

The slide features a light blue background with a dark blue triangular area in the bottom-left corner. A white circle is centered in the upper-left quadrant, containing the text 'CHAPTER 4' in a gold, sans-serif font. The circle is surrounded by a light blue ring. Two parallel diagonal lines, one gold and one white, cross the circle from the top-left to the bottom-right.

CHAPTER 4

CHAPTER 4

PAYING OUR WAY FORWARD

In accordance with federal fiscal constraint requirements (23 U.S.C. § 134(i)(2) (E)), this chapter and a more detailed Transportation Finance Technical Report identify how much money SCAG reasonably expects will be available to support our region’s surface transportation investments, ensuring that there is sufficient revenue available to support expenditures identified in Connect SoCal. SCAG has secured the necessary resources to support transportation investments detailed in past Plans, and our current financial plan will continue to meet the necessary milestones to implement Connect SoCal.

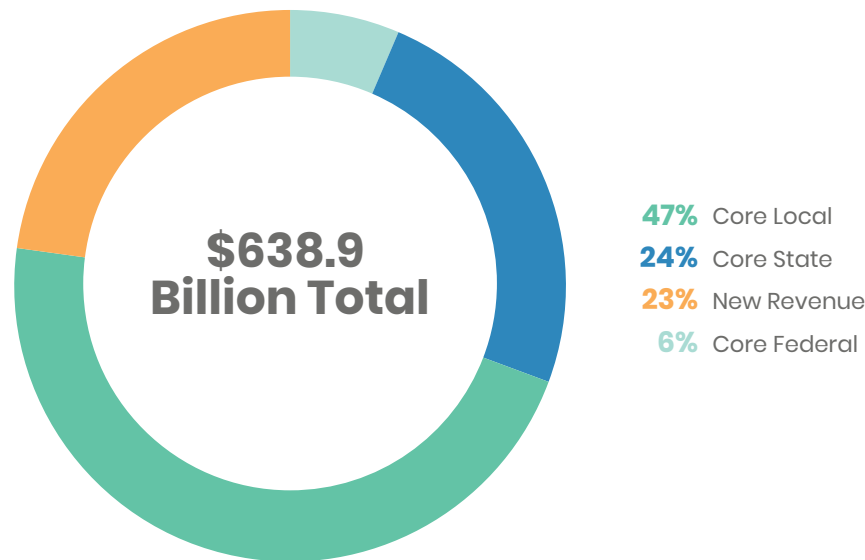
The financially constrained Connect SoCal includes both a “traditional” core revenue forecast comprised of existing local, state, and federal sources and more innovative but reasonably available sources of revenue to implement a program of improvements that keeps people and goods moving. The financial plan further documents progress made since past RTPs and describes steps we can take to obtain needed revenues to implement the region’s transportation vision.

The SCAG region’s financially constrained Connect SoCal plan includes revenues from both core and reasonably available revenue sources, which together total \$638.9 billion from FY2020-21 through FY2044-45, as illustrated in **FIGURE 4.1**. For core sources, the Plan is funded 60 percent by local sources, 32 percent by state sources and 8 percent by federal sources.

As shown in **FIGURE 4.2**, capital projects total \$287.3 billion in nominal dollars. Operating and maintenance (O&M) costs total \$316 billion, while debt service obligations total \$35.6 billion. Transit-related costs comprise the largest share of O&M costs for the region, totaling \$173.9 billion.

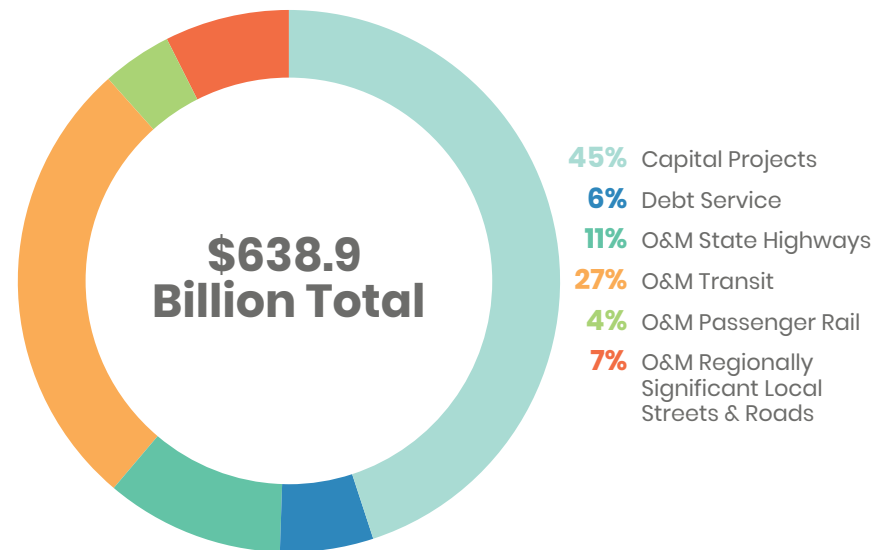
The financial plan highlights the importance of finding new and pioneering ways to pay for transportation, including an ever-expanding backlog of projects necessary to preserve our existing transportation system. Nationally, we continue to face an insolvency crisis with the Federal Highway Trust Fund (HTF), which is funded by excise taxes on fuel. The federal gas tax remains unchanged since 1993, and fuel tax receipts have declined precipitously as fuel efficiency

FIGURE 4.1 FY2021–FY2045 RTP/SCS Revenues, in Nominal Dollars



Note: Numbers may not sum to total due to rounding; Source: SCAG Revenue Model 2020

FIGURE 4.2 FY2021–FY2045 RTP/SCS Expenditures, in Nominal Dollars



Note: Numbers may not sum to total due to rounding; Source: SCAG Revenue Model 2020

has increased. California's passage of the Road Repair and Accountability Act of 2017 (Senate Bill 1) provides a significant influx of new state revenue through a state gas tax increase and other transportation fees, yet only a fraction of our needs is funded through state sources.

Our region continues to rely heavily on local sources of tax revenue. Eight sales tax measures in the region are the key reason that local sources generate 60 percent of core revenues for transportation improvements. Ventura County is the only county in the SCAG region without a sales tax. Our region's success in providing local sources of transportation funding also increases our ability to secure federal and state funding that requires local contribution.

It is vital that we find new ways to make transportation funding more sustainable in the long-term, and efforts are underway to explore how we can transition from our current system, based on fuel taxes, to a more direct system of user fees linked to how people travel. User fees can support our infrastructure needs and promote a more balanced transportation system by encouraging residents and visitors to consider their travel choices. User fees can be structured and implemented to advance environmental, economic and equity goals, including reducing congestion and vehicle miles traveled (VMT), while encouraging active transportation and transit ridership.

In our region, numerous policy and technical studies have been conducted on the subject, and more work is planned to examine and demonstrate the viability of user fee systems, including toll networks, mileage-based user fees to replace fuel taxes, and congestion pricing zones that levy fees based on time-of-day and congestion levels. Connect SoCal includes these user fee based financial strategies to support system management, preservation and resilience, and to contribute to the region's greenhouse gas reduction goals. SCAG further considers the potential equity concerns that accompany pricing policies and assumes mitigation measures such as the establishment of a mobility equity fund to provide resources that can increase access for environmental justice communities.

