%	\$ 349	
Concrete Ramp	83.5	CY	\$ 570	\$ 47,589	1.1%	\$ 47,589	
				\$ 47,938	1.1%	\$ 47,938	\$ -
CANOPY							
48" Drilled Piers	700.0	LF	\$ 855	\$ 598,500	14.1%	\$ 598,500	
Canopy Frames	7.0	EA	\$ 28,500	\$ 199,500	4.7%	\$ 199,500	
Canopy Fabric and Cables	6.0	Spans	\$ 9,500	\$ 57,000	1.3%	\$ 57,000	
				\$ 855,000	20.2%	\$ 855,000	\$ -
TRACK REALIGNMENT							
Demolition Track	1,080.0	LF	\$ 57	\$ 61,560	1.5%	\$ 61,560	
Construct New Track	1,080.0	LF	\$ 570	\$ 615,600	14.5%	\$ 615,600	
Modify Railroad Signals	1.0	LS	\$ 57,000	\$ 57,000	1.3%	\$ 57,000	
Direct Fixation Track at Station Concrete	388.2	CY	\$ 741	\$ 287,656	6.8%	\$ 287,656	
Direct Fixation Track at Station	1.0	LS	\$ 228,000	\$ 228,000	5.4%	\$ 228,000	
Earth Backfill	1,920.0	CY	\$ 7	\$ 14,227	0.3%	\$ 14,227	
Retaining Wall, includes removal of existing	370.0	LF	\$ 1,140	\$ 421,800	10.0%	\$ 421,800	
Service Drive	3,700.0	SF	\$ 11	\$ 42,180	1.0%	\$ 42,180	
				\$ 1,728,023	40.8%	\$ 1,728,023	\$ -
OCS CATENARY SYSTEM							
OCS Catenary Foundation Concrete	51.1	CY	\$ 741	\$ 37,836	0.9%	\$ 37,836	
Tapered Tubular Pole	13.0	EA	\$ 15,960	\$ 207,480	4.9%	\$ 207,480	
Contact Wire	2,160.0	LF	\$ 1,077	\$ 23,270	0.5%	\$ 23,270	
Cantilever Assembly	13.0	EA	\$ 3,420	\$ 44,460	1.1%	\$ 44,460	
Messenger Wire	2,160.0	LF	\$ 1,739	\$ 37,552	0.9%	\$ 37,552	
Downguy Wire, Anchors, & Hardware	13.0	EA	\$ 2,024	\$ 26,306	0.6%	\$ 26,306	
Guy Guard (8ft length)	13.0	EA	\$ 108	\$ 1,408	0.0%	\$ 1,408	
				\$ 378,311	8.9%	\$ 378,311	\$ -
MISCELLANEOUS							
Electrical System	1.0	LS	\$ 57,000	\$ 57,000	1.3%	\$ 57,000	
Telecom System	1.0	LS	\$ 57,000	\$ 57,000	1.3%	\$ 57,000	
Landscaping	166.7	SY	\$ 46	\$ 7,600	0.2%	\$ 7,600	
Irrigation	1,500.0	SF	\$ 1	\$ 1,967	0.0%	\$ 1,967	
				\$ 123,567	2.9%	\$ 123,567	\$ -
CONSTRUCTION ADMINISTRATION							
Metro Force Work				\$ 200,000	5%	\$ 200,000	
Metro Bus Bridge (2 Weekends)				\$ 150,000	4%	\$ 150,000	
				\$ 350,000	8%	\$ 350,000	\$ -
Construction Total				\$ 3,596,844	85%	\$ 3,596,844	\$ -
PLANNING & DESIGN							
AE Fees (10% of Construction)				\$ 359,684	8%	\$ -	\$ 359,684
Legal and Accounting				\$ 75,000	2%		\$ 75,000
Planning & Design Total				\$ 434,684	0%	\$ -	\$ 434,684
Subtotal				\$ 4,031,528	95%	\$ 3,596,844	\$ 434,684
Contingency 5%				\$ 201,576	5%		\$ 201,576
Total				\$ 4,233,105	100%	\$ 3,596,844	\$ 636,261

CENTRAL CORRIDOR TRANSIT ENHANCEMENT AND JOB ACCESS PROGRAM

Table 8: GREAT RIVERS GREENWAY TRAIL CONSTRUCTION COSTS

ITEM	QTY	UNIT	UNIT COST	TOTAL COST	COST %	TIGER	LOCAL
MISCELLANEOUS							
Bike Rack	\$ 12.0	EA	\$ 821	\$ 9,850	2%		\$ 9,850
Bike Shelter	\$ 604.5	SF	\$ 171	\$ 103,367	19%		\$ 103,367
				\$ 113,217	21%		\$ 113,217
TRAIL							
Concrete - Trail	\$ 1,480.0	SF	\$ 11	\$ 16,872	3%		\$ 16,872
Trail Heads (pavers)	\$ 800.0	SF	\$ 14	\$ 10,944	2%		\$ 10,944
Bollards	\$ 2.0	EA	\$ 1,140	\$ 2,280	0%		\$ 2,280
Signs	\$ 4.0	EA	\$ 2,052	\$ 8,208	2%		\$ 8,208
Fence (36in Decorative)	\$ 1,270.0	LF	\$ 46	\$ 57,912	11%		\$ 57,912
Handicamp Ramp	\$ 2.0	EA	\$ 2,280	\$ 4,560	1%		\$ 4,560
Decorative Crosswalk	\$ 1,600.0	SF	\$ 14	\$ 21,888	4%		\$ 21,888
Trees	\$ 30.0	EA	\$ 399	\$ 11,970	2%		\$ 11,970
Pedestrian Lights	\$ 25.0	EA	\$ 5,700	\$ 142,500	26%		\$ 142,500
Landscape	\$ 1,696.0	SY	\$ 46	\$ 77,338	14%		\$ 77,338
				\$ 354,472	66%		\$ 354,472
Construction Total				\$ 467,688	87%		\$ 467,688
PLANNING & DESIGN							
AE Fees (10% of Construction)				\$ 46,769	9%	\$ -	\$ 46,769
Planning & Design Total				\$ 46,769	9%	\$ -	\$ 46,769
Subtotal				\$ 514,457	95%	\$ -	\$ 514,457
Contingency 5%				\$ 25,723	5%		\$ 25,723
Total				\$ 540,180	100%	\$ -	\$ 540,180

