

Caltrain Business Strategy: Scenario Planning

JPB WPLP COMMITTEE
JAN 27, 2021



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. This work starts with scenario planning.



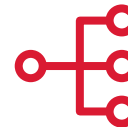
Equity, Connectivity, Recovery, & Growth Framework



Near Term Service Planning



Financial Analysis



Scenario Planning

Focus for today

The presentation today focuses on establishing context for Caltrain's post-pandemic Business Strategy. It describes major recent shifts that have occurred in Caltrain's business environment and outlines the process that staff used to generate different scenarios or "stories" about possible futures the railroad may encounter. These scenarios are intended to provoke a series of strategic questions and conversations about Caltrain's Business Strategy going forward.

Staff plans to return to the Board in spring with Business Strategy that addresses these questions and can guide the railroad through the coming years.



Background



Developing Scenarios



Business Strategy Implications & Questions

Focus for today

The presentation today focuses on establishing context for Caltrain's post-pandemic Business Strategy. It describes major recent shifts that have occurred in Caltrain's business environment and outlines the process that staff used to generate different scenarios or "stories" about possible futures the railroad may encounter. These scenarios are intended to provoke a series of strategic questions and conversations about Caltrain's Business Strategy going forward.

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Three Key Ideas

- The events of the last year have massively impacted Caltrain's business and have also provoked larger, long term shifts in the railroad's surrounding business environment
- The future looks increasingly volatile, uncertain, complex and ambiguous. Previous trends and assumptions are not necessarily a reliable guide to what may happen next. Caltrain has used scenario planning as a tool to consider multiple possible futures
- Caltrain needs a Business Strategy to navigate the challenges and opportunities of the coming years. The strategy will focus on how Caltrain can drive customer and public value during a time of significant uncertainty.

Background

What is Caltrain's Business?

There are two major areas of Caltrain's business. While closely interrelated, they are fundamentally distinct



Rail Service (San Francisco – Gilroy)

Example Activities:

- Passenger rail operations
- Maintenance of rolling stock and systems
- Fare policy and collection
- Near and long term service planning
- First- and last-mile services



Corridor Management (San Francisco – San Jose)

Example Activities:

- Hosting of Caltrain service
- Hosting of freight and other current and future tenant rail services (ACE, CCJPA, CHSRA)
- Infrastructure and corridor maintenance
- Capacity planning and participation in joint projects
- Capital project delivery
- Land asset management

How does Caltrain's Business Deliver Value?

Caltrain (and transit generally) delivers value in two broad and interrelated ways.

VALUE

for

MONEY

Customer Value:

The direct benefits that accrue to individuals who use the system

Public Value:

The mobility, equity, economic, social and environmental benefits that accrue to a broader public or advance larger public goals and values when the system is used

Self-generated Revenues:

Fares and other-self generated revenues earned directly

Public Subsidy:

Public funding of operations and capital investments

Where were we?



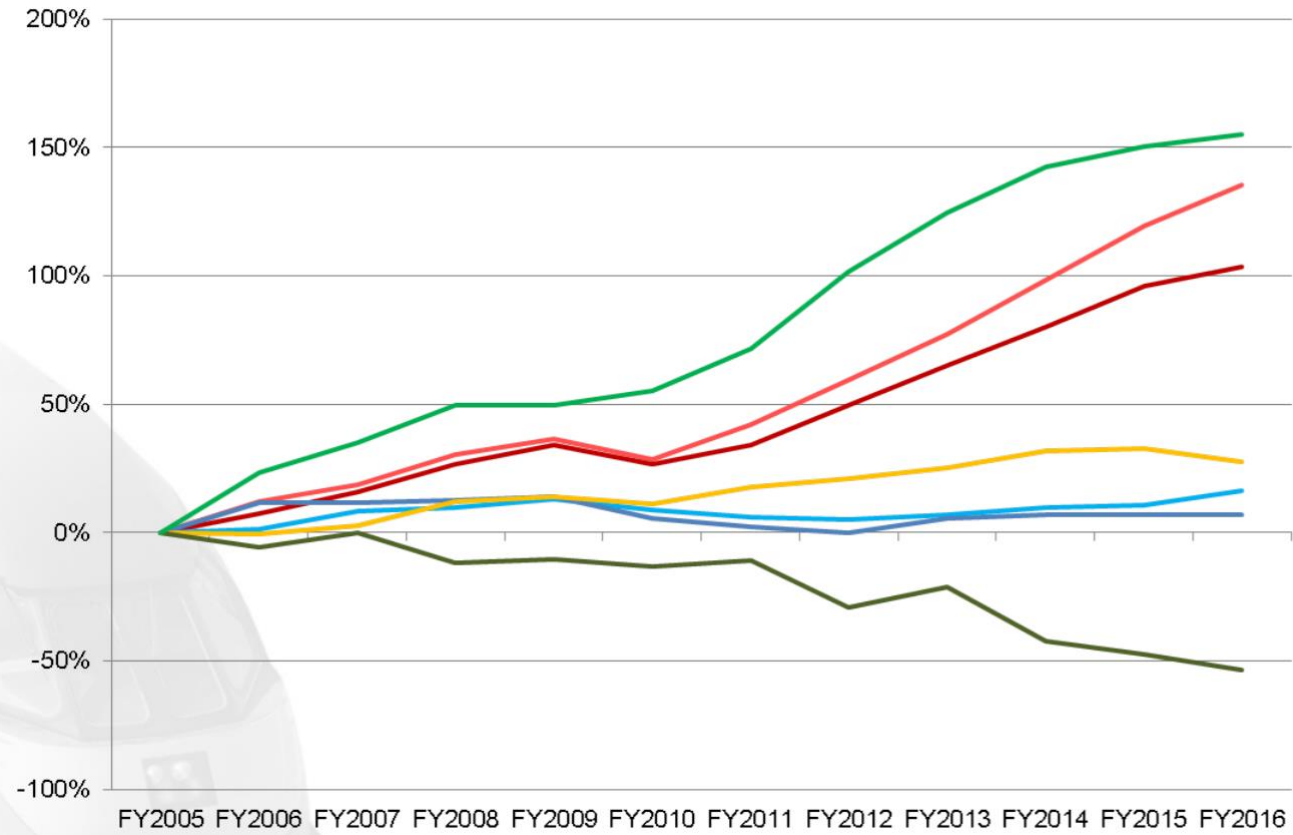
Rail Operations

In 2017, at the start of the Caltrain Business Plan process, Caltrain's commuter rail operation had enjoyed more than a decade of consistent ridership growth buoyed by the success of the "baby bullet" express service and a booming corridor economy.