ECONOMIC OUTLOOK & KEY FINANCIAL ASSUMPTIONS

SCAG's financial model reflects historical growth trends and reasonable future expectations for key revenue sources, which are described below. These include:

- Inflation
- Construction cost increases
- Retail sales growth
- Fuel consumption
- Status of the Federal Highway Trust Fund
- Status of the State Highway Account
- Local sales tax measures
- Transit operating and maintenance (O&M) costs
- Multimodal system preservation and maintenance

INFLATION

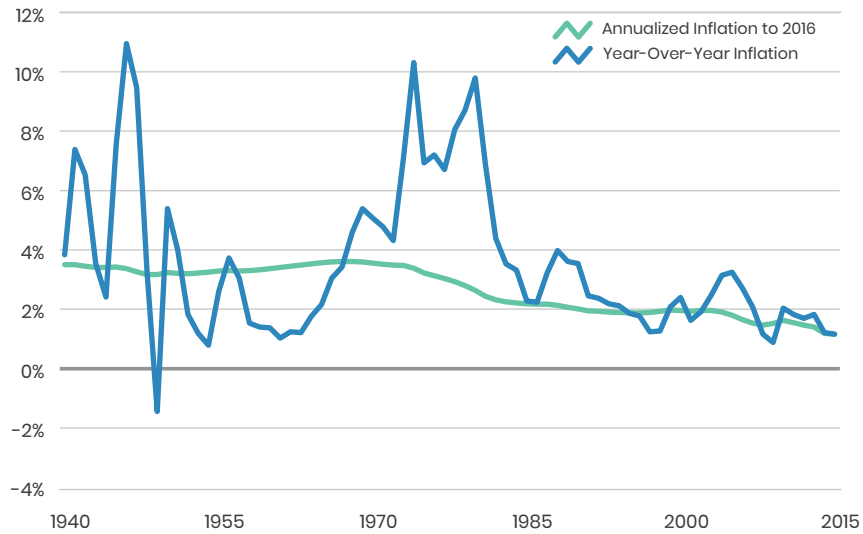
Inflation can have a profound impact over the long-term time horizon of the Plan. SCAG's revenue model accounts for historical inflation trends, as measured by the Gross Domestic Product (GDP) Price Deflator.

FIGURE 4.3 shows the trends in inflation by the GDP Price Deflator. Although inflation rates have varied considerably over time, they have generally trended between two and 4 percent. Accordingly, a 2.2 percent inflation rate is used to adjust constant dollar (revenue) forecasts into nominal (or year-of-expenditure) dollars.

CONSTRUCTION COST INCREASES

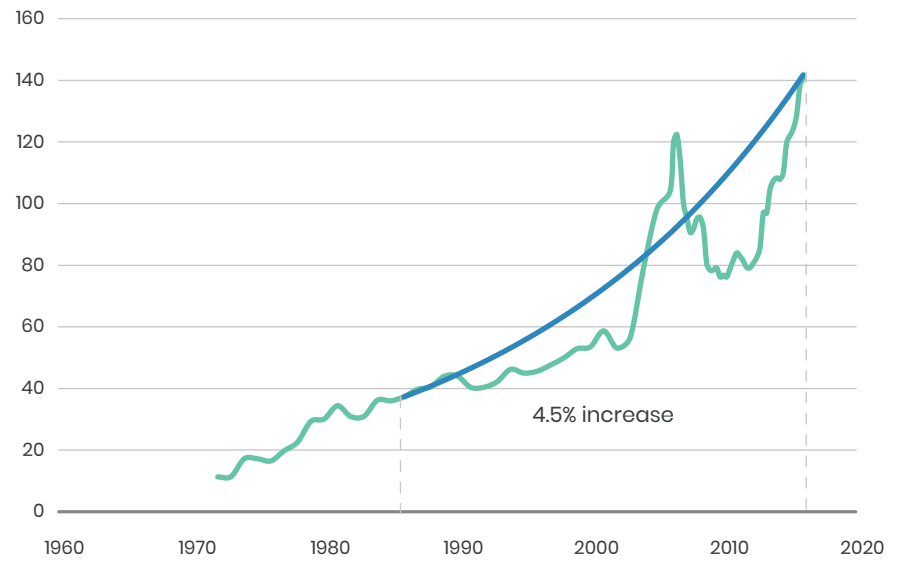
The rise in construction costs can further erode the purchasing power of transportation revenues. **FIGURE 4.4** shows the increase and decline in California highway construction costs since the early 1970s, which is well above general inflation. The financial plan uses a 4.5 percent annual inflation factor to estimate future and nominal (or year-of-expenditure) costs.

FIGURE 4.3 Historical Inflation Trends, Annual Inflation



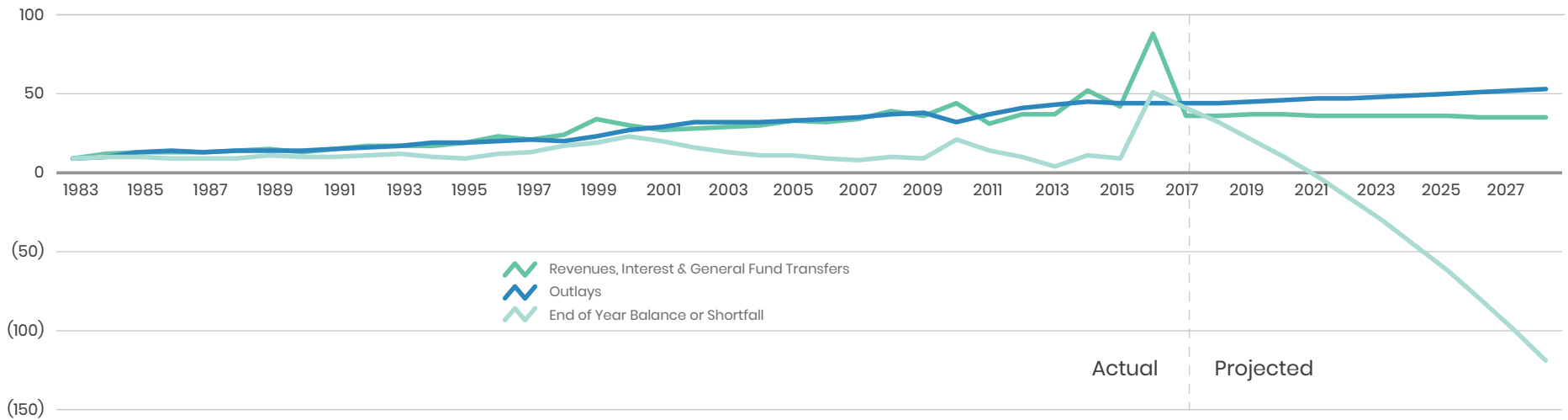
Source: Office of Management and Budget, Budget of the United States Government, Fiscal Year 2019 Budget (FY2019)

FIGURE 4.4 Growth in Highway Capital Costs, Index Value



Source: California Department of Transportation

FIGURE 4.5 Status of the Federal Highway Trust Fund, \$ Billions



Source: Congressional Budget Office and Federal Highway Administration

RETAIL SALES GROWTH

Changes in personal consumption patterns and overall population are the main contributors to the growth in retail sales. Over the 30-year period from FY1985-86 to FY2015-16, statewide retail sales grew by 1.5 percent in real terms (when the effects of inflation are eliminated). The financial plan assumes retail sales growth in the SCAG region ranging from -0.1 percent to 3.2 percent in real terms consistent with historical trends.

FUEL CONSUMPTION

Excise taxes on gasoline and diesel fuels are the basis of most federal and state transportation funding sources. Since these taxes are based on cents-per-gallon purchased, they depend on fuel consumption. Though changes in regional vehicle miles traveled will continue to play a role during the Plan period, increases in conventional fuel efficiency and the adoption of alternative fuel vehicles will reduce overall fuel consumption. The financial plan assumes that increases in vehicle fuel efficiency will reduce fuel consumption by 1 percent per year during the Plan period. Recently passed state legislation, Senate Bill 1, increased state fuel tax rates and will index these taxes to inflation in future years using the California Consumer Price Index (CPI). The combination of assumptions about declining fuel consumption and increasing excise tax rates leads to modest growth in the revenue sources funded by state fuel taxes in real terms.