Table 9: TRACK ABANDONMENT COSTS

ITEM	QTY	UNIT	UNIT COST	TOTAL COST	COST %	TIGER	LOCAL
DEMOLITION							
Disconnect Utilities	1.0	LS	\$ 11,354	\$ 11,354	4%	\$ 11,354	
Remove Crossing Gates	1.0	LS	\$ 5,119	\$ 5,119	2%	\$ 5,119	
Remove Gate Foundations	1.0	LS	\$ 3,021	\$ 3,021	1%	\$ 3,021	
Remove Cantilevers	1.0	LS	\$ 5,392	\$ 5,392	2%	\$ 5,392	
Remove Cantilever Foundations	1.0	LS	\$ 5,734	\$ 5,734	2%	\$ 5,734	
Remove Rail Track	150.0	LF	\$ 29	\$ 4,275	2%	\$ 4,275	
Remove Rail Crossing at Boyle and at Sarah	2.0	EA	\$ 2,280	\$ 4,560	2%	\$ 4,560	
Remove Pavement at Boyle and at Sarah	2.0	EA	\$ 5,700	\$ 11,400	4%	\$ 11,400	
				\$ 50,855	18%	\$ 50,855	\$ -
CONSTRUCTION							
Extend and Reconnect Utilities	1.0	LS	\$ 24,487	\$ 24,487	9%		\$ 24,487
Install New Gate and Cantilever Foundations	1.0	LS	\$ 8,983	\$ 8,983	3%		\$ 8,983
Reinstall Gate and Cantilever	1.0	LS	\$ 10,807	\$ 10,807	4%		\$ 10,807
Install Signals	1.0	LS	\$ 29,572	\$ 29,572	11%		\$ 29,572
Traffic Control	1.0	LS	\$ 11,400	\$ 11,400	4%		\$ 11,400
Repave Boyle and Sarah	2.0	EA	\$ 22,800	\$ 45,600	16%		\$ 45,600
Install Security Fencing	1,000.0	LF	\$ 40	\$ 39,900	14%		\$ 39,900
Grading	1,800.0	CY	\$ 10	\$ 17,100	6%		\$ 17,100
				\$ 187,849	68%	\$ -	\$ 187,849
CONSTRUCTION ADMINISTRATION							
Metro Force Work				\$ 25,000	9%		\$ 25,000
				\$ 25,000	9%	\$ -	\$ 25,000
Construction Total				\$ 263,705	95%	\$ 50,855	\$ 212,849
PLANNING & DESIGN							
Excluded from Grant Application							
Planning & Design Total				\$ -	0%	\$ -	\$ -
Subtotal				\$ 263,705	95%	\$ 50,855	\$ 212,849
Contingency 5%				\$ 13,185	5%		\$ 13,185
Total				\$ 276,890	100%	\$ 50,855	\$ 226,034

IV. SELECTION CRITERIA

A. Primary Selection Criteria

i. STATE OF GOOD REPAIR

The pursuance of a TIGER grant is necessary for implementation of this project. The St. Louis region has prioritized maintaining its existing transportation system in a state of good repair. As a result, other capital cost funding sources are fully committed to maintenance and renewal of existing transportation assets. **Funds are not presently available to support system expansion. A TIGER grant enables the capital costs of this project to be funded in a manner that complements regional maintenance initiatives and does not adversely affect the region's ability to maintain the existing transportation system.**

Capital and operating cost funding strategies are in place to support this project. **The strategies were developed as part of the draft Central Corridor Transit Access Feasibility Study (Exhibit B).** They are feasible and conservative strategies that are also sustainable based on 20-year funding analyses provided by the study. The incremental operating costs are conservatively calculated based on data provided by Metro and are sufficient to meet the operating needs and maintain the project investments in a state of good repair.

A single, center platform configuration is proposed to consolidate platform amenities (canopy, lighting, benches, etc.) in one location serving passengers waiting to travel in both directions. Station operating costs, including security and maintenance, are commonly lower with the single center platform configuration. This increases the operator's ability to maintain the station in a state of good repair.

Incremental operating costs will be funded by contributions from the City of St. Louis, Washington University, and BJC Healthcare. Contributions from the City are in the form of sales tax revenues designated for transit. The City has pledged to dedicate all incremental sales tax revenues generated within Cortex to support this project.

Incremental sales tax revenues based on committed developments combined with farebox revenues are expected to fulfill all operating costs needs within eight years. Future developments are likely to reduce this time period. Until those revenues fully support the station, Washington University and BJC Healthcare have agreed to fund an escrow account that will satisfy operating deficits. The funding amount committed from these partners will cover the projected shortfall plus 10 percent.

Ultimately, farebox and sales tax revenues are expected to exceed the operating needs of the Cortex Station. As that occurs, operating surpluses will be designated for the life cycle renewal of transit assets.

By expanding access to high-performance light rail transit, the project will introduce reliable multi-modal transportation to underserved portions of the adjacent Central West End and Forest Park Southeast neighborhoods and to businesses in Cortex and the Central Corridor as a whole. The project will also benefit existing transit users at the Central West End Station by alleviating overcrowding on the platform and contributing to a more reliable and efficient transit system serving that station.

ii. ECONOMIC COMPETITIVENESS

Accelerating Regional Competitiveness

The Central Corridor is an engine for growth for the St. Louis region today. The continued growth of Cortex and the BJC/Washington University Medical Center is critical to the economic competitiveness and success of the city and region as a whole. **Cortex aims to leverage the existing institutional and corporate assets in the region to commercialize research in the biomedical and high-tech sectors, which in turn will help establish the region as a global entrepreneurial and innovation hub.** The *Central Corridor Transit Enhancement and Job Access Program* will directly enable and accelerate Cortex's 25-year master plan, which projects \$2.0 billion of construction, 26,000 construction jobs, 13,000 permanent technology-related jobs, an annual payroll of \$711 million, and \$530 million of additional tax revenue (of which \$200 million will be new state tax revenue). In itself, the Cortex district will be a driver of economic growth and activity, but the new Cortex MetroLink station, expanded Central West End MetroLink station and greenway trail connection will also ensure that the district seamlessly connects to the existing urban fabric and allows for an efficient and equitable flow of pedestrian, bicyclists, transit riders, and automobiles to and from the district and other parts of the city and region.

Transit Oriented Development (TOD)—Enhanced Economic Productivity of Land and Capital

The vision of creating a comprehensive mixed-use district complete with residential, office, retail, and recreation is centered on the availability of efficient transportation access. Transit Oriented Development (TOD) aims to create higher-density, walkable environments and communities by relying upon access to public transportation as a catalyst for development. **Wexford's planned, \$140 million TOD project will directly build on the investments of the proposed *Central Corridor Transit Enhancement and Job Access Program* with new**

jobs and housing options. More broadly, the *Central Corridor Transit Enhancement and Job Access Program* is the centerpiece for the future success of Cortex, and in fact, many existing and future tenants of the district have identified MetroLink access as one of their primary site selection criteria for moving to the district.

The success of Cortex will also allow for increased demand and development potential for TOD throughout the region. The OneSTL Regional Sustainability Plan (see OneSTL.net), which wrapped up at the end of last year, calls for an increase in TOD opportunities by utilizing the existing MetroLink network. This program will essentially increase ridership on MetroLink, inevitably increasing demand for more residential and commercial development near existing MetroLink stations.

The proposed transportation enhancements will also increase demand and property values. A Transit Oriented Development Study for the Cortex MetroLink station was issued in October 2012 (funded as part of the OneSTL Regional Sustainability Plan process). It was concluded that the proposed station would 1) improve area connectivity, 2) increase residential development, and 3) allow for more efficient public transportation operations, all of which contribute to the economic vibrancy of the district and surrounding neighborhoods.

ii. ECONOMIC COMPETITIVENESS (cont.)

Economic Mobility and Accessibility

The full build-out of Cortex will provide a wide range of opportunities for workers in STEM (science, technology, engineering, and math) fields, which is consistent with the federal government's commitment to growing educational and employment opportunities in these industry sectors. As presented in a Brookings Institution study from June 2013, STEM industry jobs are higher paying at all educational backgrounds—half of all STEM jobs are available to workers without a four-year college degree and they pay 10 percent higher than jobs with similar educational requirements.