Lacking a dedicated source of funding, the railroad relied heavily (and successfully) on passenger fares – recovering more than 70% of its operating costs through ticket sales and other self-generated revenue sources.

As ridership grew, public subsidy of the service declined in both real and percentage terms.

Key Caltrain Business Metrics 2005-2016



- Weekday Ridership
- Annual Ridership
- Annual Revenue Service Hours
- Trains per Weekday
- Total Annual Operating Budget
- Total Contributed Funds
- Total Self-Generated Revenue



Where were we?



Corridor Management

Leading into the start of the Caltrain Business Plan, the railroad's corridor management efforts were overwhelmingly focused on two related initiatives.

First, longer term corridor management efforts focused on planning for the introduction of California High Speed Rail service to the corridor (the Blended System) and on related, major expansion projects like the Downtown Extension and Diridon Station.

The other major corridor management focus was the planning, funding and delivery of the Peninsula Corridor Electrification Project – an investment in corridor capacity that would allow Caltrain to significantly expand service and that could be used by CHSRA services in the future.

- **2008** CHSRA specifies its alignment
- **2011-2013** “Blended System” introduced
CHSRA Business Plan confirms Blended System
Senate Bills 1029 and 557 provide Prop 1A funds and codify 2-track blended system
- **2013-2017** Peninsula Corridor Electrification Program environmentally cleared
Receipt of Federal Full Funding Grant Agreement
Full Notice to Proceed issued

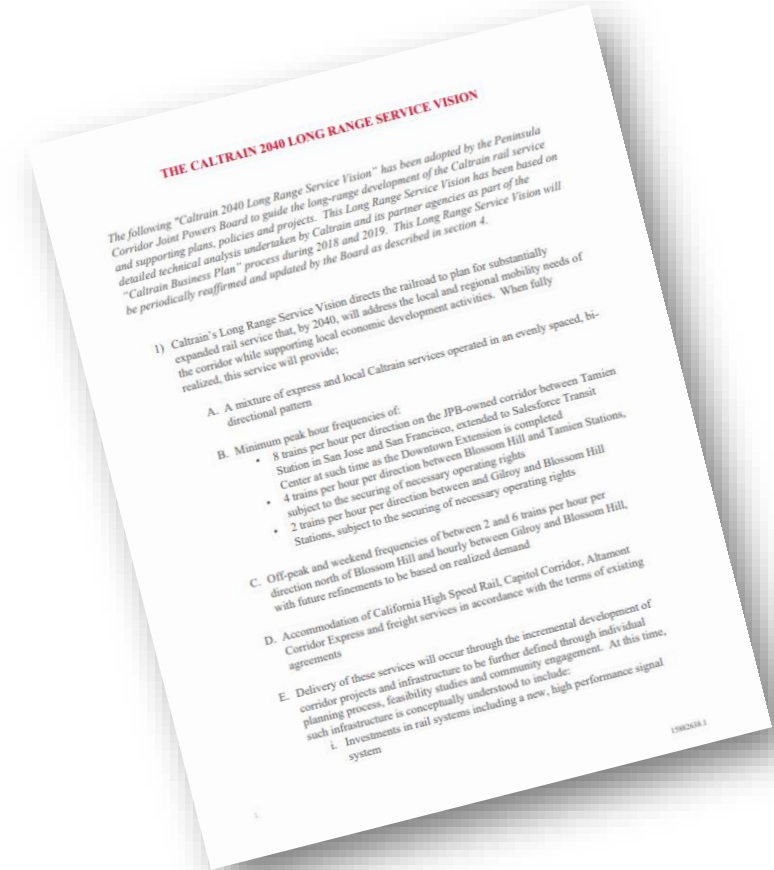
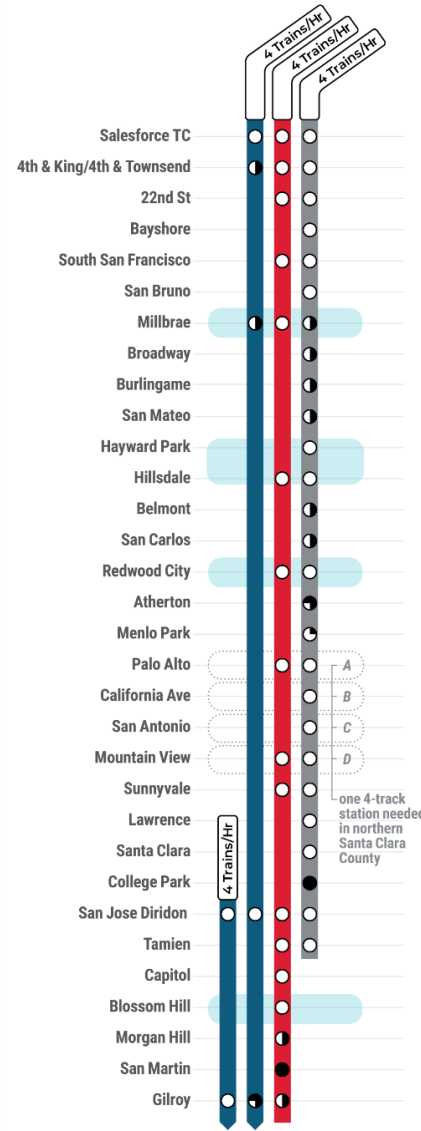


Where were we?

A Long Range Service Vision

The major focus of Caltrain's Business Plan process was the development of a Long Range Service Vision for the railroad. The Board adopted the Long Range Service Vision in the fall of 2019

The Vision was selected through a business case process and was developed to harmonize and expand upon the multiple, overlapping long range plans in the Caltrain corridor by re-focusing them around a goal of expanded and improved rail service. The 2040 Service Vision provides Caltrain with a framework that comprehensively guides the railroad's corridor management activities and long range service planning