STATUS OF THE FEDERAL HIGHWAY TRUST FUND

The Federal Highway Trust Fund (HTF) provides federal highway and transit funding from a nationally imposed 18.3 cent-per-gallon gasoline excise tax. Since 2008, the HTF has failed to meet its obligations and has required the United States Congress to make transfers from the General Fund to keep it solvent. The negative balances shown on **FIGURE 4.5** illustrate the projected inability of the HTF to pay its obligations into the highway account.

At the time of the Connect SoCal plan, nearly a decade has passed without substantive Congressional agreement on a long-term solution to provide adequate funding for the HTF and address the present, long-term structural

deficiency that exists in funding the HTF. Although the financial plan assumes that Congress will reach agreement on reauthorizing federal spending for transportation programs over the plan horizon, the core revenues available from the HTF are expected to decline due to increasing fuel efficiency and other factors.

STATUS OF THE STATE HIGHWAY ACCOUNT

The passage of California's Senate Bill 1 (SB 1) created a significant source of ongoing state transportation funding described in **TABLE 4.1**. SB 1 increased the gas excise tax from 18 cents per gallon to 47.3 cents per gallon (as of July 1, 2019), and further indexed the gas tax to inflation going forward. Prior to passage of SB 1, the effective state gas excise tax rate of 18 cents per gallon remained unadjusted for more than 20 years. SB 1 additionally instituted per vehicle fees pegged to vehicle value to raise revenue for various transportation system improvements. It also enacted an annual fee on zero-emission vehicles (ZEVs). Most of these fees are indexed to the CPI. However, these fees do not completely address the erosion of purchasing power as construction costs are rising faster than the general inflation rate.

Gas tax revenues remain the primary source of funding for the State Highway Operation and Protection Program (SHOPP), which funds projects to maintain the state highway system. As shown in **FIGURE 4.6**, previous levels of funding have been considerably less than actual needs. Statewide, the 2018 Ten-Year SHOPP Plan identifies \$85.8 billion in statewide needs, while available funding is only \$44.9 billion. While SB 1 provides a key down payment, rising construction costs could undermine efforts to bring our highway assets back to a state of good repair.

LOCAL SALES TAX MEASURES

The SCAG region continues to rely heavily on local sales tax measures for the timely delivery of transportation projects. While most counties impose a 0.5 percent sales tax to fund transportation projects, Los Angeles County effectively imposes a permanent 2 percent sales tax (a combination of four 0.5 percent sales taxes—Proposition A, Proposition C, Measure R, and Measure M) as Measure M increases from 0.5 to 1 percent upon the expiration of Measure R.

Riverside County's Measure A also expires in 2039. Measure I in San Bernardino County expires in 2040, followed by Orange County's Measure M in 2041. Measure D in Imperial County expires in 2050. Ventura County is the only county in the region without a dedicated sales tax for transportation.

TRANSIT OPERATING & MAINTENANCE COSTS

Future transit O&M costs depend on a variety of factors, such as future revenue-miles of service, labor contracts and the age of rolling stock. Over the last decade, these O&M costs grew by up to 5 percent annually, depending on the transit operator.

For Connect SoCal, transit O&M costs are estimated based upon historical increases. The regional average increase (3.3 percent) is used for most

operators. For Los Angeles County, the financial plan relies on detailed forecasts from the county transportation commission. These forecasts are consistent with historical data.

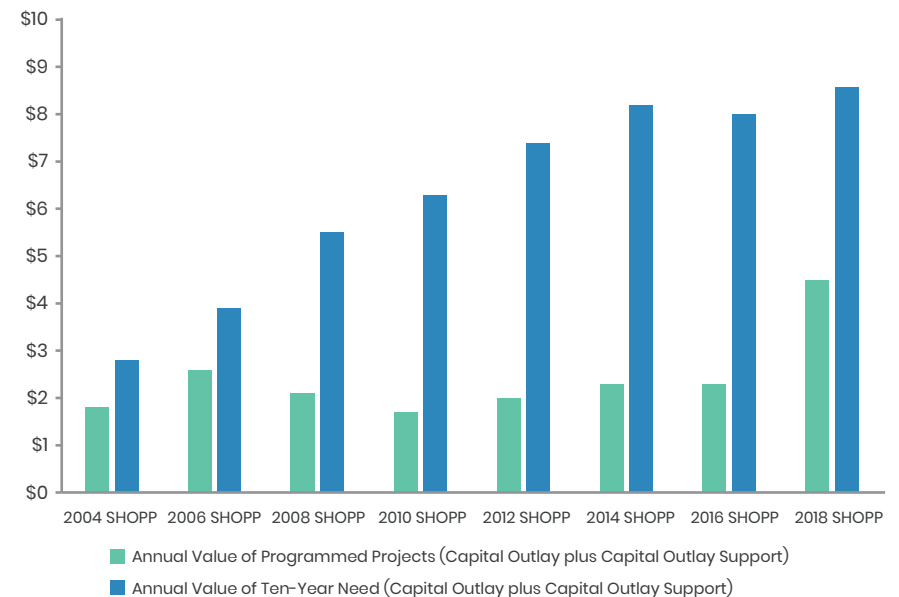
MULTIMODAL SYSTEM PRESERVATION & MAINTENANCE

TABLE 4.2 summarizes the total system preservation and maintenance needs assumed in Connect SoCal to bring transit, regionally significant local streets and roads, and the State Highway System to a state of good repair.

TABLE 4.1 California SB 1 Fees & Funding Programs

Fee	Description	Amount	Uses
Gas Tax	A per gallon excise tax on gasoline purchases	47.3 cents, indexed to the California CPI	Road Maintenance and Rehabilitation
Diesel Tax	A per gallon excise tax on diesel purchases	41.75 cents, indexed to the California CPI	Trade Corridor Enhancement Road Maintenance and Rehabilitation
Diesel Sales Tax	Percentage sales tax on diesel purchases	5.75%	Transit Improvements
Transportation Improvement Fee	An annual per-vehicle fee that varies according to the vehicle value	\$25-\$175 per vehicle, per year. Not adjusted for inflation	Road Maintenance and Rehabilitation Congested Corridors Program Transit Improvements
Zero Emissions Vehicle (ZEV) Registration Fee	An annual per-vehicle fee on all ZEVs	\$100 per year, indexed to the California CPI	Road Maintenance and Rehabilitation

FIGURE 4.6 Status of the State Highway Operation & Protection Program (SHOPP), Billions



Source: California Department of Transportation

REVENUE & EXPENDITURE CATEGORIES

CORE & REASONABLY AVAILABLE REVENUES

The Connect SoCal financial plan includes two types of revenue forecasts. Both are included in the financially constrained plan:

- Core revenues
- Reasonably available revenues

The core revenues identified are existing transportation funding sources projected to FY2044-45. The core revenue forecast does not include any future increases in state or federal gas excise tax rates (other than those described previously related to SB 1 or adoptions of new tax measures). These revenues provide a benchmark from which additional funding can be identified.