After full build-out on Cortex, of the 13,000 anticipated permanent jobs in the district, 40 percent will be for employees with high school and associates degrees, 40 percent with bachelor's degrees and 20 percent with advanced degrees. These percentages are consistent with the mix of employment at university research parks across the country. The new jobs will include researchers, entrepreneurs, technicians, managers, office support, retail, restaurant, and property services. This diversity in occupational categories emphasizes the need to provide multi-modal public transportation options for Cortex's future workforce. Even in Cortex's early stages, opportunities for upward mobility are coming to fruition and the need for effective access to these jobs is an immediate need. The recent announcement that IKEA will build a home furnishings store in the Cortex district with 300 new jobs further exemplifies the mixed-use nature of the district and the availability of job opportunities across the full spectrum of income and education levels. The proposed Cortex MetroLink station will provide light rail access to IKEA for workers and shoppers alike. (See Exhibit F for a support letter from IKEA for this project.)

Economically Distressed Area

The City of St. Louis is a federally designated Economically Distressed Area with a higher unemployment rate and lower average per capita income as the nation as a whole. Despite having a relatively resilient regional population, the population within the city limits has declined every decade since 1950. In January, 2014, the Obama Administration announced that St. Louis would be among the cities included in the second round of the Strong Cities, Strong Communities (SC2) Initiative. SC2 was established in 2011 as a means by which to increase the efficiency of targeted federal investments in economically-distressed communities.

Economic Inclusion and Diversity

As part of a Tax Increment Financing (TIF) district in the city of St. Louis, Cortex has made strong commitments to diversity and inclusion for all construction projects in the district. Cortex will continue to comply with Mayor's Executive Order #28 in which contracts and purchases have at least 25 percent participation by minority-owned business enterprises (MBEs) and five percent participation by woman-owned business enterprises (WBEs). It will also continue to comply with St. Louis City Ordinance No. 69427 related to construction workforce diversity in which all projects of \$1 million or more must have 25 percent of all labor hours performed by minorities, five percent by women, 15 percent by apprentices, and 20 percent by residents of the City of St. Louis.

Cortex will continue working closely with all involved city and regional compliance monitoring agencies and departments to ensure that all construction activities, including the proposed *Central Corridor Transit Enhancement and Job Access Program*, continue to promote economic inclusiveness and mobility.

iii. QUALITY OF LIFE

The *Central Corridor Transit Enhancement and Job Access Program* will do more than just improve pedestrian and bicycle access and connectivity—it will significantly improve the livability and vibrancy within the Central Corridor and the surrounding neighborhoods. The project area (Cortex and the medical campus) is surrounded by densely developed neighborhoods that include the Central West End neighborhood to the north, Saint Louis University to the east, the Forest Park to the west, and The Grove neighborhood to the south. When the Cortex master development plan is realized, it will “fill the gaps” and provide a much needed connection within the existing urban fabric in a previously underutilized, blighted industrial area in the heart of the city.

The *Central Corridor Transit Enhancement and Job Access Program* has been developed with consideration of the six livability principles identified by the U.S. Department of Transportation (DOT), Department of Housing and Urban Development (HUD), and the Environmental Protection Agency (EPA) as part of their joint Inter-agency Partnership for Sustainable Communities.

The project will:

Promote equitable, affordable housing by improving access and connectivity to and from the immediate project area and the surrounding neighborhoods. The St. Louis region has a very diverse housing stock across a wide range of affordability levels; however, equitable access to job centers, health care, education, retail, and recreational and cultural amenities is not shared. The proposed project presents a substantial step in providing added and enhanced public transportation options and integrating the regional transportation network as a whole, which will be a shared benefit across all income levels.

Provide more transportation choices by leveraging and expanding upon the existing MetroLink system and linking St. Louis’ Central Corridor with the

planned and existing regional rail system. These proposed transportation enhancements will improve access and connectivity to and from the employment centers and surrounding neighborhoods by providing multi-modal transportation options and reducing the dependence on automobiles. As a result, the surrounding areas will become more pedestrian friendly and socially vibrant. The proposed MetroLink light rail station will connect Cortex directly to other MetroLink light rail stations in the network including downtown St. Louis, Saint Louis University, the BJC/Washington University Medical Campus, the Washington University Danforth Campus, University of Missouri –St. Louis, and Lambert St. Louis International Airport. Additionally, the Central West End MetroLink station at the BJC/Washington University Medical Campus is the busiest in Metro’s entire system and the platform expansion will allow it to continue to accommodate increasing demand.



Drawings of completed Cortex district emphasizing the mixed-use, community focused nature of the district.

iii. QUALITY OF LIFE (cont.)

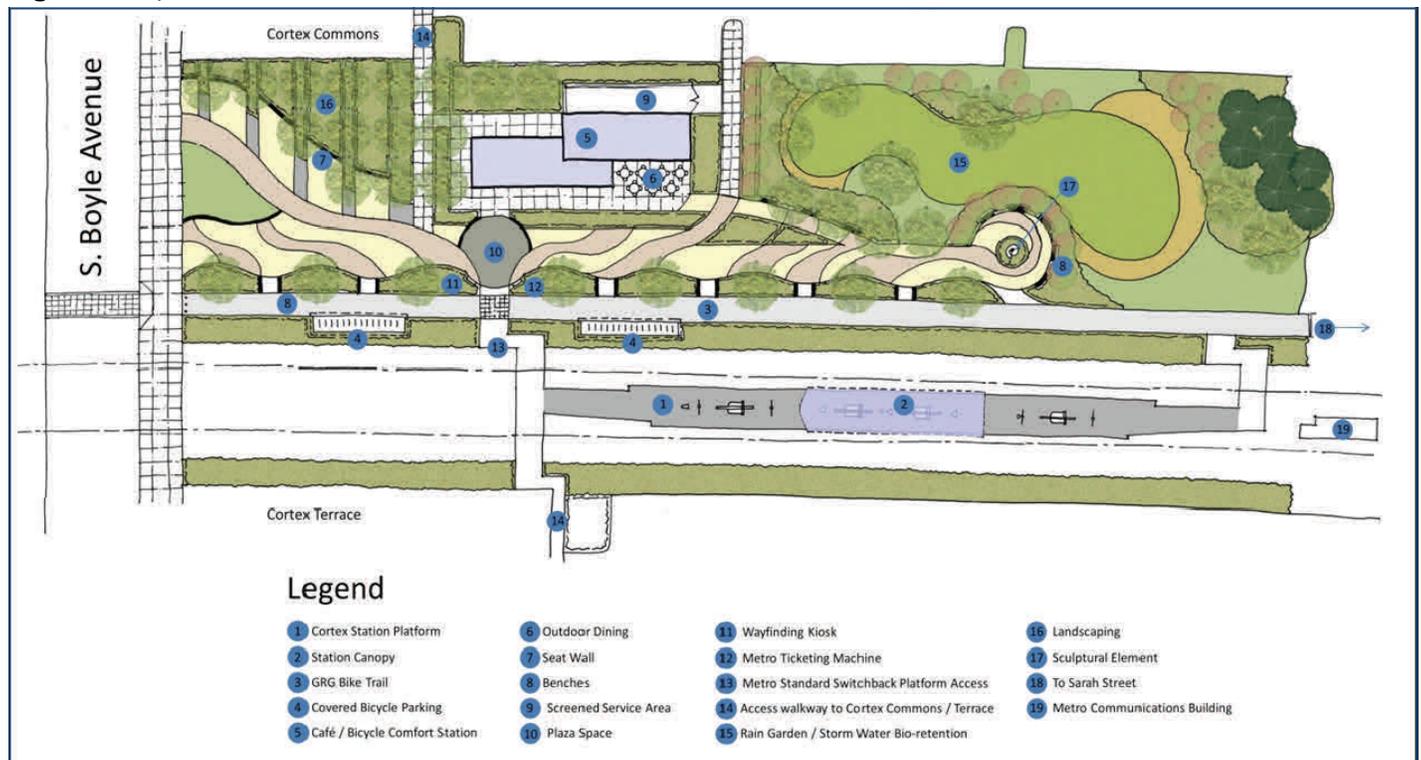
Enhance economic competitiveness by making Cortex a more desirable and sustainable mixed-use, live-work district. Cortex in itself will be a driver of regional economic growth: as previously noted, over the next 25 years it projects \$2.0 billion of construction, 26,000 construction jobs, and 13,000 permanent technology-related jobs. The proposed transportation improvements will accelerate the build-out of Cortex and trigger additional economic development growth in the surrounding neighborhoods, city, and region. As a potential hub of national and international innovation, entrepreneurship, and business development, it is critical that Cortex is linked to the key commercial, institutional, and transportation centers in the region via MetroLink.