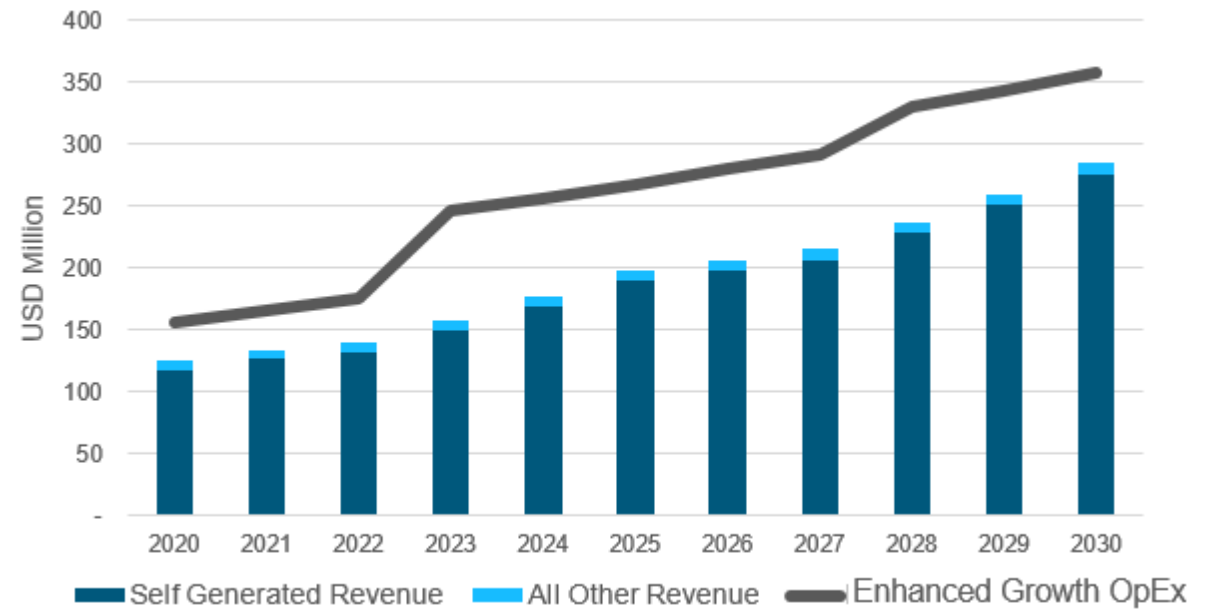
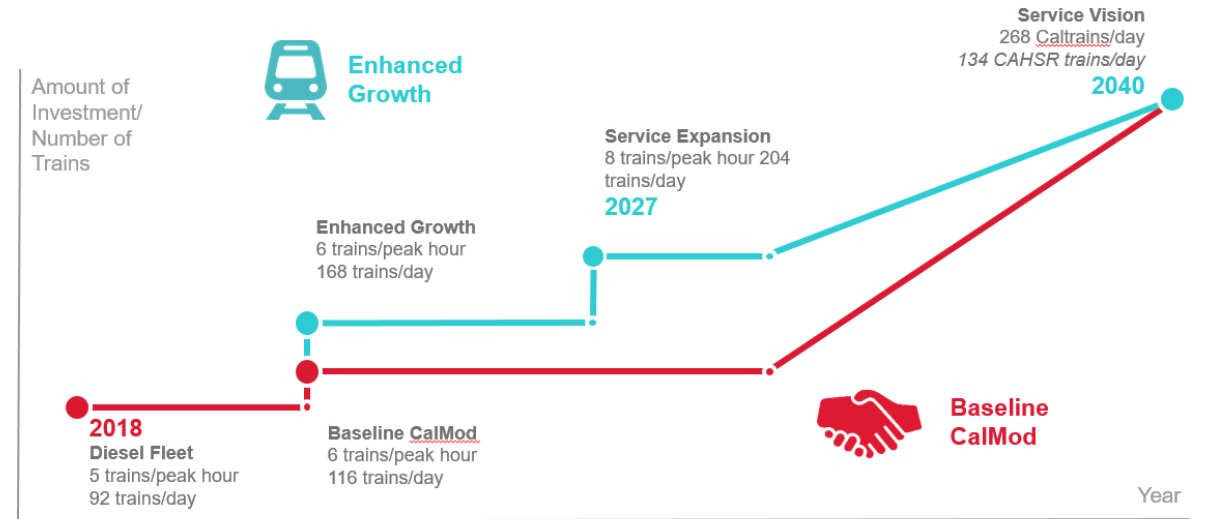



Where were we?

Planning for the next 10 years

With a Long Range Service Vision adopted, Caltrain was preparing to complete the Business Plan process and was focused on developing an “implementation plan” that would guide railroad operations and expansion activities over the coming decade. In February of 2020, staff presented to the board on a number of key areas including;

- Work related to equity and station access
- Development of interim service concepts for the next decade including both electrified service as well as an “enhanced growth” approach to deliver expanded, 8 train per hour service in the corridor as soon as feasible
- Refining ridership estimates, financial projections, and funding needs for the next decade



A photograph showing a sign for a senior center in the foreground, with a large fire burning in the background. The sign is black with white text. The background is filled with thick, orange and yellow flames and smoke, suggesting a wildfire or a large fire. The sign is positioned on the left side of the frame, and the fire occupies the right side and extends into the background.

SENIOR CENTER

**WEAR A MASK
WASH YOUR HANDS
SOCIAL DISTANCE
STAY SAFE**

COME JOIN US

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

Examples of Major shifts in the Business Environment

- Massive changes to daily life and mobility patterns resulting from the COVID-19 Pandemic and associated health orders
- Severe economic impacts, job losses and worsening economic inequality
- Widespread recognition and protest of racial injustice
- Accelerated adoption of remote working, delivery services and contactless payment
- Changes to residential and commercial real estate markets
- Intensifying impacts of climate change including severe wildfires and air quality deterioration in Northern California
- A significant federal election amidst intensifying political polarization and violence

A Year of Change for Caltrain

When the pandemic hit, Caltrain's focus immediately turned away from long range planning and toward survival and recovery as the impacts of the pandemic precipitated an abrupt loss of ridership and an existential financial crisis for the railroad.

The events of the past year have resulted in significant direct changes to the railroad's business – at a time when a great deal of change was already underway.

The future Caltrain must plan for now is not necessarily the same one we were contemplating a year ago

Direct Business Impacts

- Abrupt loss of 95% ridership and corresponding declines in revenue resulting from the pandemic and associated public health orders
- Ongoing disruption and changes to operations, project work and business practices

Significant Responses and Events

- Adoption of health and safety practices
- Federal relief funding and formation of the Blue Ribbon Task Force
- Adoption of Equity, Connectivity, Recovery & Growth Framework
- Significant restructuring of Caltrain service
- **Passage of Measure RR**

Other, Parallel Change

- Electrification of the railroad
- Advancement of governance process
- Changes in senior staff and leadership



Multiple Phases of Crisis & Response

Initial Triage

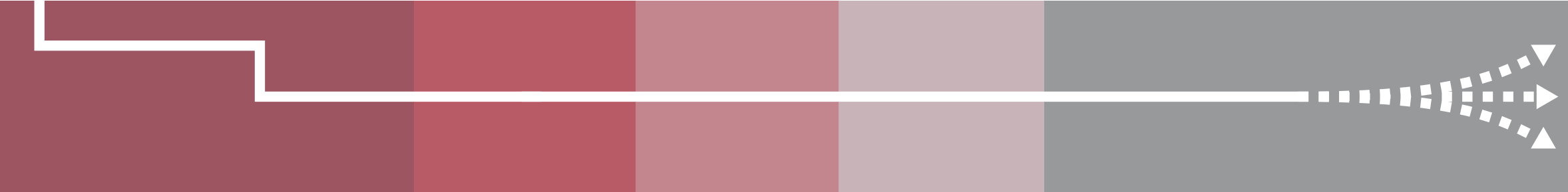
March 2020 – May 2020

Surviving the Pandemic

May 2020 – 2021 (?)

