Summary
Federal regulations require Connected KC 2050, the region’s metropolitan transportation plan (MTP), to include a financial analysis that demonstrates how the plan can be implemented. The plan lists resources from public and private sources that are reasonably expected to be available to carry out the plan and recommends additional financing strategies for needed projects and programs.

Connected KC 2050 is financially constrained based on estimates of available revenues and anticipated costs as described below. As these estimates are refined for future programming activities, adjustments will be made to the plan as needed.

The financial plan considers all projects and strategies proposed for funding by federal, state, local and private resources. Revenue and cost estimates that support the plan incorporate growth rates that reflect year-of-expenditure dollars based on reasonable financial principles and information that is cooperatively developed by states, transit operators and MARC.

Connected KC 2050 includes, by reference, those projects and funding sources included in the Transportation Improvement Program (TIP). The TIP provides a more specific accounting for the first four years of the plan. The financial plan uses 10-year aggregate cost ranges/bands (23 CFR 450.322(10)(v). The projected cost reflects reasonably expected future funding source(s) available to support identified projects.

This analysis projects anticipated revenues available to implement Connected KC 2050 projects through the year 2050 and compares revenues to costs identified in the plan for specific projects. Also, estimates are developed for other cost categories in which specific projects have not been identified, such as transportation operations and maintenance (O&M) and transportation asset management (TAM) activities. O&M include system management activities such as snow removal, signing, striping, litter control, mowing, completing routine road and bridge repairs, traffic signal operations, system management and more. TAM includes projects that reflect system rehabilitation and reconstruction. As required by federal regulations, revenues and expenditures were forecast in year of expenditure dollars rather than real dollars, meaning that inflationary increases are included in the forecasts.

Forecasted transportation revenues and expenditures through 2050
in billions (year of expenditure dollars)

<table>
<thead>
<tr>
<th>REVENUES (Billions $$)</th>
<th>Kansas</th>
<th>Missouri</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal revenues</td>
<td>$2.65</td>
<td>$3.02</td>
<td>$5.67</td>
</tr>
<tr>
<td>State revenues</td>
<td>$1.86</td>
<td>$2.22</td>
<td>$4.08</td>
</tr>
<tr>
<td>Local revenues</td>
<td>$17.60</td>
<td>$24.94</td>
<td>$42.54</td>
</tr>
<tr>
<td><strong>Total revenues</strong></td>
<td><strong>$22.11</strong></td>
<td><strong>$30.18</strong></td>
<td><strong>$52.29</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXPENDITURES</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operate and maintain the road system</td>
<td>$0.67</td>
<td>$1.86</td>
<td>$2.53</td>
</tr>
<tr>
<td>Operate and maintain the transit system</td>
<td>$0.78</td>
<td>$4.42</td>
<td>$5.20</td>
</tr>
</tbody>
</table>
### Process

The development of the financial plan included feedback generated over three years from MARC committees as well as individual meetings and conversations with transportation implementing agencies and other stakeholders. During committee meetings throughout the process, MARC staff presented draft forecasts for core revenues and expenditures necessary to operate, administer, and maintain the transportation system, as well as recommendations for reasonably expected revenues. Steps involved in this process included:

Developing revenue estimates that are based on a conservative approach of reasonably expected federal, state and local funds available for transportation. Estimates were derived through collaboration and consent by state, transit and federal planning partners. Local non-transit revenues estimates are based on the U.S. 2017 Census of Governments estimated percentage of general revenues available for transportation. Transit local, state, and federal revenues are derived from the 2017 National Transit Data Base (NTD).

Revenues are estimated at the planning level, not the programmatic level, as with the TIP. The metropolitan transportation plan’s (MTP) financial projections are reviewed and adjusted regularly to reflect future economic trends. Currently federal financial projects are based on the most recent federal transportation bill (FAST Act) and current state legislation. MARC will adjust the plan’s revenue estimates as the plan is amended.