Support existing communities by improving public transportation access and pedestrian and bicycle connectivity to the surrounding neighborhoods. The City of St. Louis has experienced population decline every decade since the 1950s and Cortex has the potential to be a catalyst for much needed growth and development. More importantly, by utilizing existing transportation infrastructure

networks, the project will allow Cortex to seamlessly integrate into the existing urban fabric. Without this connectivity, Cortex will not reach its potential to drive local urban revitalization and create opportunity.

Coordinate and leverage federal policies and investment by building upon the committed public and private investments of \$367.1 million in Cortex to date, which include capital and infrastructure investments by Cortex, Washington University, BJC HealthCare, Wexford Science and Technology, MoDOT, Solae, CET, and West End Lofts. The Cortex contribution is from part of the founders' investments, which include funds from BJC HealthCare, Saint Louis University, University of Missouri-St. Louis, and Washington University, as well as government and philanthropic grants. These contributions show the tremendous commitment by the region's leading institutions, state and local governing bodies and the private sector, and are further evidence of the influence Cortex has had on bringing key stakeholders and investors together to generate long-lasting economic growth in the city and region.

Figure 4: Proposed Cortex MetroLink Station Site Plan



iii. QUALITY OF LIFE (cont.)

Value communities and neighborhoods by fostering the completion of Cortex as a mixed-use district that promotes innovation and economic growth in the region and encourages future investment in the City of St. Louis. This activity is aimed to stimulate future job and residential growth in an area that is currently characterized by underutilized industrial uses. Cortex will provide much needed infill development to reconnect with the Central Corridor and existing urban fabric and provide much needed accessibility to the surrounding neighborhoods by making the area safer and more pedestrian friendly.



Cortex master plan incorporates sustainable design features



Example of a greenway pedestrian/bicycle trail

iv. ENVIRONMENTAL SUSTAINABILITY

This project will provide numerous environmental sustainability benefits, incorporate sustainable design elements and features, and complements region sustainability initiatives.

By expanding access to transit, this project is expected to attract 1,611 daily riders to transit by 2035 that would otherwise use automobile transportation. This represents a reduction in vehicular traffic from 53,500 to 49,500 daily trips in and out of the project area. This reduction will help lessen reliance on oil, reduce greenhouse gas emissions, and enable fewer parking spaces to be built in Cortex. In fact, assuming an average commuting distance of 32 miles round trip and an average fuel economy of 22.4 miles per gallon (mpg), a daily CO₂ reduction of 112,000 lbs will be realized as a result of this project. This amounts to a minimum 33,600,000 lbs reduction on an annual basis. Moreover, minimal additional energy will be expended to achieve these benefits, since the existing MetroLink system is already operating through the project area.

This project is not expected to have an adverse impact on the environment. The property necessary for implementation is owned and controlled by Metro. No impacts to air quality, water quality, wetlands, or endangered species are anticipated. Pursuance of environmental clearances will begin in earnest in July 2014 with clearances expected to be secured by December 2014. A Categorical Exclusion is anticipated.

The proposed Cortex MetroLink Station design incorporates several sustainable design features:

- **Bicycle Infrastructure:** Two sheltered bike parking areas and the first phase of an east-west pedestrian and bicycle trail are proposed to encourage pedestrian and bicycle connectivity to MetroLink. Walking and cycling promote active and healthy lifestyles and further reduce our reliance on vehicular transportation.

iv. ENVIRONMENTAL SUSTAINABILITY (cont.)

- **Green Infrastructure:** Porous pavers, rain gardens, and a wetlands area are proposed as part of the station design to promote stormwater infiltration and minimize runoff. Cortex has a master stormwater agreement in place with the Metropolitan Sewer District that outlines practices and policies for managing stormwater. The agreement encourages the use of green infrastructure practices.

OneSTL Regional Sustainability Plan – The St. Louis region’s long range plan for sustainable development entitled **OneSTL** was recently completed and adopted by the East-West Gateway Council of Governments (see OneSTL.net). OneSTL is a comprehensive sustainability document that covers a wide range of environmental, economic, and public health issues facing the region. **This project is consistent with the overarching goals outlined in the OneSTL plan, including:**

- **Improve access to opportunities** – Upon opening, the Cortex Station will attract 360 daily boardings from the adjacent Central West End and Forest Park Southeast neighborhoods, both of which have a high percentage of zero car and low income households. In addition, the station is expected to bring over 200 riders per day from low income areas served by existing stations to jobs in Cortex.
- **Invest in green infrastructure** – This project incorporates sustainability features for stormwater management, per the Cortex master plan (Exhibit D-1).
- **Invest in existing communities** – This project represents a sizable investment in an area that has suffered from disinvestment and deteriorated infrastructure. Public investments

are critical for attracting additional private investments and enabling the adaptive reuse of historic buildings.

- **Reduce combined housing and transportation costs** – The housing and job access to transit afforded by this project will provide more people the opportunity to use transit and lower their combined housing and transportation costs.
- **Utilize transportation assets to stimulate economic development** – This project is expected to bolster momentum for development and contribute to job attraction and housing initiatives underway.
- **Integrate transportation and land use planning** – The Cortex area represents one of the region’s best opportunities for transit-oriented development, which can only occur in combination with the proposed Cortex Station. The planned Wexford TOD is evidence of the real, immediate opportunity.
- **Expand transit accessibility and utilization** – The Cortex Station will attract up to 2,000 daily boardings by 2035, thereby introducing new riders to the system.
- **Advance active transportation initiatives** – The project complements active transportation initiatives by incorporating pedestrian and bicycle infrastructure in the form of a trail and bicycle storage.
- **Effectively manage and maximize the efficiency of existing transportation assets** – The project will contribute new riders to the transit system without materially impacting system operations or efficiencies.



v. SAFETY

This project will improve transportation safety by expanding access to transit and by improving the Central West End Station. As previously noted, the Cortex Station will divert 1,611 vehicular trips to transit by 2035. The Federal Highway Administration's latest condition assessment reported that **transit passengers are 40 percent less likely to be injured traveling by light rail as compared to private automobile**. Overall, the resulting traffic reduction will reduce the incidence of surface transportation-related accidents, injuries, and fatalities on area roadways.

