Draft TTTF Meeting #10 Note on Funding Needs and Revenue Generation

AGENDA ITEM: 5

SUBJECT: Discussion on additional funding needs and revenue generation

ACTION: Possible action

CONTEXT

CalSTA and Caltrans set up a Transit Transformation Task Force (TTTF) on December 8, 2023, with the goal of meeting the requirements of Senate Bill 125 and identifying paths to increase ridership and improve transit experience for all users.

The TTTF previously met on February 5th during Meeting #8 to discuss SB125 section 1.f.6 "New options for revenue sources to fund transit operations and capital projects to meet necessary future growth of transit systems for the next 10 years".

During that discussion, consensus emerged that new, dedicated sources of funding for transit may be needed, and a number of potential funding mechanisms were discussed.[1] The TTTF also requested further analysis on transit funding trends.[2]

This staff report is structured as follows:

A. **The cost to operate, maintain, and provide for the future growth of transit systems for the next 10 years** (SB125 section 1.e.4)
B. **Further options for new revenues sources:** (SB125 section 1.f.6)

Based on feedback from the task force today, we will incorporate the recommendations into the full report.

POSSIBLE ACTION

- **The task force can approve, modify, or reject the cost estimates to operate, maintain and provide for the future growth of transit systems over the next 10 years.**
- **The task force can endorse all, some, or none of the recommendations around future revenue sources**

DISCUSSION

1 TTTF #8 Approved Meeting Minutes
2 TTTF #8 Approved Meeting Minutes

A. The cost to operate, maintain, and provide for the future growth of transit systems for the next 10 years (SB125 section 1.e.4)

At present, certain transit agencies in California face near-term funding challenges. Bay Area Rapid Transit (BART), Metrolink and Caltrain, that had a higher farebox recovery ratio pre-COVID, face funding gaps due to a reduction in post-pandemic ridership. In 2024, BART, for example, had only 47% of pre-pandemic ridership.[3] These and other transit agencies received short-term Federal funding relief under the CARES[4] Act and CRRSA[5] to address this shortfall, but these funds have already been exhausted or may soon be exhausted, depending on the transit agency.

Other transit agencies, such as the San Francisco Municipal Transportation Agency (SFMTA), face funding gaps due to low parking revenue relative to pre-pandemic levels.20[6] The SFMTA is projected to be in a $15 million deficit in FY2025-2026, which could increase to over $320 million in FY2026-2027.[7] While SF MUNI ridership has only slightly declined, parking revenues are roughly 30% lower compared to pre-COVID levels.[8] The situation is further complicated by the non-passage of Proposition L in last November's election, leaving limited options for addressing the funding gap.[9]

Looking over the longer-term, while farebox revenues have fallen for some transit agencies, costs have increased faster than inflation over the past decade. Operating expenses have grown about 13-18% above inflation in the last ten years and capital costs have increased 2-6% above inflation, as measured by the Employment Cost Index (ECI), but given the uneven timing of spend, the choice of starting and ending year impacts these growth rate estimates).[10] In the future, transit agencies could also have to contend with the costs of replacing increasingly aging systems, that can create a step change in costs when technology or other components become obsolete. Additional uncertainty in longer term revenue exists with gas tax funded fuel sources, which may decline by 30% by 2030 per the LAO.

Exhibit 1: CA transit operating and capital expenditure growth over the past decade[11]

[3] Bay Area Ridership Data

[4] Coronavirus Aid, Relief, and Economic Security

[5] Coronavirus Response and Relief Supplemental Appropriations

[6] BART Financial Crisis; SF Muni's Impending Fiscal Cliff ; Metrolink: Tracking Ridership, Revenue, And Cares Act Funding