Federal guidelines additionally permit the inclusion in the financial plan of revenues that are reasonably available. Further, the Plan includes strategies for ensuring the availability of these sources. The region’s reasonably available revenues include new sources of transportation funding likely to materialize within the Connect SoCal timeframe. These sources include:

- Adjustments to the existing federal gas tax rate
- Replacement of existing state and federal gas excise taxes with more direct mileage-based user fees
- Federal credit assistance and bond proceeds
- Private investment participation
- A local road charge program
- Value capture strategies
- A per-mile charge for Transportation Network Companies (e.g. Uber and Lyft)

TABLE 4.2 Multimodal System Preservation & Maintenance Needs, in Nominal Dollars, Billions

System	State of Good Repair Needs Included in Estimate	Estimated State of Good Repair Cost
Transit	O&M Existing Service; O&M Service Expansion; O&M Major New Service; Preservation	\$173.9
Passenger Rail	O&M Existing Service; O&M Service Expansion; O&M Major New Service; Preservation	\$26.6
Regionally Significant Local Streets and Roads*	Pavement; Essential Components; Bridges; Goods Movement Corridors; Active Transportation Safety Improvements	\$47.5
State Highways	Bridges, Pavement, Roadside; Mobility, Collision Reduction; Mandates, Facilities; Emergency Response	\$68.0
Total		\$316.0

Note: Numbers may not sum to total due to rounding
 * Includes \$4.8 billion for active transportation & \$5 billion GM arterial

EXPENDITURE CATEGORIES

Transportation expenditures in the SCAG region are summarized into three main categories:

- Capital costs for transit, state highways, and local streets and roads (including regionally significant arterials). This category includes programmatic investments in transportation demand management (TDM), transportation system management, etc.
- Operating and maintenance costs for transit, state highways and local streets and roads (including regionally significant arterials)
- Debt service payments (for current and anticipated bond issuances)

CORE REVENUES

SCAG’s regional core revenue model forecasts transportation revenues over the entire Connect SoCal time horizon. The revenue model is comprehensive and provides data by county and funding source. The revenue forecast was developed using the following framework:

- Incorporate financial planning documents developed by local county transportation commissions and transit operators in the region, where available
- Ensure consistency with both local and state planning documents
- Utilize published data sources to evaluate historical trends
- Conduct sensitivity testing of assumptions to augment local forecasts, as needed

The region’s revenue forecast horizon for the financial plan is FY2020-21 through FY2044-45. **TABLE 4.3** shows these core revenues in five-year increments by county.

TABLE 4.3 Core Revenue Forecast FY2021–FY2045, in Nominal Dollars, Billions

County	FY2021–FY2025	FY2026–FY2030	FY2031–FY2035	FY2036–FY2040	FY2041–FY2045	Total
Imperial	\$0.4	\$0.5	\$0.6	\$0.7	\$0.9	\$3.1
Los Angeles	\$47.3	\$53.8	\$63.9	\$73.7	\$83.6	\$322.1
Orange	\$11.4	\$13.2	\$15.9	\$19.3	\$20.4	\$80.3
Riverside	\$5.9	\$6.4	\$7.4	\$8.2	\$8.4	\$36.3
San Bernardino	\$5.6	\$6.5	\$7.5	\$8.7	\$8.4	\$36.8
Ventura	\$2.1	\$2.4	\$2.8	\$3.3	\$3.9	\$14.5
Total	\$72.6	\$82.9	\$98.1	\$114.0	\$125.5	\$493.1

Note: Numbers may not sum to total due to rounding

As shown in **FIGURE 4.7**, the majority of revenues in the SCAG region come from local sources (60 percent). The share of state sources has increased since the last RTP from 11 percent share of core revenues to 32 percent as a result of the passage of SB 1.

FIGURE 4.8 shows the breakdown of revenues by county. With four local sales tax measures, Los Angeles County accounts for 65 percent of the funding available in the SCAG region. This includes revenues from the passage of Measure M since the adoption of the 2016 Connect SoCal.

Local sales taxes provide the largest single source of local funding, as shown in **FIGURE 4.9**. These taxes account for more than half (57 percent) of local sources in the plan.

As shown in **FIGURE 4.10**, the State Highway Operations and Protection Program (SHOPP), the Highway User Tax Account (HUTA), the Road Maintenance and Rehabilitation Account (RMRA), and the State Transit Assistance fund (STA) account for the bulk of the state funding available.

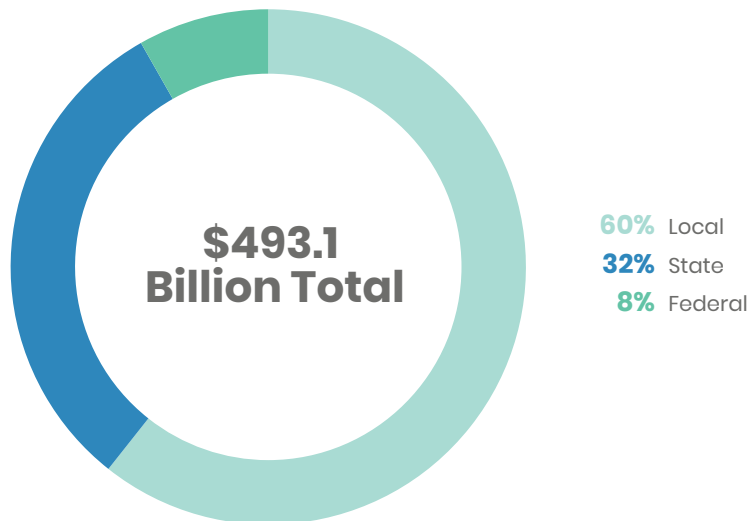
As shown in **FIGURE 4.11**, federal sources are expected to comprise a small portion of overall transportation funds (\$41.1 billion or eight percent share of core revenues). This is consistent with past RTPs. Federal Transit Administration (FTA) funds account for 61 percent of federal funding in the SCAG region. The financial plan also assumes that Congestion Mitigation and Air Quality funding will decline over the life of the Plan due to the region achieving attainment for a number of criteria pollutants and reducing the severity level of others.

REASONABLY AVAILABLE REVENUES

There are several new funding sources that are reasonably expected to be available for Connect SoCal. The following guiding principles were used for identifying reasonably available revenues:

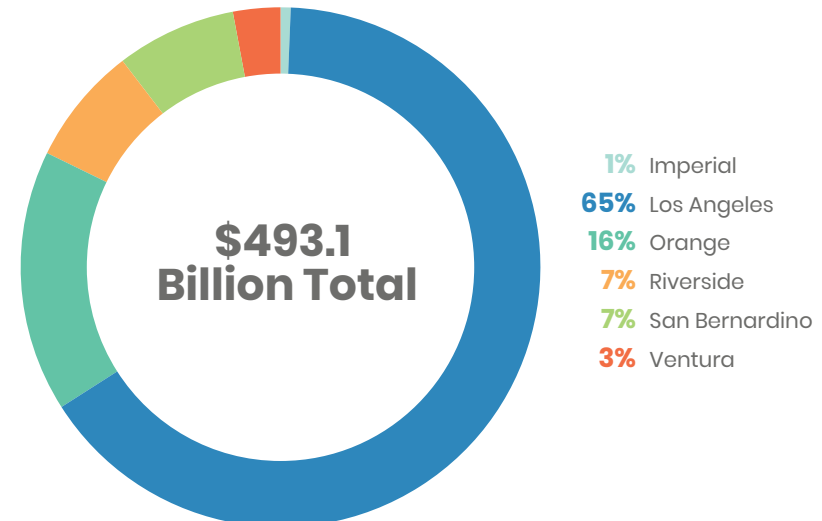
- Establish a user fee-based system that better reflects the true cost of transportation, provides firewall protection for transportation funds and ensures an equitable distribution of costs and benefits
- Promote national and state programs that include return-to-source

FIGURE 4.7 Core Revenues, in Nominal Dollars



Note: Numbers may not sum to total due to rounding; Source: SCAG Revenue Model 2020

FIGURE 4.8 Core Revenues by County, in Nominal Dollars



Note: Numbers may not sum to total due to rounding; Source: SCAG Revenue Model 2020

