Caltrain
Business Strategy:

Scenario Planning

APRIL 28, 2021

JPB WPLP COMMITTEE

Ongoing Recovery Planning Efforts

During most of 2020, Caltrain pivoted its Business Plan effort to focus on COVID-19 recovery planning. This work has been spread across multiple streams as shown on the right.

In 2021, with the passage of Measure RR and vaccination campaigns underway, staff is shifting the emphasis of recovery planning efforts toward preparing a Business Strategy for a post-pandemic reality.

The presentation today focuses first on translating the outcomes of Caltrain's scenario planning process into a range of possible financial outcomes for the railroad.

Equity, Connectivity, Recovery, & Growth Framework

Near Term Service Planning

Scenario Planning

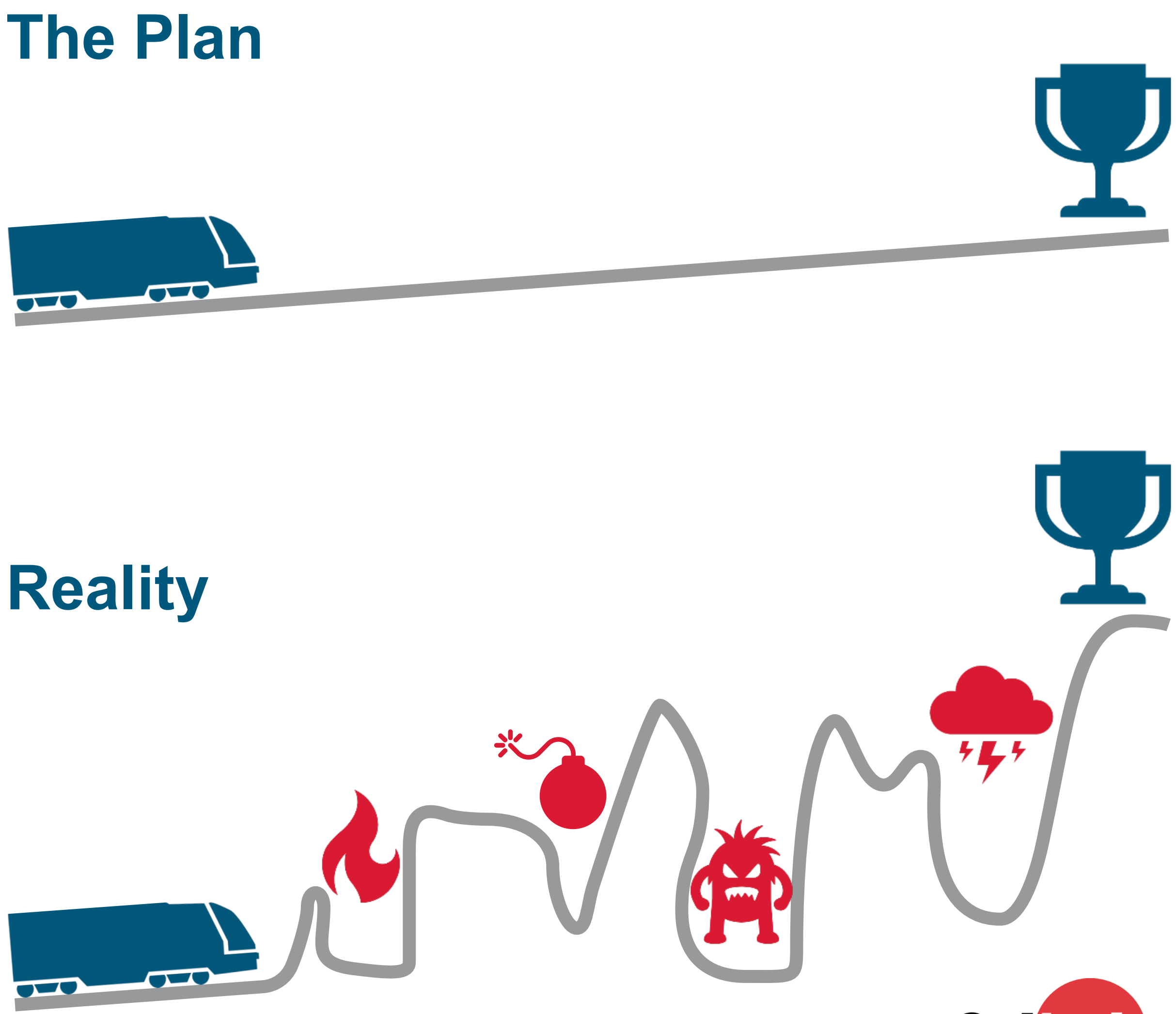
Financial Analysis

A Year of Change

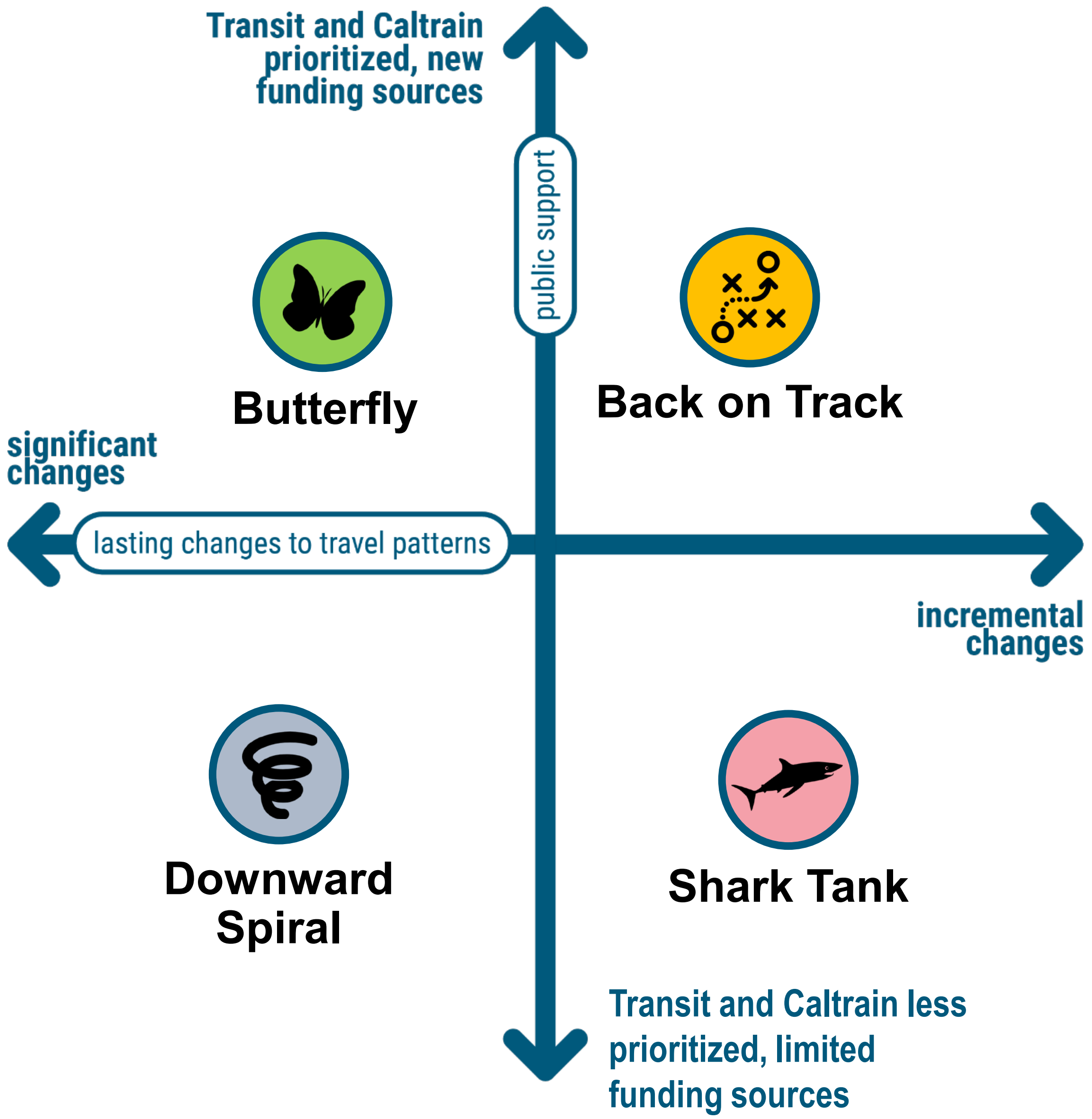
In March of 2020 the pandemic hit the Bay Area and daily life changed dramatically.