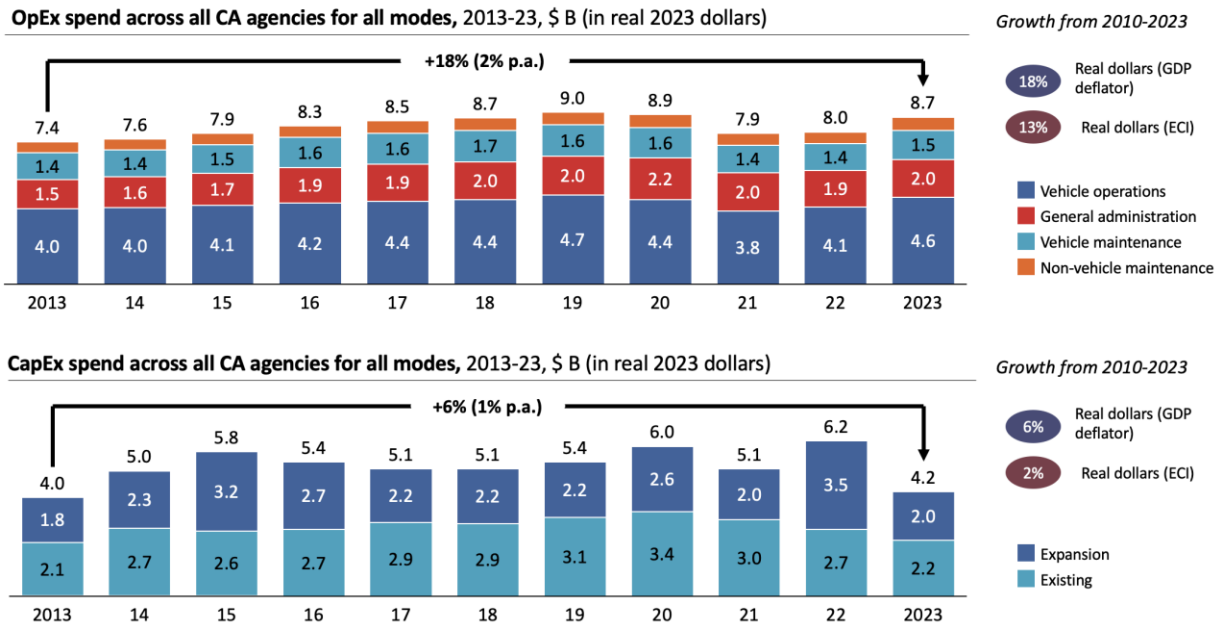
[7] San Francisco transit: Muni is in a furious race to save itself; SFMTA, San Francisco Controller's Office create Muni Funding Working Group

[8] San Francisco transit: Muni is in a furious race to save itself

[9] San Francisco transit: Muni is in a furious race to save itself

[10] National Transit Database data on operating expenditures and capital costs

[11] Source: National Transit Database, U.S. Bureau of Economic Analysis



Given current trends, operating expenditures could increase up to twice today's levels by 2035 (i.e., from ~$9 billion today up to $18 billion in 2035). A range of potential outcomes are shown in Exhibit 2 based on analysis of NTD data and assumptions around service levels and cost efficiency. The higher end of this range (see A below) assumes transit agencies invest in improved service levels to achieve VMT[12] reduction goals and costs continue to increase in line with recent trends.[13] For example, in the 2010s, transit agencies in Canada and Australia (e.g., TransLink, Transport for NSW) made significant increases to service levels, **that saw ridership increase by roughly double the increases in Vehicle Revenue Miles that the agencies delivered.**

On the other hand, costs could remain flat or decrease modestly (see D below) if service levels remain at similar levels and transit agencies invest in measures to improve cost efficiency over time. For example, agencies could invest further in predictive maintenance regimes, increase the speed of buses through transit prioritization and road improvement projects, and increase fuel efficiency of fleets. Since speed improvements have a direct relationship to Vehicle Revenue Miles delivered per Vehicle Revenue Hour, a given increase in speed should reduce costs that scale per hour of service by a similar amount. Scenario D in the table below assumes a 15% operational efficiency increase and estimates a year 2035 cost savings of $2.9B. For context, the Van Ness BRT achieved a 26-36% speed increase and reversing the general decline in speeds from 2019 to 2002 would deliver about an 8% speed increase. It's conceivable that focusing on transit priority could deliver an overall 15% cost savings in the medium term.

[12] Vehicle Miles Traveled
[13] Analysis from the National Transit Database data on revenues, operating expenditures and capital costs assuming cost trends continue into the future

An example of how agencies can invest in ways that increase cost efficiency, is SFMTAs buildout of the Van Ness Bus rapid transit project. By increasing the speed of buses, SFMTA can meet more frequent headways, with fewer buses, and lower costs.[14]

Exhibit 2: As congestion increases in areas where transit does not have traffic priority measures, transit service becomes slower and more expensive to provide.

EXAMPLE: Cost to Provide 10-Minute Bus Frequency, 6 AM – 12 AM, daily

Travel time and cost increase together

Travel Time	Buses Required	Annual Cost
30 minutes		$4 million
45		$6 million
60		$8 million
75		$10 million

Assumes operating cost of $200/hour per vehicle for example purposes only. Actual costs vary by mode.