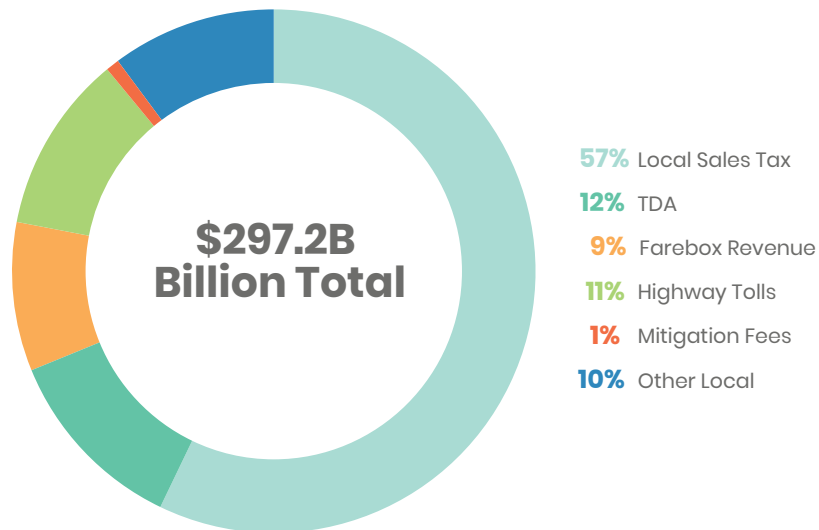
guarantees, while maintaining flexibility to reward regions that continue to commit substantial local resources

- Leverage locally available funding with innovative financing tools (e.g., tax credits and expansion of the Transportation Infrastructure Finance and Innovation Act [TIFIA]) to attract private capital and accelerate project delivery
- Promote local funding strategies that maximize the value of public assets while improving mobility, sustainability, and resilience

TABLE 4.4 identifies seven categories of funding sources that are reasonably available and are included in the financially constrained plan. These sources were identified because of their potential for revenue generation, historical precedence, and the likelihood of their implementation within the time frame of Connect SoCal. For each funding source, SCAG has examined the policy and legal context of implementation and has prepared an estimate of the potential revenues generated.

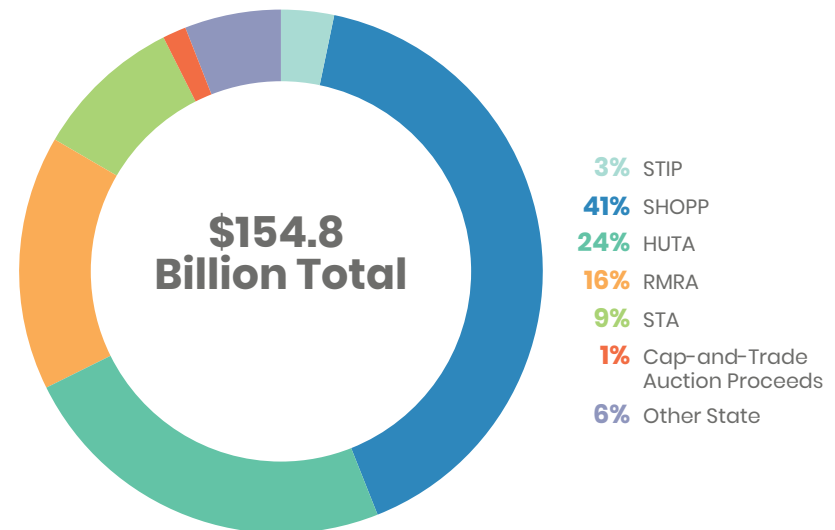
The implementation of road user charges, in particular, will require further collaboration with the California State Transportation Agency, the California Transportation Commission, Caltrans, business, and other key parties on the California Road Charge Pilot Program to address key implementation factors such as: technology and associated privacy issues, cost of implementation and administrative methods for fee collection/revenue allocation, and potential equity concerns. Equity concerns can be addressed through enhanced transportation alternatives for transit dependent populations, and discounts for impacted low-income populations. Connect SoCal assumes the establishment of a Mobility Equity Fund to cover the cost of rebates, credits, or discounts for general mobility expenses including user fees/tolls, parking charges, transit fares and new mobility options. Additional documentation of funding sources included in the financial plan are provided in the Transportation Finance Technical Report.

FIGURE 4.9 Core Revenues, Local Sources, in Nominal Dollars



Note: Numbers may not sum to total due to rounding; Source: SCAG Revenue Model 2020

FIGURE 4.10 Core Revenues, State Sources, in Nominal Dollars



Note: Numbers may not sum to total due to rounding; Source: SCAG Revenue Model 2020

ASSUMPTIONS BY REVENUE SOURCE

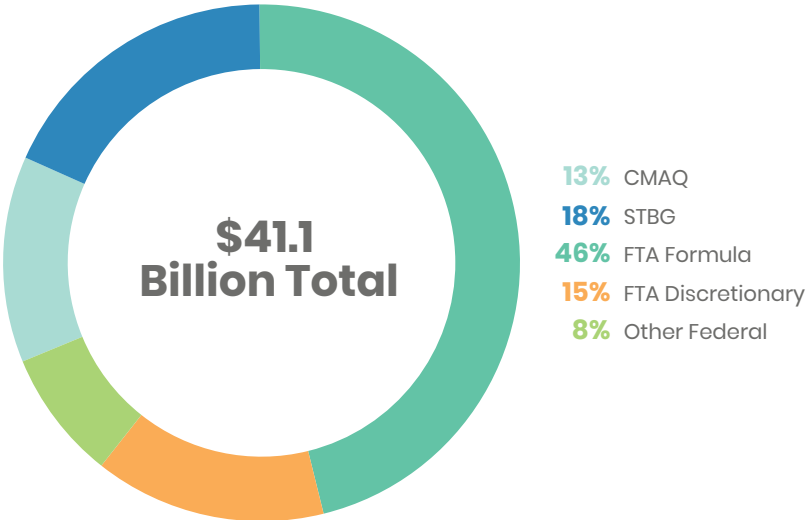
TABLE 4.5 describes the specific revenue assumptions used for the financially constrained 2020 Connect SoCal. A more detailed discussion of revenue sources is included in the Transportation Finance Technical Report.

SUMMARY OF REVENUE SOURCES & EXPENDITURES

TABLE 4.6.1 presents the SCAG region's revenue forecast by source in five-year increments, from FY2020-21 through FY2044-45.

This is followed by TABLE 4.6.2, which provides details of the region's expenditures by category in five-year increments.

FIGURE 4.11 Core Revenues, Federal Sources, in Nominal Dollars



Note: Numbers may not sum to total due to rounding; Source: SCAG Revenue Model 2020

TABLE 4.4 New Revenue Sources & Innovative Financing Strategies, in Nominal Dollars, Billions

Revenue Source	Description	Amount	Actions to Ensure Availability	Responsible Party(ies)
Federal Gas Excise Tax Adjustment to Maintain Historical Purchasing Power	Additional \$0.10 per gallon gasoline tax imposed at the federal level starting in 2025 to 2029—indexed to maintain purchasing power.	\$2.7	Requires action of Congress. Strategy is consistent with recommendations from two national commissions to move immediately with augmenting fuel tax resources through conventional Highway Trust Fund mechanisms.	Congress
Mileage-Based User Fee (Replacement)	Mileage-based user fees would be implemented to replace gas taxes—estimated at about \$0.025 (in 2019 dollars) per mile starting in 2030 and indexed to maintain purchasing power.	\$42.7 (est. increment only)	Requires state enabling legislation and action of Congress. In 2017, California successfully conducted a legislatively-mandated pilot program to study the feasibility of a road charge as a replacement to the gas tax, and is currently pursuing next-step studies. The FAST Act establishes the Surface Transportation System Funding Alternatives program, which provides grants to states to demonstrate alternative user-based revenue mechanisms that could maintain the long-term solvency of the Trust Fund.	State Legislature, Congress
Federal Credit Assistance; Other Bond Proceeds	TIFIA/RRIF credit assistance and other bond financing, pledging new local funding (e.g., mileage-based road charge program funding) to help finance specific initiatives including SCORE.	\$2.2	Issuance of debt and TIFIA/RRIF credit agreement terms subject to County Transportation Commissions' respective board policies, and potentially the Southern California Regional Rail Authority (SCRRA).	County Transportation Commissions and USDOT Build America Bureau; other potential parties include SCRRA.
Private Investment	XpressWest, to construct and operate high-speed rail service from the Victor Valley to Las Vegas along the I-15 corridor. Revenue estimate would cover construction costs for the San Bernardino County portion only. This category of funding also assumes private funding for SCAG-region portion of California High-Speed Rail Phase 1; various freight related initiatives.	\$12.7	Contingent upon financing efforts by XpressWest and necessary approvals. Similarly, contingent upon private financing for California High-Speed Rail. For freight investments, contingent upon private entities in the region, including freight railroads.	XpressWest; private partners; freight railroads as may be applicable.

