# KANSAS CITY STREETCAR MAIN STREET EXTENSION

Financial Plan



ruses City Stroots



Applicant: City of Kansas City, Missouri

Partner: Kansas City Streetcar Authority

Partner: Kansas City Area Transportation Authority

September 7, 2018

RideKC STREETCAR

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# 1.0 Introduction

The purpose of this Financial Plan is to document the financial capacity of the City of Kansas City (KCMO), along with its project partners the Kansas City Streetcar Authority and the Kansas City Area Transportation Authority (KCATA), to construct, operate and maintain the Main Street Streetcar Extension Project (Streetcar Extension Project or the Project) under the Federal Transit Administration's (FTA) Section 5309 Capital Investment Grant (CIG) Program. Specifically, this Financial Plan supports the request for the Streetcar Extension Project to be included in the FTA's fiscal year (FY) 2020 CIG Program's *Annual Report on Funding Recommendations* under the New Starts category. The Financial Plan presents:

- A description of funding and implementation partners;
- An overview of the financial analysis methodology;
- Assumptions and analysis of capital and operating sources and uses of funds;
- A financial strategy for the Project;
- An agency-wide 20-year forecast of operating and capital cash flows; and
- Local Financial Commitment Checklist, Finance Template, and supporting documentation.

All dollar figures in this Financial Plan are presented in year-of-expenditure dollars (YOE\$), unless stated otherwise. Additionally, unless stated otherwise, all figures are presented on the basis of the City's fiscal year, which runs from May 1<sup>st</sup> through April 30<sup>th</sup>. Finally, the Streetcar Extension Project Financial Plan is based on engineering completed as of August 2018 and reflects 10-15 percent design.

## 1.1 Project Partners

KCMO is the project sponsor and will partner with the Downtown Transportation Development District, KCATA, and KCSA. These three agencies have been jointly conducting Project Development efforts. The roles and responsibilities of project partners are as follows:

1) City of Kansas City, Missouri: KCMO will serve as the Project Sponsor and grantee, and will oversee design and construction for the streetcar expansion project. KCMO was project sponsor and led design and construction efforts for the new Downtown Streetcar starter line. The City is also the Owner of the existing streetcar system and will be the owner of the extension. KCMO's staff has significant experience addressing the FTA project management and financial oversight requirements through successful completion of the Downtown Streetcar starter line. KCMO provides an annual financial contribution to the debt service and operations and maintenance costs of the Starter Line in the amount of \$2.039 million per year (the City Contribution). It is expected that



- KCMO will continue to provide this same annual contribution once the Streetcar Extension Project is constructed and operational.
- 2) Kansas City Area Transportation Authority: KCATA is a bi-state agency created by a compact between the States of Missouri and Kansas, and approved by the United States Congress. The compact gives the ATA responsibility for planning, construction, owning and operating passenger transportation systems and facilities within the seven-county Kansas City metropolitan area. KCATA operates RideKC bus service, the MAX Bus Rapid Transit service, Flex demand-response routes, RideKC Freedom paratransit service for the elderly and persons with disabilities, and RideKC Van vanpool service.
  - As the regional transit authority, and an FTA grantee, KCATA will provide valuable financial, technical and operations support. KCATA will provide extensive operational knowledge of existing and historic transit services in the proposed corridor, and will continue to guide the development of regional service integration and coordination activities. KCATA also has experience dealing with FTA CIG requirements on two successful Bus Rapid Transit (BRT) projects, and on the current Prospect MAX BRT project. While KCATA provided funding to support preliminary planning, the agency is providing no funding to support construction or long-term operations of the Streetcar Extension Project, as those activities will be funded through the Downtown Transportation Development District (TDD) as explained below.
- 3) Kansas City Streetcar Authority: The KCSA is a not-for-profit organization that was formed for the purpose of managing, operating, and maintaining the Downtown Streetcar line. The KSCA is led by an Executive Director along with staff that manages communications, marketing, media relations, and streetcar budgetary issues; with oversight from a Board of Directors. As primary stakeholder and partner in the expansion project, KCSA will provide valuable financial, technical and operations support in the Project Development process. KCSA will assume the same operational role when the project is complete and revenue operations are set to begin.
- 4) **Downtown Transportation Development District (TDD) and Main Street TDD:** The TDD is the local funding source for the project.
  - Background: In 2011 and 2012, KCMO pursued the formation of a Missouri Transportation Development District (TDD) known as the Kansas City Downtown Streetcar Transportation Development District (the Starter Line TDD) to provide the local match funding for the construction and operation of an approximately 4.5-mile (round-trip) modern streetcar line running predominantly along an approximately 2.2-mile stretch of Main Street between the River Market area and Union Station (the Starter Line). A TDD is a special purpose political subdivision with the power to impose certain revenue sources within (and only within) its boundary. In 2012, voters



residing within the Starter Line TDD approved a one percent sales tax for 30 years within (and only within) the Starter Line TDD (the Starter Line TDD Sales Tax) and certain annual special assessments on all of the real estate within the Starter Line TDD (the Starter Line TDD Special Assessments, and together with the Starter Line TDD Sales Tax, the Starter Line TDD Revenue). The Starter Line TDD Revenue is used to pay debt service on the bond financing for the local match of design and construction costs of the Starter Line and a maintenance facility, the costs of vehicle acquisition, and operations and maintenance costs of the Starter Line.

Seeking to build on the momentum and extraordinary success of the Starter Line, a second TDD was proposed in late 2016 known as The Kansas City Main Street Rail Transportation Development District (the Main Street TDD) to provide the local match funding for the construction of an approximately 7-mile (round trip) extension of the Starter Line that would continue along Main Street south from the terminus of the Starter Line at Union Station through Midtown, into the mixed-use area known as Country Club Plaza and terminating in the vicinity of the Volker Campus of the University of Missouri-Kansas City (the Extension Line). The Main Street TDD encompasses approximately 10 square miles, and includes the land area comprising the Starter Line District. The intention is for the Main Street TDD to replace the Starter Line TDD as further explained below.

In August of 2017, voters residing within the Main Street TDD approved the formation of the Main Street TDD. The Main Street TDD is governed by a Board of Directors whose members are elected at large by the voters residing within the Main Street TDD for fixed terms.<sup>1</sup> The initial Directors of the Main Street TDD were elected in October of 2017. In June of 2018, the voters in the Main Street TDD approved the imposition of a one-percent sales tax for 30 years within (and only within) the Main Street TDD (the Main Street TDD Sales Tax) and certain special assessments on some, but not all, of the real estate within the Starter Line TDD as further explained below (the Main Street TDD Special Assessments, and together with the Main Street TDD Sales Tax, the Main Street TDD Revenue).

The Main Street TDD Revenue will not begin to be collected until (a) the Starter Line TDD is abolished, terminated or dissolved, or merged with or into the Main Street TDD, or its revenue sources reduced to zero by action of the Board of Directors of the Starter Line TDD or otherwise, in accordance with then applicable law, and (b) the Board of Directors of the Main Street TDD determines that there are sufficient funds to be derived from sources other than revenue of the Main Street TDD in order to

<sup>&</sup>lt;sup>1</sup> The initially elected Directors have staggered terms of one, two and three years, and therefore there will need to be an election of some Directors every year.



make the construction of a substantial portion of the Extension Line financially viable when aggregated with revenue of the Main Street TDD. Specifically, the following chronological milestones will activate the TDD: (1) positive rating from the New Starts application; (2) approval into Engineering; and (3) recommended for funding by the Administration (of the United States) (or appropriation by US Congress).

Once collection of the Main Street TDD Revenue begins, it will pay for debt service on financing for the local match of the design and construction costs of the Extension Line, acquisition of additional vehicles, debt service on the bonds issued for the Starter Line (unless refinanced with the financing for the Extension Line) and operations and maintenance costs of the entire combined Starter Line and Extension Line (approximately 12 miles round trip).

- **Boundary: Figure 1** shows the overall boundary of the Main Street TDD. The Main Street TDD Sales Tax extends throughout the entire Main Street TDD. **Figure 2** shows the boundary of the Main Street TDD, but also contains two colored areas, green and yellow. Those two colored areas are the areas within the Main Street TDD in which the Main Street TDD Special Assessments are expected to be imposed. The green area is the same as the boundary of the Starter Line TDD.
- Assessment Rates: The Main Street TDD Special Assessments in the yellow area are to be paid for 25 years from the year first assessed. The Main Street TDD Special Assessments in the green area are to be paid for 25 years from the year the Starter Line TDD Special Assessments were first assessed, and therefore will end earlier than the Main Street TDD Special Assessments in the yellow area.

The Main Street TDD Special Assessments are imposed at the following rates:<sup>2</sup>

- Real Estate Special Assessments (Main Street TDD Real Estate Assessments) at the rate of (1) 48¢ for each \$100 of assessable value for commercial property, and (2) 70¢ for each \$100 of assessable value for residential property<sup>3</sup>
- Surface Pay Parking Lot Assessments (Main Street TDD Pay Parking Lot Assessments) at the rate of \$54.75 multiplied by the number of Pay Parking Spaces in commercial surface parking lots (not garages and not free employee or visitor spaces in a surface parking lot

<sup>&</sup>lt;sup>3</sup> For commercial property, the assessable value is 32% of the market value as determined by the County, and for residential property, the assessable value is 19% of the market value as determined by the County. Special assessments are payable by all non-governmental properties, even non-governmental properties that have been granted tax abatement from regular property tax by KCMO, and properties that are exempt from regular property tax because of charitable use, such as churches and nonprofits.



<sup>&</sup>lt;sup>2</sup> These rates are the same as the rates imposed by the Starter Line TDD.