Over the course of the last year, the impacts brought about by COVID-19 have intertwined with and, in some cases, amplified and accelerated other significant events and trends around the region, country and world. The future “Business Environment” Caltrain must plan for now seems very different, and less stable, than the one in which we existed pre-COVID

Caltrain has used scenario planning as a tool to think about how best to chart a path toward its Long Range Vision during a coming decade that remains highly uncertain and volatile



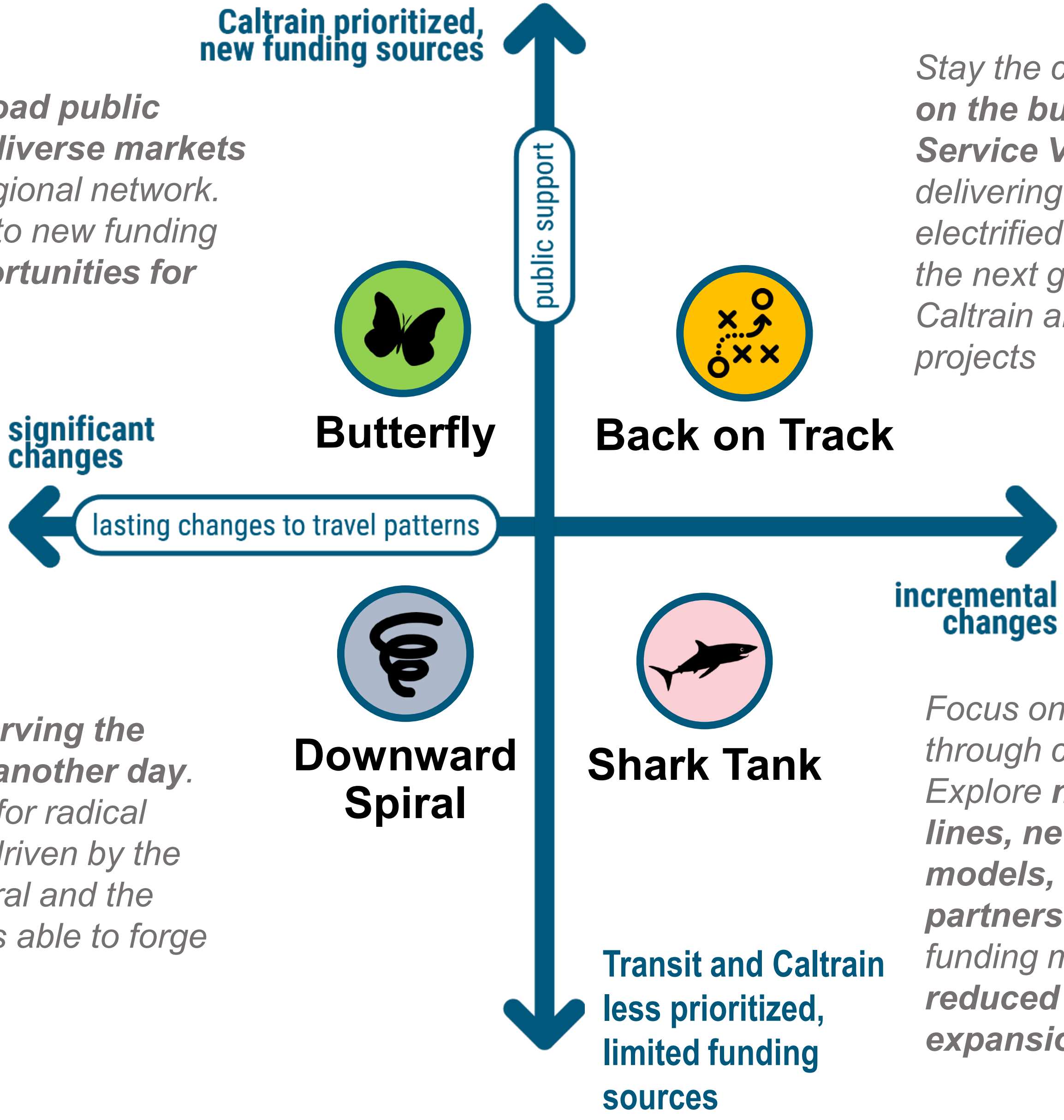
Four Caltrain Scenarios



Each Scenario Suggests A Different Point of View for Caltrain

*Embrace a **broad public mission** and **diverse markets** as part of a regional network. Look outward to new funding and **new opportunities for partnership**.*

*Stay the course and **focus on the build out of the Service Vision**: focus on delivering expanded electrified service and on the next generation of Caltrain and regional projects*



*Focus on **preserving the ability to fight another day**. Caltrain's need for radical change will be driven by the depth of the spiral and the partnerships it is able to forge and maintain.*

*Focus on driving revenue through customer value. Explore **new business lines, new business models, and new partners**. Limited public funding may mean a **reduced focus on expansion.***

Developing Financial Projections for Scenarios:

Staff has developed ***illustrative*** combinations of service plans and investment approaches to match each future scenario.

These have been costed through FY23-FY30 using a unit-based integrated business model and then further refined for typical escalation rates by cost category.

Projected costs have then been combined with ridership projections and indicative assumptions about fare policy and funding sources for each scenario

Assumptions and Caveats

- Caltrain's scenarios are intended to highlight four **plausible** and **divergent** futures for the railroad. **They are not plans** - Caltrain is not "choosing" one of the scenarios and financial projections are illustrative.
- Projections are shown in year of expenditure dollars for FY23 – FY30.
- The projections represent Caltrain's best available information on likely costs and revenues for each scenario based on a nominal set of assumptions about service levels and fare policy. These are high level estimates and several areas of significant uncertainty remain:
  - Details of TASI costs and operational parameters play a significant role in determining overall operating costs.
  - Costs of maintaining new systems and equipment (overhead catenary system, EMUs) have been estimated but are still being refined.
  - Many cost categories are inherently volatile and may vary (e.g. fuel, insurance).
  - Timing and speed of ridership growth have been estimated for each scenario but are inherently unknown- particularly in a volatile, post-COVID context

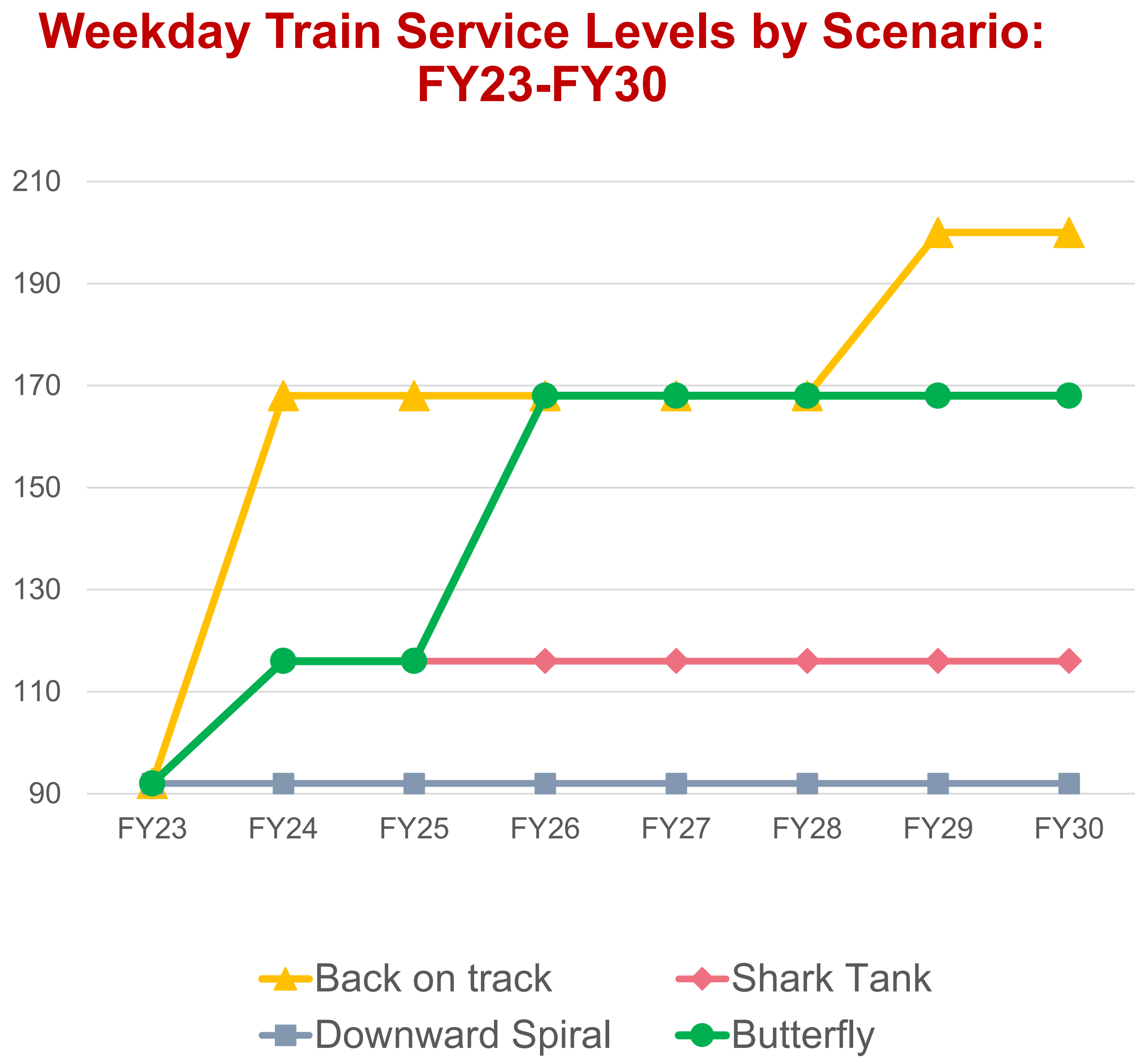
Illustrative Service Approach by Scenario

Scenario	Service Description	Caltrain Specific Capital Investments	Major Operating Cost Drivers
 **Back on Track**	• 92 trains per day (tpd) until full compliment of electric service commences in FY24 • 168tpd electrified service in FY24, with 6 trains per peak hour and expanded peak periods • 204tpd by the end of the decade with 8 trains per peak hour. • Increase to 4 and then 5 round trips per day to Gilroy by end of decade.	• PCEP completed in early 2020s. • Ongoing investment in State of Good Repair. • Direct investments required to support 8 tphpd service, including additional fleet investment, train storage, minor track work, station enhancements, etc.	• TASI costs related to increased trains per day and peak hour frequencies • Maintenance of new systems and expanded fleet • Electricity for traction • Reduced fuel consumptions • Reduced diesel fleet maintenance
 **Shark Tank**	• 92 trains per day (tpd) until full compliment of electric service commences in FY24 • 116 tpd in FY24 with 6 trains per hour during short peaks. • Increase to 4 round trips per day to Gilroy throughout decade.	• PCEP completed in early 2020s. • Ongoing investment in State of Good Repair. • No additional capital investments to increase service prior to FY30.	• Same as above