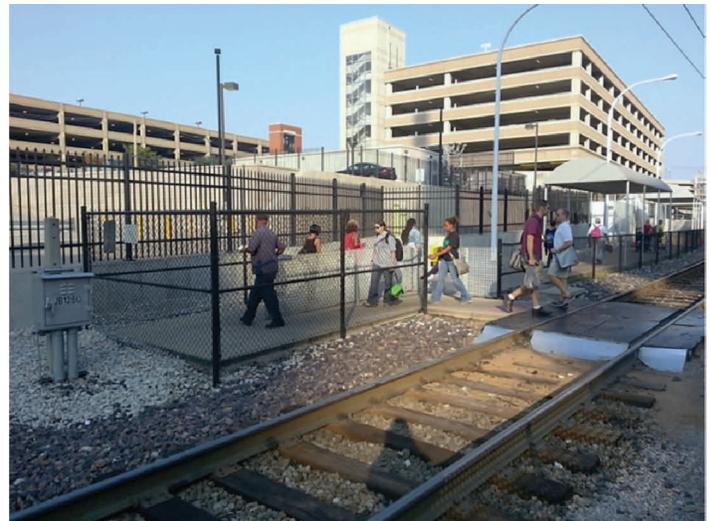
The Cortex Station design itself emphasizes user safety. Included are separate pedestrian access and bicycle trail access routes from Boyle Ave to minimize conflicts between these user groups. The at-grade track crossing at Boyle Ave will be improved with a smoother pedestrian crossing as well as enhanced crossing gates with pedestrian arms.

Additionally, the proposed center platform configuration is considered safer. Pedestrians cross one track at a time instead of two. This crossing maneuver is simpler and benefits from “Z-crossings”, which physically turn passengers towards approaching trains at crossings to facilitate a direct line of sight. The center platform enables misdirection passengers to transfer in the opposite direction without leaving the platform and without crossing tracks. Accommodating these passengers is important given the station's location on the combined Red and Blue Lines.

The platform extension at the Central West End Station is a designated safety improvement, intended to provide additional standing capacity on the platform and reduce over-crowding. The draft Central Corridor Transit Access Study evaluated the Central West End Station platform using a level of service analysis as defined in the *Transit Capacity and Quality of Service Manual, 3rd Ed.*

Platform level of service is measured by the average standing area per person and accounts for the effective useable space of the platform, excluding platform “furniture” such as signs, benches, trash cans, etc. Also excluded are platform edge warning strips, space between trains not proximate to boarding doors, and linear circulation pathways along the platform. Deducting for these items, the existing platform at the Central West End Station has approximately 750 square feet of effective standing area.

The analysis determined that the current platform level of service during peak periods is ‘D’, based on approximately 5 square feet per standing passenger. This is a less than desirable condition. The threshold between level of service ‘D’ and level of service ‘E’ is typically considered a critical capacity that should not be exceeded. Level of service ‘C’ is a target for acceptable conditions. The platform expansion will add 650 square feet of standing area, increasing the square footage per passenger by 80 percent and achieving the target level of service ‘C’.



Pedestrian track crossing at Central West End Station

IV. SELECTION CRITERIA

B. Secondary Selection Criteria

i. INNOVATION

Innovation is a defining feature of the Central Corridor. Cutting-edge research and state-of-the-art medical care take place every day at BJC and Washington University. Innovation is part of Cortex's name—the Cortex Innovation Community—and represents the focus of all investment activity in the district. In order to accelerate company formation and job growth, Cortex is establishing five innovation centers. These centers will amass a critical mass of entrepreneurial talent, provide business support services, and attract venture capital investments to drive entrepreneurial density and “collision points” of innovation. The five centers (see Cortex Background, Exhibit D-1 for more information) are:

- Center for Emerging Technologies
- BioGenerator
- Cambridge Innovation Center
- The HUB
- TechShop

The proposed new Cortex MetroLink light rail station would incorporate the latest transit technologies to provide a modern, state-of-the-art facility that would serve the community for decades to come. The transit fare system would utilize smart card technologies that improve convenience by allowing value to be added to cards at any time, accommodating online purchases, and eliminating the need for customers to carry cash. In addition, the technology allows Metro to monitor ridership patterns and improve fare enforcement. The station would also capitalize on Metro's automatic vehicle location system to provide real-time arrival information on electronic message boards at the station.

The station and supporting pedestrian and bicycle infrastructure represent a unique opportunity for the St. Louis region to improve utilization of the existing MetroLink system and help better connect that existing asset to an emerging urban, mixed-use district and integrate it with other modes of transportation. The character of the project as a multi-modal transportation hub to support surrounding neighborhoods and help cultivate additional growth and development in Cortex is an innovative approach to transportation for St. Louis, where travel by private automobile continues to dominate the landscape. The planned TOD adjacent to the station will create new opportunities for car-optional living.

The financing approach for the capital and operating costs associated with the project are innovative as well. Local match sources for the capital costs include revenues generated through a tax increment financing district, which uses economic development successes (in this case, a new IKEA store in the urban market) to fund needed transit infrastructure. Additional funding will be provided by Great Rivers Greenway, showing the importance of multimodal planning and sustainable investment. On the operating side, the incremental costs of operations will be funded through a combination of farebox revenues, new City taxes generated by IKEA, and gap funding pledged by Washington University and BJC Healthcare—a true public-private partnership representing the commitment of the community to growing transit opportunities and providing access to employment.

ii. PARTNERSHIP

Jurisdictional and Stakeholder Collaboration

This project is the result of extensive collaboration among public and private partners at the local, regional and state levels. As described in the “Project Parties” section, above, direct contributors to this application include:

- Metro Transit
- Great Rivers Greenway
- Cortex Innovation Community
- BJC Healthcare
- Washington University
- St. Louis Development Corporation
- City of St. Louis
- Citizens for Modern Transit
- IKEA
- Wexford Science & Technology
- Senator Claire McCaskill, US Senator for Missouri
- Mayor Francis G. Slay, City of St. Louis
- Missouri Department of Transportation
- East-West Gateway Council of Governments

Additional public investments in infrastructure in this area include the Missouri Department of Transportation’s contributions to the new I-64 interchange currently under construction and the pledge by the Missouri Development Finance Board of \$10 million in Contribution Tax Credits to support \$20 million of private donations to fund infrastructure.

Disciplinary Integration

The application is the product of an interdisciplinary collaboration. Metro Transit and Great Rivers Greenway are diverse transportation agencies that will implement the project, and the Missouri Department of Transportation and the East-West Gateway Council of Governments are

both in support. The St. Louis Development Corporation, the economic development organization for the City of St. Louis, is committing funds to show the strong support of the City for the project. The City has also approved a comprehensive Redevelopment Plan for the Cortex district, which serves as the basis for the tax increment financing district; the proposed MetroLink station is included in this plan. Further, Cortex has worked with the Metropolitan St. Louis Sewer District (MSD) to develop a district-wide plan for storm water management (described in Cortex District Master Plan, Exhibit D-2) and has partnered with MSD and BJC Healthcare to ensure that new infrastructure can address storm water needs in the watershed even beyond the Cortex district boundaries. Plans for storm water infrastructure in the project will be consistent with the district plan. Finally, Washington University and BJC Healthcare have pledged funds toward operating costs.