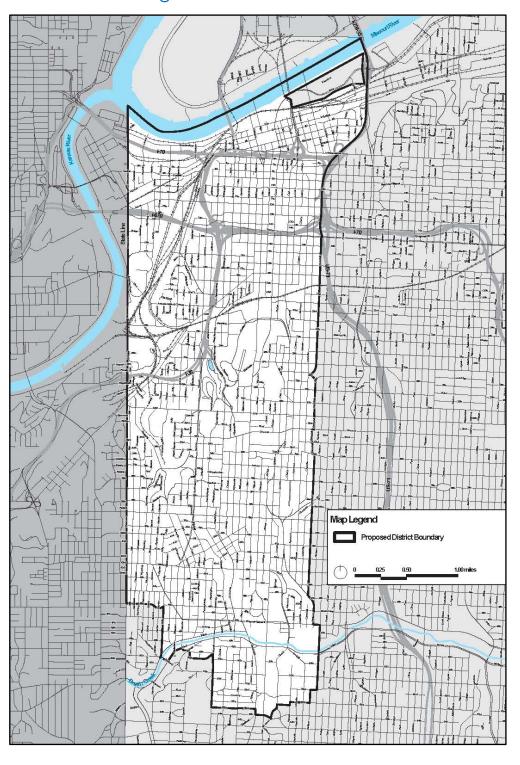


Figure 1. Main Street TDD



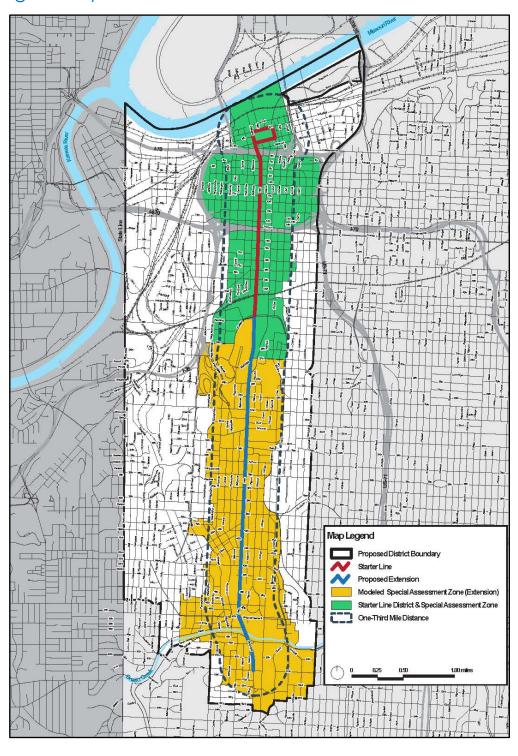


Figure 2. Special Assessment areas of the Main Street TDD



5) Federal Transit Administration: This Financial Plan assumes federal funding assistance from the FTA for the capital costs of the Streetcar Extension Project. Based on the current capital cost estimate, the Financial Plan assumes \$151.6 million (YOE \$) in FTA Section 5309 New Starts funding.

## 1.2 Project Description

In 2012 and 2013, KCMO, in coordination with KCATA, MARC, and Jackson County, initiated a \$1.9 million planning study called NextRail KC to evaluate the potential impacts, feasibility, and cost of streetcar expansions in eight designated corridors. Through a phased process that included public/stakeholder engagement, systems overview, route screening, and detailed route analysis, the Extension Line, along with two others, was selected by the City Council for endorsement. Additionally, the Project has been included in the region's adopted long-range transportation plan, Transportation Outlook 2040.

As shown in **Figure 3**, the Streetcar Extension Project is in Midtown, an urban, energetic area located directly south of downtown that boasts historic neighborhoods, a diverse population, the presence of significant institutions, a number of vibrant commercial areas, and over 30,000 jobs. The proposed project is approximately 3.5 miles long, from the current streetcar terminus at Union Station to the vicinity of the Plaza/UMKC campus. It would extend the Downtown Streetcar starter line south along Main Street, largely running in mixed traffic, as it currently does along the Starter Line, with potential for semi-exclusive operations in portions of the corridor.



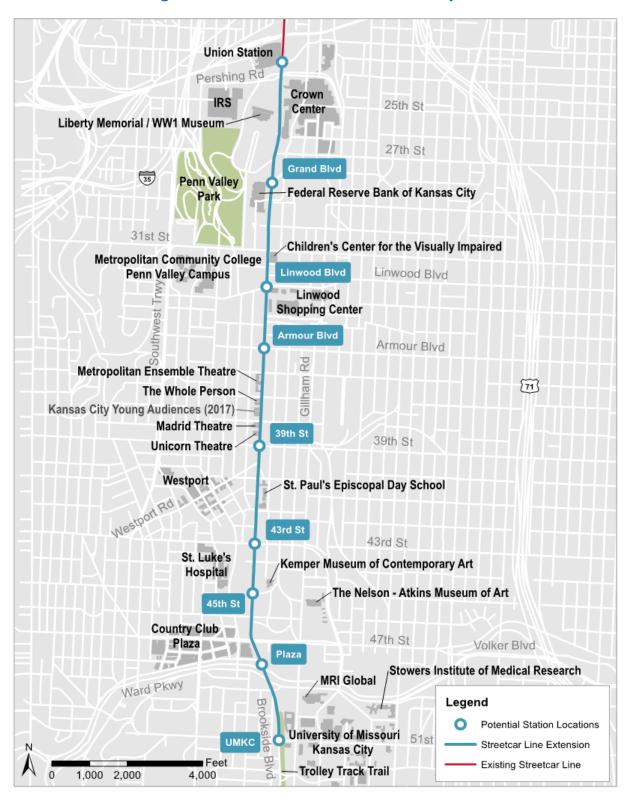


Figure 3. Main Street Extension Project



#### 1.2.1 Current Transit Conditions

#### **Existing Streetcar Service**

As shown in **Figure 4**, the existing 2.2 mile route along Main Street provides free service from River Market to the historic Union Station, traveling mostly along Main Street. Areas serviced include the Central Business/Convention District, the Power & Light District and Crown Center—and several businesses, restaurants, art galleries and residential areas. Destinations and stops include:

- Union Station (Pershing & Main)
- Crossroads (19th & Main)
- Kauffman Center (16th & Main)
- Power & Light (14th & Main)
- Metro Center (12th & Main)
- Library (9th & Main)
- North Loop (7th & Main)
- City Market (5th & Walnut)
- River Market North (3rd & Grand)
- River Market West (4th & Delaware)

Service is provided seven days a week with 10 to 15 minute headways. Hours of operation are:

• Monday-Thursday: 6AM - Midnight

• Friday: 6AM - 2AM

• Saturday: 7AM - 2AM

• Sunday: 7AM - 10PM





Figure 4. Existing Downtown Streetcar Project



#### 1.2.2 Purpose and Need for Project

The purpose of the proposed Streetcar Extension Project along Main Street is to continue to positively enhance the mobility and economics of the Main Street corridor by improving transit service; connecting existing activity centers; and supporting development/redevelopment in the urban core. Building on the downtown starter line, the Purpose of the Main Street Extension is to:

- Expand mobility choices for the metropolitan area and provide greater options for future connections to regional transit
- Provide improved accessibility for all users
- Provide efficient, reliable and safe transit service
- Enhance the region's transit system by creating a significant central spine around which to organize and integrate regional service
- Provide better transit service to UMKC's urban campus and to the Plaza the two largest employment and activity centers in the region – with strong connections throughout the region
- Develop underutilized and vacant property, while supporting existing residential and commercial activity
- Enhance the desirability of the corridor for employment and residential growth.

This project is needed to continue Kansas City's initial four Streetcar themes: connect, develop, thrive, and sustain. The need for the Main Street Extension is to continue efforts to provide mobility and connectivity, economic development and growth, community amenities and improved livability, and sustainability. In short, the Main Street Extension seeks to build upon downtown's success, connecting neighborhoods in the urban core.



## 1.3 Project Schedule

The current implementation schedule for the Streetcar Extension Project is presented in Table 1.

Table 1. Project Implementation Schedule (as of September 2018)

Implementation Phase	Duration	
Project Development	September 2017 – December 2019	
Engineering	December 2019 – May 2020	
Submit request to award Full Funding	May 2020	
Grant Agreement	1VIAY 2020	
Major Construction	June 2020 – Dec 2022	
Testing	Jan 2023 – June 2023	
Start of Revenue Operations	June 2023	

# 1.4 Project Funding Summary

Table 2 summarizes the Streetcar Extension Project's capital cost estimate and planned revenue sources and levels. Additional details on the capital cost estimate and financial strategy is provided in Section 2.1. Local funds supplied and approved by KCSA will be used to complete project development activities. In addition, the Main Street TDD has been formed to levy a sales tax and special assessments within its boundary to fund a portion of the capital costs and all of the operations and maintenance costs of the project. Additional details on the Main Street TDD are provided in **Section 3.3.1**.

Table 2. Streetcar Extension Project Capital Cost and Revenues (YOE\$, in millions)

Costs	
Streetcar	\$316.6
Revenues	
FTA Section 5309 New Starts	\$151.6
Local Share (TDD)	\$164.9
Total Revenues <sup>1</sup>	\$316.6

Note: <sup>1</sup> Total may not sum due to rounding.



# 1.5 Key Assumptions

The following is a list of key assumptions applied in developing the financial plan.

Table 3. Key Cost and Revenue Assumptions

	Growth Rate Assumption	Note	
Costs			
District Administrative Costs	1.50%	Annually	
O&M Costs	2.50%	Annually	
	Following		
	manufacturing		
Capital Costs (SGR Program Vehicle Overhaul)	recommended		
Capital Costs (30K Program Vehicle Overhaul)	expense schedule		
	until 2026- 3% cost		
	growth thereafter		
	3% annually under		
Capital Costs (SGR Program Track and Facility)	warranty and then		
	5% thereafter		
Capital Costs (SGR Program TPSS)	3%	Annually	
Revenues			
Sales Tax	1.50%	Annually	
Property Assessment	2.00%	Biannually	
Surface Barking Accessments	Reduced 5% annually through 2025, the		
Surface Parking Assessments	fixed thereafter		
City Contribution	\$2.04 M	Annually	
Advertising	2.5%	Annually	



# 1.6 Agency-Wide Plan Sources and Uses Summary

**Table 4** summarizes the sources and uses of funds for the agency-wide capital and operating plan over the calendar (CY) 2019 to CY 2039 period. The table presents the total capital costs and revenues, debt service costs, as well as total operating costs and revenues in YOE dollars.

As shown in the table and throughout the Financial Plan, the agency-wide operating and capital costs and revenues reflect the following:

#### Capital Costs

 Of the total agency-wide capital costs (\$326.1 million), the Main Street Extension accounts for 97.1 percent, while KCSA's state of good repair program comprises the remaining 2.9 percent.

#### Capital Revenues

- Of the total agency-wide capital revenues, including the Main Street Extension, (\$334.3 million), federal sources provide 45.4 percent. FTA Section 5309 CIG is the only federal capital revenue source.
- Local TDD revenues provide the remaining 54.6 percent of total capital revenue.
- Based on the revenue and cost growth assumptions over the 2019 to 2039 period, capital revenues are projected to exceed capital costs by \$8.2 million.

#### O&M Costs

 Of the total agency-wide operating uses, (\$553.6 million), annual streetcar operating costs (Starter Line and Main Street Extension) account for 47.7 percent, District Administrative Cost account for 0.7 percent, and existing and planned debt service accounts for the remaining 51.5 percent.

#### O&M Revenues

- Of the total agency-wide O&M revenues (\$660.3 million), revenues generated by the TDD comprise 92.6 percent.
- The City's Annual Contribution provides 6.8 percent and Advertising revenue provides 0.6 percent.
- KCSA does not charge a fare to ride the existing Starter Line and will similarly not charge a fare on the Main Street Extension.