### Revenue

Connected KC 2050 is based on estimates of expected available regional revenues from 2020 to 2050. The TIP provides more specific cost estimates that reflect the first four years of the plan’s development. As MTP projects come closer to implementation, project cost assumptions are adjusted, and more specific costs are reflected in the TIP. This approach is suited to a long-range planning process focused on determining regional investment priorities, rather than budgeting for a program. This section outlines current estimates for potential highway and transit revenues.

For purposes of the financial capacity analysis, roadway and transit funds were accounted for separately, even though federal regulations (FAST Act) allow some categories of federal highway funds to be used for transit projects and vice versa. Estimates of roadway revenues and expenditures were developed separately for the Kansas and Missouri portions of the metropolitan area, since federal and state highway funds generally must stay within a given state. Transit revenues and expenditures were estimated on a regional basis, because most federal transit funds are allocated directly to the region. For this analysis, all revenue and expenditure estimates are reported in fiscal year 2019 dollars adjusted for

<table>
<thead>
<tr>
<th>Asset management and system preservation</th>
<th>$17.03</th>
<th>$21.40</th>
<th>$38.43</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset management and system preservation transit</td>
<td>$0.31</td>
<td>$1.73</td>
<td>$2.04</td>
</tr>
<tr>
<td>Financially constrained roadway system expansion</td>
<td>$3.30</td>
<td>$0.64</td>
<td>$3.94</td>
</tr>
<tr>
<td>Financially constrained transit system expansion</td>
<td>$0.02</td>
<td>$0.13</td>
<td>$0.15</td>
</tr>
<tr>
<td><strong>Total expenditures</strong></td>
<td><strong>$22.11</strong></td>
<td><strong>$30.18</strong></td>
<td><strong>$52.29</strong></td>
</tr>
<tr>
<td><strong>Balance</strong></td>
<td><strong>$0.00</strong></td>
<td><strong>$0.00</strong></td>
<td><strong>$0.00</strong></td>
</tr>
</tbody>
</table>
inflation. In order to develop the fiscally constrained project list, the net present value of total potential revenues was estimated for three time periods: 2020–2029, 2030–2039 and 2040–2050.

**Reasonably Expected Revenues**
The region estimates approximately $52 billion roadway and transit revenues over the life of Connected KC 2050. Forecasts of core revenues include funding sources the region currently receives for transportation purposes—taxes, fees, and fares - and do not include any new sources. The forecasts assume that Greater Kansas City will continue to receive revenues from federal, state, and local sources for constructing, operating and maintaining the current roadway and transit system.

**State-programmed federal highway revenue - $2.75 billion**
Highway revenues for Kansas and Missouri are accounted for separately, since there are restrictions prohibiting state and local entities from transferring funds across state lines. As a reasonable starting point for MARC's long-range financial forecasts, the plan uses state and federal financial revenue forecasts for the base years of 2020–2024 for Kansas and Missouri. Federal and state funds are derived using 2019 revenue estimates obtained from KDOT, MoDOT and other sources. Federal and Missouri state revenues are expected to have a down-turn from 2025 – 2050. The downturn reflects reliance on gas tax as a primary source of transportation revenues with anticipated increases in fuel economy and alternative fuel use not off-set by increasing vehicle miles travel.

- Kansas federal - $1.88 billion
- Missouri federal - $0.87 billion

**Apportioned federal highway revenue - $.81 billion**
The region receives an annual federal apportionment that is passed through the Kansas City region for programming by MARC. This includes the federal fund sources of congestion mitigation and air quality (CMAQ), Transportation Alternatives Program (TAP) and Surface Transportation Program Kansas and Missouri (STP). Revenues were assumed to grow 2.5 percent annually.

- Kansas apportionment - $0.28 billion
- Missouri apportionment - $0.53 billion

**State highway revenue, Kansas - $1.69 billion**
Kansas has successfully funded comprehensive transportation programs throughout the state for the last 20 years. Kansas' current transportation program, T-WORKS, ended in 2020 and has been replaced with the Eisenhower Legacy Transportation Program which will continue through 2030 at the same funding levels as T-WORKS. Based on the state’s success in funding transportation, it is expected that Kansas will continue with comprehensive transportation programs through 2050. Kansas’s state revenues are primarily based on motor fuel taxes, vehicle registration fees and sales taxes and expected to grow in years 2021 to 2050. For purposes of this forecast, revenues are held flat. Kansas does not allocate transportation funds to the region by formula.