TABLE 4.4 New Revenue Sources & Innovative Financing Strategies, in Nominal Dollars, Billions – Continued

Revenue Source	Description	Amount	Actions to Ensure Availability	Responsible Party(ies)
Local Road Charge Program	Local road charge program assumes a \$0.015 (in 2019 dollars) per mile charge throughout the region that can be implemented on a county basis. This can be adjusted by time-of-day and location with congestion pricing and/or parking pricing at major activity centers. For analysis, also assumed congestion pricing (peak period charges) in parts of Los Angeles County, along with increases in parking pricing at major job centers as a part of the regional job centers strategy.	\$77.8	Requires state enabling legislation for at least two components--mileage-based user fees and congestion pricing. Parking pricing would be subject to local policies.	MPO, CTCs, Caltrans, and FHWA as may be applicable; local jurisdictions.
Value Capture Strategies	Assumed the use of EIFDs and tax increment financing (TIF) to support investment in transit supportive housing infrastructure needs.	\$3.0	Pursue necessary approvals for district formation and TIF.	Local jurisdictions
Transportation Network Company (TNC) Mileage-Based Fee	User fees on TNC mileage —estimated at about \$0.05 (in 2019 dollars) per mile starting in 2021.	\$4.7	Requires state enabling legislation to implement at local level. Currently being explored by LA Metro and a similar measure was approved by voters in San Francisco in 2019.	MPO, CTCs, California Public Utilities Commission, State Legislature

TABLE 4.5 Summary of Revenue Sources

4.5.1 Core & Reasonably Available Revenue Projections—Local Core Revenue Sources, in Nominal Dollars, Billions		
Revenue Source	Revenue Projection Assumptions	Revenue Estimate
Local Option Sales Tax Measures	<p>Description: Locally imposed ½ percent sales tax in four counties (Imperial, Orange, Riverside, and San Bernardino). Permanent 2 percent sales tax in Los Angeles County (combination of two permanent ½ percent sales taxes, Measure R through 2039, and Measure M, which will increase from 1/2 percent to 1 percent upon the expiration of Measure R). Measure D in Imperial County expires in 2050; Measure M in Orange County expires in 2041; Measure A in Riverside County expires in 2039; and Measure D in San Bernardino County expires in 2040.</p> <p>Assumptions: Sales taxes grow consistent with county transportation commission forecasts and historical trends.</p>	\$169.8
Transportation Development Act (TDA)—Local Transportation Fund	<p>Description: The Local Transportation Fund (LTF) is derived from a ¼ cent sales tax on retail sales statewide. Funds are returned to the county of generation and used mostly for transit operations and transit capital expenses.</p> <p>Assumptions: Same sales tax growth rate as used for local option sales tax measures.</p>	\$34.7
Transit Farebox Revenue	<p>Description: Transit fares collected by transit operators in the SCAG region.</p> <p>Assumptions: Farebox revenues increase consistent with historic trends, planned system expansions, and operator forecasts.</p>	\$27.3
Highway Tolls	<p>Description: Revenues generated from toll roads operated by the Transportation Corridor Agencies (TCA), from the SR-91 Express Lanes operated by the Orange County Transportation Authority (OCTA) and Riverside County Transportation Commission (RCTC), and from the MetroExpress Lanes along I-10 and I-110 in Los Angeles County.</p> <p>Assumptions: Toll revenues grow consistent with county transportation commission forecasts and historical trends.</p>	\$32.7
Mitigation Fees	<p>Description: Revenues generated from development impact fees. The revenue forecast includes fees from the Transportation Corridor Agencies (TCA) development impact fee program, San Bernardino County's development impact fee program and Riverside County's Transportation Uniform Mitigation Fee (TUMF) for both the Coachella Valley and Western Riverside County.</p> <p>Assumptions: The financial forecast is consistent with revenue forecasts from TCA, Coachella Valley Council of Governments, Western Riverside Council of Governments, and the San Bernardino County Transportation Commission (SBCTA).</p>	\$2.5
Other Local Sources	<p>Description: Includes local revenue sources such as general funds, transit advertising and auxiliary revenues, lease revenues and interest and investment earnings from reserve funds. For Los Angeles County, interest income from Propositions A and C and Measure R are included under this source. Income from financing is also included, while principal and interest payments are included as part of debt service.</p> <p>Assumptions: Revenues are based on financial data from transit operators and local county transportation commissions.</p>	\$30.2
Local Subtotal		\$297.2

Note: Numbers may not sum to total due to rounding

TABLE 4.5 Summary of Revenue Sources – Continued

4.5.2 Core & Reasonably Available Revenue Projections—State Revenue Sources, in Nominal Dollars, Billions		
Revenue Source	Revenue Projection Assumptions	Revenue Estimate
State Transportation Improvement Program (STIP)	<p>Description: The STIP is a five-year capital improvement program that provides funding from the State Highway Account (SHA) for projects that increase the capacity of the transportation system. The SHA is funded through a combination of state gas excise tax, the Federal Highway Trust Fund, and truck weight fees. The STIP may include projects on state highways, local roads, intercity rail, or public transit systems. The Regional Transportation Planning Agencies (RTPAs) propose 75 percent of STIP funding for regional transportation projects in Regional Transportation Improvement Programs (RTIPs). Caltrans proposes 25 percent of STIP funding for interregional transportation projects in the Interregional Transportation Improvement Program (ITIP).</p> <p>Assumptions: Funds are based upon the 2020 STIP Fund Estimate, 2020 STIP Commission Staff Recommendations, February 28, 2020. Fuel consumption declines in real terms by 1 percent due to increasing fuel efficiency.</p>	\$5.1
State Highway Operation and Protection Plan (SHOPP)	<p>Description: Funds state highway maintenance and operations projects.</p> <p>Assumptions: Short-term revenues are based on overlapping 2016 and 2018 SHOPP programs. Long-term forecasts are consistent with STIP forecasts and assume decline in fuel consumption. As with the HUTA and STA, a portion of SHOPP revenues are indexed due to passage of SB 1, which offsets the effect of the increase in fuel efficiency.</p>	\$63.0
Highway Users Tax Account (HUTA)	<p>Description: Gas tax revenue apportionments distributed via the HUTA to counties and cities in the region.</p> <p>Assumptions: The forecast is based on current funding levels reported by the State Controller. Future funding declines with fuel consumption using assumptions consistent with other sources.</p>	\$36.7
Road Maintenance and Rehabilitation Account (RMRA)	<p>Description: The RMRA was established by SB 1 and is funded by new diesel and gas excise taxes, a transportation improvement fee, and electric vehicle fee. Although the RMRA also provides SHOPP funding, for purposes of the 2020 RTP/SCS financial plan, it only reflects the portion directed to counties and cities.</p> <p>Assumptions: SB 1 indexes the sources for RMRA, offsetting the decline due to fuel efficiency.</p>	\$24.3
State Transit Assistance Fund (STA)	<p>Description: The STA is funded by diesel sales taxes and the transportation improvement fee established under SB 1. SB 1 also created a State of Good Repair Program associated with the STA, which for purposes of this financial plan are included in the STA figures.</p> <p>Assumptions: The forecast is based on current funding levels reported by the State Controller. Future funding declines with fuel consumption but is offset by SB 1 indexing using assumptions consistent with other sources.</p>	\$14.2
Cap-and-Trade Auction Proceeds	<p>Description: The Global Warming Solutions Act of 2006 (AB 32) established the goal of reducing greenhouse gas (GHG) emissions statewide to 1990 levels by 2020. In order to help achieve this goal, the California Air Resources Board (ARB) adopted a regulation to establish a cap-and-trade program that places a “cap” on the aggregate GHG emissions from entities responsible for roughly 85 percent of the state’s GHG emissions. As part of the cap-and-trade program, ARB conducts quarterly auctions where it sells emission allowances. Revenues from the sale of these allowances fund projects that support the goals of AB 32, including transit and rail investments. Funds associated with non-transportation and High-Speed Rail are not included in this amount.</p> <p>Assumptions: The forecast is based on current funding levels reported by the State Controller for the Low Carbon Transit Operations Program and award lists as reported by Caltrans. Given the uncertainty about future allowance prices, annual growth is assumed to be flat and is assumed to end after 2030.</p>	\$2.2
Other State Sources	<p>Description: Other state sources include remaining SB 1 competitive program awards; the Active Transportation Program (ATP); and other miscellaneous state grant apportionments for the SCAG region.</p> <p>Assumptions: Short-term revenues are based on actual apportionments. Future Active Transportation Program funding declines with fuel consumption using assumptions consistent with other sources.</p>	\$9.2
State Subtotal		\$154.8