Table 4: Sources and Uses Summary: 2019 to 2039 (\$ in millions)

	Total: 2019-2039	Percent Share
Capital Program		
Capital Uses: New Starts Project		
Main Street Extension	\$316.58	97.1%
Capital Uses: SGR Program		
Vehicle Overhaul	\$4.62	1.4%
TPPS/Sub	\$0.36	0.1%
Track/ROW	\$3.40	1.0%
Facility	\$1.13	0.3%
Total Capital Uses	\$326.09	100.0%
Capital Sources: New Starts Project		
FTA New Starts	\$151.64	45.4%
TDD Funding	\$164.94	49.3%
Capital Sources: SGR Program		
TDD Funding (SGR Capital Allocation)	\$17.76	5.3%
Total Capital Sources	\$334.34	100.0%
Operating Program		
Operating Uses		
O&M Costs	\$263.13	45.1%
District Administrative Costs	\$4.03	0.7%
Debt Service	\$315.63	54.2%
Starter Line Bond Debt Service	\$93.13	16.0%
Streetcar Lease	\$5.02	0.9%
Main Street Ext Debt Service	\$217.48	37.3%
Total Operating Uses	\$582.79	100.0%
Operating Sources		
Sales Tax	\$446.05	67.6%
Starter Line Property Assessment	\$94.89	14.4%
Main Ext Property Assessment	\$68.07	10.3%
Parking Assessment	\$2.15	0.3%
City Contribution	\$44.86	6.8%
Advertisement	\$4.27	0.6%
Total Operating Sources	\$660.29	100.0%

Note: Totals may not sum due to rounding.



# 2.0 Capital Plan

The \$326.1 million agency-wide capital plan includes the Main Street Extension Project, KCSA's state of good repair (SGR) plan and KCSA's existing and planned debt service. As shown in **Figure 5** and **Table 5**, implementation of the Main Street Extension Project represents 97.3 percent of the total capital program. The other major cost categories include: ongoing SGR investments for the Starter Line (1.1 percent), and planned SGR investments for the Main Street Extension Project (1.6 percent).

Figure 5. Projected Capital Expenditures: 2019 to 2039 (YOE \$, in millions)

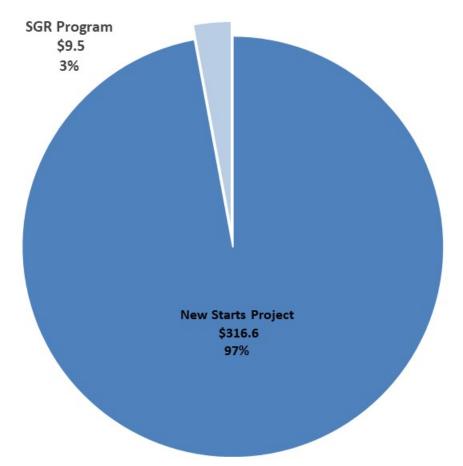




Table 5. Projected Capital Sources and Uses of Funds: CY 2018 to CY 2039 (YOE\$, in millions)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Capital Sources											
Main Street Extension	\$12.90	\$63.66	\$102.69	\$131.75	\$2.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
New Starts Funding	\$0.00	\$0.00	\$75.82	\$75.82	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Main Street TDD	\$12.90	\$63.66	\$26.87	\$55.93	\$2.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SGR Program	\$0.00	\$0.25	\$0.26	\$0.26	\$0.81	\$0.83	\$0.86	\$0.88	\$0.90	\$0.92	\$0.94
Starter Line SGR Capital Allocation	\$0.00	\$0.25	\$0.26	\$0.26	\$0.28	\$0.28	\$0.29	\$0.30	\$0.30	\$0.31	\$0.32
Main St Extension SGR Capital Allocation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.54	\$0.55	\$0.57	\$0.58	\$0.59	\$0.61	\$0.62
Total Capital Sources	\$12.90	\$63.91	\$102.95	\$132.01	<i>\$3.27</i>	\$0.83	\$0.86	\$0.88	\$0.90	\$0.92	\$0.94
Capital Uses											
Main Street Extension Capital Costs	-\$12.90	-\$63.66	-\$102.69	-\$131.75	-\$2.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Capital Costs	-\$12.90	-\$63.66	-\$102.69	-\$131.75	-\$2.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Starter Line SGR Program Costs	\$0.00	-\$0.11	-\$0.13	-\$0.11	-\$0.12	-\$0.37	-\$0.12	-\$0.13	-\$0.16	-\$0.14	-\$0.39
Vehicle Overhaul	\$0.00	-\$0.05	-\$0.05	-\$0.05	-\$0.05	-\$0.28	-\$0.06	-\$0.06	-\$0.06	-\$0.06	-\$0.31
TPPS/Sub	\$0.00	\$0.00	-\$0.02	\$0.00	\$0.00	-\$0.03	\$0.00	\$0.00	-\$0.03	\$0.00	\$0.00
Track/ROW	\$0.00	-\$0.04	-\$0.04	-\$0.04	-\$0.05	-\$0.05	-\$0.05	-\$0.05	-\$0.05	-\$0.06	-\$0.06
Facility	\$0.00	-\$0.02	-\$0.02	-\$0.02	-\$0.02	-\$0.02	-\$0.02	-\$0.02	-\$0.02	-\$0.02	-\$0.02
Main St Extension SGR Program Costs	\$0.00	\$0.00	\$0.00	\$0.00	-\$0.12	-\$0.35	-\$0.18	-\$0.18	-\$0.23	-\$0.20	-\$0.79
Vehicle Overhaul	\$0.00	\$0.00	\$0.00	\$0.00	-\$0.05	-\$0.28	-\$0.06	-\$0.06	-\$0.06	-\$0.06	-\$0.64
TPPS/Sub	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	-\$0.04	\$0.00	\$0.00
Track/ROW	\$0.00	\$0.00	\$0.00	\$0.00	-\$0.05	-\$0.05	-\$0.10	-\$0.10	-\$0.11	-\$0.11	-\$0.12
Facility	\$0.00	\$0.00	\$0.00	\$0.00	-\$0.03	-\$0.03	-\$0.03	-\$0.03	-\$0.03	-\$0.03	-\$0.03
Total Capital Costs	-\$12.90	-\$63.77	-\$102.83	-\$131.86	-\$2.70	-\$0.72	-\$0.30	-\$0.31	-\$0.39	-\$0.34	-\$1.18
Ending Balance	\$0.00	\$0.14	\$0.12	\$0.15	<i>\$0.57</i>	\$0.12	\$0.56	\$0.57	\$0.51	\$0.58	-\$0.24
Cumulative Ending Balance	\$0.00	\$0.14	<i>\$0.26</i>	\$0.41	\$0.98	\$1.10	\$1.66	\$2.22	\$2.73	\$3.32	\$3.08



Table 5. Projected Capital Sources and Uses of Funds: CY 2018 to CY 2039 - cont (YOE\$, in millions)

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Capital Sources										
Main Street Extension	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
New Starts Funding	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Main Street TDD	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SGR Program	\$0.97	\$0.99	\$1.02	\$1.04	\$1.07	\$1.10	\$1.12	\$1.15	\$1.18	\$1.21
Starter Line SGR Capital Allocation	\$0.33	\$0.34	\$0.34	\$0.35	\$0.36	\$0.37	\$0.38	\$0.39	\$0.40	\$0.41
Main St Extension SGR Capital Allocation	\$0.64	\$0.66	\$0.67	\$0.69	\$0.71	\$0.72	\$0.74	\$0.76	\$0.78	\$0.80
Total Capital Sources	\$0.97	\$0.99	\$1.02	\$1.04	\$1.07	\$1.10	\$1.12	\$1.15	\$1.18	\$1.21
Capital Uses										
Main Street Extension Capital Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Capital Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Starter Line SGR Program Costs	-\$0.15	-\$0.19	-\$0.16	-\$0.17	-\$0.18	-\$0.22	-\$0.47	-\$0.20	-\$0.21	-\$0.25
Vehicle Overhaul	-\$0.06	-\$0.07	-\$0.07	-\$0.07	-\$0.07	-\$0.07	-\$0.36	-\$0.08	-\$0.08	-\$0.08
TPPS/Sub	\$0.00	-\$0.03	\$0.00	\$0.00	\$0.00	-\$0.03	\$0.00	\$0.00	\$0.00	-\$0.04
Track/ROW	-\$0.06	-\$0.06	-\$0.07	-\$0.07	-\$0.07	-\$0.08	-\$0.08	-\$0.09	-\$0.09	-\$0.09
Facility	-\$0.02	-\$0.03	-\$0.03	-\$0.03	-\$0.03	-\$0.03	-\$0.03	-\$0.03	-\$0.04	-\$0.04
Main St Extension SGR Program Costs	-\$0.22	-\$0.27	-\$0.24	-\$0.25	-\$0.26	-\$0.32	-\$0.97	-\$0.29	-\$0.31	-\$0.37
Vehicle Overhaul	-\$0.06	-\$0.06	-\$0.07	-\$0.07	-\$0.07	-\$0.07	-\$0.76	-\$0.07	-\$0.08	-\$0.08
TPPS/Sub	\$0.00	-\$0.04	\$0.00	\$0.00	\$0.00	-\$0.05	\$0.00	\$0.00	\$0.00	-\$0.05
Track/ROW	-\$0.12	-\$0.13	-\$0.13	-\$0.14	-\$0.15	-\$0.16	-\$0.16	-\$0.17	-\$0.18	-\$0.19
Facility	-\$0.03	-\$0.04	-\$0.04	-\$0.04	-\$0.04	-\$0.04	-\$0.05	-\$0.05	-\$0.05	-\$0.05
Total Capital Costs	-\$0.37	-\$0.46	-\$0.40	-\$0.42	-\$0.43	-\$0.53	-\$1.44	-\$0.49	-\$0.51	-\$0.62
Ending Balance	\$0.60	\$0.54	\$0.62	\$0.63	\$0.63	\$0.56	-\$0.32	\$0.66	\$0.67	\$0.58
Cumulative Ending Balance	\$3.68	\$4.22	\$4.83	\$5.46	\$6.10	\$6.66	\$6.34	\$7.00	<i>\$7.66</i>	\$8.25

Note: Totals may not sum due to rounding.



## 2.1 Main Street Streetcar Extension Project

This section provides an overview of the capital costs and revenue estimates for the Main Street Extension Project. The capital plan reflects the estimated cost and implementation schedule for the Project and summarizes the anticipated timing and level of FTA New Starts funds and the timing, amount, and commitment of the local matching funds.

#### 2.1.1 Capital Cost Methodology

A detailed description of the capital cost methodology can be found in the August 2018 Basis of Estimate Report. To summarize, the cost estimate is based on quantities taken from the Preliminary Concept Outside-Running design CADD files and reflects the following activities, which are described in this section: establish project segmentation, identify project elements and measure quantities; develop a cost library; and prepare cost estimate.

#### **Establish Project Segmentation**

The overall project was divided into nine distinct segments to provide flexibility in reporting costs. These segments are tied generally to geographic locations that make up the Project and most construction costs and associated non-construction costs can be summarized by these geographical segments:

- Zone 1: Downtown Alignment to 27th Street;
- Zone 2: 27th Street to 31st Street;
- Zone 3: 31st Street to Armour Boulevard;
- Zone 4: Armour Boulevard to 39th Street;
- Zone 5: 39th Street to 43rd Street;
- Zone 6: 43rd Street to 45th Street;
- Zone 7: 45th Street to Ward Parkway;
- Zone 8: Ward Parkway to 51st Street; and
- Zone 9: Vehicle Maintenance Facility Location.