The proposed station has been the subject of two recent federally-funded planning studies. In 2012, a portion of the grant made to the East-West Gateway Council of Governments from the U.S. Department of Housing and Urban Development (HUD) for the OneSTL Regional Sustainability Plan funded a transit-oriented development study for Cortex to evaluate the potential opportunity for the proposed light rail station. This study developed ridership projections that showed the proposed station as growing to be one of the busiest in the entire MetroLink system within the 20-year planning period.

To build on the findings of the first study, a more extensive feasibility study, the draft Corridor Transit Access Study referenced throughout this application (Exhibit B), was funded through the Congestion Mitigation and Air Quality Improvement Program.

IV. SELECTION CRITERIA

C. Results of Benefit-Cost Analysis

PROJECT MATRIX

The Benefit Cost Analysis is intended to quantify most of the expected future benefits or costs of a given project. The matrix below details the current issues with the study area and how the proposed project will impact stakeholders in both qualitative and quantitative terms. Because the *Central Corridor Transit Enhancement and Job Access Program* is intended to provide connectivity and transit alternatives to both area residents and the greater St. Louis metro, it is assumed that all project components must be in place for the proposed improvements to truly succeed.

Table 10

PROJECT MATRIX

CURRENT STATUS/BASLINE & PROBLEM TO BE ADDRESSED	CHANGE TO BASELINE/ ALTERNATIVES	TYPES OF IMPACT	POPULATION AFFECTED BY IMPACT
INADEQUATE TRANSIT SERVICE TO THE GROWING CORTEX MIXED-USE DISTRICT WITHIN THE CITY OF ST. LOUIS	CONSTRUCT A METROLINK LIGHTRAIL STATION ON THE EXISTING LIGHTRAIL RIGHT OF WAY TO SERVE THE CORTEX AREA	INCREASED TRANSIT RIDERSHIP ON AN EXISTING LINE, REDUCED VEHICLE EMISSIONS, INCREASED SAFETY	METRO AREA RESIDENTS WILL HAVE BETTER ACCESS TO THIS GROWING DISTRICT AND RESIDENTS TROUGHOUT THE REGION WILL HAVE BETTER ACCESS TO JOB OPPORTUNITIES AND TRANSIT.
LACK OF CAPACITY AT BUSIEST EXISTING LIGHT RAIL STATION IN REGIONAL NETWORK (CENTRAL WEST END STATION) TO MEET GROWING DEMAND	EXPAND PLATFORM AT THE EXISTING CENTRAL WEST END STATION TO MEET GROWING DEMAND	INCREASED TRANSIT RIDERSHIP ON EXISTING TRANSIT LINE, REDUCED VEHICLE EMISSIONS, INCREASED SAFETY	METRO AREA RESIDENTS WILL HAVE BETTER AND MORE EFFICIENT ACCESS TO AND FROM HOSPITAL DISTRICT AND CORTEXT DISTRICT.
INADEQUATE PEDESTRIAN AND BIKE CONNECTIONS TO AND FROM THE CORTEX AREA, HOSPITAL DISTRICT, FOREST PARK, AND OTHER PARTS OF THE ST. LOUIS CITY CENTRAL CORRIDOR FROM THE EXISTING REGIONAL GREENWAY AND TRAIL SYSTEM.	CONSTRUCT OFF-STREET PAVED TRAIL AS PART OF PLANNED/EXISTING REGIONAL GREENWAY AND TRAIL SYSTEM	INCREASED ACCESS TO CORTEX AREA, HOSPITAL DISTRICT, FOREST PARK, CENTRAL CORRIDOR AND TRANSIT FOR METRO AREA RESIDENTS. INCREASED TRANSIT ALTERNATIVES.	METRO AREA RESIDENTS WILL HAVE EXCELLENT ACCESS TO TRANSIT ALTERNATIVES AND JOBS WITHIN THE CORTEX AREA, HOSPITAL DISTRICT, AND CENTRAL CORRIDOR AS WELL AS RECREATIONAL AND CULTRAL AMENITIES IN FOREST PARK

CURRENT STATUS/BASLINE & PROBLEM TO BE ADDRESSED	ECONOMIC BENEFIT	SUMMARY OF RESULTS	PAGE REFERENCE IN APPLICATION
INADEQUATE TRANSIT SERVICE TO THE GROWING CORTEX MIXED-USE DISTRICT WITHIN THE CITY OF ST. LOUIS	MONETIZED VALUE OF INCREASING THE UTILIZATION OF AN EXISTING TRANSIT ASSET. ESTIMATED INCREASE IN PROPERTY VALUE DUE TO THE PRESENCE OF THE LIGHTRAIL STATION. MONETIZED VALUE OF EMISSIONS REDUCTION.	NEW TRANSIT SERVICE WILL BOLSTER EXISTING NEIGHBORHOODS, SUPPORT NEW JOB CREATION, AND FOSTER TRANSIT ORIENTED DEVELOPMENT.	1-2, 14-22
LACK OF CAPACITY AT BUSIEST EXISTING LIGHT RAIL STATION IN REGIONAL NETWORK (CENTRAL WEST END STATION) TO MEET GROWING DEMAND	MONETIZED VALUE OF INCREASING THE UTILIZATION OF AN EXISTING TRANSIT ASSET. ESTIMATED INCREASE IN PROPERTY VALUE DUE TO THE PRESENCE OF INCREASED CAPACITY OF THE LIGHTRAIL STATION. MONETIZED VALUE OF EMISSIONS REDUCTION.	INCREASING CAPACITY OF AN EXISTING TRANSIT ASSET WILL BOLSTER EXISTING NEIGHBORHOODS, SUPPORT NEW JOB CREATION, AND CONSTITUTE TO FOSTER TRANSIT ORIENTED DEVELOPMENT.	1-2, 14-22
INADEQUATE PEDESTRIAN AND BIKE CONNECTIONS TO AND FROM THE CORTEX AREA, HOSPITAL DISTRICT, FOREST PARK, AND OTHER PARTS OF THE ST. LOUIS CITY CENTRAL CORRIDOR FROM THE EXISTING REGIONAL GREENWAY AND TRAIL SYSTEM.	MONETIZED VALUE OF HEALTH BENEFITS OF BIKE COMMUTING. REDUCTION IN EMISSIONS. NEIGHBORHOOD ACCESS TO MUTIPLE FORMS OF TRANSIT.	GREENWAY/PATHWAY WILL ALLOW EASIER PEDESTRIAN AND BIKE ACCESS.	2, 14-22

BENEFITS-COST ANALYSIS

The Benefit Cost Analysis examined the quantifiable aspects of the *Central Corridor Transit Enhancement and Job Access Program*. In total, the approximately \$12.9 million investment will create approximately 170 construction jobs and support transit alternatives for the estimated 13,000 permanent jobs to be created in the Cortex area and throughout the Central Corridor.

Overall, the project is expected to generate a **Benefit Cost Ratio of 2.74** assuming that expected benefits from reduced emissions, property value increases, and travel time improvements materialize.

Some expected benefits and costs are difficult to quantify. The synergy of connecting the Cortex area to the greater Metro transit system and to neighborhoods throughout the Central Corridor, city, and region is difficult to estimate. While it is expected that the costs of operating a new station, expanded station, and trail segment will increase overall project costs, it is difficult to fully ascertain the value, or hidden costs, of adding new riders to the existing transit system or pedestrian and cyclists to the regional trail network.