Illustrative Service Approach by Scenario

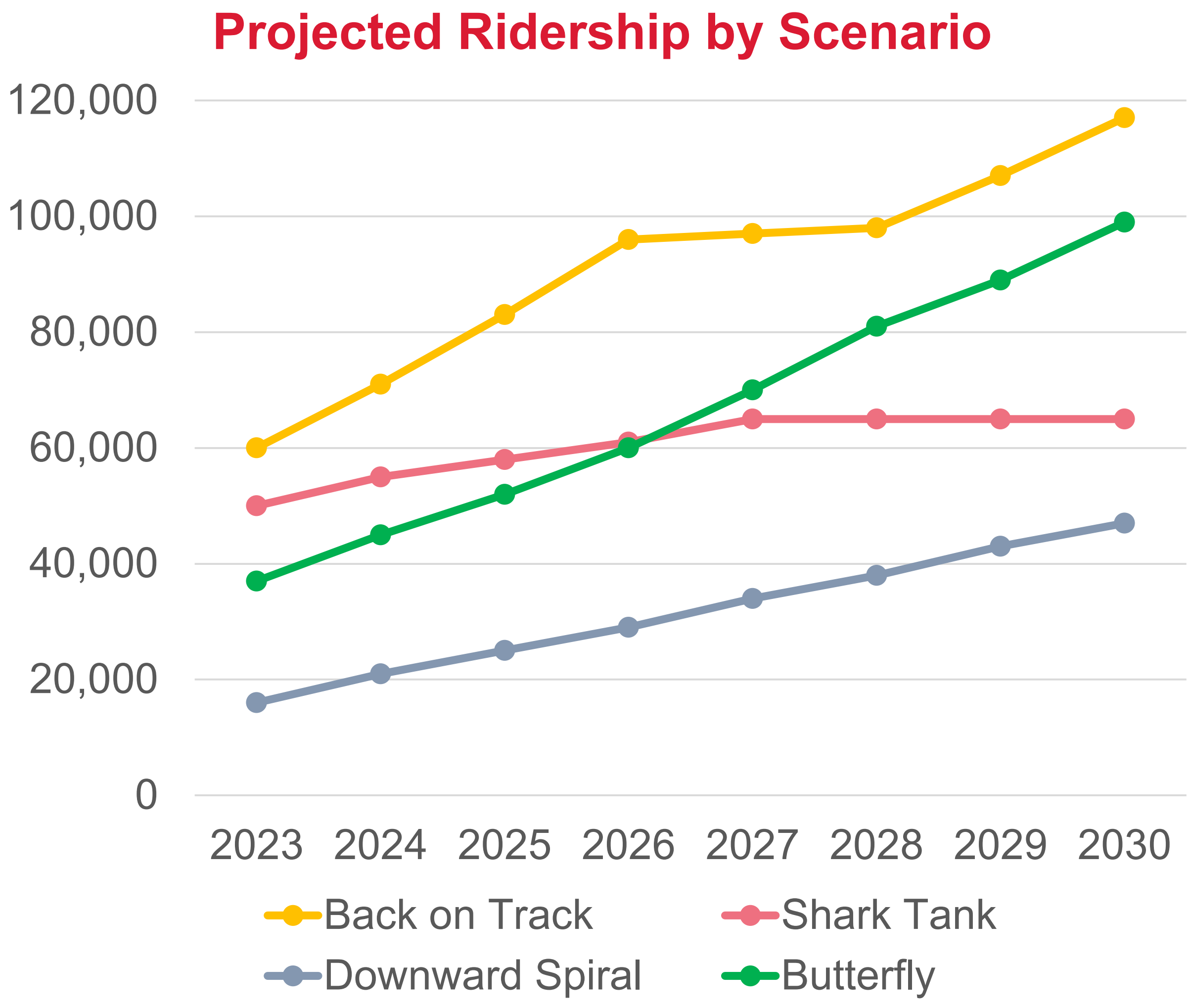
Scenario	Service Description	Caltrain Specific Capital Investments	Major Operating Cost Drivers
Downward Spiral	• Constant 92 trains per day (tpd) throughout decade (4tphpd in peaks) even as system migrates from diesel to electric • 2 round trips per day to Gilroy.	• PCEP completed in early 2020s. • Ongoing investment in State of Good Repair. • No additional capital investments to increase service prior to FY30.	• TASI costs related to service hours • Maintenance of new systems and expanded fleet • Electricity for traction • Reduced fuel consumption • Reduced diesel fleet maintenance
Butterfly	• 92 trains per day (tpd) until full compliment of electric service commences in FY24 • 116 tpd in FY24 with 6 trains per hour during short peaks. • Expansion to 168 tpd and longer peaks in second half of decade. • Increase to 4 round trips per day to Gilroy throughout decade.	• PCEP completed in early 2020s. • Ongoing investment in State of Good Repair. • No additional capital investments required to increase service prior to FY30 – however commencement of capital investments in late 2020s is assumed to eventually grow service to 204tpd (including 8 trains per peak hour) in early 2030s.	• Same as above

Summary of Illustrative Train Service Levels by Scenario: FY23-FY30



Illustrative Ridership Projections by Scenario FY23-FY30

- **Back on Track:** Ridership returns quickly. Electrification and economic growth fuels demand for Caltrain service across both old markets and new ones.
- **Shark Tank:** Commute oriented ridership returns relatively quickly as the economy rebounds, but difficult financial conditions lead Caltrain to limit service expansion.
- **Downward Spiral:** Ridership never fully recovers due to economic stagnation and greatly expanded remote work. Caltrain service is not expanded and lack of frequent service and investment undermines long term market recovery.
- **Butterfly:** Despite significant changes to work habits, ridership steadily recovers as Caltrain is able to reinvent itself with expanded all-day service paired alongside outside funding and a transit supportive policy environment.



Back on Track O&M

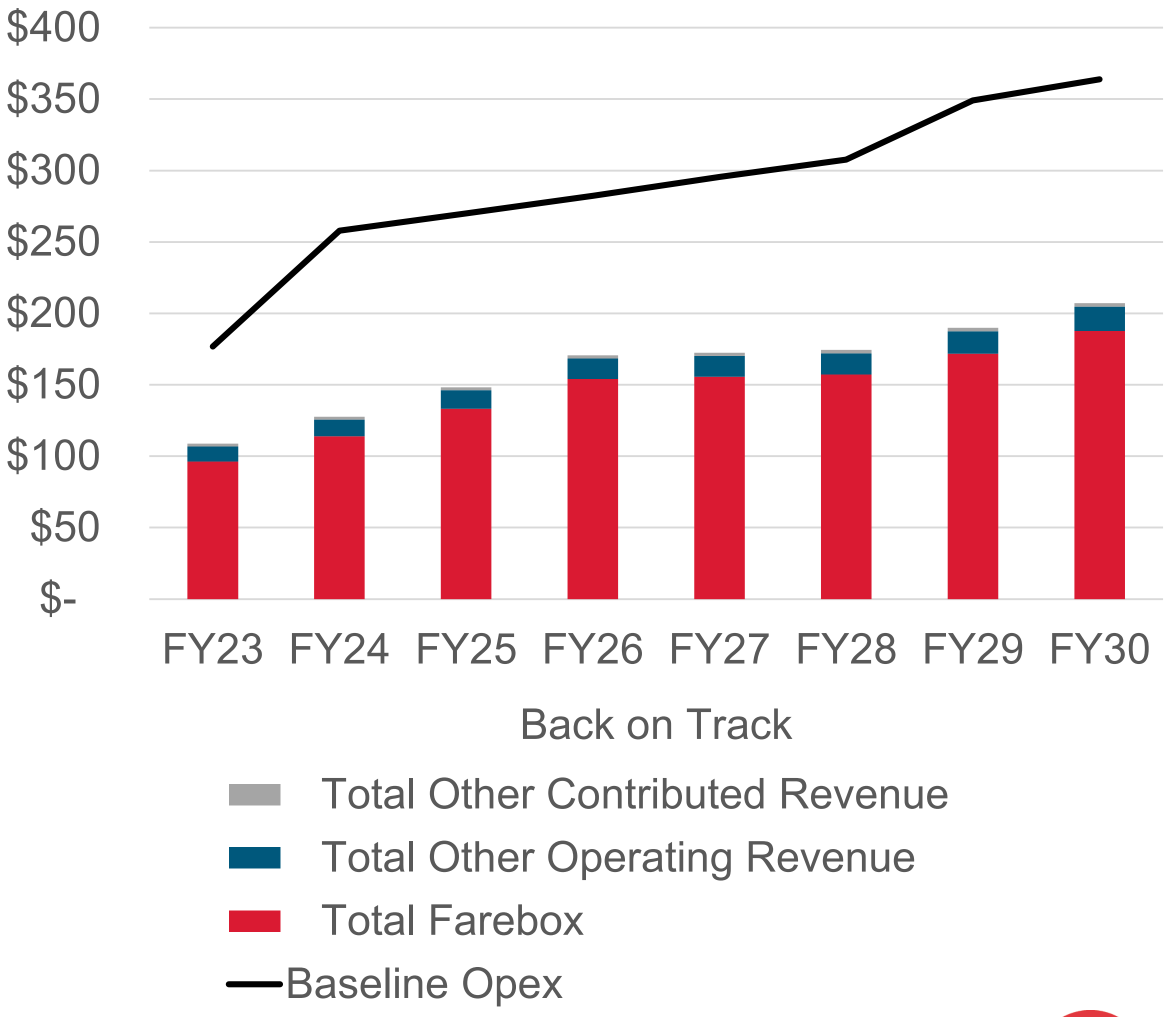
CALTRAIN & TRANSIT FUNDING
prioritized de-prioritized