**State highway revenue, Missouri - $2.18 billion**
Missouri relies on motor fuel taxes and vehicle registration fees to cover costs for the state highway system. The regional plan assumes existing funding for the life of the plan. The MTP assumes a modest
1.9 percent increase in funding in Missouri from 2020–2050. The source of this increase is taken from MoDOT’s 2020 – 2024 Statewide Transportation Improvement Program (STIP) financial assumptions and KC District’s financial targets. Missouri allocates state highway funds to the region by a formula adopted by the Missouri Highways and Transportation Commission.

Local revenues - $37.26 billion
Local government sources of transportation funds include state and federal motor-fuel tax revenue, state funds, property taxes, local-option sales taxes and bond issues. To create the local revenue estimates for this plan, the projected gross regional product (GRP) growth rate of 2.5%, developed by Regional Economic Modeling Inc., was applied to aggregate local revenue. The 2017 Census of Government indicates that Kansas local jurisdictions allocates approximately 21% of general revenues to transportation and Missouri local jurisdictions allocate around 8%. Please note, these forecasts of local revenue may not fully account for the level of private-sector funding available or for additional funding sources available to local governments through vehicles such as community improvement districts or transportation development districts.

- Kansas - $17.08 billion
- Missouri - $20.18 billion

Transit revenue
Public transportation revenue is predicted at approximately $7.49 billion. Revenue Information was collected from National Transit Database (NTD) reported by the primary fixed-route transit operators submitted to the Federal Transit Administration (FTA) for fiscal year 2018 and the U.S. Census of Government 2017 local government revenues for transit. The analysis uses 2.5 percent growth for all reported revenues.

- Federal transit revenue - $2.1 billion
  The public transportation analysis covers the five primary fixed-route transit properties operating under the RideKC brand — the Kansas City Area Transportation Authority, City of Independence, MO, Johnson County (KS) Transit, Unified Government Transit and Kansas City Streetcar — and their paratransit services, since they are recipients of virtually all federal funding for transit in Greater Kansas City.

  Federal revenue information was collected from National Transit Database (NTD) reported by the primary fixed-route transit operators submitted to the Federal Transit Administration (FTA) for fiscal year 2018 assuming 2.5 percent growth.

  - Kansas -- $0.49 billion
  - Missouri -- $1.6 billion

State transit revenue - $0.10 billion
States allocate state funding differently for transit services in the Kansas City region. Both States allocated state funds to the region for paratransit services. Kansas provides funding for transit through its state tax transportation program. Missouri has no dedicated transit funding but typically provides some general revenue appropriated annually for rural and paratransit services. State revenue projections are derived as reported to the 2018 NTD assuming 2.5 percent growth.
Local transit revenue - $.84 billion
The primary sources of local revenue for public transportation include sales taxes, property taxes, general fund revenue, fare box collections and other sources. Local revenue estimates are based on the NTD reported by the primary fixed-route transit operators submitted to the FTA for fiscal year assuming 2.5 percent growth.

Kansas -- $.84 billion
Missouri -- $.16 billion

Other transit revenue - $.75 billion
Other revenue is earned from actives that are not connected to farebox or local revenues. “Other” are revenues from actives as: concessions, advertising and rents. This information is collected from NTD reported by the primary fixed-route transit operators submitted to the Federal Transit Administration for fiscal year 2018

Kansas -- $.53 billion
Missouri -- $.4 billion

Expenditures
The transportation system that exists today was made possible through a tremendous investment of financial resources over time, and the Kansas City region has consistently placed a high priority on preserving and maintaining this investment. The importance of system preservation was continually reinforced by public and stakeholder input received during Connected KC 2050’s public engagement development activities. In the adopted Policy Framework, the system condition goal seeks to “Ensure the transportation system is maintained in good condition.”