Note that these calculations do not include any of the expected benefits associated with the \$140 million TOD project planned by Wexford Science & Technology, nor other investment planned in the Cortex Innovation Community of the BJC/ Washington University Medical Center.

Table 11

RATIO OUTCOMES

BENEFITS	VALUE AT 7%	VALUE AT 3%
LIVABILITY		
HEALTH BENEFITS OF CYCLING	\$ 63,000	\$ 107,000
SUSTAINABILITY		
REDUCED EMISSIONS	\$ 583,000	\$ 996,000
STATE OF GOOD REPAIR		
O&M	(\$7,879,000)	(\$13,498,000)
ECONOMIC COMPETITIVENESS		
INCREASE IN PROPERTY VALUE	\$ 42,257,000	\$ 68,960,000
TRAVEL TIME IMPROVEMENTS	\$ 349,000	\$ 2,740,000
TOTAL BENEFITS	\$ 35,373,000	\$ 59,305,000
ONE-TIME BENEFITS		
COSTS		
MATCHING FUNDS	\$ 2,579,853	\$ 2,579,853
TIGER REQUEST	\$ 10,339,129	\$ 10,339,129
TOTAL COSTS	\$ 12,918,982	\$ 12,918,982
BCA RATIO	2.74	4.59

V. PROJECT READINESS

A. TECHNICAL FEASIBILITY

The technical feasibility of this project has been confirmed by the draft Central Corridor Transit Access Study— a feasibility study and alternatives analysis submitted on 4/22/14 that recommended advancing the project components included in this application (see Exhibit B). The study was performed as a partnership between Citizens for Modern Transit (a transit advocacy organization), Metro, and Central Corridor stakeholders.

The study was predicated on rigorous, data-driven analyses that provided quantitative metrics for considering the advantages and disadvantages of the alternatives considered. Population and employment were forecasted to indicate future activity levels and to serve as inputs to transit ridership projections. Using the regional travel demand model, ridership forecasts were provided for opening year, 10-year, and 20-year time horizons, in accordance with typical FTA study protocols.

Additional quantitative and qualitative analyses addressed constructability, anticipated capital and operating costs, transit operational impacts, and the transit user experience.

The conceptual design of the Cortex Station is shown in Figure 4, above. The station will be located adjacent to Boyle Ave for proximity to the heaviest concentration of employment and to maximize the potential ridership capture. The ridership forecasts are summarized in *Table 6*, below. The number of boardings generated by the Cortex Station are generally considered to be sufficient to warrant the station. The 2015 boardings would fall just short of the median station ridership for the entire system.

A single, center platform of approximately 200 feet in length will be provided. The platform's west edge will be located approximately 250 feet from the centerline of Boyle Ave. The station will be

accessible from both Boyle Ave and Sarah St via a pedestrian plaza and the pedestrian/bicycle trail to fully integrate the station with surrounding uses. Pedestrian access to the platform will be provided at both the east and west ends via at-grade track crossings. The platform will be protected by a signature architectural canopy that will provide placemaking and branding for the Central Corridor and complement the adjoining Cortex Commons.

Also included in the project are the communications, electrical systems, and signaling infrastructure necessary to support the station and realignment of the westbound track to accommodate the center platform. Additional station features include a pedestrian plaza with seating walls and benches, bike parking, opportunities for public art in the plaza space, and a variety of landscaping and green infrastructure in the form of rain gardens, wetlands, and planting beds to manage stormwater run-off.

The east-west pedestrian/bicycle trail will operate parallel to the MetroLink tracks. The segment between Boyle Ave and Sarah St included in this project is the first segment of a broader plan of Central Corridor pedestrian and bicycle linkages. Ultimately, the trail will be extended eastward to St. Louis University and the Grand MetroLink Station and westward to Washington University Medical Center and Forest Park. A 10-foot wide paved trail accommodating both cyclists and pedestrians is proposed. The trail will reside within Metro right-of-way and will satisfy the 20-foot minimum offset from the centerline of the nearest track that is desired by Metro.

Per information on file with the City of St. Louis Office of the Assessor, property needed to accommodate the station design concept is owned and controlled by Metro, as depicted in Exhibit G. **No acquisition is necessary.** However, a portion of the property is occupied by freight rail spurs that are discontinued but not yet formally abandoned.

A. TECHNICAL FEASIBILITY (cont.)

That process includes obtaining the permitting and regulatory clearances to abandon the tracks as well as the design and construction of the track removal.

Table 12. Cortex Station Projected Ridership, Daily Boardings

2015	2025 Low	2025 High	2035 Low	2035 High
890	1,176	1,597	1,419	1,907

In addition to the Cortex Station and pedestrian/bicycle trail, this project includes improvements to the existing Central West End MetroLink Station. Specifically, the existing center island platform will be extended eastward by approximately 60 feet to the east to enable eastbound and westbound trains to stagger their stop at Central West End. Eastbound trains will use the eastern two-thirds of the platform and westbound trains will use the western two-thirds, reducing the overlap of eastbound and westbound standing passengers. The extended platform will include an additional windscreen, lighting, and seating for passengers.

A platform level of service analysis based on procedures outlined in the *Transit Capacity and Quality of Service Manual, 3rd Ed.* confirmed that the platform extension will increase the effective passenger standing area by 80 percent, resulting in a level of service improvement from ‘D’ to ‘C’. The longer platform will provide each standing passenger with 7.75 square feet of space on average, an increase over the 5 square feet of space available currently. Additional details are provided in the draft feasibility study.

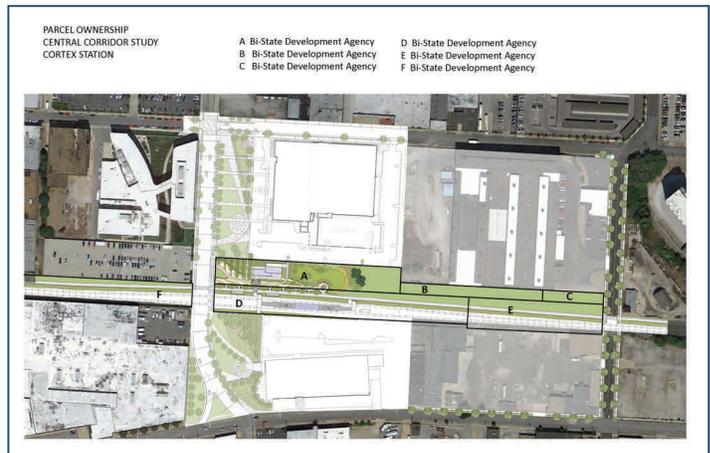
In order to accomplish the platform lengthening, the existing eastbound track will need to be modified to accept a reduced radius from 1,100 to 800 feet. In addition, the platform’s east pedestrian connection to the Central West End Transit Center will be relocated to the end of the extended platform. It will effectively be rebuilt in its current configuration at the new location, including an at-grade crossing of the westbound track to accommodate passengers transferring between MetroLink and MetroBus.

Additionally, the same architectural canopy design planned for the Cortex Station will be incorporated along the full length of the Central West End Station, including the existing platform area. This feature will help co-brand and unify the Central West End and Cortex Stations as part of the collective Central Corridor area.