Preparing for the Next Reality

2021 and Beyond



Initial crisis and immediate triage response by Caltrain

Extended period where Pandemic is ongoing and Caltrain ridership and operations remain deeply impacted and in a state of dynamic flux. Railroad's financial position is precarious

Long-term resolution of pandemic through vaccine or other permanent public health approaches. Caltrain adjusts to new Business Environment

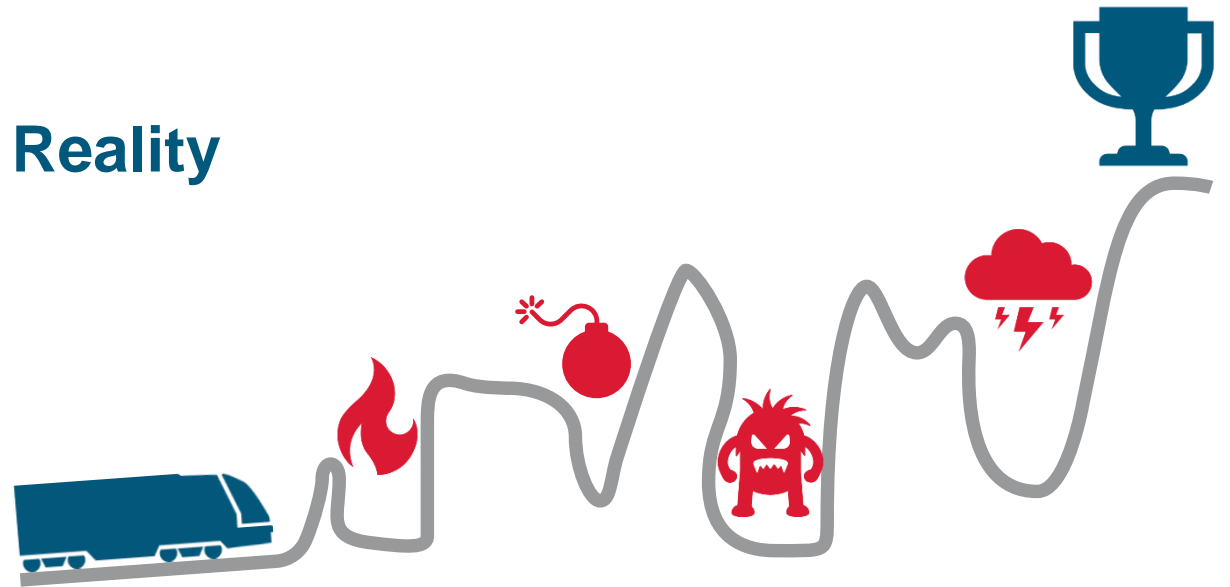
Why did Caltrain Undertake Scenario Planning?

The events of the last year have massively changed Caltrain's business and have also provoked larger, long term shifts in the railroad's surrounding business environment. The "next reality" Caltrain faces looks increasingly volatile, uncertain, complex and ambiguous. Previous trends and assumptions are not necessarily a reliable guide to what may happen next

The Plan



Reality



Stages of Caltrain's Scenario Planning Process



Lay the Groundwork

- Interview** key leaders
- Assess** external trends
- Design** workshops
- Study** Bay Area infections model



Develop Scenarios

- Choose** the most important external forces
- Identify** 4 diverging scenarios and develop stories for each
- Map** these scenarios over time



Determine Strategic Implications

- Study** implications for Caltrain in each scenario
- Identify** actions to take over different time frames
- Define** early indicators for each scenario

Who was involved?

Caltrain Staff

Caltrain Executive leadership

Representatives from Systemwide Planning & Policy, Financial Planning, Grants & Funding, Operations, and Marketing departments

External Experts

Katherine Carmen *Behavioral Economist*

Egon Terplan *Advisor to Governor Newsom*

Kiran Jain *Policy and Civic Technology/Innovation Expert*

David Bragdon *Transit Center Executive Director*

Ibbi Almufti *Arup Risk and Resilience Leader*

Stakeholders

Project Partner Committee (PPC) – staff from partner agencies - participated in a workshop provide feedback on scenarios

Consultant Team

Nicole Boyer *NOW Partners*

Ratna Amin *Deutsche Bahn & Engineering*

Huma Husain *Fehr & Peers*

Lee Reis *Fehr & Peers*

Karina Schneider *Fehr & Peers*

Katie Miller *Fehr & Peers*

Developing Scenarios

Caltrain's Focal Question:

What's the impact of the pandemic on Caltrain's future business?

Surviving the Pandemic
(next 6 months to 3 years)

What will the **regional market and funding environment** look like during the transition period?

New Reality
(3-10 years)

What are the **lasting impacts in the region as a place to work, live and visit?**

Scenario Development Process

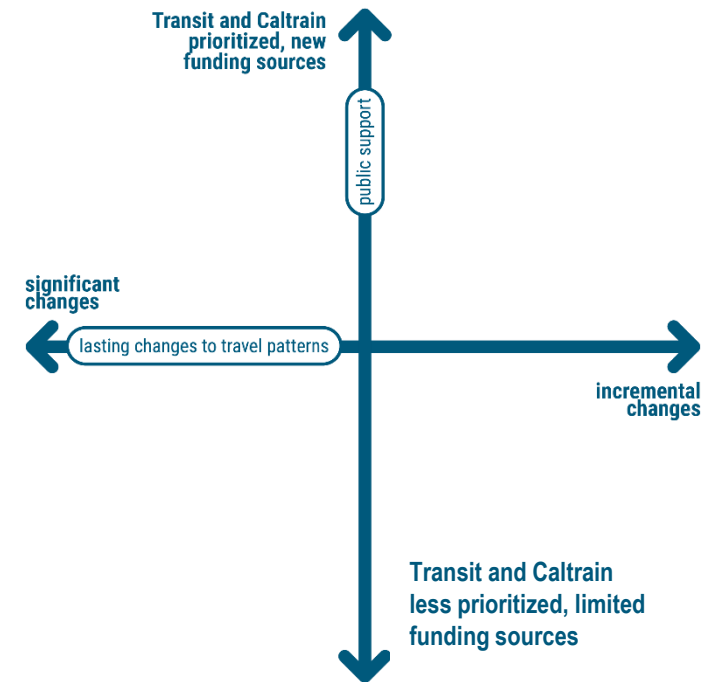
What driving forces will shape the answer to Caltrain's focal question?