Note: Numbers may not sum to total due to rounding

TABLE 4.5 Summary of Revenue Sources – Continued

4.5.3 Core & Reasonably Available Revenue Projections—Federal Core Revenue Sources, in Nominal Dollars, Billions		
Revenue Source	Revenue Projection Assumptions	Revenue Estimate
FHWA Non-Discretionary Congestion Mitigation and Air Quality (CMAQ) Program	<p>Description: Program to reduce traffic congestion and improve air quality in non-attainment areas.</p> <p>Assumptions: Short-term revenues are based upon the Caltrans apportionment estimates. Long-term revenues assume that fuel consumption declines by 1 percent (in real terms) annually. CMAQ funding is assumed to be reduced by 25 percent in 2027, an additional 25 percent in 2032, and an additional 25 percent in 2037 due to improved air quality.</p>	\$5.3
FHWA Non-Discretionary Surface Transportation Block Grant (STBG)	<p>Description: Projects eligible for STBG funds include rehabilitation and new construction on any highways included in the National Highway System (NHS) and Interstate Highways (including bridges). Also, transit capital projects, as well as intracity and intercity bus terminals and facilities, are eligible.</p> <p>Assumptions: Short-term revenues are based upon the Caltrans apportionment estimates. Long-term revenues assume that fuel consumption declines by 1 percent (in real terms) annually.</p>	\$7.5
FTA Formula Programs 5307 Urbanized Area Formula, 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Formula, 5311 Rural Formula, 5337 State of Good Repair Formula, and 5339 Bus and Bus Facilities Formula	<p>Description: This includes a number of FTA programs distributed by formula. 5307 is distributed to state urbanized areas with a formula based upon population, population density, number of low-income individuals, and transit revenue and passenger miles of service. Program funds capital projects, planning, job access and reverse commute projects, and operations costs under certain circumstances. 5310 funds are allocated by formula to states for projects providing enhanced mobility to seniors and persons with disabilities. 5311 provides capital, planning, and operating assistance to states to support public transportation in rural areas with populations less than 50,000. 5337 is distributed based on revenue and route miles and provides funds for repairing and upgrading rail transit systems, high-intensity bus systems that use High-Occupancy Vehicle (HOV) lanes, including bus rapid transit (BRT). 5339 provides capital funding to replace, rehabilitate, and purchase buses and related equipment and to construct bus-related facilities.</p> <p>Assumptions: Formula funds are assumed to decline in proportion with the Federal Highway Trust Fund. As with the FHWA sources, fuel consumption declines by 1 percent (in real terms) annually.</p>	\$19.0
FTA Non-Formula Program 5309 Fixed Guideway Capital Investment Grants ("New Starts")	<p>Description: Provides grants for new fixed-guideways or extensions to fixed guideways (projects that operate on a separate right-of-way exclusively for public transportation, or that include a rail or a catenary system), bus rapid transit projects operating in mixed traffic that represent a substantial investment in the corridor, and projects that improve capacity on an existing fixed-guideway system.</p> <p>Assumptions: Operators are assumed to receive FTA discretionary funds in rough proportion to what they have received historically. As with the FHWA sources, fuel consumption declines by 1 percent (in real terms) annually.</p>	\$6.0
Other Federal Sources	<p>Description: Includes other federal programs, such as Transportation Investment Generating Economic Recovery (TIGER) competitive grant program, Highway Safety Improvement Program, Federal Safe Routes to School, Highway Bridge Program, and earmarks.</p> <p>Assumptions: Short-term revenues are based on actual apportionments. Long-term revenues assumes a 1 percent (in real terms) annual decline in fuel consumption as used for other federal funding sources.</p>	\$3.3
Federal Subtotal		\$41.1

Note: Numbers may not sum to total due to rounding

TABLE 4.5 Summary of Revenue Sources – Continued

4.5.4 Core & Reasonably Available Revenue Projections—Innovative Financing and New Revenue Sources, in Nominal Dollars, Billions		
Revenue Source	Revenue Projection Assumptions	Revenue Estimate
Federal Gas Excise Tax Adjustment	Description: Additional 10-cents-per-gallon gasoline tax imposed by the federal government starting in 2025 through 2029. Assumptions: Forecast consistent with historical tax rate adjustments for federal gas taxes.	\$2.7
Mileage-Based User Fee (Replacement)	Description: Mileage-based user fees would be implemented to replace existing gas taxes (state and federal) by 2030. Assumptions: It is assumed that a national mileage-based user fee system would be established during the latter years of the RTP/SCS. An estimated \$0.025 per mile (in 2019 dollars) is assumed starting in 2030 to replace existing gas tax revenues, indexed to maintain purchasing power.	\$42.7 (est. increment only)
Federal Credit Assistance; Other Bond Proceeds	Description: Credit assistance/debt financing is assumed to facilitate construction of regional initiatives, pledging new regional/local funding via road charge program. Assumptions: It is assumed that some credit assistance in the form of TIFIA/RRIF will be needed to facilitate implementation of key regional initiatives. Assumed aggregate level debt service using an interest rate of 2.2 percent over 35 years.	\$2.2
Private Investment	Description: XpressWest, to construct and operate high-speed rail service from Victor Valley to Las Vegas along the I-15 corridor; assumes private sector investment contribution for California High-Speed Rail Phase 1; also includes freight initiatives. Assumptions: Revenue estimate reflects only the San Bernardino County segment costs for XpressWest; SCAG-region segment for California-High Speed Rail Phase 1.	\$12.7
Local Road Charge Program	Description: Local road charge program assumes a per mile charge across the region that can be implemented on a county basis. This can be adjusted by time-of-day and location with congestion pricing and parking pricing at major activity centers. For analysis, also assumed congestion pricing in parts of Los Angeles County, along with increases in parking pricing at major job centers throughout the region as a part of the regional job centers strategy. Assumptions: Assumes a charge of \$0.015 per mile (in 2019 dollars) starting in 2030; peak period congestion charges in parts of Los Angeles County; some increases in parking costs assumed starting in 2025 at regional job centers.	\$77.8
Value Capture Strategies	Description: Formation of EIFDs and use of tax increment financing for transit supportive housing related infrastructure. Assumptions: Based on recent EIFD/tax increment financing studies to fund improved water and sewer infrastructure in Transit Priority Areas	\$3.0
Transportation Network Company (TNC) Mileage-Based Fee	Description: User fees on TNC mileage Assumptions: Estimated at about \$0.05 (in 2019 dollars) per mile starting in 2021	\$4.7
New Revenue Source Subtotal		\$145.7