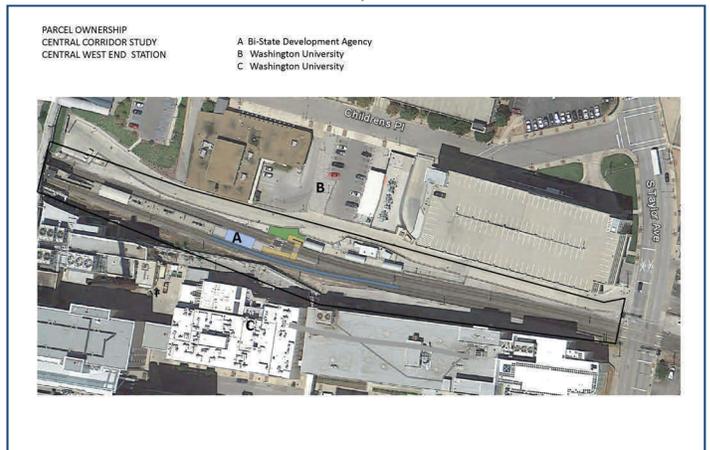
Existing survey information on file with Metro and parcel information on file with the City of St. Louis Office of the Assessor confirm that the Central West End Station improvements are within the limits of property owned and controlled by Metro. The Metro property limits are highlighted in yellow in Exhibit G. **No acquisition is necessary.**

B. FINANCIAL FEASIBILITY

See III. GRANT FUNDS AND SOURCES/USES OF PROJECT FUNDS, p 7-13.



Cortex Station Parcel Ownership



Central West End Station Parcel Ownership

C. PROJECT SCHEDULE

Planning for this project began in 2012 with the TOD study mentioned above; this study identified the anticipated utilization of an infill MetroLink light rail station in Cortex. A detailed feasibility study was submitted in draft to Metro on 4/22/14 (Exhibit B) to evaluate in greater detail the merits of the infill station and also to consider the need for enhancements to the Central West End Station. That draft study confirmed the need for the infill station and also recommended the platform improvement at the Central West End Station that is included as part of this project request. Project milestones are summarized below. **All pre-construction activities, including PS&E Approval, will be complete by the end of 2015.** Construction will begin in earnest in the first half of 2016. This schedule allows all funds to be obligated well in advance of the September 30, 2016 deadline. Construction will be complete in early 2017.

Project Milestones

October 1, 2012	Cortex Transit Oriented Development Study Completed
April 22, 2014	Draft Central Corridor Transit Access (Feasibility) Study Completed
June 1, 2014	Central Corridor Transit Access (Feasibility) Study Finalized
July 1, 2014	Request for Proposal Issued for Environmental Review
July 1, 2014	Track Abandonment Proceedings Commence
September 1, 2014	Environmental Consultant Issued Notice-to-Proceed
December 1, 2014	Notice of Funding Award from TIGER
December 1, 2014	MPO Initiates Amending of TIP to Incorporate Project
December 31, 2014	Environmental Review Completed and Submitted to FTA
January 1, 2015	Request for Proposal Issued for Design Services
February 1, 2015	Design Services Consultant Submissions Received
March 1, 2015	Environmental Clearance Received from FTA
March 1, 2015	Design Consultant Selected
April 1, 2015	Design Consultant Issued Notice-to-Proceed
April 1, 2015	Track Abandonment Approval Received from Surface Transportation Board
December 1, 2015	Final Design Submitted
December 31, 2015	Approval of PS&E and Pre-Construction Activities Complete
February 1, 2016	Project Advertised for Construction
March 1, 2016	Construction Bids Received
April 1, 2016	Contractor Selected
May 1, 2016	Contractor Issued Notice-to-Proceed
June 1, 2016	Construction Begins
March 1, 2017	Construction Completed

D. ASSESSMENT OF PROJECT RISKS

Funding Limitations

A comprehensive review of all available funding sources conducted as part of the draft Central Corridor Transit Access Study has concluded that **a Federal discretionary grant through the TIGER program is absolutely essential to fulfill the capital costs of this project.** Funds available through other Federal programs such as CMAQ and STP-S are committed to supporting ongoing transit system preservation and cannot be diverted without impacting the ability to maintain the existing transit system in a state of good repair. Similarly, Federal funding through the New Starts and Small Starts programs preclude funding for infill stations as they do not meet FTA's expectations for new fixed guideway systems or extensions of an existing system. State funding is not presently available for transit capital costs. There is considerable risk that this project will not move forward without an infusion of discretionary Federal dollars not already committed to the region.

Environmental Approvals

As discussed in greater detail in a subsequent section, environmental clearance for this project will be sought in accordance with the National Environmental Protection Act. The environmental review process will begin in July 2014 with completion by December 2014; Cortex has committed funds to initiate this work. It is anticipated that the project will receive a Categorical Exclusion (CE) determination in early 2015. This is based on conversations with FTA and a review of FTA guidance on the environmental process.

There is a very minor risk that a Categorical Exclusion will not be made and that a more thorough Environmental Assessment will be required. This will extend the environmental review process by approximately 6 months. This extension can be accommodated without disrupting the project schedule, as environmental approvals are not part of the project's critical path. Reserve funds are available to perform an Environmental Assessment, if necessary.

E. ENVIRONMENTAL REVIEWS AND APPROVALS

National Environmental Policy Act (NEPA)

This project is not anticipated to cause any adverse environmental impacts to air or water quality, wetlands or endangered species since it will be constructed in right-of-way already dedicated to rail transportation usage. The NEPA process is expected to be completed in the fall of 2014. Based on preliminary conversations with the Federal Transit Administration (held in February 2012) and Metro, it is anticipated that this project will receive a Categorical Exclusion (CE) determination. Moreover, recently released FTA guidance on the environmental review process would suggest that this project would qualify as CE under Article 9 of Sec 771.118(c): Assembly or Construction of Facilities. Projects consistent with Article 9 are described below:

Article (9): Assembly or construction of facilities that is consistent with existing land use and zoning requirements (including floodplain regulations), and uses primarily land disturbed for transportation use, such as: buildings and associated structures; bus transfer stations or intermodal centers; busways and streetcar lines or other transit investments within areas of the right-of-way occupied by the physical footprint of the existing facility or otherwise maintained or used for transportation operations; and parking facilities.

This particular CE is applicable when new facilities are in keeping with existing land use and zoning requirements and primarily use land already disturbed for existing transportation uses. It should be reiterated that the proposed project is not seeking additional right-of-way and intends to wholly utilize right-of-way reserved for existing transportation infrastructure. As such, it would be consistent with the project character addressed by Article 9.

Legislative Approvals

The *Central Corridor Transit Enhancement and Job Access Program* has broad support at the local and state level. Please refer to Letters of Support at <http://cmt-stl.org/cortexmid-town-metrolink-station-study/>.

State and Local Planning

Although the *Central Corridor Transit Enhancement and Job Access Program* is not identified on the region's current Transportation Improvement Program (TIP), East-West Gateway Council of Governments, the Metropolitan Planning Organization for the St. Louis region, will amend the TIP when the application is selected to receive funding through the TIGER Discretionary Grant Program. Please refer to the support letter from Ed Hillhouse, Executive Director of East-West Gateway Council of Governments, at <http://cmt-stl.org/cortexmid-town-metrolink-station-study/>.