#### **Identify Project Elements and Measure Quantities**

Preliminary bid items were identified through the process of quantity takeoffs using the Preliminary Concept Outside-Running design files. The items were comprehensive enough to adequately define the aspects of project construction while reflecting the level of design development and quantities that could be readily measured.



#### **Develop Cost Library**

The cost library is a compilation of all construction and non-construction items contained within the cost estimate, with the items presented in calendar year Q3 2018 dollars. The items are characterized by unit price, lump sum cost, and allowance.

- Unit Costs: Unit costs represent basic construction elements such as roadway excavation, import borrow, curb and gutter, etc. that are typically bid by a contractor on a given project. Unit pricing prices for these items are developed primarily through a production-based methodology in the same format as a bidding contractor self-performing the work. Developed unit pricing is considered to be a direct cost including all activities and materials associated with completing the actual work, but excluding all indirect supervision, mobilization, overhead and profit.
- Lump Sum Costs: Lump sum costs are included in the estimate to provide for negotiated and budgeted fees for administrative and project management activities. For example, the program cost estimate is carrying many assumed costs for engineering, program management or other services as lump sum costs.
- Allowances and Percentage-Based Costs: Allowances and percentage-based costs are
  intended to capture elements known to be a part of this type of project, but not known
  and/or defined at the time the estimate was prepared (for example, mobilization, traffic
  control, contractor indirect costs, etc). These costs are based on historical sources or
  prevailing experience. As the design progresses and these elements are defined, these
  costs will be converted to other cost types.

#### **Prepare Cost Estimate**

The project costs described above were transferred over to a spreadsheet workbook that was developed for the capital cost estimate. In general, individual tables were created to hold specific information such as the cost library, segmentation, quantity takeoff, work categorization, Standard Cost Category (SCC) coding, schedule association, etc. These tables are compiled in the Base Cost Estimate worksheet via lookup or other formulaic methodology. This approach provides consistency for elements that are distributed in a variety of locations throughout the estimate. In addition, it provides a single database from which various summaries can be easily generated to provide response to a wide variety of potential information requests. This data is then input into the main FTA worksheet.

#### **Estimate Exclusions**

 Market Adjustment Factor. The Market Adjustment Factor is above and beyond the typical contractor mark-ups and current but normal escalation factors. It covers the potential



influence of an abnormal bidding environment such as a lack of competition among contractors (contractors being busy or selectively bidding jobs), competition for construction personnel that requires contractors to pay wage premiums to retain key workers and management staff, and abnormal increases or decrease in fuel and material costs.

- Hazardous or contaminated material abatement and/or removal.
- 3rd party utilities, impacts, relocation and/or any delays that could be caused by them.
- Cost reductions based on 3rd party funding or grants.
- Unforeseen conditions due to additional borings or geotechnical information.
- Special environmental considerations and mitigation.
- All other costs not specifically called out in this report or in the estimate.

#### **Assumptions**

Finally, the following major assumptions were made when developing the cost estimate:

- Escalation for overtime and expedited schedule have not been applied.
- The costs included in the estimate are in 2018 dollars.
- Total contingency is set at 33.25 percent. Although current FTA guidance would indicate a contingency of 30 percent at this level of planning and design, the higher value was selected in anticipation of potential P65 risk-assessment requirements. Division between allocated and unallocated contingency is described in Section 2.2.
- The cost estimate includes escalation of base year costs to YOE based on preliminary project construction schedules provided by the design team. In general, construction costs for various cost components such as guideway or paving are assigned to the construction year in which they are assumed to be constructed. Each component is linked to a scheduled activity and escalated to year of construction for that particular element, and combined with other elements to provide the YOE cost. A simplified process is necessary within the SCC Workbooks, however, as this flexibility is not a part of the methodology. Therefore, a 3.5 percent annual escalation rate is assumed for this cost estimate, and within the SCC Workbooks
- Unit costs as shown in the cost library reflect total construction costs including overhead and profit.
- This cost estimate currently reflects a design-bid-build delivery method with a sufficient number of bidders to provide a competitive bidding environment.
- Imported construction materials such as fill and concrete are available in sufficient quantities from local suppliers, and that waste material can be disposed of within a reasonable haul distance from the project location.



# 2.2 Capital Cost Estimate by FTA Standard Cost Category

Based on the previously described methodology, the current implementation schedule summarized previously in **Table 1**, and annual escalation for construction costs, the detailed cost estimate for Main Street Extension Project is shown in **Table 6**. As shown in the table, the total capital cost of the Project, is \$279.6 million (2018\$) or \$316.6 million (YOE\$).

Table 6. Streetcar Project Capital Cost Estimate (2018 \$ and YOE \$, in million)

FTA Standard Cost Category	2018	2019	2020	2021	2022	2023	Total
10—Guideways and Track Elements	\$0.0	\$0.0	\$3.3	\$19.8	\$9.9	\$0.0	\$33.0
20—Stations, Stops, Terminals, Intermodal	\$0.0	\$0.0	\$1.0	\$4.0	\$4.0	\$0.0	\$9.1
30—Support Facilities: Yards, Shops, Admin. Buildings.	\$0.0	\$0.0	\$0.0	\$3.9	\$11.6	\$0.0	\$15.4
40—Sitework and Special Conditions	\$0.0	\$0.0	\$18.2	\$6.2	\$13.8	\$0.0	\$38.1
50—Systems	\$0.0	\$0.0	\$21.0	\$39.8	\$0.0	\$0.0	\$60.8
60—ROW, Land, Existing Improvements	\$0.0	\$0.0	\$0.2	\$0.4	\$0.4	\$0.0	\$0.9
70—Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$53.1	\$0.0	\$53.1
80—Professional Services	\$2.8	\$11.2	\$10.1	\$10.0	\$12.1	\$1.9	\$48.1
90—Unallocated Contingency	\$0.3	\$1.0	\$4.6	\$7.0	\$7.9	\$0.2	\$21.0
100—Finance Costs	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total (2018 \$)	\$3.1	\$12.3	\$58.4	\$91.0	\$112.8	\$2.0	\$279.6
Escalation Rates	1.02	1.05	1.09	1.13	1.17	1.21	
Total (YOE \$)	\$3.1	\$12.9	\$63.7	\$102.7	\$131.7	\$2.5	\$316.6

Totals may not sum due to rounding.



#### **Contingencies**

As described in the Capital Cost Methodology summary, the capital cost estimate includes a total contingency of \$69.8 million (2018 \$) for both allocated and unallocated contingencies. This is equivalent to 33.25 percent of the base year dollars for all categories (cost categories 10 through 80) and 44.5 percent of the construction categories (cost categories 10 through 50). As mentioned previously, the 33.25 percent was chosen in anticipation of P65 risk-assessment requirements.

- Allocated Contingencies: Table 7 summarizes the allocated contingencies included by SCC category to address the level of design, scope, and quantity definition at this phase of the Project. The amount of allocated contingency depends on the complexity of any particular item as well as the stage of engineering completion. As shown in Table 4, at this point of the Project Development process, the allocated contingencies for all cost categories and the total level of allocated contingency included in the capital cost estimate is 23.25 percent of total base year costs (2018 \$). As part of FTA's risk assessment process, which will occur later in the project development process, individual contingencies will be evaluated and appropriate allocations based on the determined level of risk.
- Unallocated Contingency: The unallocated contingency was included to address bid risk
  and construction risk in addition to the aforementioned allocated contingencies.
  Unallocated contingency is intended to address "unknown unknowns," to cover
  unanticipated events, including political events, labor strife, weather, differing site
  conditions, commodity pricing fluctuations, unfavorable market conditions, bid risk, etc.
  A 10.0 percent unallocated contingency was applied to the total base year dollars (2018
  \$) for cost categories 10 through 80.



Table 7. Allocated Contingency Assumptions

	SCC Category and Description	Allocated Contingency Percentage
10 GUII	DEWAY & TRACK ELEMENTS (route miles)	20%
10.10	Track: Embedded	20%
10.12	Track: Special (switches, turnouts)	20%
20 STA	TIONS, STOPS, TERMINALS, INTERMODAL (number)	20%
20.01	At-grade station, stop, shelter, mall, terminal, platform	20%
30 SUP	PORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	30%
30.02	Light Maintenance Facility	30%
30.05	Yard and Yard Track	30%
40 SITE	WORK & SPECIAL CONDITIONS	27%
40.01	Demolition, Clearing, Earthwork	35%
40.02	Site Utilities, Utility Relocation	50%
40.06	Pedestrian / bike access and accommodation, landscaping	26%
40.07	Automobile, bus, van accessways including roads, parking lots	25%
40.08	Temporary Facilities and other indirect costs during construction	18%
50 SYS	TEMS	20%
50.01	Train control and signals	20%
50.02	Traffic signals and crossing protection	20%
50.03	Traction power supply: substations	20%
50.04	Traction power distribution: catenary and third rail	20%
50.05	Communications	20%
50.06	Fare collection system and equipment	20%
Constru	uction Subtotal (10 - 50)	23%
60 ROV	V, LAND, EXISTING IMPROVEMENTS	N/A
70 VEH	ICLES (number)	40%
70.01	Light Rail	40%
80 PRO	FESSIONAL SERVICES (applies to Cats. 10-50)	10%
80.01	Project Development	10%
80.02	Engineering	10%
80.03	Project Management for Design and Construction	10%
80.04	Construction Administration & Management	10%
80.05	Professional Liability and other Non-Construction Insurance	0%
80.06	Legal; Permits; Review Fees by other agencies, cities, etc.	10%
80.07	Surveys, Testing, Investigation, Inspection	10%
80.08	Start up	10%
Subtota	al (10 - 80)	23%



#### **Professional Services**

Costs for professional services include elements such as project management, engineering, construction administration, insurance, inspections, fees/permits, and start-up costs (covering project initiation work such as training, site access, and protection work performed by agency staff and outside contractors). In some instances, these have been represented as a percentage of the construction cost, and in other cases as an assessment of commitments in place at the time and any anticipated adjustments. **Table 8** summarizes the percentages assumed in each subcategory in relation to the base year construction estimate (cost categories 10 through 50).

Table 8. Professional Services Percentage Assumptions

FTA Category No.	Description	Percent of Construction Costs
80.01	Project Development	4.0%
80.03	Project Management	8.0%
80.04	Construction Administration	8.6%
80.05	Professional Liability Insurance	10.4%
80.06	Legal/Permits	0.0%
80.07	Surveys, Testing, Inspection	1.0%
80.08	Start-Up	0.8%



#### 2.2.1 Main Street Extension Project Capital Funding Sources

- FTA Capital Investment Grant Program: The Streetcar Extension Project is a fixed-guideway project that represents a substantial investment in a critical corridor within the City of Kansas City. As such, the project partners are requesting \$151.6 million in New Starts funding from the Section 5309 CIG Program, representing approximately 48 percent of total project costs. Table 10 reflects a preliminary assumption of the timing and use of New Starts funds, which is \$75.8 million in both 2021 and 2022. The actual level and timing will be negotiated with FTA as part of the New Starts Full Funding Grant Agreement (FFGA).
- **TDD:** As stated in **Section 1.1**, the Main Street TDD has been approved by voters within the District's boundaries. The Financial Plan assumes the Main Street TDD will start generating revenue in 2019 and the first full year of revenue will be collected in 2020. This will follow the chronological milestones to activate the TDD including: (1) positive rating from the New Starts application; (2) approval into Engineering; and (3) recommended for funding by the Administration or Congress.
- A detailed description of all uses of the TDD revenue is provided in Section 3. For the
  Main Street Extension, the Financial Plan reflects a combination of pay-as-you-go TDD
  funds and bond proceeds. Specifically, the KCMO will issue \$165 million in Appropriation
  Bonds in October 2019. The Financial Plan assumes the bonds will have an interest rate
  of 4.46 percent and a 30 year term.