How big are the uncertainties associated with each force?



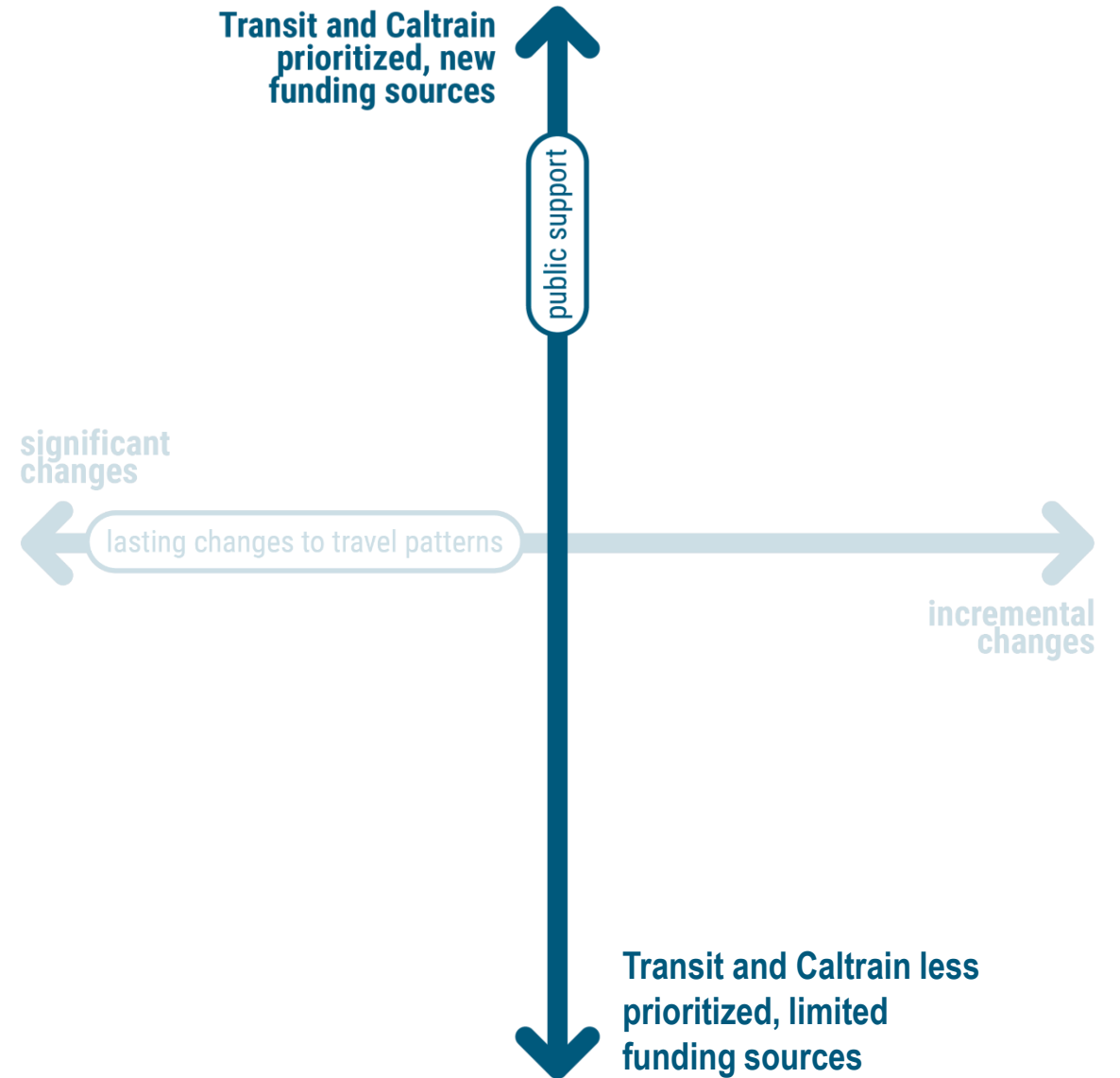
What are the biggest uncertainties shaping our future?



Public Support for Transit

Key Considerations on this Axis:

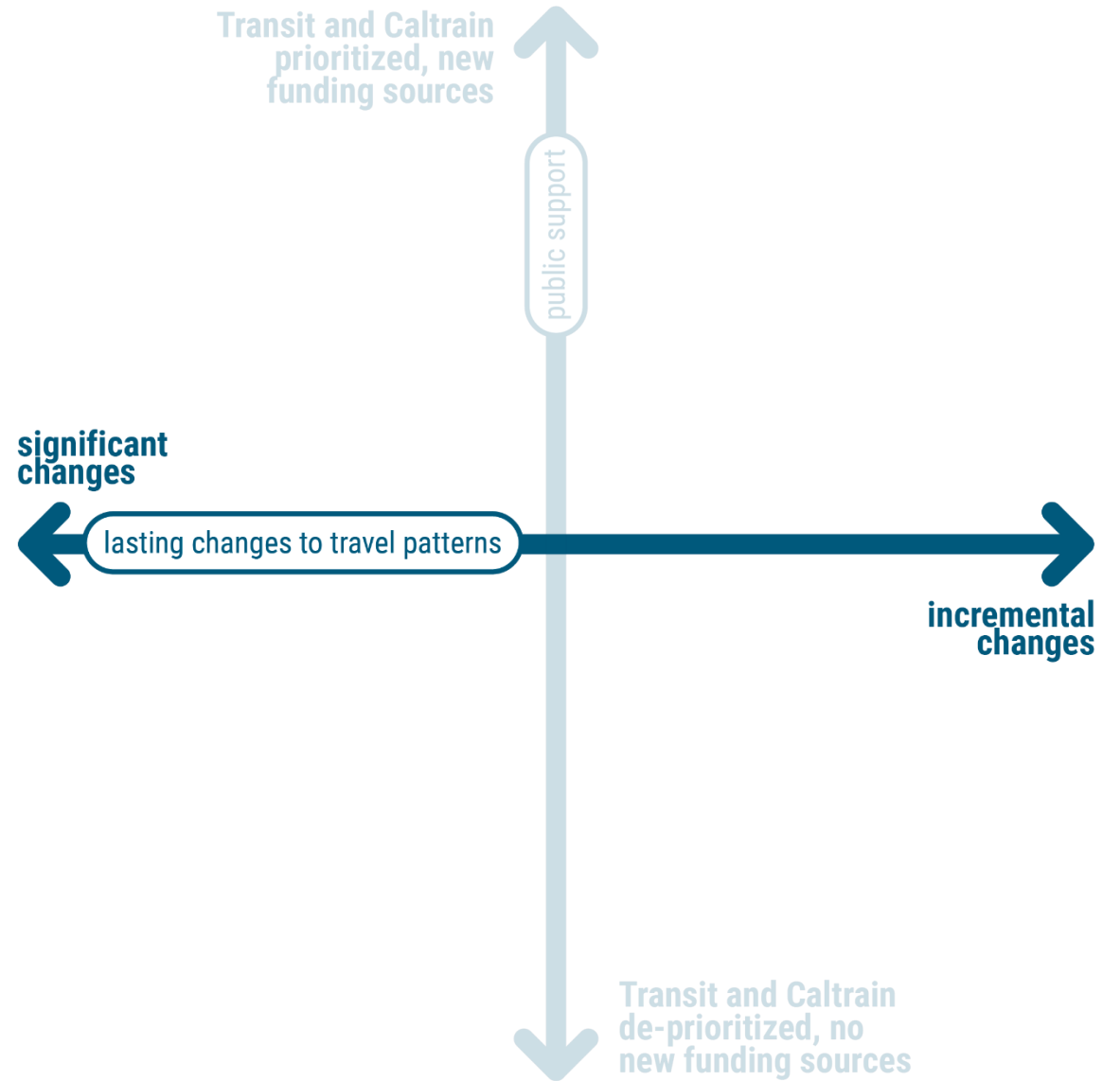
- What nature and level of direct public financial support is available to Caltrain? (eg member funds, Measure RR, other direct funding streams)
- What Federal and state funding opportunities are available to Caltrain specifically and transit generally? (eg relief funds, new stimulus, ongoing and new programs)
- What nature of political support is there for Caltrain in the region and state?
- Is transit politically prioritized and a focus generally at the regional, state, and national levels?