CHANGES TO TRAVEL PATTERNS
incremental significant

Revenue assumptions:
- Farebox: No fare increases shown
- Other Revenues: 3% YoY growth
- Measure RR and/or Member Funding: Not shown

Service assumptions:
- FY23: 92tpd (4tph peak/2tph off-peak)
- FY24 – FY28: 168tpd (6tph peak/3tph off-peak)
- FY29 – FY30: 204tpd (8tph peak/4tph off-peak)

Back on Track O&M: Revenues vs. Expenses, without Measure RR or Fare Increases



Back on Track O&M

CALTRAIN & TRANSIT FUNDING
prioritized de-prioritized

CHANGES TO TRAVEL PATTERNS
incremental significant

Revenue assumptions:

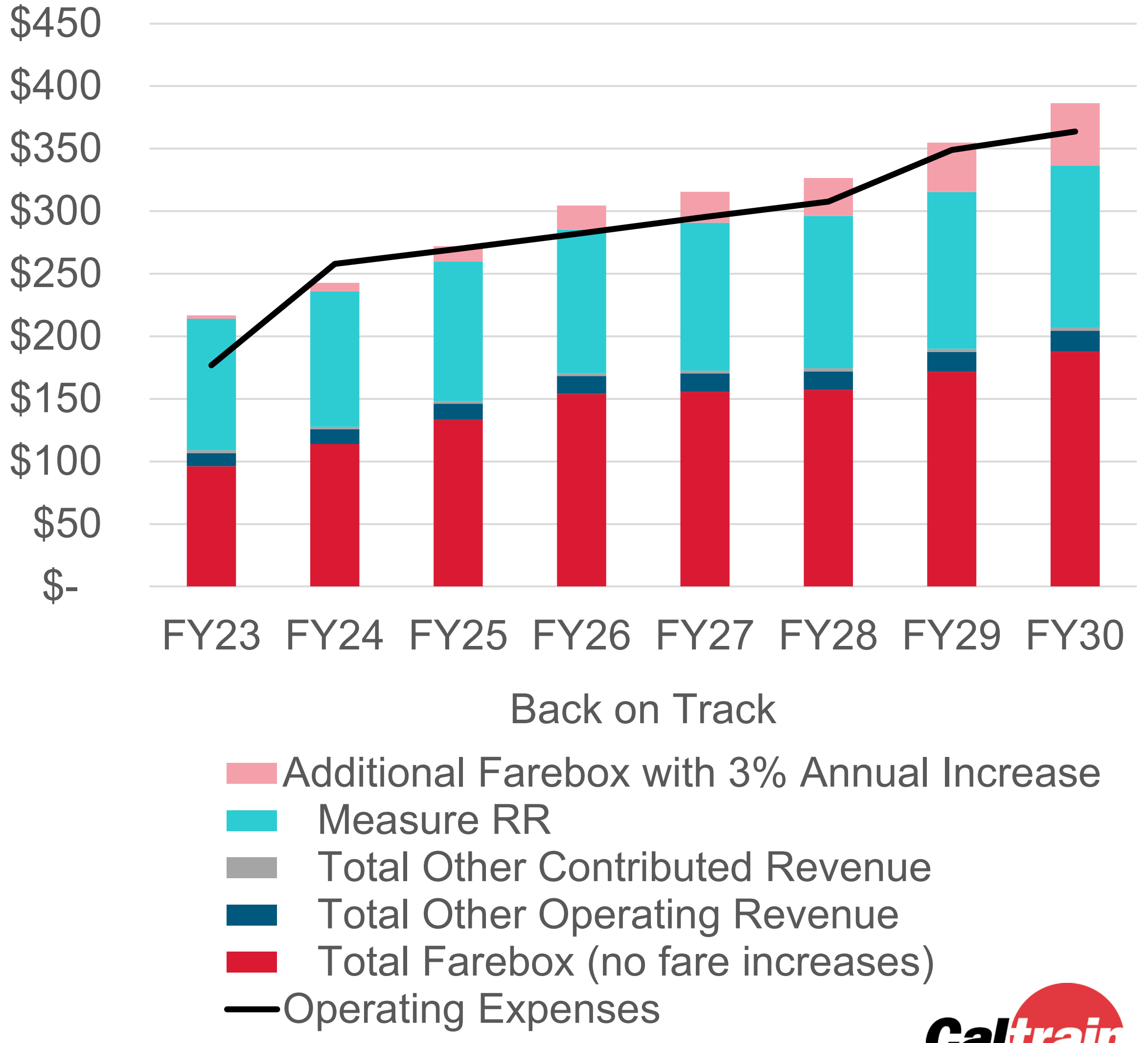
- Farebox: 3% YoY fare increases shown
- Measure RR: 3% YoY growth - <u>full amount shown applied to operating needs</u>

- Other Revenue: 3% YoY growth
- JPB Member Operating Contributions: None shown

Service assumptions:

- FY23: 92tpd (4tph peak/2tph off-peak)
- FY24 – FY28: 168tpd (6tph peak/3tph off-peak)
- FY29 – FY30: 204tpd (8tph peak/4tph off-peak)

Back on Track O&M: Revenues vs. Expenses, with Measure RR Funds and Fare Increases

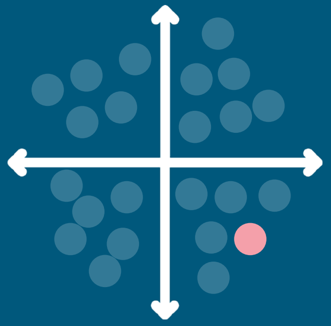


Scenario 2

Shark Tank O&M

CALTRAIN & TRANSIT FUNDING
prioritized   **de-prioritized**

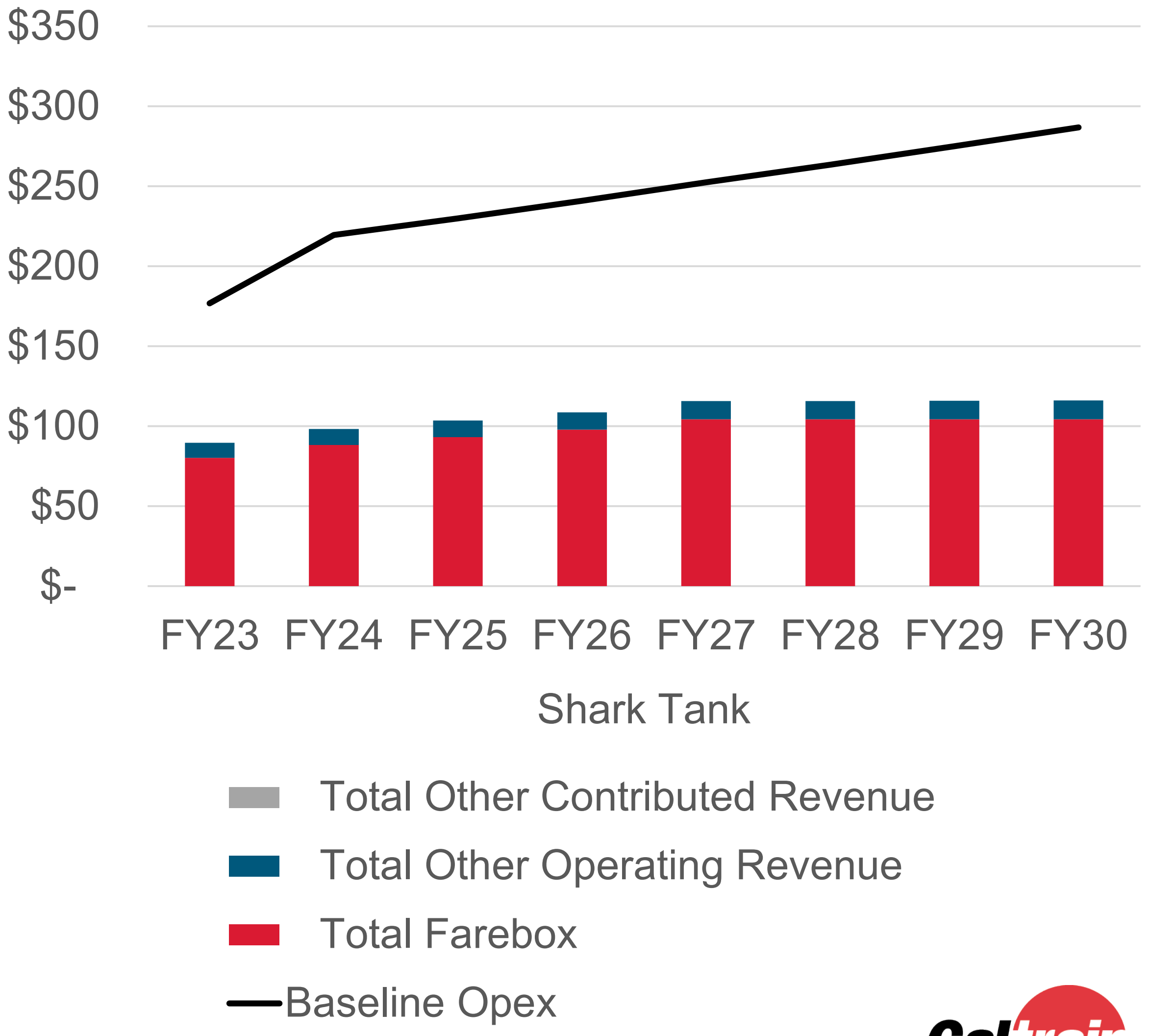
CHANGES TO TRAVEL PATTERNS
incremental   significant



Revenue assumptions:
- Farebox: No fare increases shown
- Measure RR and/or Member Funding: Not shown
- Other Revenue: 4% YoY growth rental/advertising income, due to increased focus on monetizing assets