**Table 9** outlines the anticipated debt service by year. TDD revenue will be used on a pay-as-you-go basis prior to the bond issue and to pay for the ongoing debt service payments.



Table 9. Main Street Extension Debt Service Assumptions

CY	Principal (1)	Interest (2)	Reserve Funds @ 0% (3)	Debt Service
2019	\$0.0	\$0.0		\$0.0
2020	\$6.5	\$7.3		\$13.8
2021	\$5.9	\$8.0		\$13.9
2022	\$6.5	\$7.7		\$14.1
2023	\$1.9	\$7.3		\$9.2
2024	\$2.1	\$7.3		\$9.3
2025	\$2.2	\$7.2		\$9.3
2026	\$2.4	\$7.0		\$9.4
2027	\$2.5	\$6.9		\$9.4
2028	\$3.1	\$6.8		\$9.8
2029	\$3.5	\$6.6		\$10.1
2030	\$3.8	\$6.5		\$10.2
2031	\$4.0	\$6.3		\$10.2
2032	\$4.3	\$6.1		\$10.3
2033	\$4.5	\$5.9		\$10.3
2034	\$4.8	\$5.7		\$10.4
2035	\$5.0	\$5.4		\$10.4
2036	\$5.4	\$5.2		\$10.5
2037	\$5.5	\$4.9		\$10.4
2038	\$10.5	\$4.6		\$15.1
2039	\$6.9	\$4.1		\$11.0
2040	\$7.3	\$3.8		\$11.0
2041	\$7.6	\$3.4		\$11.0
2042	\$8.0	\$3.0		\$11.0
2043	\$8.3	\$2.6		\$10.9
2044	\$8.7	\$2.2		\$10.9
2045	\$5.9	\$1.8		\$7.7
2046	\$6.2	\$1.5		\$7.6
2047	\$6.4	\$1.2		\$7.6
2048	\$6.7	\$0.8		\$7.5
2049	\$10.0	\$0.5	-\$10.5	\$0.0
Total	\$165.8	\$147.3	-\$10.5	\$302.7

<sup>(1)</sup> Sizing includes premium and all estimated costs of issuance, underwriting expense and debt service reserve fund. Produces project proceeds of \$165 million

Tax-exempt eligibility subject to review and determination by bond/tax counsel. Estimated coverage for illustration only; actual coverage level dependent on credit ratings and investor marketability.



 $<sup>^{(2)}</sup>$  Based on tax-exempt current market appropriation rates as of 8.20.2018 + 0.50%; preliminary, subject to change.

 $<sup>^{(3)}</sup>$  Final year debt service net of DSRF at 0% interest earnings

#### 2.2.2 Main Street Extension Project Sources and Uses Summary

The proposed sources of funds, by year, for the Streetcar Project are summarized in **Table 10**. As the local funding source (TDD Revenues) are currently considered "Budgeted", the Project is fully funded, assuming receipt of \$151.6 million from the FTA Section 5309 New Starts program.

Table 10. Streetcar Sources and Uses Summary (YOE \$, in millions)

Uses	2018	2019	2020	2021	2022	2023	Total
Main Street Ext Capital Costs	\$3.1	\$12.9	\$63.7	\$102.7	\$131.7	\$2.5	\$316.6
Total Uses	\$3.1	\$12.9	\$63.7	\$102.7	\$131.7	\$2.5	\$316.6
Sources							
Federal							
New Starts Funds				\$75.8	\$75.8		\$151.6
Local							
TDD Funds	\$3.1	\$12.9	\$63.7	\$26.9	\$55.9	\$2.5	\$164.9
Total Sources <sup>1</sup>	\$3.1	\$12.9	\$63.7	\$102.7	\$131.7	\$2.5	\$316.6
Ending Balance	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

Note: <sup>1</sup> Totals may not sum due to rounding.

## 2.3 State of Good Repair Program

This section discusses the agency's historic and forecasted capital sources and uses of funds. First, a brief overview is provided of the FY 2018 to FY 2038 capital program included in the Financial Plan. The section then presents historic sources of funds, followed by a discussion of the projections for the proposed sources.

## 2.3.1 Historic Expenses

With the Starter line opening for service in May 2016, the historic capital costs and revenues that are typical of other transit systems are not available for the KCSA.

**Table 11** provides a summary of costs prior to and through the first three years of operations. As shown in the table, capital costs have ranged from \$0.1 million to \$3.1 million. Capital cost in 2016 and 2018 reflect expenses related to periodic (bi-annual) capital maintenance per manufacturers' specifications. A combination of TDD revenue, the City's contribution, and advertising revenue has been used to pay for capital expenses over this period.

Table 11. Historic Capital Costs and Revenues (YOE \$, in millions)



	2014	2015	2016	2017	2018
Capital Expenses					
Annual Costs		\$0.102	\$2.296	\$0.500	\$3.134
Capital Revenues					
Annual Revenue		\$0.102	\$2.296	\$0.500	\$3.134

#### 2.3.2 SGR Sources and Uses Forecast

- Sources: The Financial Plan reflects an assumption that on an annual basis, a portion of the TDD revenue is directly allocated to support SGR investments. (Note that a separate portion of the TDD revenue would support ongoing O&M costs.) Specifically, beginning in 2020, the Starter Line would receive \$0.25 million and this level would grow about 2.5 percent annually. Similarly, beginning in 2023, the Main Street Extension Project would receive \$0.54 million which would increase approximately 2.5 percent annually.
- **Uses:** As shown in **Table 12**, the Financial Plan includes allowances for SGR investments related to vehicle overhauls, traction power substation, track / right-of-way (ROW), and facility improvements. Additional details on the SGR allowances are summarized below:
  - Vehicle overhauls will follow the manufacturing recommended expense schedule though 2026. Beginning in 2027, these costs increase 3 percent annually.
  - Track and Facility costs are assumed to increase 3 percent annually while still under warranty and then 5 percent per year thereafter.
  - Traction Power Substation costs are assumed to increase 3 percent annually.

As shown in **Table 12**, based on the assumptions for TDD Capital Allocation and for the SGR investments, revenues exceed costs on an annual basis and a cumulative ending balance grows to \$8.25 million in 2039.



Table 12. SGR Program Sources and Uses (YOE \$, in millions)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
SGR Program Sources											<u>.</u>
Starter Line SGR TDD Capital Allocation	\$0.00	\$0.25	\$0.26	\$0.26	\$0.28	\$0.28	\$0.29	\$0.30	\$0.30	\$0.31	\$0.32
Main St Extension SGR TDD Capital Allocation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.54	\$0.55	\$0.57	\$0.58	\$0.59	\$0.61	\$0.62
Total SGR Program Sources	\$0.00	\$0.25	\$0.26	\$0.26	\$0.81	\$0.83	\$0.86	\$0.88	\$0.90	\$0.92	\$0.94
SGR Program Uses											
Starter Line	\$0.00	-\$0.11	-\$0.13	-\$0.11	-\$0.12	-\$0.37	-\$0.12	-\$0.13	-\$0.16	-\$0.14	-\$0.39
Vehicle Overhaul	\$0.00	-\$0.05	-\$0.05	-\$0.05	-\$0.05	-\$0.28	-\$0.06	-\$0.06	-\$0.06	-\$0.06	-\$0.31
TPPS/Sub	\$0.00	\$0.00	-\$0.02	\$0.00	\$0.00	-\$0.03	\$0.00	\$0.00	-\$0.03	\$0.00	\$0.00
Track/ROW	\$0.00	-\$0.04	-\$0.04	-\$0.04	-\$0.05	-\$0.05	-\$0.05	-\$0.05	-\$0.05	-\$0.06	-\$0.06
Facility	\$0.00	-\$0.02	-\$0.02	-\$0.02	-\$0.02	-\$0.02	-\$0.02	-\$0.02	-\$0.02	-\$0.02	-\$0.02
Main St Extension	\$0.00	\$0.00	\$0.00	\$0.00	-\$0.12	-\$0.35	-\$0.18	-\$0.18	-\$0.23	-\$0.20	-\$0.79
Vehicle Overhaul	\$0.00	\$0.00	\$0.00	\$0.00	-\$0.05	-\$0.28	-\$0.06	-\$0.06	-\$0.06	-\$0.06	-\$0.64
TPPS/Sub	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	-\$0.04	\$0.00	\$0.00
Track/ROW	\$0.00	\$0.00	\$0.00	\$0.00	-\$0.05	-\$0.05	-\$0.10	-\$0.10	-\$0.11	-\$0.11	-\$0.12
Facility	\$0.00	\$0.00	\$0.00	\$0.00	-\$0.03	-\$0.03	-\$0.03	-\$0.03	-\$0.03	-\$0.03	-\$0.03
SGR Costs	\$0.00	-\$0.11	-\$0.13	-\$0.11	-\$0.24	-\$0.72	-\$0.30	-\$0.31	-\$0.39	-\$0.34	-\$1.18
Ending Balance	\$0.00	\$0.14	\$0.12	\$0.15	\$0.57	\$0.12	\$0.56	\$0.57	\$0.51	\$0.58	-\$0.24
Cumulative Ending Balance	\$0.00	\$0.14	\$0.26	\$0.41	\$0.98	\$1.10	\$1.66	\$2.22	\$2.73	\$3.32	\$3.08



Table 12. SGR Program Sources and Uses (YOE \$, in millions)