To demonstrate financial constraint in the plan, the cost to operate, maintain and preserve (preservation projects) the transportation system in the MARC region is deducted from available transportation revenues first, and the remaining balance is available for other transportation investments. These efforts are captured in Operations and Maintenance (O&M) and Transportation Asset Management (TAM) cost. The process may be unique for highway and transit funding, but the equation is consistent. Bottom line “Financial Constraint” in its simplest form -- the cost of new projects cannot exceed the financial resources available after accounting for O&M and TAM.

Roadway expenditures
The Federal Highway Administration (FHWA) has placed great emphasis on regions demonstrating that there are adequate revenues available to fund operations and maintenance (O&M) of the transportation system. Connected KC 2050 defines the region’s highway transportation system as roadways eligible for federal funding (the Federal Aid System). The wide variety in how local jurisdictions and state departments of transportation account for current system O&M costs makes establishing an
exact regional O&M cost quite complicated. To overcome this complexity, the plan takes a conservative approach to O&M estimates based on inputs from the state DOTs. Kansas and Missouri have each taken different approaches to account for O&M cost factors.

**Regional O&M expenditures - $2.53 billion**
Local governments and state DOTs are responsible for O&M activities on the Federal Aid System. MARC assumes local jurisdictions would need to expend costs for O&M, at a minimum, the same per-lane-mile cost as the state DOTs to keep pace with current system requirements. MARC assumes that local jurisdiction expends O&M activity cost equal to or greater than reported by its State’s DOT. To establish regional O&M costs, MARC reviewed O&M cost information provided by KDOT from KS’s T-Works for these costs in the MARC region. MoDOT provided urban O&M cost reported for the Kansas City District.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>KDOT</td>
<td>$.29 billion</td>
</tr>
<tr>
<td>KS local</td>
<td>$.38 billion</td>
</tr>
<tr>
<td>MoDOT</td>
<td>$.77 billion</td>
</tr>
<tr>
<td>MO local</td>
<td>$1.1 billion</td>
</tr>
</tbody>
</table>

**Regional TAM expenditures - $38.43 billion**
The FAST Act requires State DOTs to develop Transportation Asset Management Plans (TAMP) by the fourth quarter 2019. TAMP is a plan for managing transportation infrastructure over a period to deliver an agreed level of service, performance, and condition targets, put simply asset management is a systematic approach to managing rehabilitation/reconstruction and/or preservation cost. KDOT and MoDOT completed their plans as required. MARC assumes that State DOTs TAMP are a better representation of cost over time necessary to preserve and maintain the transportation system. MARC used the 10-year average of KDOT’s and MoDOT’s TAMPs to establish a baseline cost that jurisdictions should expend for system preservation.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>KDOT</td>
<td>$3.46 billion</td>
</tr>
<tr>
<td>KS local</td>
<td>$13.56 billion</td>
</tr>
<tr>
<td>MoDOT</td>
<td>$2.83 billion</td>
</tr>
<tr>
<td>MO local</td>
<td>$18.58 billion</td>
</tr>
</tbody>
</table>

**Regional TIP and reconstruction and rehabilitation expenditures – $3.16 billion**
As mentioned, O&M and TAM are activities the maintain, operate and preserves the integrity of our existing transportation system. Captured within the $2.5 billion for O&M and the $38.43 billion for TAM are those submitted projects that maintain, operate, rebuild and/or rehab the existing system and those committed projects in the TIP.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>KDOT</td>
<td>$1.3 billion</td>
</tr>
<tr>
<td>KS local</td>
<td>$.80 billion</td>
</tr>
<tr>
<td>MoDOT</td>
<td>$.88 billion</td>
</tr>
<tr>
<td>MO local</td>
<td>$.48 billion</td>
</tr>
</tbody>
</table>
Regional constrained project expenditures - $3.94 billion
Constrained Connected KC 2050 projects are those projects funded once the region has accounted for O&M and TAM cost. Constraint demonstrates the consistency between reasonably available and projected sources of Federal, State, local, and private revenues and costs of implementing proposed transportation system improvements.