Service assumptions:
- FY23: 92tpd (4tph peak/2tph off-peak)
- FY24 – FY30: 116tpd (6tph peak/2tph off-peak)

Shark Tank O&M: Revenues vs. Expenses, without Measure RR Funds or Fare Increases

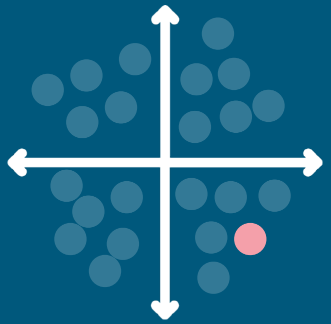


Caltrain

Shark Tank O&M

CALTRAIN & TRANSIT FUNDING
prioritized de-prioritized

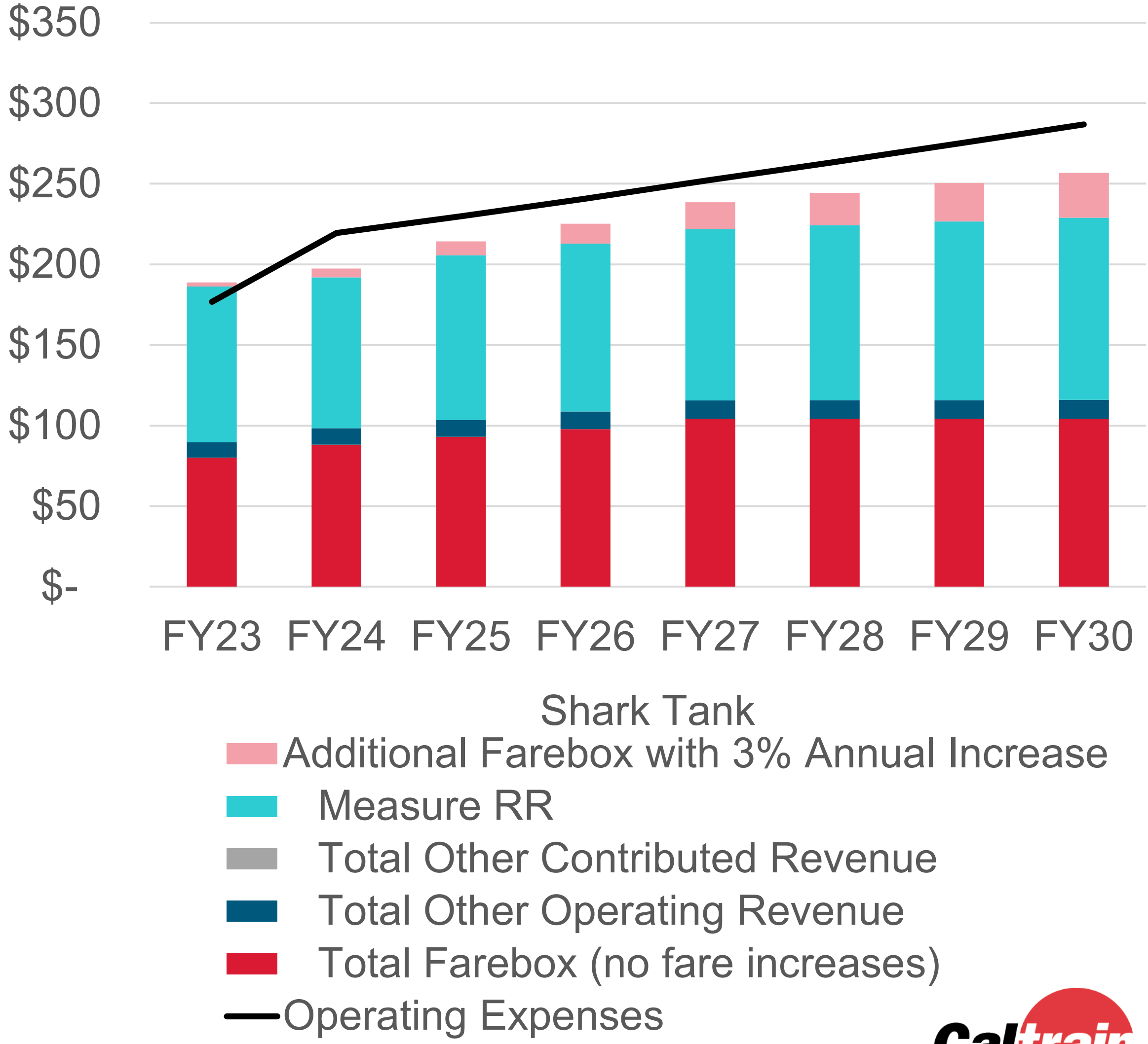
CHANGES TO TRAVEL PATTERNS
incremental significant



Revenue assumptions:
- Farebox: 3% YoY increases shown
- Measure RR: 2 year recessionary impact before return to growth in FY25, does not keep up with inflation - <u>full amount shown applied to operating needs</u>
- Other Revenue: 4% YoY growth rental/advertising income, due to increased focus on monetizing assets
- JPB Member Operating Contributions: None Shown

Service assumptions:
- FY23: 92tpd (4tph peak/2tph off-peak)
- FY24 – FY30: 116tpd (6tph peak/2tph off-peak)

Shark Tank O&M: Revenues vs. Expenses, with Measure RR Funds and Fare Increases



Caltrain

Scenario 3

Downward Spiral O&M

CALTRAIN & TRANSIT FUNDING

prioritized **de-prioritized**

CHANGES TO TRAVEL PATTERNS

incremental **significant**

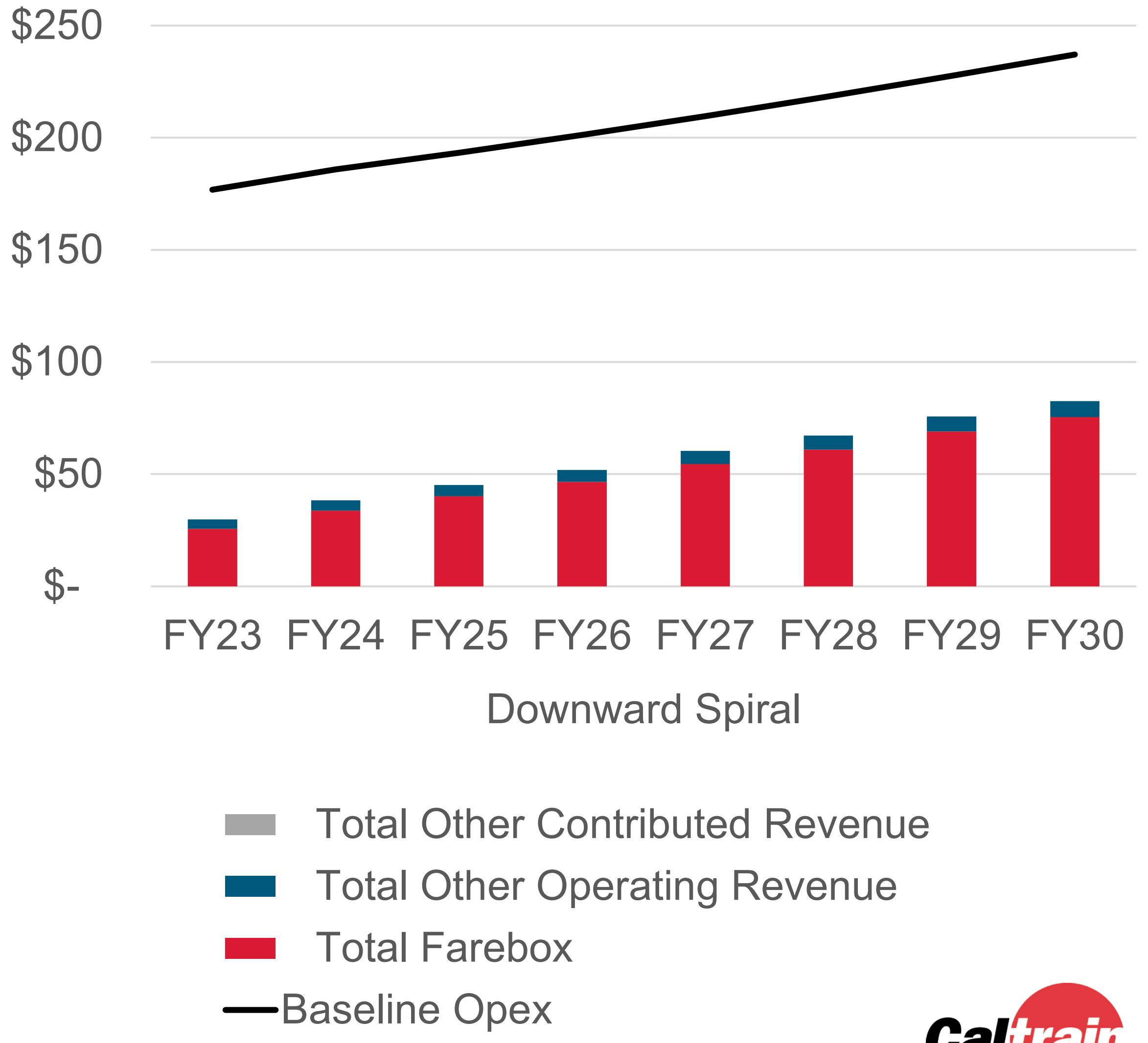
Revenue assumptions:

- Farebox: No fare increases shown
- Measure RR and/or Member Funding: Not shown
- Other Revenue: 1% YoY growth

Service assumptions:

- FY23-30: 92tpd (4tph peak/2tph off-peak)

Downward Spiral O&M: Revenues vs. Expenses, without Measure RR Funds or Fare Increases