Over the past 25 years, we've seen a noted decline in average speeds among agencies.

[14] SF MTA, Transit Transformation Task Force Meeting #4

Exhibit 3:

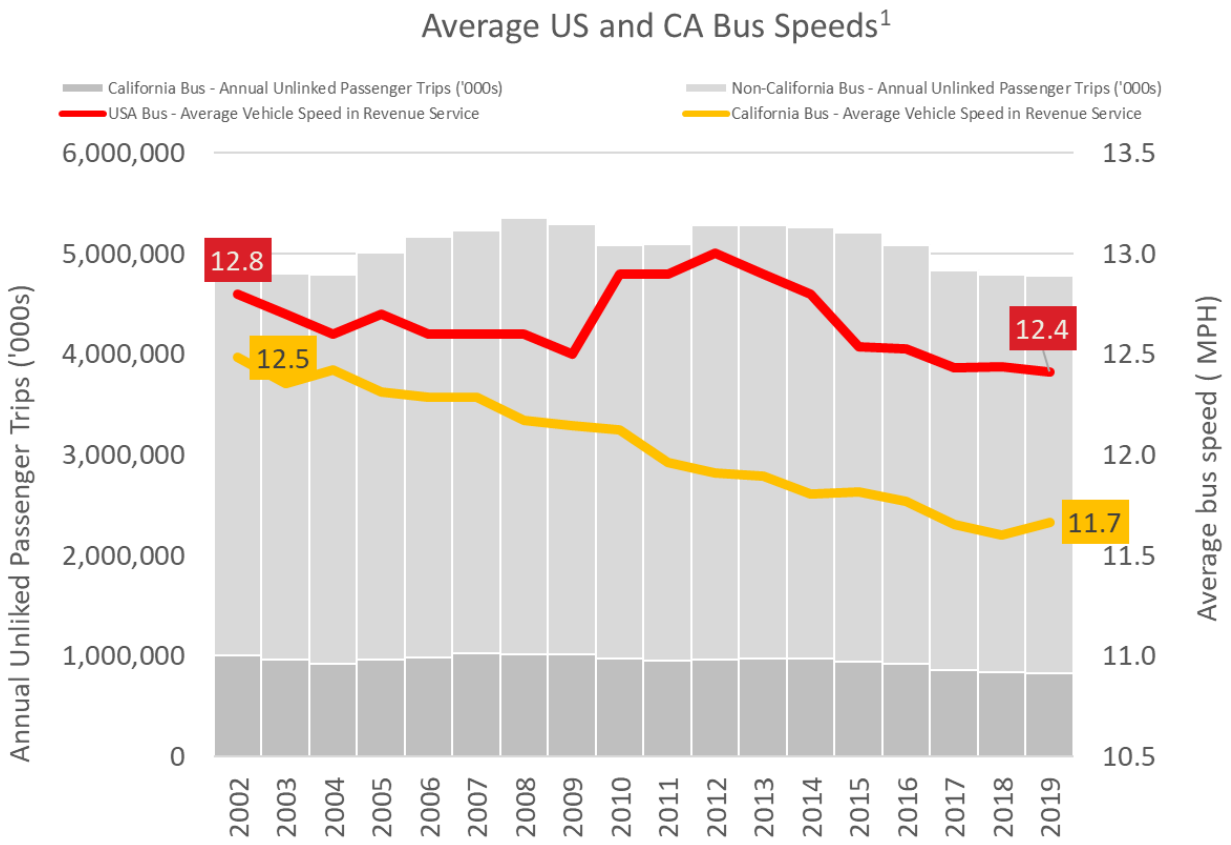

Average US and CA Bus Speeds[1]
California Bus - Annual Unlinked Passenger Trips ('000s)
Non-California Bus - Annual Unlinked Passenger Trips ('000s)
USA Bus - Average Vehicle Speed in Revenue Service
California Bus - Average Vehicle Speed in Revenue Service
Annual Unliked Passenger Trips ('000s)
Average bus speed (MPH)
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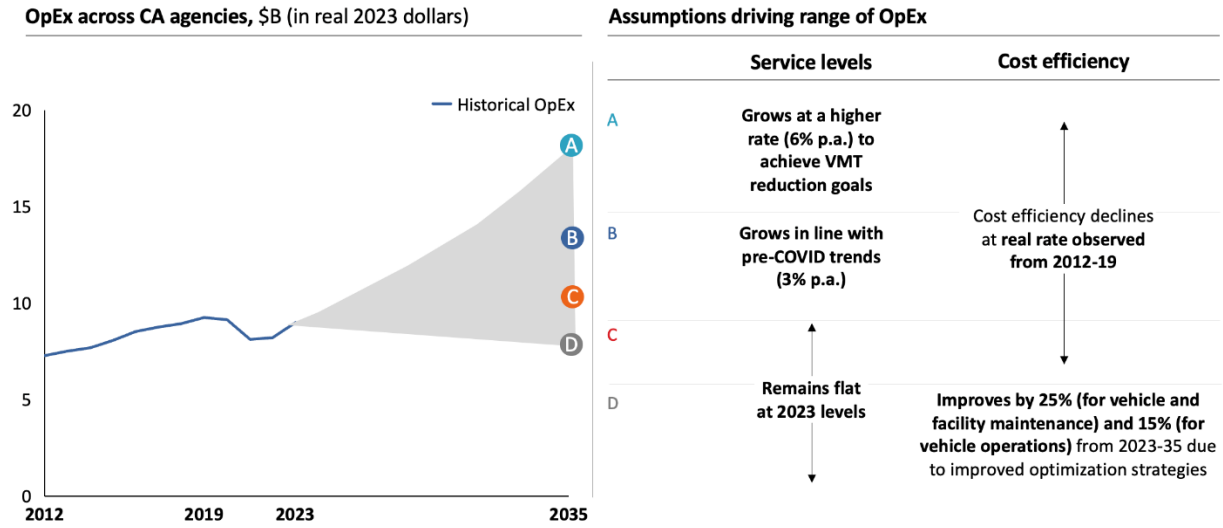
Exhibit 4: Potential operating expenditures across California transit agencies to 2035[15]



Scenario	Total Vehicle Revenue Hour assumptions	Cost efficiency ($/VRH) assumptions	Potential 2035 Opex in 2025 dollars, $B
A	Grows at higher rate (VRH grows 6% per year)	Cost efficiency declines at real rate observed from 2012-2019	18.5
B	Grows in line with pre-COVID trends (3% p.a.)	Cost efficiency declines at real rate observed from 2012-2019	13.5
C	Remain flat at 2023 levels	Cost efficiency declines at real rate observed from 2012-2019	10.4
D	Remain flat at 2023 levels	Improves by 25% (for vehicle and facilitate maintenance) and 15% for (vehicle operations) from 2023-35 due to improved optimization strategies	7.5

Capital costs tend to be more variable, and dependent on how much funding is available, but could also double if recent trends continue (i.e. from ~$5 billion to ~$11 billion).[16] Over the past five years, capital expenditures have grown 2 to 11 percent, depending on the transit mode (and 4.3% across all modes), for both expansion projects and state of good repair projects. This has been partly driven by a growth in the number of new projects, as well as rising per project costs, particularly for heavy and commuter rail.[17] In the future transit agencies could also have to contend with the costs of replacing increasingly aging systems, that can create a step change in costs when technology or other components become obsolete.