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
SGR Program	•	•				•				
Starter Line SGR TDD Capital Allocation	\$0.33	\$0.34	\$0.34	\$0.35	\$0.36	\$0.37	\$0.38	\$0.39	\$0.40	\$0.41
Main St Extension SGR TDD Capital Allocation	\$0.64	\$0.66	\$0.67	\$0.69	\$0.71	\$0.72	\$0.74	\$0.76	\$0.78	\$0.80
Total SGR Program Sources	\$0.97	\$0.99	\$1.02	\$1.04	\$1.07	\$1.10	\$1.12	\$1.15	\$1.18	\$1.21
SGR Program										
Starter Line	-\$0.15	-\$0.19	-\$0.16	-\$0.17	-\$0.18	-\$0.22	-\$0.47	-\$0.20	-\$0.21	-\$0.25
Vehicle Overhaul	-\$0.06	-\$0.07	-\$0.07	-\$0.07	-\$0.07	-\$0.07	-\$0.36	-\$0.08	-\$0.08	-\$0.08
TPPS/Sub	\$0.00	-\$0.03	\$0.00	\$0.00	\$0.00	-\$0.03	\$0.00	\$0.00	\$0.00	-\$0.04
Track/ROW	-\$0.06	-\$0.06	-\$0.07	-\$0.07	-\$0.07	-\$0.08	-\$0.08	-\$0.09	-\$0.09	-\$0.09
Facility	-\$0.02	-\$0.03	-\$0.03	-\$0.03	-\$0.03	-\$0.03	-\$0.03	-\$0.03	-\$0.04	-\$0.04
Main St Extension	-\$0.22	-\$0.27	-\$0.24	-\$0.25	-\$0.26	-\$0.32	-\$0.97	-\$0.29	-\$0.31	-\$0.37
Vehicle Overhaul	-\$0.06	-\$0.06	-\$0.07	-\$0.07	-\$0.07	-\$0.07	-\$0.76	-\$0.07	-\$0.08	-\$0.08
TPPS/Sub	\$0.00	-\$0.04	\$0.00	\$0.00	\$0.00	-\$0.05	\$0.00	\$0.00	\$0.00	-\$0.05
Track/ROW	-\$0.12	-\$0.13	-\$0.13	-\$0.14	-\$0.15	-\$0.16	-\$0.16	-\$0.17	-\$0.18	-\$0.19
Facility	-\$0.03	-\$0.04	-\$0.04	-\$0.04	-\$0.04	-\$0.04	-\$0.05	-\$0.05	-\$0.05	-\$0.05
SGR Costs	-\$0.37	-\$0.46	-\$0.40	-\$0.42	-\$0.43	-\$0.53	-\$1.44	-\$0.49	-\$0.51	-\$0.62
Ending Balance	\$0.60	\$0.54	\$0.62	\$0.63	\$0.63	\$0.56	-\$0.32	\$0.66	\$0.67	\$0.58
Cumulative Ending Balance	<i>\$3.68</i>	\$4.22	\$4.83	\$5.46	\$6.10	\$6.66	\$6.34	\$7.00	\$7.66	\$8.25



# 3.0 **System-wide Operating Plan**

The operating plan reflects KCSA's 2019 Budget, existing service levels and the initial operating plan's start of service on the Main Street Extension.

**Table 14** summarizes the annual operating sources and uses over the 2019 to 2039 period. As shown in the table, based on the assumptions described below, annual operating revenues will match or exceed costs in almost every year. The Financial Plan projects the Cumulative Ending Balance will increase from \$6.0 million to \$107.8 million in 2039.

In the first full year of Main Street Extension service (2023), 100 percent of revenues used for operations are considered budgeted or committed as the revenues will be TDD-generated revenue, the City's annual contribution, and advertising revenue. Further, the Cumulative Ending Balance in 2023 is projected to be \$54.0 million, which would provide KCSA access to cash to cover over a 100-percent increase in agency-wide operating costs. As described in more detail below, the Cumulative Ending Balance is after accounting for annual debt service payments for KCSA existing bonds and leases and planned bonds to support implementing the Main Street Extension Project.

#### 3.1 Historic Costs and Service Levels

**Table 13** summarizes annual Streetcar revenue hours, costs and calculated costs per hour since service started in 2016.

Table 13. Historic Service Levels, Costs and Cost per Hour

	2016	2017	2018
Revenue Hours	17,524	17,524	17,524
Annual Costs (in millions)	\$1.88	\$3.26	\$3.62
Cost/Hour	\$107.42	\$185.89	\$206.67



Table 14. Projected Operating Sources and Uses: 2019 to 2039 (YOE \$, in millions)

	Beginning Balance	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Operating Sources										2023		
Operating Revenues		\$12.25	\$28.40	\$28.67	\$29.10	\$29.39	\$29.84	\$30.13	\$30.59	\$30.91	\$31.38	\$31.70
Sales Tax		\$5.80	\$18.76	\$19.04	\$19.33	\$19.62	\$19.91	\$20.21	\$20.52	\$20.82	\$21.14	\$21.45
Starter Line Property Assessment		\$4.13	\$4.21	\$4.21	\$4.29	\$4.29	\$4.38	\$4.38	\$4.47	\$4.47	\$4.56	\$4.56
Main Ext Property Assessment		\$0.00	\$3.11	\$3.11	\$3.17	\$3.17	\$3.23	\$3.23	\$3.30	\$3.30	\$3.36	\$3.36
Parking Assessment		\$0.13	\$0.12	\$0.12	\$0.11	\$0.11	\$0.10	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09
City Contribution		\$2.04	\$2.04	\$2.04	\$2.04	\$2.04	\$2.04	\$2.04	\$2.04	\$2.04	\$2.04	\$2.04
Advertising		\$0.15	\$0.15	\$0.16	\$0.16	\$0.17	\$0.17	\$0.17	\$0.18	\$0.18	\$0.19	\$0.19
Operating Uses												
Operating Costs		-\$4.84	-\$4.96	-\$5.09	-\$5.21	-\$11.62	-\$11.91	-\$12.21	-\$12.51	-\$12.83	-\$13.15	-\$13.47
O&M Costs		-\$4.72	-\$4.84	-\$4.96	-\$5.09	-\$11.50	-\$11.79	-\$12.08	-\$12.38	-\$12.69	-\$13.01	-\$13.33
District Administrative Costs		-\$0.12	-\$0.12	-\$0.12	-\$0.13	-\$0.13	-\$0.13	-\$0.13	-\$0.13	-\$0.14	-\$0.14	-\$0.14
Net Revenue Before Debt Service		\$7.41	\$23.43	\$23.59	\$23.89	\$17.77	\$17.92	\$17.92	\$18.08	\$18.08	\$18.23	\$18.23
Debt Service												
Total Debt Service		-\$4.58	-\$11.49	- \$10.93	-\$11.47	-\$6.86	-\$14.33	-\$14.33	-\$14.45	-\$14.45	-\$14.57	-\$14.56
Starter Line Bond Debt Service		-\$4.43	-\$4.43	-\$4.44	-\$4.44	-\$4.44	-\$4.44	-\$4.44	-\$4.44	-\$4.44	-\$4.44	-\$4.43
2015 Lease		-\$0.14	-\$0.57	-\$0.57	-\$0.57	-\$0.57	-\$0.57	-\$0.57	-\$0.57	-\$0.57	-\$0.29	\$0.00
Main Street Ext Debt Service		\$0.00	-\$6.49	-\$5.92	-\$6.46	-\$1.85	-\$9.32	-\$9.32	-\$9.44	-\$9.44	-\$9.85	-\$10.13
Ending Balance		\$2.83	\$11.94	\$12.66	\$12.43	\$10.91	\$3.59	\$3.59	\$3.63	\$3.63	\$3.66	\$3.67
Cumulative Ending Balance	\$3.22	\$6.05	\$17.99	\$30.65	\$43.08	\$53.99	\$57.58	\$61.17	\$64.80	\$68.43	\$72.09	\$75.76



Table 14. Projected Operating Sources and Uses: 2019 to 2039 (YOE \$, in millions)

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Operating Sources										
Operating Revenues	\$32.18	\$32.52	\$33.01	\$33.36	\$33.87	\$34.22	\$34.75	\$35.11	\$35.65	\$30.90
Sales Tax	\$21.77	\$22.10	\$22.43	\$22.77	\$23.11	\$23.46	\$23.81	\$24.17	\$24.53	\$24.90
Starter Line Property Assessment	\$4.65	\$4.65	\$4.74	\$4.74	\$4.83	\$4.83	\$4.93	\$4.93	\$5.03	\$0.00
Main Ext Property Assessment	\$3.43	\$3.43	\$3.50	\$3.50	\$3.57	\$3.57	\$3.64	\$3.64	\$3.71	\$3.71
Parking Assessment	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.00
City Contribution	\$2.04	\$2.04	\$2.04	\$2.04	\$2.04	\$2.04	\$2.04	\$2.04	\$2.04	\$2.04
Advertising	\$0.20	\$0.20	\$0.21	\$0.21	\$0.22	\$0.22	\$0.23	\$0.23	\$0.24	\$0.25
Operating Uses										
Operating Costs	-\$13.81	-\$14.15	-\$14.50	-\$14.87	-\$15.24	-\$15.62	-\$16.00	-\$16.40	-\$16.81	-\$17.23
O&M Costs	-\$13.67	-\$14.01	-\$14.36	-\$14.72	-\$15.09	-\$15.46	-\$15.85	-\$16.25	-\$16.65	-\$17.07
District Administrative Costs	-\$0.14	-\$0.14	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.15	-\$0.16	-\$0.16	-\$0.16
Net Revenue Before Debt Service	\$18.38	\$18.36	\$18.51	\$18.49	\$18.63	\$18.60	\$18.74	\$18.71	\$18.84	\$13.67
Debt Service										
Total Debt Service	-\$14.68	-\$14.67	-\$14.78	-\$14.76	-\$14.87	-\$14.84	-\$14.95	-\$14.80	-\$19.58	-\$10.99
Starter Line Bond Debt Service	-\$4.43	-\$4.43	-\$4.43	-\$4.43	-\$4.43	-\$4.43	-\$4.44	-\$4.44	-\$4.43	\$0.00
2015 Lease	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Main Street Ext Debt Service	-\$10.25	-\$10.23	-\$10.35	-\$10.32	-\$10.44	-\$10.41	-\$10.51	-\$10.37	-\$15.15	-\$10.99
Ending Balance	\$3.69	\$3.70	\$3.73	\$3.73	\$3.76	\$3.76	\$3.79	\$3.90	-\$0.74	\$2.68
Cumulative Ending Balance	\$79.45	\$83.15	\$86.88	\$90.61	\$94.37	\$98.14	\$101.93	\$105.83	\$105.09	\$107.76



## 3.2 Operating Cost Estimate Methodology and Results

The Financial Plan includes two categories of expenses in the Operating Plan: Administrative Costs and ongoing operation and maintenance (O&M). Administrative costs were estimated to be \$120,000 for 2019. This amount includes estimated legal fees, accounting fees, Director and Officer Liability insurance premium, and cost of the annually required election of Directors. Beyond 2019, administrative costs are forecasted to increase 1.5 percent annually.

The following provides an overview of the methodology used to forecast annual O&M costs for the Main Street Extension combined with the existing Starter Line service.

#### 3.2.1 Main Street Extension Operating Plan

Sunday

The streetcar system (Starter Line plus Man Street Extension) will operate over 17.5 hours a day, seven days a week, for 365 days a year. The service schedule is set to align with existing transit operations (bus and Max services) and the schedule of operation is reported in **Table 15**.

Start Time	End Time	Hours per Day
4:00 AM	12:00 AM	20
4:00 AM	2:00 AM	22
5:00 AM	2:00 AM	21
	4:00 AM 4:00 AM	4:00 AM 12:00 AM 4:00 AM 2:00 AM

11:00 PM

Table 15. Service Schedule Assumptions

The corresponding operating characteristics are provided in **Table 16**. As shown in the table, the service schedule and operating assumptions will result in 43,056 annual revenue hours. The Financial Plan assumes this level of service will be maintained through 2039, as shown in **Table 17**.