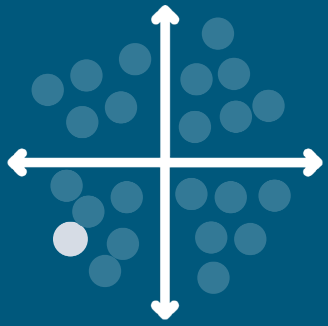
Caltrain

Scenario 3

Downward Spiral O&M

CALTRAIN & TRANSIT FUNDING
prioritized **de-prioritized**

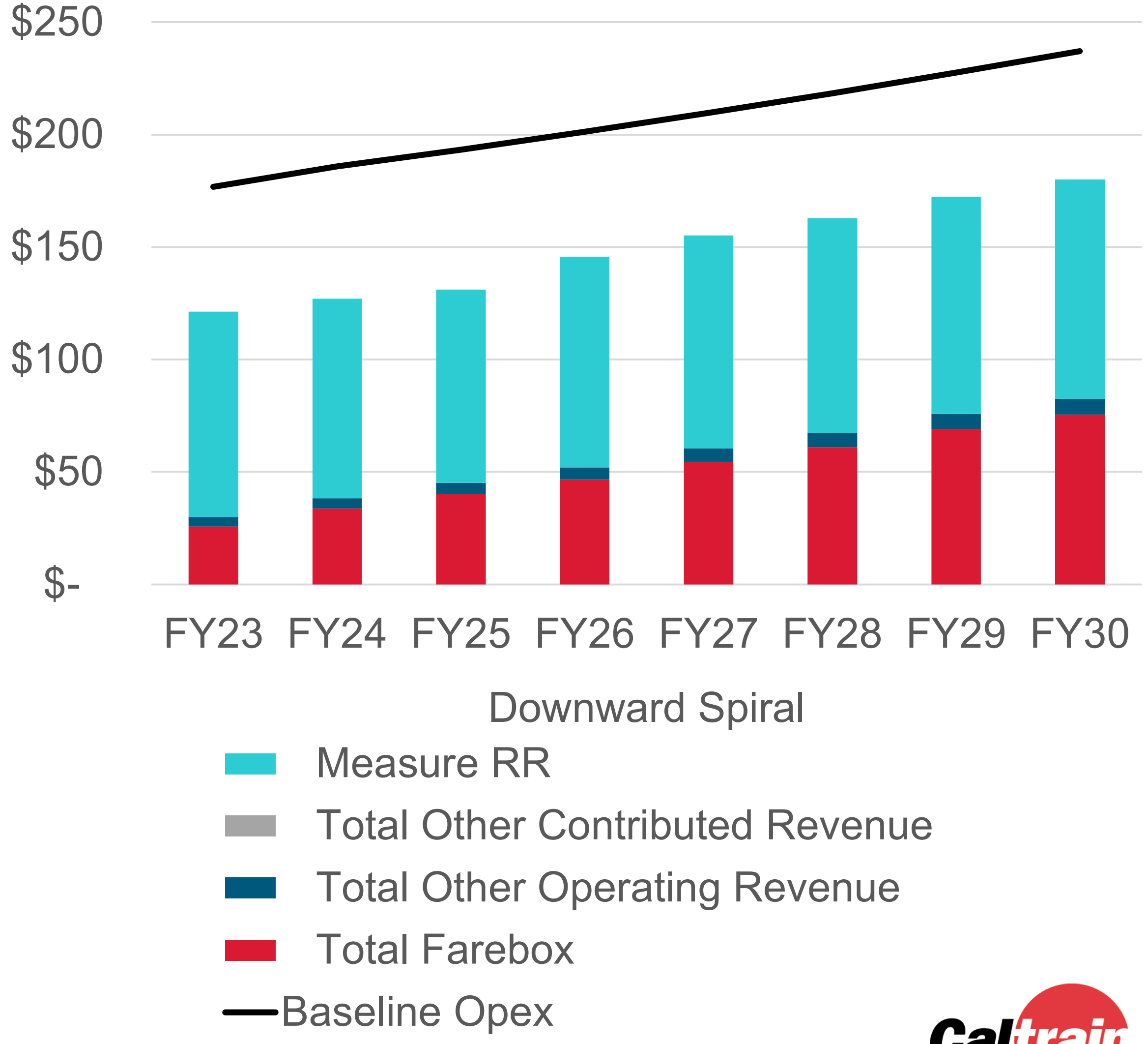
CHANGES TO TRAVEL PATTERNS
incremental **significant**



Revenue assumptions:
- Farebox: No fare increases assumed
- Measure RR: 3 year recessionary impact with a slow return to growth for rest of the decade - <u>full amount shown applied to operating needs</u>
- Other Revenue: 1% YoY growth
- JPB Member Operating Contributions: none

Service assumptions:
- FY23-30: 92tpd (4tph peak/2tph off-peak)

Downward Spiral O&M: Revenues vs. Expenses, with Measure RR Funds and No Fare Increases



Caltrain

Scenario 4

Butterfly O&M

CALTRAIN & TRANSIT FUNDING
prioritized de-prioritized

CHANGES TO TRAVEL PATTERNS
incremental **significant**

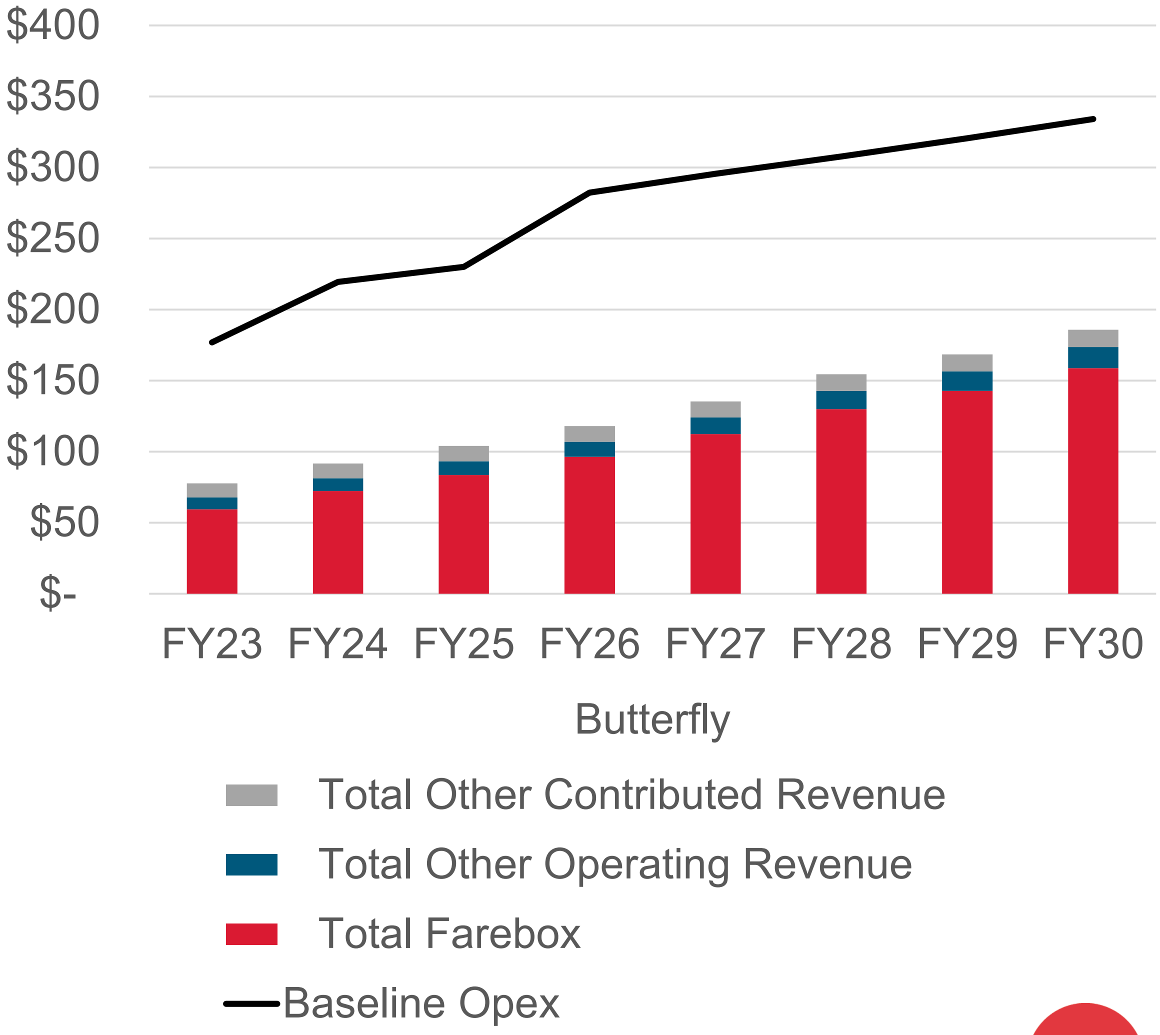
Revenue assumptions:

- Farebox: No fare increases shown
- Measure RR and/or Member Funding: Not shown
- Other Revenue: Modest increased operating funding for Public Transit at Federal or State level

Service assumptions:

- FY23: 92tpd (4tph peak/2tph off-peak)
- FY24-25: 116tpd (6tph peak/2tph off-peak)
- FY26-30: 168tpd (6tph peak/3 tph off-peak)