[15] Includes 261 transit agencies in CA with reported data to the National Transit Database; Scenario A is based on the assumption that ridership increases by 5X from 2019 – 2045 (from TTTF 2 analysis) to achieve 30% reduction in vehicle miles traveled and service level will change at half the rate based on ridership trends observed in Vancouver from 2015 – 2019 (link) and New South Wales from 2010 – 2016 (link); 25% improvement in cost efficiency is based on estimates provided by Center for Urban Transportation Research, University of South Florida (link) | Source: Discussions with CalSTA in Nov. 24 on scenarios and assumptions for funding needs analysis, National Transit Database, U.S. Bureau of Economic Analysis

[16] Analysis from the National Transit Database data on revenues, operating expenditures and capital costs assuming cost trends continue into the future

[17] Analysis from the National Transit Database data on revenues, operating expenditures and capital costs assuming cost trends continue into the future

Exhibit 5 shows an analysis of how capital costs could evolve based off of NTD data and assumptions around the levels of capex activity, unit costs and the potential costs of implementing Innovative Clean Transit plans. The high end of the estimated range (see A below) assumes transit agencies increase capex activity to support service expansion to achieve VMT reduction goals and unit costs continue to increase in line with recent trends.[18] However, costs could remain flat or decrease (see D below) if improvements are made to agencies' portfolios, project delivery is expedited and the cost of procuring zero-emission buses (ZEBs) reaches parity with existing fleets.