5:30 AM



17.5

Table 16. Project Operating Characteristics

Operating Characteristics	Mon - Thurs	Fri	Sat	Sun				
Average Speed	8-15 miles per hour for 7 miles per trip							
Layover	8 minutes							
Headway	10-12 minutes	(30 early a.m.)	12-15 minutes (20 early a.m.)	12-18 minutes (30 early a.m.)				
Round Trip Cycle Time	58-63 minutes							
Required Vehicles		7	*					
Days per Week	4	1	1	1				
Hours per Day	20	22	21	17.5				
Annual Hours (52 weeks)	26,000	7,228	5,720	4,108				

<sup>\*</sup>The capital cost accounts for 6 new vehicles, bringing the fleet to a total of 12 (8 peak, 4 spare). The system is expected to experience at least 25 "surge" days per year, during which 8 vehicles will be needed to serve demand and meet operating requirements; and the high spare ratio is based on KCSA's operating experience. The operating budget contingency accounts for the extra revenue-hours.

Table 17. Projected Revenue Hours

	Starter Line	Starter Line plus Main Street Extension
2018	17,524	
2019	17,524	
2020	17,524	
2021	17,524	
2022	17,524	
2023		43,056
2024		43,056
2025		43,056
2026		43,056
2027		43,056
2028		43,056
2029		43,056
2030		43,056
2031		43,056
2032		43,056
2033		43,056
2034		43,056
2035		43,056
2036		43,056
2037		43,056
2038		43,056



36

#### 3.2.2 Incremental Cost Increase Estimate

Historic Starter Line streetcar operating expenses are used to develop Main Street Extension operating expenses. Specifically, 2023 Starter Line costs are projected and a percentage markup is applied to estimate the total operating cost with the new extension. Though the extension will run over twice as many operating hours than the existing route, the operating cost will only be about twice as much because of economies of scale.

Beyond 2023, and as shown in **Table 14**, the Financial Plan assumes operating cost will increase approximately 2.5 percent per year.

Table 18. Incremental Cost Assumptions

EXPENSE	Starter Line	Main Street Extension Incremental	Total
GENERAL MANAGEMENT AND ADMIN	\$1,312,780	\$651,782	\$1,964,562
Professional Services	\$127,001	\$50,800	\$177,801
Marketing and Communications	\$141,426	\$56,570	\$197,996
Insurance	\$426,587	\$365,670	\$792,257
Administrative	\$91,156	\$36,463	\$127,619
Payroll Expense	\$442,064	\$176,826	\$618,889
Management/ Admin Contingency	\$80,767	-\$30,767	\$50,000
Operations and Maintenance	\$4,167,875	\$4,880,445	\$9,048,320
O&M Contract	\$3,266,032	\$4,377,717	\$7,643,749
Utilities	\$219,493	\$219,493	\$438,986
Supplemental Safety and Security	\$302,652	\$302,652	\$605,303
Operations Support (KCATA)	\$137,304	\$102,978	\$240,281
Operations Contingency	\$215,378	-\$95,378	\$120,000
Capital Program	\$269,223	\$269,223	\$538,445
Total Expense	\$5,746,098	\$5,805,229	\$11,551,327

#### 3.2.3 Ridership Forecast

Based on the results of the FTA Simplified Trips-on-Project Software (STOPS) ridership model, the streetcar system (Starter Line plus Main Street Extension) is projected to have 11,870 daily riders. Based on an annualization factor of 312 days, this results in an estimated 3.7 million annual riders. (See Travel Forecast Report for additional details). As noted earlier, KCSA does not charge a fare on the streetcar. As such, the Financial Plan assumes no fare revenue for the streetcar system through 2039.



#### 3.3 O&M Revenues

As described below, KCSA's systemwide revenues are provided from Downtown TDD (to be ultimately replaced by the Main Street TDD) and the City's contribution. **Figure 6** summarizes the forecasted \$660.3 million in total O&M revenue sources assumed in the Financial Plan over the FY 2018 to FY 2038 period. As shown in the figure, TDD revenues (sales tax, property assessment, and parking assessment) account for approximately 93 percent of the total. The remaining funds reflect the City's annual contribution and advertising revenue. All sources are considered budgeted or committed.

Figure 6. Projected Systemwide Operating Revenue (\$ in millions) FY 2019 to FY 2039

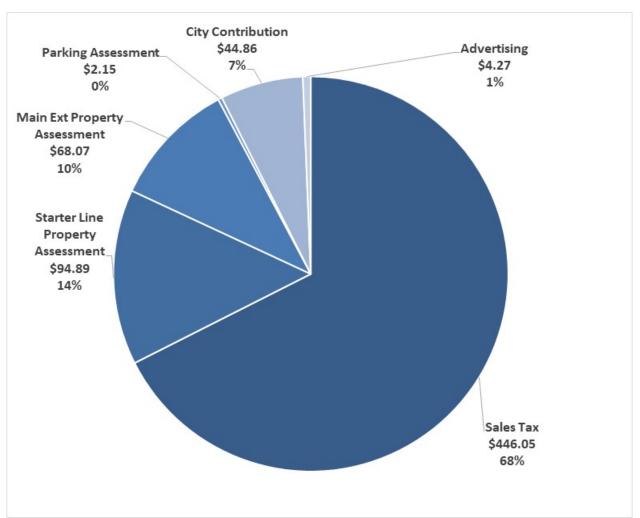




Table 19. Historic Operating Revenues: FY 2016 to FY 2018

	2016	2017	2018		
TDD Sales Tax @98%	\$5,458,896	\$5,681,927	\$6,387,300		
TDD Property Assessment	\$4,195,257	\$5,012,299	\$3,616,877		
TDD Parking Assessment	\$159,008	\$87,677	\$135,346		
City Contribution	\$1,200,000	\$710,565	\$2,039,000		
Advertising Revenue	-	-	\$194,000		
Miscellaneous	\$98,599	\$117,819	\$214,610		
Total Revenues	\$11,111,760	\$11,610,287	\$12,587,133		

#### 3.3.1 TDD Funds

The following provides an overview of the methodology used to forecast the different sources that make up the TDD revenue:

Main Street TDD Sales Tax: First, in order to establish a baseline for the Main Street TDD Sales
 Tax Projection, sales tax revenue for calendar year 2017 was projected as if the Main Street TDD
 had been in effect in 2017. This is comprised of two components, the first being the actual
 Starter Line TDD Sales Tax Revenue for 2017 (Actual 2017 TDD Sales Tax Revenue - Downtown),
 and the second component being projected 2017 sales tax revenue from the remainder of the
 area of Main Street TDD (Projected 2017 TDD Sales Tax Revenue - Expansion Area).

In order to determine the Projected 2017 TDD Sales Tax Revenue – Expansion Area, KCMO staff reviewed its 2012 general sales tax collection data for the area within the Main Street TDD that is not within the Starter Line TDD (excluding sales that are not subject to a TDD sales tax, such as utility charges) and applied a one percent sales tax against those 2012 TDD-taxable sales, and the 2012 amount as so determined was increased through 2017 by 3 percent annually (the same average annual growth rate as City-wide sales tax over the same period). The Actual 2017 TDD Sales Tax Revenue - Downtown and the Projected 2017 TDD Sales Tax Revenue - Expansion Area were added together to determine the "Total Projected 2017 Main Street TDD Sales Tax Revenue". The Total Projected 2017 Main Street TDD Sales Tax Revenue was grown to 2020 using a conservative 1.5 percent annual growth factor. However, because it is anticipated that 2019 will be a transition year between the Starter Line TDD and the Main Street TDD, the projection for 2019 assumes the Total Projected 2017 Main Street TDD Sales Tax Revenue will be derived 75 percent from the Starter Line TDD, and 25 percent from the Main Street TDD. In addition, the otherwise projected 2019 Main Street TDD Sales Tax revenue has been reduced by \$2 million to account for reimbursement of costs advanced prior to the commencement of collection of revenue of the Main Street TDD. Thereafter, commencing from 2020, an annual growth factor of 1.5 percent has been applied for the remainder of the 30-year life of the Main Street TDD Sales Tax.



The Main Street TDD Sales Tax Projection does not include any additional growth factor for taxable sales attributable to the anticipated new business development within the Main Street TDD, although such additional growth is anticipated. As an example of why this is likely a conservative assumption, during the period 2013 to 2017 (end of fiscal year), TDD sales tax revenue in the Starter Line TDD grew 10.8 percent per year, as compared to a 5.1 percent sales tax revenue growth rate City-wide.

Main Street TDD Special Assessments: In order to establish a baseline for the projection of Main Street TDD Real Estate Assessments, KCMO staff calculated the revenue that would be derived from the Main Street TDD Property Assessments if such assessments were imposed in 2018, based on actual assessable value of properties anticipated to be subject to such assessments. It was assumed that the special assessments of the Starter Line TDD imposed in 2018 would be applied toward the combined expanded project, and that the Main Street TDD Real Estate Assessments would first be imposed in 2019 (payable in December 2019 and included in 2020 revenue). It was also assumed that the Main Street TDD Real Estate Assessments would continue in the yellow area on Figure 2 for 25 years (i.e., providing revenue through 2044) and in the green area on Figure 2 for 19 years (i.e., providing revenue through 2038) to account for the 6 years during which property owners in the Starter Line TDD paid such assessments imposed by the Starter Line TDD. Because real property is reassessed by Jackson County, Missouri bi-annually each odd year, the 2018 assessable value amounts were then grown by two percent bi-annually starting in 2019 (2020 revenue). The projection of the Main Street TDD Real Estate Assessments does not include any additional growth factor attributable to the anticipated additional real estate development within the Main Street TDD, although such additional growth is anticipated. The pendency of the Extension Line has already led to development proposals within the yellow area on Figure 2 that developers are attributing to the potential Extension Line.

Regarding the projection of Main Street TDD Pay Parking Lot Assessments, it has been determined that there are no surface pay parking spaces subject to such assessment other than in the portion of the Main Street TDD that is within the Starter Line TDD boundary. The actual assessment revenue expected for 2019 based on actual 2018 assessable pay parking spaces has been used for 2019 revenue, and then that amount has been reduced by five percent annually through 2015, at which point it remains level at the 2025 projected amount until 2038, at which time that revenue ceases (to account for the six years during which property owners in the Starter Line TDD paid such assessments imposed by the Starter Line TDD).