Butterfly O&M: Revenues vs. Expenses, without Measure RR Funds or Fare Increases



Scenario 4

Butterfly O&M

CALTRAIN & TRANSIT FUNDING
prioritized de-prioritized

CHANGES TO TRAVEL PATTERNS
incremental **significant**

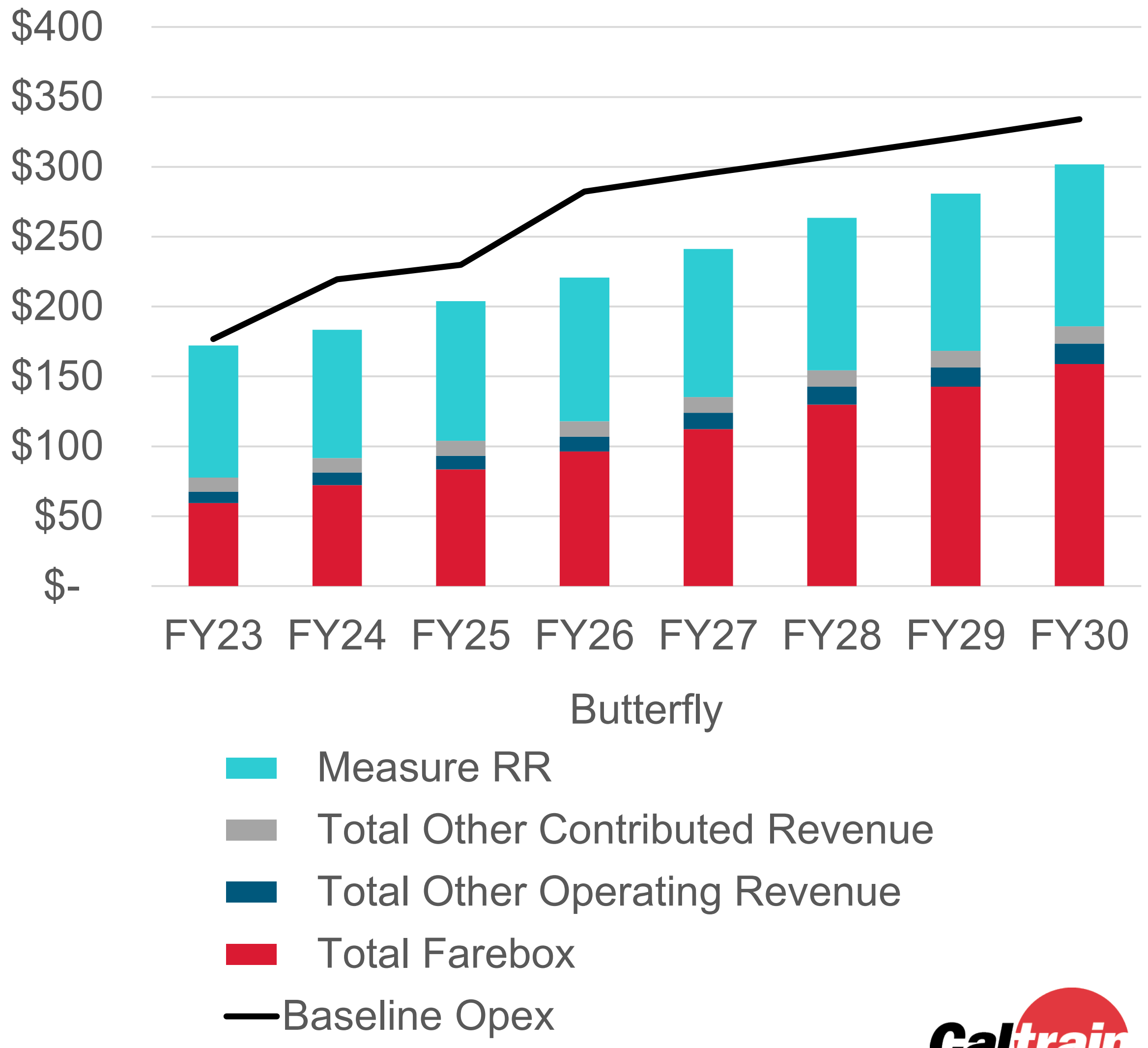
Revenue assumptions:

- Farebox: No fare increases assumed
- Measure RR: 2 year recessionary impact with return to growth in FY25- full amount shown applied to operating needs
- Other Revenue: Modest increased operating funding for Public Transit at Federal or State level
- level JPB Member Operating Contributions: none

Service assumptions:

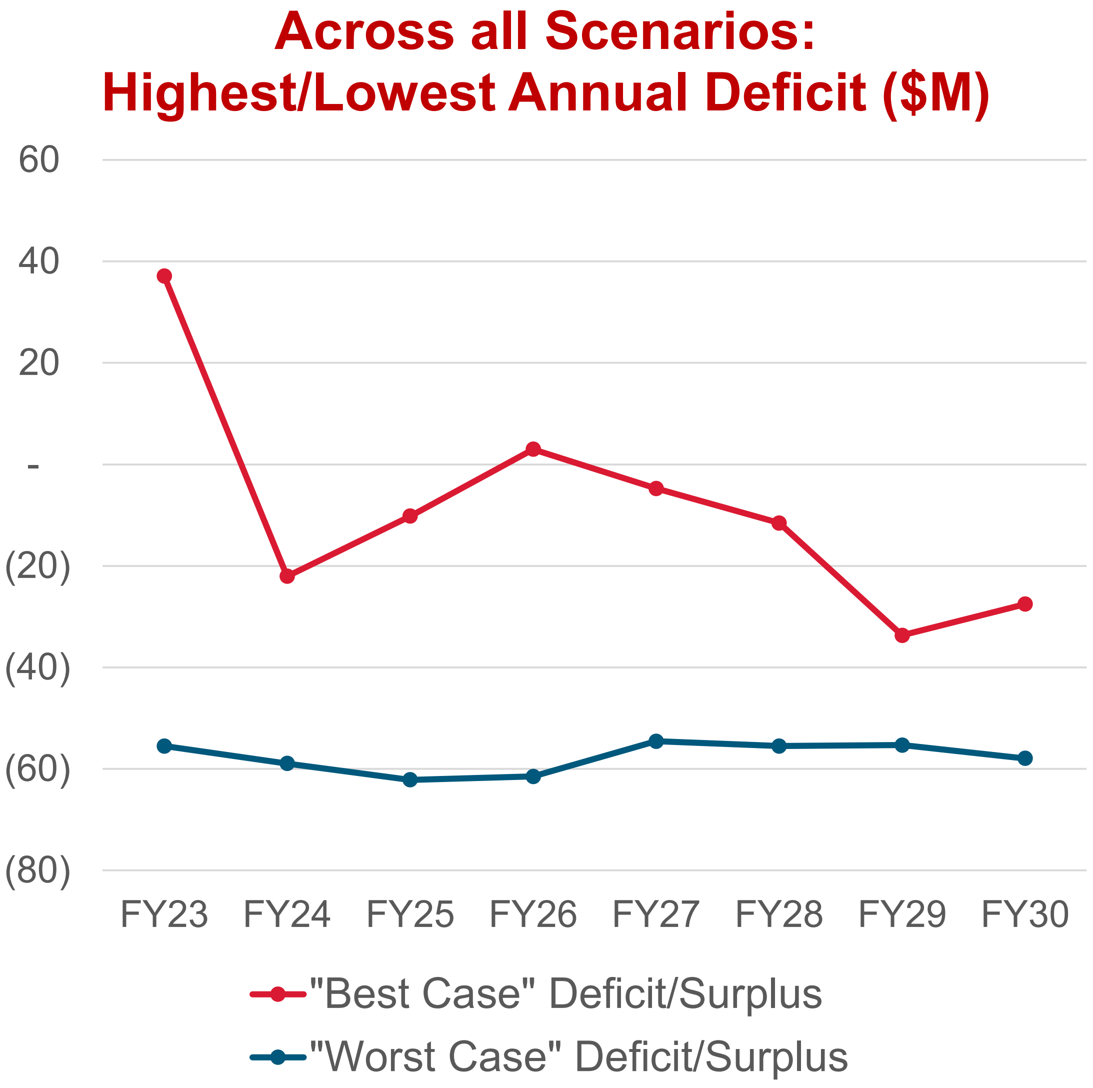
- FY23: 92tpd (4tph peak/2tph off-peak)
- FY24-25: 116tpd (6tph peak/2tph off-peak)
- FY26-30: 168tpd (6tph peak/3 tph off-peak)

Butterfly O&M: Revenues vs. Expenses, with Measure RR Funds and No Fare Increases



Across all scenarios each year, what are the best and worst cases for the size of our deficit/surplus?

[Note: goes year by year, looks at each scenario, and selected the highest and lowest deficit/surplus in each year across the scenarios. Does not show the surplus/deficit for best/worst scenarios – more granular than that.]