[18] Analysis from the National Transit Database data on revenues, operating expenditures and capital costs assuming cost trends continue into the future

Exhibit 5: Potential capital expenditures across California transit agencies to 2035[19]

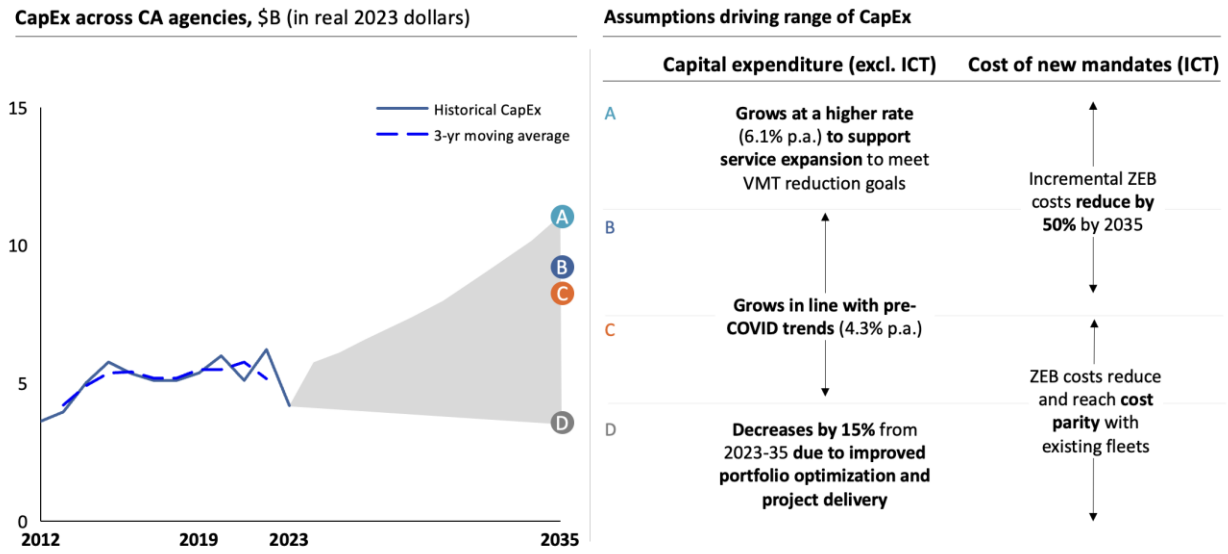
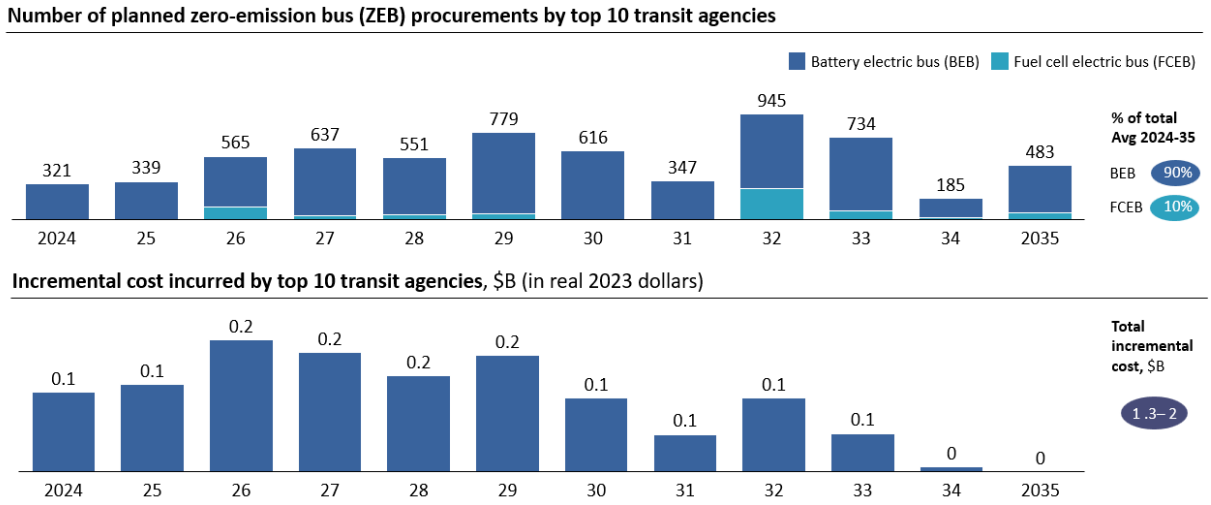


Exhibit 6: Zero emission bus procurements and associated costs[20]