Revenues – (O&M + TAM) = Available for projects

- KDOT – $.99 billion
- KS local – $2.31 billion
- MoDOT – $0
- MO local -- $.64 billion

Transit expenditures
As with highways, the region must account for transit’s O&M and transit asset management (TAM) costs. O&M costs are projected to total approximately $5.2 billion and TAM $2.04 billion over three decades, leaving roughly $221 million over the life of the MTP for new transit projects to expand the regional transit system. Transit expenditures are estimated for the region for bus and streetcar operations.

Regional O&M expenditures transit- $5.2 billion
O&M costs include the transit agencies’ current and future responsibilities and commitments to keep buses rolling and facilities maintained.

- Bus -- $4.9 billion
- Streetcar -- $.3 billion

Regional TAM expenditures transit- $2.04 billion
The KCATA and Streetcar TAM plans include systematic life-cycle costs to maintain and improve public transportation assets.

- Bus -- $1.9 billion
- Streetcar -- $.14 billion

Regional constrained project expenditures transit - $.15 billion
After accounting for O&M and TAM costs, remaining revenues were available for fiscally constrained projects to expand the transit system. As with non-transit projects the region must demonstrate revenue constraint that revenues equal or exceeds expenditures.

- Transit projects - $.15 billion
Other modes

Other transportation modes such as bicycle, pedestrian and truck freight projects are accounted for from roadway fund revenues. Bikeway and pedestrian improvements may also be incorporated in other highway or transit projects without being specifically identified in the plan.

NEW FUNDING SOURCES FOR FUTURE CONSIDERATION

The region is approaching a crossroads about how we fund transportation. While trends in vehicle fuel efficiency, electrification of the vehicle fleet, shifts towards online shopping, and other innovations provide significant regional environmental, economic and other benefits, they will also place pressure on the traditional funding sources identified above. The following examples illustrate the revenue potential of several new funding sources as well as some of the policy considerations associated with them. This plan encourages regional leaders to develop one or more of these or other new funding sources to address future funding needs for the transportation system.

Estimates of potential annual gross revenues from the sources above are shown in the following table.

<table>
<thead>
<tr>
<th>Potential revenue sources</th>
<th>Potential annual gross revenues ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional investment district sales tax (0.5%)(^1)</td>
<td>Kansas $73.0</td>
</tr>
<tr>
<td></td>
<td>Missouri $81.9</td>
</tr>
<tr>
<td></td>
<td>Total $154.9</td>
</tr>
<tr>
<td>Road user charge (1.7 cent per mile)(^2)</td>
<td>Kansas $61.5</td>
</tr>
<tr>
<td></td>
<td>Missouri $64.4</td>
</tr>
<tr>
<td></td>
<td>Total $125.9</td>
</tr>
<tr>
<td>Internet sales tax (1%)(^3)</td>
<td>Kansas $14.6</td>
</tr>
<tr>
<td></td>
<td>Missouri $16.4</td>
</tr>
<tr>
<td></td>
<td>Total $31.0</td>
</tr>
<tr>
<td>Local motor fuels taxes (1 cent per gallon)(^4)</td>
<td>Kansas $3.7</td>
</tr>
<tr>
<td></td>
<td>Missouri $8.1</td>
</tr>
<tr>
<td></td>
<td>Total $11.9</td>
</tr>
<tr>
<td>Sales tax on motor fuels (4%)(^5)</td>
<td>Kansas $2.3</td>
</tr>
<tr>
<td></td>
<td>Missouri $4.9</td>
</tr>
<tr>
<td></td>
<td>Total $7.1</td>
</tr>
</tbody>
</table>

Regional investment district sales tax

Legislation currently exists in Missouri to allow creation of a special funding district to collect up to a ½ cent sales tax for public transit purposes (MO Rev Stat § 70.515-70.545), although it has not been implemented. Similar legislation would need to be enacted in Kansas and county-wide elections in one or more counties would be required to levy and collect the tax.