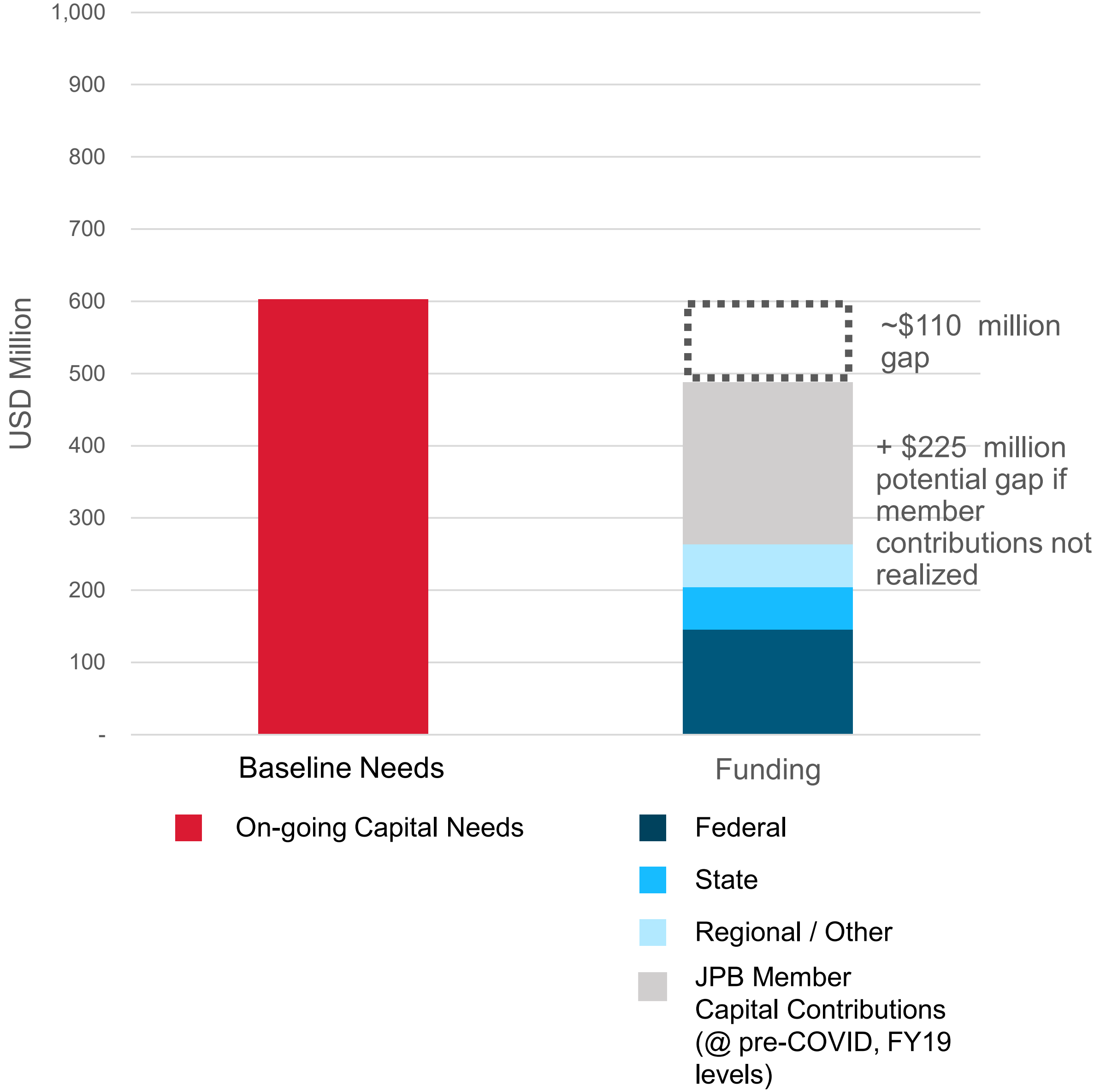
Capitalized State of Good Repair

Caltrain <u>has not</u> developed scenario-specific estimates of ongoing minor capital and capitalized state of good repair (SOGR) needs

The graph on the right was presented to the JPB previously (in early 2020) and shows a 10-year estimate of ongoing minor capital and SOGR needs associated with maintaining the base system (existing and committed/ required investments) through FY2030. This analysis reflects an averaged need of roughly $60 million annually in capitalized SOGR, minor capital needs and capital program administration – none of which have changed substantially as a result of COVID.

This base need is likely to remain stable across the decade- with any significant potential variations in capitalized SOGR during this time frame occurring in out years as a result of choices around the long term disposition of the remaining diesel fleet.

Approximate 10-year State of Good Repair Need

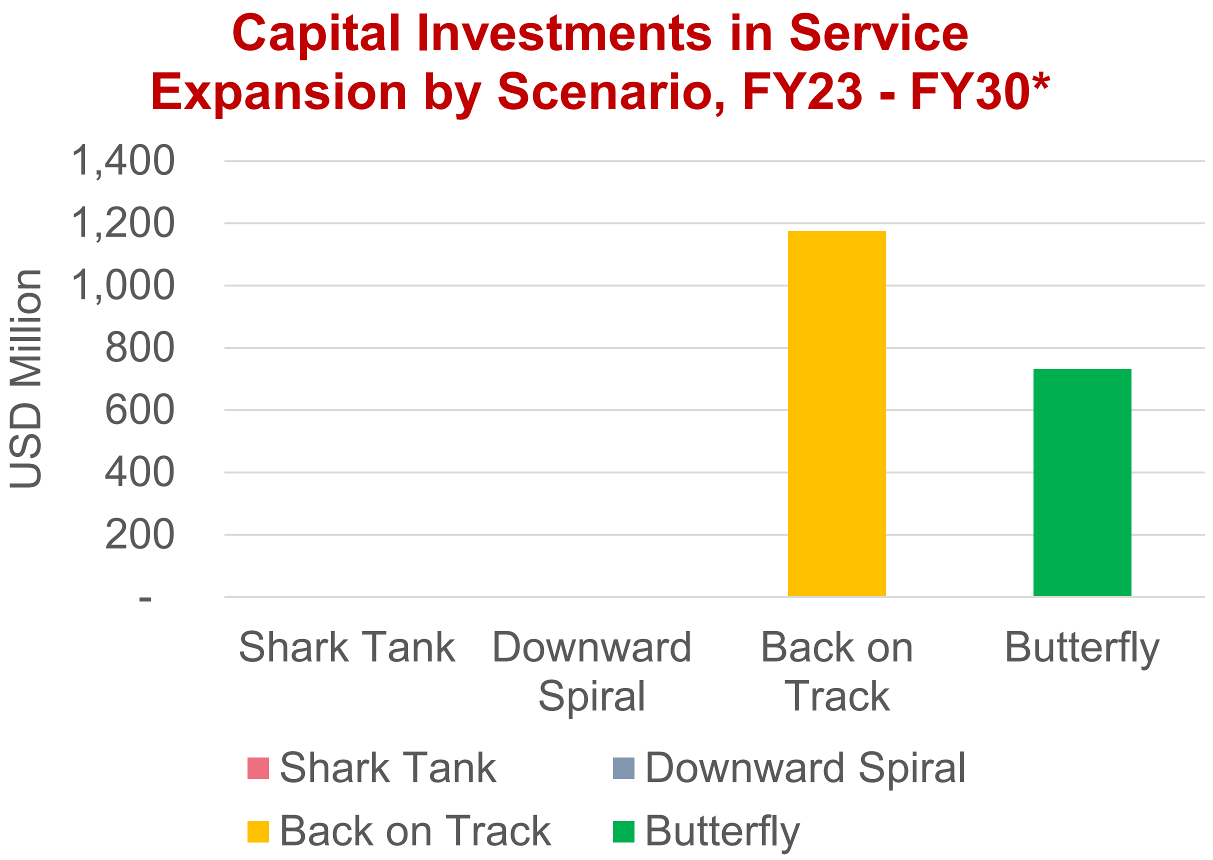


All costs shown in US$ 2018

Capital Investments in Service Expansion

While the 2040 Service Vision describes a long-range program of capital enhancements, Caltrain's adopted Equity, Connectivity, Recovery and Growth Scenario outlines a smaller program of rail-specific investments that would allow Caltrain to achieve an 8-train per hour service in the medium term as an incremental step toward the Vision.

The assumed timing of this investment in Service Expansion differs by scenario with both demand-based need and funding availability acting as major drivers of timing.



*Notes:

- No major capital investments in Service Expansion are required prior to FY30 for Shark Tank or Downward Spiral.
- Additional capital costs would be needed in Butterfly beyond FY30 to achieve 204tpd level of service.

Initial Conclusions from Financial Analysis of Scenario Work

Caltrain's scenarios are intended to highlight four **plausible** and **divergent** futures for the railroad. **They are not plans** - Caltrain is not "choosing" one of the scenarios

Similarly, the financialization of these scenarios is intended to show a range of plausible outcomes for the FY23-FY30 period based on different packages of assumptions and illustrative policy choices

Taken in aggregate, this work allows Caltrain to draw a number of important assumptions about the railroad's financial future

- **Restoring and building ridership is critical to Caltrain's ongoing financial sustainability.** The impact of COVID has had to ridership means that some kind of prolonged recovery is inevitable- this has severe financial implications for the railroad with deficits projected in a majority of circumstances.

- Caltrain is a high fixed-cost operation with a major system expansion (PCEP) already underway that will raise fixed costs further– "**cutting to prosperity" is not a viable strategy from either a service or financial perspective**

- **Inflationary pressures will be a constant challenge.** Caltrain is subject to the same inflationary pressures that have historically challenged the rest of the transit industry- with key cost drivers increasing faster than funding and revenue sources

Initial Conclusions from Financial Analysis of Scenario Work

Caltrain's scenarios are intended to highlight four **plausible** and **divergent** futures for the railroad. **They are not plans** - Caltrain is not "choosing" one of the scenarios

Similarly, the financialization of these scenarios is intended to show a range of plausible outcomes for the FY23-FY30 period based on different packages of assumptions and illustrative policy choices

Taken in aggregate, this work allows Caltrain to draw a number of important assumptions about the railroad's financial future

- **Robust fare revenue will always be an essential component of Caltrain's revenues.** While Caltrain must address equity issues and attract new riders, there is no viable source of funding – including Measure RR- that can substitute for a robust level of overall fare revenue
- Absent ongoing member funding or other new sources, **Measure RR revenues will be substantially needed to support Caltrain's operations across all scenarios.**
- **Funding and revenue sources outside of Measure RR are needed.** Significant additional sources of funding and revenue – such as JPB Member funds - will be critical to overcoming anticipated operating deficits and will be needed to support capital needs including SOGR and future system expansion

Caltrain

Next Steps

1. Synthesize financial projections and conclusions with larger scenario planning work and overall agency plans and policy commitments
2. Develop a concise “Business Strategy” statement to articulate and guide railroad focus and activities through FY25

FOR MORE INFORMATION

WWW.CALTRAIN.COM