Scenario	Capital expenditure assumptions (excl. ICT)	Cost of new mandates (ICT)	Potential 2035 Annual Capex in 2025 dollars, $B
A	Grows at higher rate (6.1% per annum)	Incremental ZEB costs reduce by 50% by 2035	11.2
B	Grows in line with pre-COVID trends (4.3% p.a.)	Incremental ZEB costs reduce by 50% by 2035	9.1

[19] Includes 261 transit agencies in CA with reported data to the National Transit Database; ICT: Innovative Clean Transit; CapEx to service miles relationship based on historical trends observed in Vancouver from 2016 (link) to 2018 (link); Decrease in capital expenditures based on estimates provided by Center for Urban Transportation Research, University of South Florida (link); ZEB: Zero-emission bus | Source: Discussions with CalSTA in Nov. 24 on scenarios and assumptions for funding needs analysis, National Transit Database, U.S. Bureau of Economic Analysis

[20] Top 10 agencies account for 57% of total bus count in CA based on size of bus fleets reported to the National Transit Database in 2023 and they are AC Transit, LA Metro, MTS, SFMTA, OCTA, LADOT, SacRT, VTA, Foothill Transit and SamTrans. ZEB for VTA is assumed to be BEB as agency indicated TBC in roll out plan; FCEB: Fuel cell electric bus, BEB: battery electric bus | Source: Comprehensive Review of California's Innovative Clean Transit Regulation: Phase I Summary Report (NREL), ICT roll out plans of LA Metro (link), SFMTA (link), MTS (link), AC Transit (link), LADOT (link), OCTA (link), SacRT (link), VTA (link), Foothill Transit (link) and SamTrans (link)

C	Grows in line with pre-COVID trends (4.3% p.a.)	ZEB costs reach parity with existing fleets by 2035	8.9
D	Decreases by 15% overall from 2023-35 due to improved project priotization and project delivery	ZEB costs reach parity with existing fleets by 2035	3.6

The increase in CapEx above associated with rolling out Innovative Clean Transit was estimated through analysis of transit agency rollout plans. The total incremental procurement cost for the largest 10 agencies in California could be between $1.3 and $2 billion based on how incremental costs for ZEBs evolve over time.[21] At present, each ZEB costs between $410,000 to $730,000 more than purchasing an internal combustion engine alternative.[22] Changes in the number of ZEVs needed for replacing existing services could substantially change this number.

If operating and capital costs continue to rise, a funding gap may emerge unless new revenue sources are identified, or agencies cut spending by improving service and capital project efficiency or by scaling back expansion and maintenance plans. These topics will be particularly important to address as California develops its rail network as recently announced in the California 2024 Rail Plan.[23]

According to the National Transit Database and Legislative Analyst's Office, funding sources have grown for transit in California from ~$9 billion in 2013 to ~$14 billion in 2022. Depending on the scenario, the current level of funding may be adequate (as in scenario D), or instead need to grow, at either historical, or above historical rates, to meet potential total costs in Scenarios A, B and C.

Scenario	**Potential 2035 Opex,** $B	**Potential 2035 Capex,** $B	**Potential 2035 Total,** $B
A	18.5	11.2	29.7
B	13.5	9.1	22.6
C	10.4	8.9	19.3
D	7.5	3.6	11.1

Additionally, potential future year capital Investment could increase or decrease based on allocations and revenue to programs, such additional or less GGRF revenue, or changes in federal investment decisions via the Capital Investment Grants (CIG) program. In short, more money will result in more projects, less money will result in fewer projects. The fiscally constrained RTPs contain some, but not all of the key projects for investment purposes.

Finally, there are substantial investments needed in the capital sector that may result in a rise in this total. For example, currently there is $33,707,732,314 in total project costs in

[21] Capital costs in ICT roll out plans of LA Metro (link), SFMTA (link), MTS (link), AC Transit (link), LADOT (link), OCTA (link), SacRT (link), VTA (link), Foothill Transit (link) and SamTrans (link); subtracting average cost of internal combustion engine buses
[22] ICT roll out plans of LA Metro (link), SFMTA (link), MTS (link), AC Transit (link), LADOT (link), OCTA (link), SacRT (link), VTA (link), Foothill Transit (link) and SamTrans (link)
[23] California State Rail Plan 2024 Fact Sheet

the active and committed projects in the TIRCP program including the Southeast Gateway Line, Gold Line Extension to Montclair, BART to Silicon Valley, Metrolink SCORE, Valley Rail, Transbay Corridor Core Capacity Program, DTX Downtown Rail Extension, LOSSAN Rail Corridor Improvements and more.