Pros

- Pool funds raised across the region to pay for improvements that are regional in nature
- Benefit residents throughout the metro area

Cons

- As with other sales taxes, these would have a higher impact on low-income households as an overall percent of their incomes than on higher-income households.

---

\(^1\) Kansas and Missouri Departments of Revenue 2018 sales

\(^2\) MARC travel demand model

\(^3\) Kansas and Missouri Departments of Revenue 2018 sales

\(^4\) U.S. Energy Information Administration

\(^5\) Kansas and Missouri Departments of Revenue. Sales subject to sales tax only. Does not include use tax.
**Road user charges**

Road user charges (RUC) are distance-based taxes or fees typically calculated based on vehicle miles traveled (VMT). Under this concept, motorists would pay fees based on distance driven and, perhaps, on other costs. The methods of collecting these charges could range from electronic transmittal of mileage data directly from vehicles to manual reporting of each vehicle’s odometer reading, perhaps taken during an annual inspection.

There is federal debate on merits associated with implementing a road user type charge nationally. MoDOT received a grant from FHWA (Surface Transportation System Funding Alternatives in 2020) to evaluate miles-based user fees and road user charges. Road user charges would require new federal or state legislation. The estimates below are based on current annual estimates of regional VMT and a 1.7 cent per-mile tax or fee, consistent with pilot RUC programs in Oregon and other states.

**Pros**
- RUC would provide a direct connection between user payments and use of the system.
- RUC could provide pricing signals to users via variable pricing or congestion, to promote public benefits such as congestion mitigation and emission reductions.
- Basic per-mile charge could be adjusted based on any number of factors, such as the time of day a trip is taken, the place of travel, the weight of the vehicle, and the emissions of the vehicle’s engine.

**Cons**
- Public concerns about personal privacy.
- Higher collection and enforcement costs (estimates range from 5% to 13% of collections); the administrative challenge of collecting the charge

**Internet sales tax**

One way of increasing transportation revenues is to create an internet sales tax for transportation. The concept is based on an idea that internet sales cause additional use/strain of the transportation system and there should be an additional cost to support that use. The revenue estimates below assume that approximately 10 percent of all sales are online internet purchases.

**Pros**
- Would capture revenue from online sales which require transportation infrastructure for deliveries.
- Would partially mitigate one competitive disadvantage of local brick and mortar retailers verses out of region on-line sellers.

**Cons**
- At times internet business appear to operate from ambiguous locations increasing regulatory cost for identification and enforcement.
- As with other sales taxes, these would have a higher impact on low-income households as an overall percent of their incomes than on higher-income households.

**Local motor fuels taxes**

Traditional fuel tax on gasoline, diesel and the Leaking Underground Storage Tank fee not indexed to inflation. Increase in fuel tax revenue is based on an increased in total gallons consumed. Assumes a one cent per gallon tax.
Pros

- Higher gas tax rates prompt some people to drive less resulting in benefits for society and the environment.

Cons

- Unless indexed for in inflation, future purchasing power could decline with inflation and reduced fuel consumption.
- As with sales taxes, these would have a higher impact on low-income households as an overall percent of their incomes than on higher-income households.

Sales tax on motor fuels

Legislation introduced in Missouri in 2019 (HB 1157) would have created regional transportation funding districts with the capacity to collect sales taxes on motor fuels at the local level above the per-gallon motor fuels taxes collected at the state level. These would require authorization by counties and local elections to allow creation of the authority and collection of the tax. Since these would be based on the value of fuel sold, sales tax revenues on fuel could rise from year to year even if consumption does not increase. Conversely, however, a decline in motor fuel prices could lead to a reduction in sales tax revenue. Possible annual revenues based on a four percent motor fuels tax.

Other potential sources

In addition to the area-wide funding sources described above, other funding and financing tools may be applicable for specific projects. These include the potential to toll certain bridges or roadways at fixed or variable rates based on demand, value-capture methods where transportation investments increase the value of adjacent land or property, public-private partnerships to share risk and accelerate project delivery where project revenues are available.