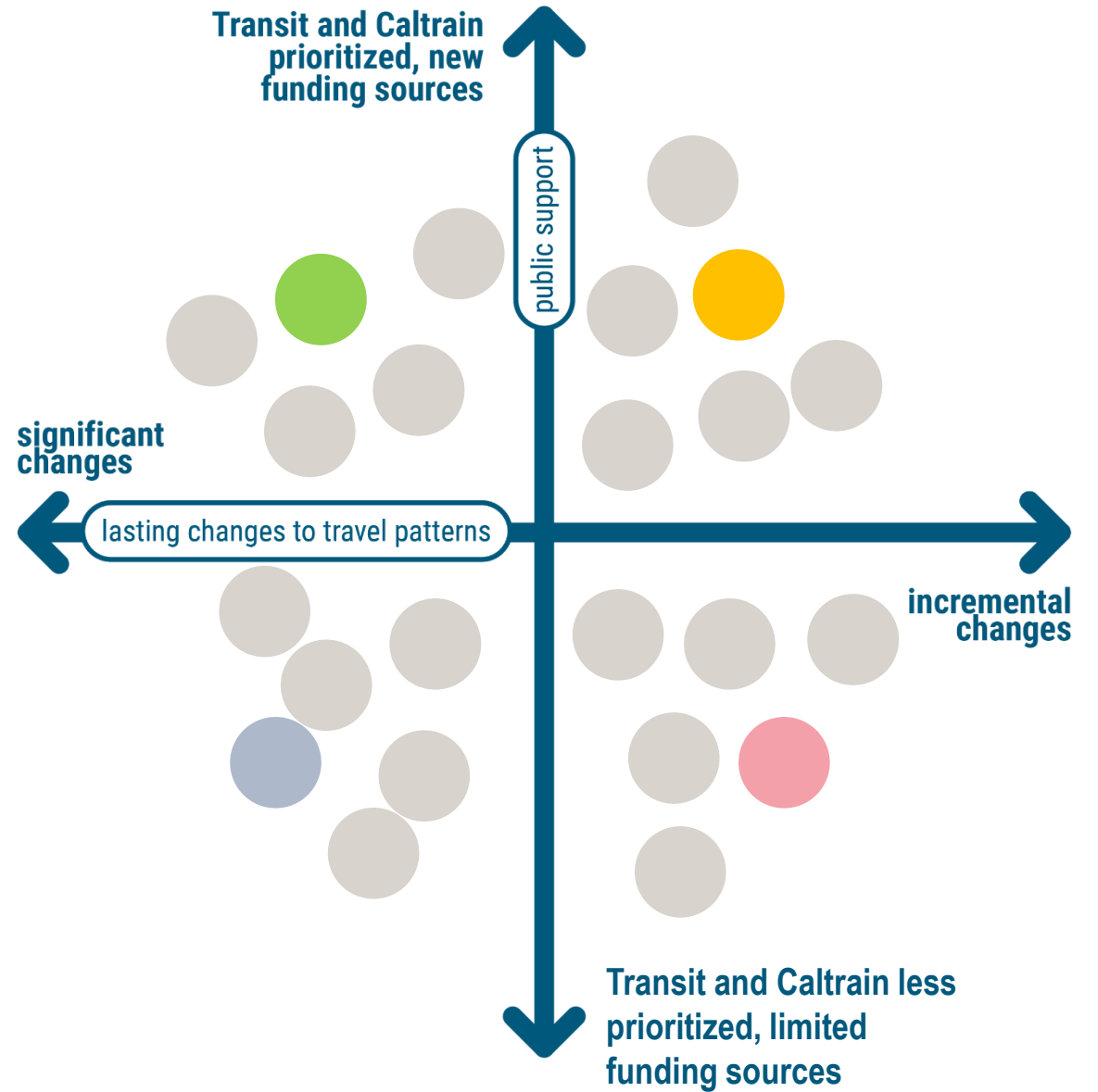
Lasting Changes to Travel Patterns

Key Considerations on this Axis:

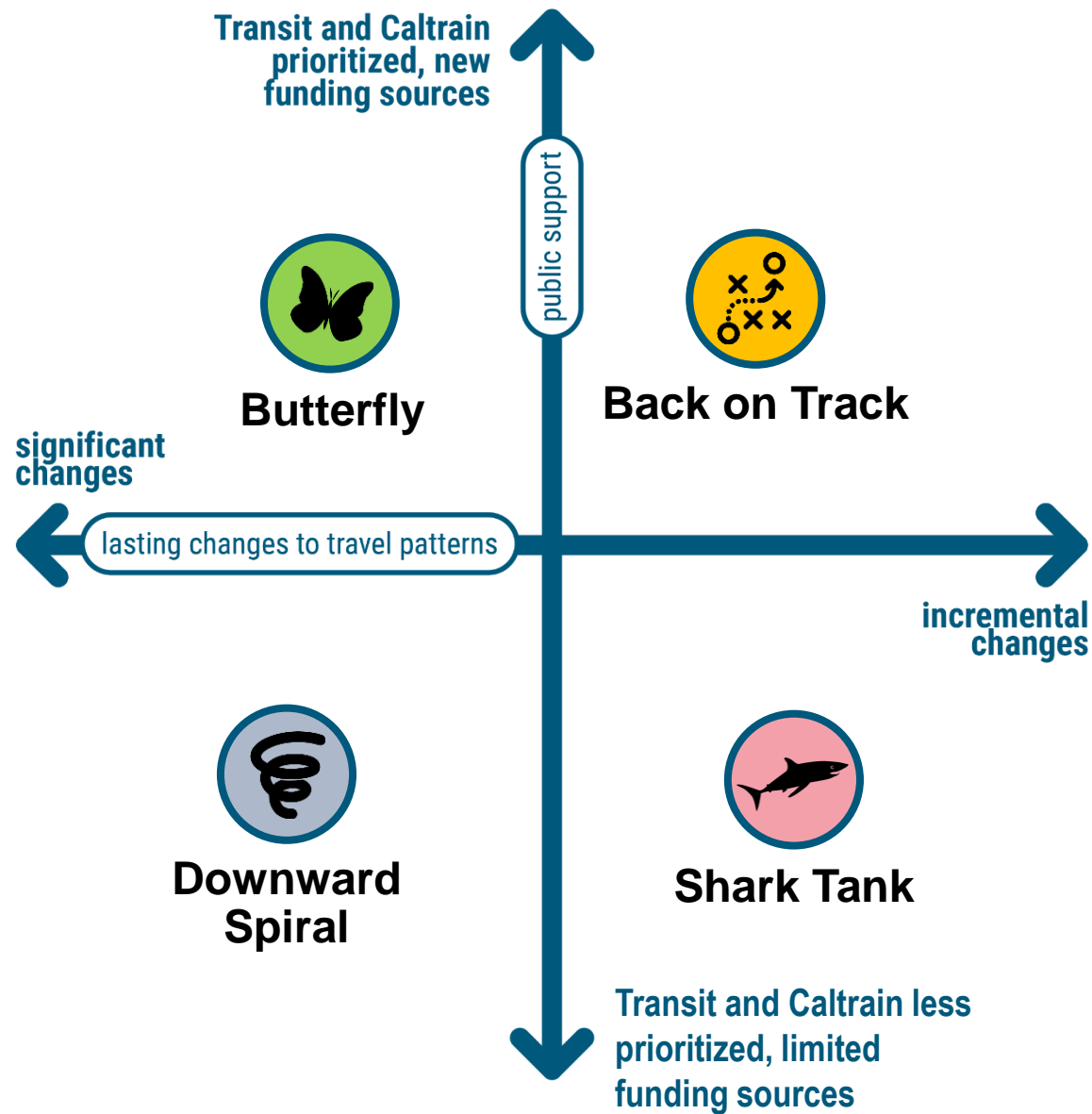
- Progress of the pandemic including timing/ and efficacy of a vaccination campaign
- Evolution of remote work (WFH) and education both during and post-pandemic
- Changes in regional economic outlook and growth patterns
- Near- and longer term impacts to housing and job distribution and growth within the region
- Speed of ongoing technological innovation in the remote work and transportation industries
- Ongoing evolution of traffic and congestion patterns
- Accelerating impacts of climate change to daily life



Developing Stories About the Future



Four Caltrain Scenarios





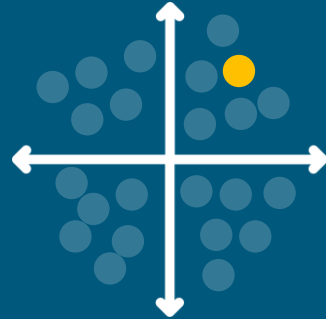
Back on Track

CALTRAIN & TRANSIT FUNDING

prioritized de-prioritized

CHANGES TO TRAVEL PATTERNS

incremental significant



This is a world in which after a near-death experience, public transit becomes more integral to the Bay Area. The megaregional economy emerges strongly from the pandemic, and a new stream of Federal transit funding enables receiving agencies to prioritize advancement of capital programs, deliver robust service and prioritize equity. Leadership shown during the pandemic increases trust in the capabilities of existing government institutions.

Why Back on Track Happens

- An effective vaccination campaign gets people back to offices and schools gradually throughout 2021.
- Thanks to strong Federal and State incentives the regional economy recovers within 3 years.
- The corridor office travel market is smaller than before, but remains. Other travel markets grow in relative importance.
- Major, sustained Federal investments in transit fund both capital expansion and transit operations.
- Institutional reforms occur incrementally as Caltrain and the region focus on an ambitious capital program and expanded service.

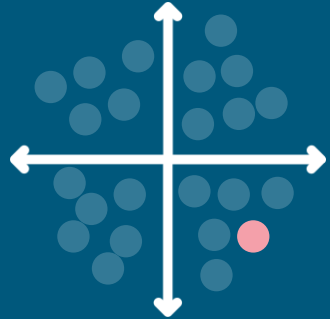
Scenario 2



Shark Tank

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

CHANGES TO TRAVEL PATTERNS
incremental **significant**



This is a world in which it's survival of the fittest. Despite initial rounds of relief funding and the passage of Measure RR, further funding for transit largely stagnates for the remainder of the 2020's as public priorities shift and the country grapples with intense polarization at the federal level. Measure RR guarantees Caltrain's survival but with other funding sources in decline the railroad turns to a mixed bag of innovations and private partnerships to grow its business; Caltrain has an increasingly singular focus on its own survival rather than long term expansion.

Why Shark Tank Happens

- An effective vaccination campaign gets people back to offices and schools gradually throughout 2021.
- A recession results in a smaller commuter market and many people continue working from home. Nonetheless, a core market of regional and intercity travel remains
- Financial scarcity drives continued polarization at multiple levels of government. Federal aid and stimulus are initially significant but are quickly spent and over time fall well short of overall need
- While a handful of major projects advance, longer term ambitions to expand transit begin to fade across the region and individual agencies grow increasingly focused on their own markets and protective of their bottom lines.
- Caltrain is marginalized politically and must seek new and additional partners and consider new business lines and ways of monetizing assets. The private sector gets increasingly involved with keeping public transportation going.