B. Further options for new revenues sources

During TTTF Meeting #8 the Task Force indicated that transforming transit may require increased funding that is stable and predictable. Options the Task Force previously discussed included:

- **Government sources of funds:** There are a range of potential sources, all of which may come with potential limitations or tradeoffs. These could include sales tax, fuel taxes, cap-and-trade proceeds (which are current sources of funding) and hotel taxes (mentioned in a previous TTTF meeting). As an illustrative exercise, see Exhibit 6, for how much these taxes would need to change to increase annual transit revenues by 10% (or $1.25B). However, any change to funding arrangements for California's transit system could require navigating some constraints. At present, the largest source of government revenue for transit is local taxes, but given California's maximum local sales tax cap, it may be difficult to adjust tax policies to enable increased transit funding.[24] Other transportation-related taxes and fees could be increased (e.g., vehicle titling fees, commercial vehicle road use tax (based on Gross Vehicle Weight Rating), automotive gasoline tax), but this may prove difficult as existing rates are already high relative to peer states.[25] The Legislature could choose to reallocate additional funding toward transit from other sources, such as the general fund, Local Transportation Fund, or Highway Trust Fund federal dollars. However, these funds already have competing priorities, limiting their availability for transit.

  Another large source of funds with substantial uncertainty is the Greenhouse Gas Reduction Fund (GGRF), funded by the state's Cap & Trade program, which expires in 2030. The loss of both GGRF and predicted declines in Fuel Taxes could hit simultaneously, substantially reducing available funds to transit agencies around 2030.
- **Fare and roadway revenue:** TTTF also identified measures to boost ridership and associated fare revenues, including increasing transit-orientated development, improving service speeds through transit prioritization, and improving safety and security. Additionally, both the State of California and the regions have significant existing and planned investments in managed lane facilities and pricing programs that could generate significant revenue, depending on the types of projects built and selected.[26] Specifically, roadway pricing in the form of either conversions or congestion pricing that do not require new roadway-infrastructure generates significant free cash-flow, as the cost of installation is marginal compared to the

[24] State Controller's Office
[25] California drivers pay nation's highest gas taxes for roads and bridges in poor condition; Proposed Reauthorization of AB 8 Vehicle Fees; Gas Taxes by State, 2023, Tax Foundation
[26] Strategies were identified by the Technical Working Group and Subject Matter Expert (SME) identified by CalSTA

revenue generated. It also generates positive externalities to transit as it drives mode shift.

- **Property and related activities:** To generate additional revenue, California could consider creating value from property and related activities.[27] The TTTF has already identified several options including property development on agency-owned land, expanding the use of Tax Increment Financing districts, and other related property revenues such as leasing retail. The agencies facing the most severe fiscal challenges (e.g., BART, SF MUNI, Caltrain, Metrolink) may be best positioned to grow directly generated sources given their location in major metropolitan centers. However, these sources of revenues generally start off as a smaller revenue stream compared to other sources and could take time to develop. However, over the long term, aggressive value capture and giving vested rights to agencies to develop and profit from property development may be a sustainable solution to fiscal issues without raising new revenues. Currently, the state vests significant property rights (density bonuses, etc) in areas near high-quality transit, but makes it hard for transit agencies to support the operational patterns that make high-quality transit. A sustainable longer-term source of funding would be allowing agencies to capture, where possible, the value that high quality transit systems create.
- **Other directly generated revenue:** TTTF identified other smaller revenue sources that could grow over time, including sponsorships and partnerships, advertising, private charters, and right-of-way leasing for telecom.[28]
- **Reallocation of other revenues:** There are also some additional Federal and State funds for infrastructure, that today are largely used for roads, that may also be eligible to be used for transit and are partially used for transit. Some of the largest include the Federal Surface Transportation Block Grants (STBG)($1.2B), the Federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) ($0.5B) and State Transportation Improvement Program (STIP) ($0.5B).3 Currently, some of these funds are spent on transit projects, at the discretion of the allocating agency (either the State of CA or the Regions). The total amount of funding inside the IIJA FHWA formula programs to CA is ~$4.5B a year. Currently, there is over 2$ billion in obligation authority that is obligation from prior federal fiscal years that could be used to capitalize an infrastructure bank or be reallocated to transit. However, this would come at a clear cost to other priorities, and may jeopardize projects that are relying on prior OA to fund a larger project over time.