Note: Numbers may not sum to total due to rounding

TABLE 4.6.1 FY2021–FY2045 RTP/SCS Revenues, in Nominal Dollars, Billions

Revenue Sources		FY2021 – FY2025	FY2026 – FY2030	FY2031 – FY2035	FY2036 – FY2040	FY2041 – FY2045	Total
Local	Sales Tax	\$28.4	\$34.3	\$41.4	\$48.9	\$51.5	\$204.5
	– Local Option Sales Tax Measures	\$23.6	\$28.7	\$34.7	\$40.9	\$42.0	\$169.8
	– Transportation Development Act (TDA)—Local Transportation Fund	\$4.8	\$5.7	\$6.7	\$8.0	\$9.5	\$34.7
	Transit Farebox Revenue	\$3.5	\$4.4	\$5.2	\$6.4	\$7.8	\$27.3
	Highway Tolls (in core revenue forecast)	\$3.4	\$4.5	\$6.0	\$8.0	\$10.7	\$32.7
	Mitigation Fees	\$0.4	\$0.4	\$0.5	\$0.5	\$0.6	\$2.5
	Other Local Sources	\$6.5	\$5.4	\$7.3	\$6.6	\$4.3	\$30.2
	Local Total	\$42.2	\$49.1	\$60.5	\$70.6	\$74.9	\$297.2
State	State Transportation Improvement Program (STIP)	\$1.3	\$0.7	\$0.9	\$1.0	\$1.2	\$5.1
	– Regional Transportation Improvement Program (RTIP)	\$1.1	\$0.5	\$0.6	\$0.7	\$0.9	\$3.8
	– Interregional Transportation Improvement Program (ITIP)	\$0.1	\$0.2	\$0.2	\$0.3	\$0.3	\$1.2
	State Highway Operation and Protection Plan (SHOPP)	\$8.5	\$10.2	\$12.2	\$14.6	\$17.5	\$63.0
	Highway Users Tax Account (HUTA)	\$5.1	\$6.0	\$7.1	\$8.4	\$10.0	\$36.7
	Road Maintenance and Rehabilitation Account (RMRA)	\$3.1	\$3.8	\$4.7	\$5.7	\$7.0	\$24.3
	State Transit Assistance Fund (STA)	\$1.9	\$2.3	\$2.8	\$3.3	\$3.9	\$14.2
	Cap-and-Trade Auction Proceeds	\$1.1	\$1.1	\$0.0	\$0.0	\$0.0	\$2.2
	Other State Sources	\$1.6	\$1.6	\$1.8	\$2.0	\$2.2	\$9.2
	State Total	\$22.6	\$25.8	\$29.5	\$35.1	\$41.9	\$154.8

Note: Numbers may not sum to total due to rounding

TABLE 4.6.1 FY2021–FY2045 RTP/SCS Revenues, in Nominal Dollars, Billions – Continued

Revenue Sources		FY2021 – FY2025	FY2026 – FY2030	FY2031 – FY2035	FY2036 – FY2040	FY2041 – FY2045	Total
Federal	Federal Transit	\$4.4	\$4.7	\$5.0	\$5.3	\$5.6	\$25.0
	– Federal Transit Formula	\$3.4	\$3.6	\$3.8	\$4.0	\$4.2	\$19.0
	– Federal Transit Non-Formula	\$1.1	\$1.1	\$1.2	\$1.3	\$1.3	\$6.0
	Federal Highway & Other	\$3.4	\$3.3	\$3.2	\$3.1	\$3.2	\$16.1
	– Congestion Mitigation and Air Quality (CMAQ)	\$1.5	\$1.3	\$1.0	\$0.8	\$0.8	\$5.3
	– Surface Transportation Block Grant (STBG)	\$1.3	\$1.4	\$1.5	\$1.6	\$1.7	\$7.5
	– Other Federal Sources	\$0.5	\$0.6	\$0.7	\$0.7	\$0.8	\$3.3
	Federal Total	\$7.8	\$8.0	\$8.1	\$8.4	\$8.8	\$41.1
New	Federal Gas Excise Tax Adjustment	\$0.6	\$2.1	\$0.0	\$0.0	\$0.0	\$2.7
	Mileage-Based User Fee (Replacement)	\$0.0	\$1.6	\$10.4	\$13.7	\$16.9	\$42.7
	Federal Credit Assistance; Other Bond Proceeds	\$0.0	\$2.2	\$0.0	\$0.0	\$0.0	\$2.2
	Private Equity Participation	\$3.2	\$0.0	\$2.1	\$4.2	\$3.2	\$12.7
	Local Road Charge Program	\$0.2	\$5.8	\$21.0	\$23.8	\$26.9	\$77.8
	Enhanced Infrastructure Financing District	\$0.0	\$0.8	\$0.8	\$0.8	\$0.8	\$3.0
	TNC Fee	\$0.7	\$0.8	\$0.9	\$1.1	\$1.2	\$4.7
	New Revenue Total	\$4.7	\$13.3	\$35.1	\$43.5	\$49.1	\$145.7
Revenue Total		\$77.3	\$96.2	\$133.2	\$157.6	\$174.6	\$638.9

Note: Numbers may not sum to total due to rounding

TABLE 4.6.2 FY2021–FY2045 RTP/SCS Expenditures, in Nominal Dollars, Billions

RTP Costs	FY2021 – FY2025	FY2026 – FY2030	FY2031 – FY2035	FY2036 – FY2040	FY2041 – FY2045	Total
Capital Projects and Other Programs	\$36.2	\$44.6	\$68.0	\$70.9	\$67.6	\$287.3
Arterials	\$7.1	\$4.7	\$4.2	\$4.1	\$0.7	\$20.7
Goods Movement (including Grade Separations)	\$4.8	\$9.3	\$9.6	\$22.7	\$19.6	\$66.0
High-Occupancy Vehicle/Express Lanes	\$0.9	\$3.2	\$3.3	\$3.4	\$2.6	\$13.4
Mixed-Flow and Interchange Improvements	\$2.7	\$1.7	\$1.7	\$1.4	\$2.8	\$10.3
Transportation System Management (including ITS)	\$1.4	\$1.4	\$3.3	\$3.9	\$3.7	\$13.7
Transit	\$10.9	\$13.9	\$20.4	\$13.5	\$8.1	\$66.8
Passenger Rail	\$4.6	\$6.5	\$14.5	\$9.3	\$18.4	\$53.3
Active Transportation	\$1.6	\$2.3	\$4.2	\$4.9	\$4.6	\$17.7
Transportation Demand Management	\$0.7	\$0.2	\$2.4	\$2.4	\$1.7	\$7.3
Other**	\$1.5	\$1.5	\$4.3	\$5.4	\$5.4	\$18.1
Operations and Maintenance	\$35.9	\$44.9	\$57.4	\$77.8	\$100.0	\$316.0
State Highways	\$8.5	\$10.2	\$12.2	\$17.1	\$20.0	\$68.0
Transit	\$20.5	\$24.9	\$31.8	\$41.2	\$55.4	\$173.9
Passenger Rail	\$2.0	\$2.7	\$4.3	\$7.5	\$10.1	\$26.6
Regionally Significant Local Streets and Roads*	\$4.8	\$7.1	\$9.1	\$12.0	\$14.4	\$47.5
Debt Service	\$5.2	\$6.6	\$7.8	\$8.9	\$7.0	\$35.6
Cost Total	\$77.3	\$96.2	\$133.2	\$157.6	\$174.6	\$638.9

Note: Numbers may not sum to total due to rounding

* Includes \$4.8 billion for active transportation in addition to capital project investment level of \$17.7 billion for a total of \$22.5 billion for active transportation improvements

** Includes Safety, Pooled Incentives, Mobility Equity Fund, Regional PEV Charger Program, and Others