Table 20. Projected TDD Revenues by Source: 2019 to 2044 (YOE \$, in millions)

Vaar	PROPERTY ASSESSMENT 1/3 MILE (RECEIVED JANUARY OF YEAR INDICATED)									
Year	Starter Line	Main Street Extension	Surface Parking Assessments							
2019	\$4.13	\$0.00	\$0.13							
2020	\$4.21	\$3.11	\$0.12							
2021	\$4.21	\$3.11	\$0.12							
2022	\$4.29	\$3.17	\$0.11							
2023	\$4.29	\$3.17	\$0.11							
2024	\$4.38	\$3.23	\$0.10							
2025	\$4.38	\$3.23	\$0.09							
2026	\$4.47	\$3.30	\$0.09							
2027	\$4.47	\$3.30	\$0.09							
2028	\$4.56	\$3.36	\$0.09							
2029	\$4.56	\$3.36	\$0.09							
2030	\$4.65	\$3.43	\$0.09							
2031	\$4.65	\$3.43	\$0.09							
2032	\$4.74	\$3.50	\$0.09							
2033	\$4.74	\$3.50	\$0.09							
2034	\$4.83	\$3.57	\$0.09							
2035	\$4.83	\$3.57	\$0.09							
2036	\$4.93	\$3.64	\$0.09							
2037	\$4.93	\$3.64	\$0.09							
2038	\$5.03	\$3.71	\$0.09							
2039		\$3.71								
2040		\$3.79								
2041		\$3.79								
2042		\$3.86								
2043		\$3.86								
2044		\$3.94								
Total	\$91.27	\$87.31	\$2.01							

### 3.3.2 Other Operating Funds Sources

Other Operating funds include annual contributions for KCMO and forecasted revenue levels for advertising.

- City Contribution: KCMO provides an annual financial contribution to the debt service and O&M costs of the Starter Line in the amount of \$2.039 million per year (the City Contribution). It is expected that KCMO will continue to provide this same level of annual contribution once the Main Street Extension Project is constructed and operational. The funds are approved as part of the KCMO's annual budget process.
- Advertising: As shown in Table 19, KCSA began collecting advertising revenue in 2018 (\$0.19 million). The Financial Plan assumes this sources will increase 2.5 percent annually.



# 3.4 Existing and Planned Debt Service

**Table 21** summarizes the debt service schedule for KCSA's existing and planned bonds and leases. The Existing Series 2014A bonds were issued to support construction of the Starter Line and will be repaid in 2037. The Existing Streetcar Lease is debt service on the City's lease purchase financing for one of the two streetcars for the Starter Line. As shown previously in **Table 9**, to support construction of the Main Street Extension, the current financial strategy reflects the KCMO issuing \$165 million bonds during the fall 2019. Based on the projected net operating revenue available after operating expenses, the combined coverage ratio is projected to be approximately 1.25 through 2049.

Table 21. Debt Service Schedules and Coverage Ratio: 2019 to 2049 (YOE \$, in millions)

	Duningto d Devenues		Annual Dek	ot Service			
Year	Projected Revenues Available for Debt Service	Existing Series 2014A	Streetcar Lease	Planned Main Street Ext Series 2019	Combined Debt Service	Combined Coverage	
2019	\$7.41	\$4.47	\$0.14	\$0.00	\$4.61	1.61	
2020	\$23.43	\$4.48	\$0.57	\$13.76	\$18.82	1.25	
2021	\$23.59	\$4.48	\$0.57	\$13.88	\$18.94	1.25	
2022	\$23.89	\$4.48	\$0.57	\$14.13	\$19.19	1.25	
2023	\$17.77	\$4.49	\$0.57	\$9.20	\$14.26	1.25	
2024	\$17.92	\$4.49	\$0.57	\$9.32	\$14.38	1.25	
2025	\$17.92	\$4.49	\$0.57	\$9.32	\$14.39	1.25	
2026	\$18.08	\$4.50	\$0.57	\$9.44	\$14.51	1.25	
2027	\$18.08	\$4.50	\$0.57	\$9.44	\$14.51	1.25	
2028	\$18.23	\$4.50	\$0.29	\$9.85	\$14.63	1.25	
2029	\$18.23	\$4.50	\$0.00	\$10.13	\$14.63	1.25	
2030	\$18.38	\$4.50	\$0.00	\$10.25	\$14.75	1.25	
2031	\$18.36	\$4.51	\$0.00	\$10.23	\$14.74	1.25	
2032	\$18.51	\$4.51	\$0.00	\$10.35	\$14.86	1.25	
2033	\$18.49	\$4.52	\$0.00	\$10.32	\$14.84	1.25	
2034	\$18.63	\$4.52	\$0.00	\$10.44	\$14.96	1.25	
2035	\$18.60	\$4.53	\$0.00	\$10.41	\$14.94	1.25	
2036	\$18.74	\$4.53	\$0.00	\$10.51	\$15.05	1.25	
2037	\$18.71	\$4.65	\$0.00	\$10.37	\$15.02	1.25	
2038	\$18.84	\$0.00	\$0.00	\$15.15	\$15.15	1.24	
2039	\$13.67	\$0.00	\$0.00	\$10.99	\$10.99	1.24	
2040	\$13.69	\$0.00	\$0.00	\$11.01	\$11.01	1.24	
2041	\$13.64	\$0.00	\$0.00	\$10.96	\$10.96	1.24	
2042	\$13.65	\$0.00	\$0.00	\$10.98	\$10.98	1.24	
2043	\$13.59	\$0.00	\$0.00	\$10.93	\$10.93	1.24	
2044	\$13.59	\$0.00	\$0.00	\$10.93	\$10.93	1.24	
2045	\$9.58	\$0.00	\$0.00	\$7.70	\$7.70	1.24	
2046	\$9.49	\$0.00	\$0.00	\$7.64	\$7.64	1.24	
2047	\$9.41	\$0.00	\$0.00	\$7.56	\$7.56	1.24	
2048	\$9.31	\$0.00	\$0.00	\$7.49	\$7.49	1.24	
2049	\$1.99	\$0.00	\$0.00	\$0.00	\$0.00		



# 4.0 Financial Plan Summary

**Table 22** provides a summary of the 20-year agency-wide cash flow. As shown in the table, based on the assumptions described in the prior sections, both the operating plan and capital plan are fully funded through annual revenues and transfers from the cumulative available balances (in 2036 and 2038 only).



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# Table 22. Agency-Wide Cash Flow: 2019 to 2049 (YOE \$, in millions)

	Beginning Balance	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Operating												
Operating Revenue		\$12.25	\$28.40	\$28.67	\$29.10	\$29.39	\$29.84	\$30.13	\$30.59	\$30.91	\$31.38	\$31.70
Operating Expenses		(\$4.84)	(\$4.96)	(\$5.09)	(\$5.21)	(\$11.62)	(\$11.91)	(\$12.21)	(\$12.51)	(\$12.83)	(\$13.15)	(\$13.47)
Net Revenue Before Debt Service		\$7.41	\$23.43	\$23.59	\$23.89	\$17.77	\$17.92	\$17.92	\$18.08	\$18.08	\$18.23	\$18.23
Debt Service												
Combined Debt Service		(\$4.58)	(\$18.77)	(\$18.89)	(\$19.14)	(\$14.21)	(\$14.33)	(\$14.33)	(\$14.45)	(\$14.45)	(\$14.57)	(\$14.56)
Annual Net Revenue Available for Future Capital / Ops		\$2.83	\$4.66	\$4.70	\$4.76	\$3.56	\$3.59	\$3.59	\$3.63	\$3.63	\$3.66	\$3.67
Cumulative Net Revenue Available for Future Capital / Ops	\$3.22	\$6.05	\$10.71	\$15.41	\$20.16	\$23.72	\$27.32	\$30.91	\$34.53	\$38.16	\$41.82	\$45.49
Capital												
Capital Revenues (TDD Allocation		\$12.90	\$63.91	\$102.95	\$132.01	\$3.27	\$0.83	\$0.86	\$0.88	\$0.90	\$0.92	\$0.94
Capital Expenses		(\$12.90)	(\$63.77)	(\$102.83)	(\$131.86)	(\$2.70)	(\$0.72)	(\$0.30)	(\$0.31)	(\$0.39)	(\$0.34)	(\$1.18)
Annual Capital Ending Balance		\$0.00	\$0.14	\$0.12	\$0.15	\$0.57	\$0.12	\$0.56	\$0.57	\$0.51	\$0.58	(\$0.24)
Cumulative Capital Ending Balance		\$0.00	\$0.14	\$0.26	\$0.41	\$0.98	\$1.10	\$1.66	\$2.22	\$2.73	\$3.32	\$3.08
Overall Ending Balance												
Annual Balance	\$3.22	\$2.83	\$4.80	\$4.82	\$4.90	\$4.13	\$3.71	\$4.15	\$4.19	\$4.14	\$4.24	\$3.43
Cumulative Balance		\$6.05	\$10.85	\$15.67	\$20.57	\$24.71	\$28.42	\$32.57	\$36.76	\$40.90	\$45.14	\$48.57



Table22. Agency-Wide Cash Flow: 2019 to 2049 (\$ in millions)

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total
Operating											
Operating Revenue	\$32.18	\$32.52	\$33.01	\$33.36	\$33.87	\$34.22	\$34.75	\$35.11	\$35.65	\$30.90	\$647.92
Operating Expenses	(\$13.81)	(\$14.15)	(\$14.50)	(\$14.87)	(\$15.24)	(\$15.62)	(\$16.00)	(\$16.40)	(\$16.81)	(\$17.23)	(\$262.44)
Net Revenue Before Debt Service	\$18.38	\$18.36	\$18.51	\$18.49	\$18.63	\$18.60	\$18.74	\$18.71	\$18.84	\$13.67	\$385.47
Debt Service											
Combined Debt Service	(\$14.68)	(\$14.67)	(\$14.78)	(\$14.76)	(\$14.87)	(\$14.84)	(\$14.95)	(\$14.80)	(\$19.58)	(\$10.99)	(\$311.19)
Annual Net Revenue Available for Future Capital / Ops	\$3.69	\$3.70	\$3.73	\$3.73	\$3.76	\$3.76	\$3.79	\$3.90	(\$0.74)	\$2.68	
Cumulative Net Revenue Available for Future Capital / Ops	\$49.18	\$52.88	\$56.61	\$60.34	\$64.10	\$67.87	\$71.66	\$75.57	\$74.82	\$77.50	
Capital											
Capital Revenues (TDD Allocation	\$0.97	\$0.99	\$1.02	\$1.04	\$1.07	\$1.10	\$1.12	\$1.15	\$1.18	\$1.21	\$331.22
Capital Expenses	(\$0.37)	(\$0.46)	(\$0.40)	(\$0.42)	(\$0.43)	(\$0.53)	(\$1.44)	(\$0.49)	(\$0.51)	(\$0.62)	(\$322.97)
Annual Capital Ending Balance	\$0.60	\$0.54	\$0.62	\$0.63	\$0.63	\$0.56	(\$0.32)	\$0.66	\$0.67	\$0.58	
Cumulative Capital Ending Balance	\$3.68	\$4.22	\$4.83	\$5.46	\$6.10	\$6.66	\$6.34	\$7.00	\$7.66	\$8.25	
Overall Ending Balance											
Annual Balance	\$4.30	\$4.23	\$4.35	\$4.36	\$4.40	\$4.33	\$3.47	\$4.56	(\$0.08)	\$3.26	
Cumulative Balance	\$52.86	\$57.10	\$61.44	\$65.80	\$70.20	\$74.53	\$78.00	\$82.56	\$82.49	\$85.75	



Kansas City Streetcar Main Street Extension Project Financial Plan