During the last discussion, the Taskforce asked for analysis of other additional revenue sources. Those included:

- **Personal income taxes:** These represent the largest category of revenues in the CA24-25 May Revision Budget, and are expected to generate a little over $100B in general revenues.[29] Generating an additional 10% for transit funding (or $1.25B) may therefore require either an additional 1% of revenues being dedicated to transit or other measures to increase tax collections. For example, in 2022 Massachusetts voters

[27] Strategies were identified by the Technical Working Group and Subject Matter Expert (SME) identified by CalSTA
[28] Strategies were identified by the Technical Working Group and Subject Matter Expert (SME) identified by CalSTA
[29] CA 24-25 May Revision Budget

approved a 4% tax on those earning more than $1M per year, and part of these revenues will be used to increase the operating budget of the MBTA.[30]

- **Corporate taxes:** These represent the second largest category of revenues in the CA24-25 May Revision Budget and are expected to generate around $36B in general revenues.[31] Increasing transit revenues by 10% (or $1.25B) could require increasing overall corporate tax collections by 3.5%. Corporations other than banks and financial institutions in California currently pay a tax rate of 8.84%.[32] Top rates range between 2.5% in North Carolina to 9.8% in Minnesota.[24]
- **Payroll taxes:** California has a range of payroll taxes paid by employers. For example, the unemployment insurance (UI) fund collects between $5-6B each year and is used to pay unemployment benefits.[33] According to the LAO, these payroll taxes currently average 3.5 percent on the worker's first $7,000 in annual wages, or about $250 per year for each worker.[25] The system is currently experiencing fiscal difficulties and "concerns over trust fund solvency have impeded benefit increases and expansions".[25] If a new fund was set up to increase public transit funding by 10% (or $1.25B) it would need to be about 20-25% of the size of the current UI system, which amounts to about an extra $50-65 per year per worker.

Exhibit 7: Illustrative Scenarios: Tax scenarios to increase overall transit funding by 10%[34]

Types of taxes	Used to fund transit in California?	Amount existing tax collections could need to rise to increase transit funding by 10% (or $1.25B)	Current level in California	Current range in other states	Total funding being generated in California, $B/year
Sales tax for the Local Transportation Fund	Yes	100%	0.25% on goods	0.375% to 1.05%	$1.2B
Fuel tax for transportation	Yes	17%	59 cents / gallon	~9 to 59 cents / gallon	$7.5B
Express lane toll revenue[1]	Yes	500% in revenues through additional toll miles or raised rates	565 miles of express lanes	N/A	$0.25B
Hotel tax	No	42%	12.3% (weighted average)	1% to 17%	$3.0B
Cap & Trade from the GGRF for transit	Partial	+ 33% of GGRF allocation[2] or + 164% of GGRF funding[3]	~20% of GGRF goes to transit	N/A	$3.8B
Person income tax	Partial (through general revenues)	1%	N/A	N/A	$101B
Corporate tax	Partial (through general revenues)	3.5%	8.84%	2.5%-9.8%	$36B
Payroll taxes	No	20-25% which is ~$50-65 per worker	~$250 per worker	N/A	$4-5B

C. Possible Actions

[30] Mass.gov Personal Income Tax Surtax
[31] CA 24-25 May Revision Budget
[32] Tax Foundation State Tax Rates
[33] LAO Fixing Unemployment Insurance
[34] Source: Legislative Analyst's Office , CA Budget Summary, State of California Franchise tax board, State Corporate Income Tax Rates and Brackets, 2024, Gasoline State Excise Tax Rates for 2025; Funding Regional Transportation with Sales Tax Revenue: 2024 Update; Transportation Development Act (TDA)

The Transit Transformation Task Force will need to make clear and direct recommendations on the goal and the sources for revenue generation and expenditure.

Our recommendation is that based on this report, the task for take an action side the following framework:

1) Near Term – suggest path forwards for dealing with the immediate fiscal crisis at agencies, prevent transit death spiral
2) Mid Term – How to address further fiscal cliff issues and invest in the needed transformation to meet our climate goals.
3) Long Term - determine long term sustainable support in alignment with TTTF report principles

It is likely the long term and midterm needs will overlap, but the goal is to distinguish between the on-going support needed vs investment frame needed for transit transformation.

Timeline	Need	Recommended Source(s)
Near Term (1-3) years	Stabilizing agencies facing fiscal cliff and investing in transformation	
Mid Term (3-10 years)	Continued investment in transformation and increased service levels	
Long Term (10+ Years)	Sustainable revenue models for long term growth	