Scenario 3



Downward Spiral

CALTRAIN & TRANSIT FUNDING

prioritized **de-prioritized**

CHANGES TO TRAVEL PATTERNS

incremental **significant**



This is a world in which life and travel patterns change fundamentally – commuting doesn't rebound to anything like pre-COVID levels and a recession decimates the economy. Public transit - and rail in particular - go through a prolonged downward spiral of declining quality, resources, and demand. When the market begins to recover and congestion worsens at the end of the decade, transit doesn't have the organizational or financial capacity to pivot effectively

Why Downward Spiral Happens

- A halting and stilted vaccination campaign results in daily life remaining disrupted well into 2022
- The US economy is depressed for several years. The nation remains highly polarized and all layers of government are focused on dealing with escalating social, environmental and economic crises.
- Remote work proves popular and office densities begin a permanent decline. Over time, living or working near rail stations loses its appeal. People keep their work and activities close and rely on personal transportation: walking, cars, bikes and scooters.
- There's little private interest in public transportation. Instead, informal transit – privately-organized – becomes common. Automated car rides and delivery become common later in the decade. Public policy focus orients toward increasing road capacity and managing automobility – e.g. HOT lanes, congestion pricing.
- Public transit is – and is viewed as - a lifeline social service for those with no alternative. Large infrastructure projects are slowly abandoned and inflationary pressures steadily erode the operating funding that remains for transit

Scenario 4



Butterfly

CALTRAIN & TRANSIT FUNDING

prioritized de-prioritized

CHANGES TO TRAVEL PATTERNS

incremental **significant**



This is a world in which Caltrain and transit throughout the region have a few very painful years of hard decisions and dramatic organizational changes followed by transformation and renewal. The business case for transit is redefined and widened to include broad social and environmental benefits and new investment follows. Some major projects in the region advance while others are reimaged and modified. New leaders and public sector collaborations emerge centered on equity, sustainability, and resilience. Continued prosperity in Silicon Valley means Caltrain stays necessary and relevant to people throughout the corridor.

Why Butterfly Happens

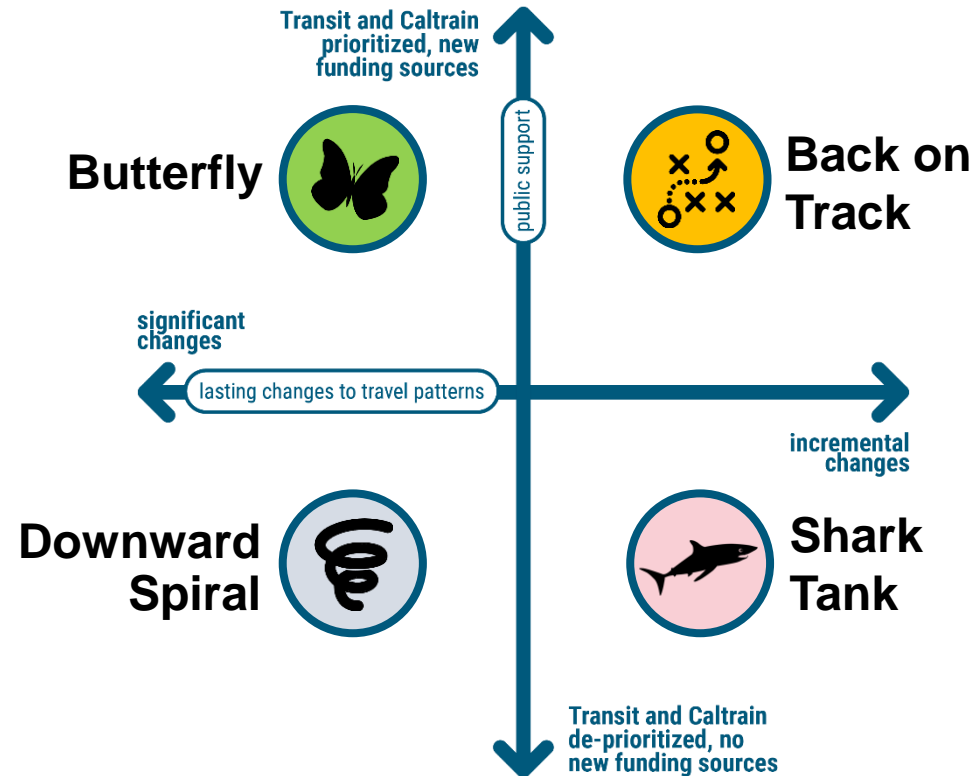
- A halting and stilted vaccination campaign results in daily life remaining disrupted well into 2022
- The temporal structure of daily life is permanently changed - - remote and hybrid work remains popular, corridor employers and schools adopt varied and asynchronous schedules.
- While land use developments in the pipeline are built, new office starts to taper off and settlement patterns steadily shift across the region and state
- Congress passes one-time and permanent funding packages supporting public transit, renewing the social safety net, and addressing climate change and adaptation.
- A new regionalism emerges to tackle climate adaptation and to address pressing social challenges. A new cohort of leadership moves to the public sector creating new coalitions and institutional arrangements.
- Transportation demand becomes heterogenous –people need to move seamlessly from transit to scooters to AVs – the private sector expands its involvement in mobility.

How might we start to know which of these scenarios are unfolding?

Signposts and early warning indicators

- Senate and Presidency flip party
- Composition of ridership changes
- Increased regional cohesion and cooperation
- Aggressive Federal and State climate policy
- Policies to reduce auto reliance are enacted or strengthened

- Pandemic is endemic
- Private sector actively encourages work from home and hybrid work
- Congestion levels are moderate
- Regional population declines
- Climate change becomes a discussion of adaptation



- Senate and Presidency flip party
- Significant and sustained federal and state investments in transit
- Ridership increases steadily
- Widespread return to the office
- Congestion returns and increases

- Corridor economy regains strength
- Federal relief funding and stimulus are modest and quickly spent
- Regional coordination efforts falter
- Climate change is not aggressively addressed
- Expressions of interest from private sector
- Breakthroughs and private funding for first/last mile connections and automation

Strategic Implications

Caltrain's Focal Question:

What's the impact of the pandemic on Caltrain's future business?

Surviving the Pandemic
(next 6 months to 3 years)

What will the **regional market and funding environment** look like during the transition period?

New Reality
(3-10 years)

What are the **lasting impacts in the region as a place to work, live and visit?**

What are "givens" in the business environment which Caltrain must prepare for?

Transactional Space

- Transit must continue to address public health as well as equity and anti-racism in service, fares and participation.
- Some transit agencies and local governments will undergo significant, transformative crises – albeit insulated by relief funding
- Leadership and organizational changes will occur
- Sustained favoring of personal mobility
- There will be more focus on multi-purpose projects which address multiple public goals.
- There will be significant advances in automated transportation as well as other mobility-interfacing technologies
- The way government delivers services will change to address participation, equity, resiliency and operational efficiency, with more creativity.

Next 18 months

2030 onward

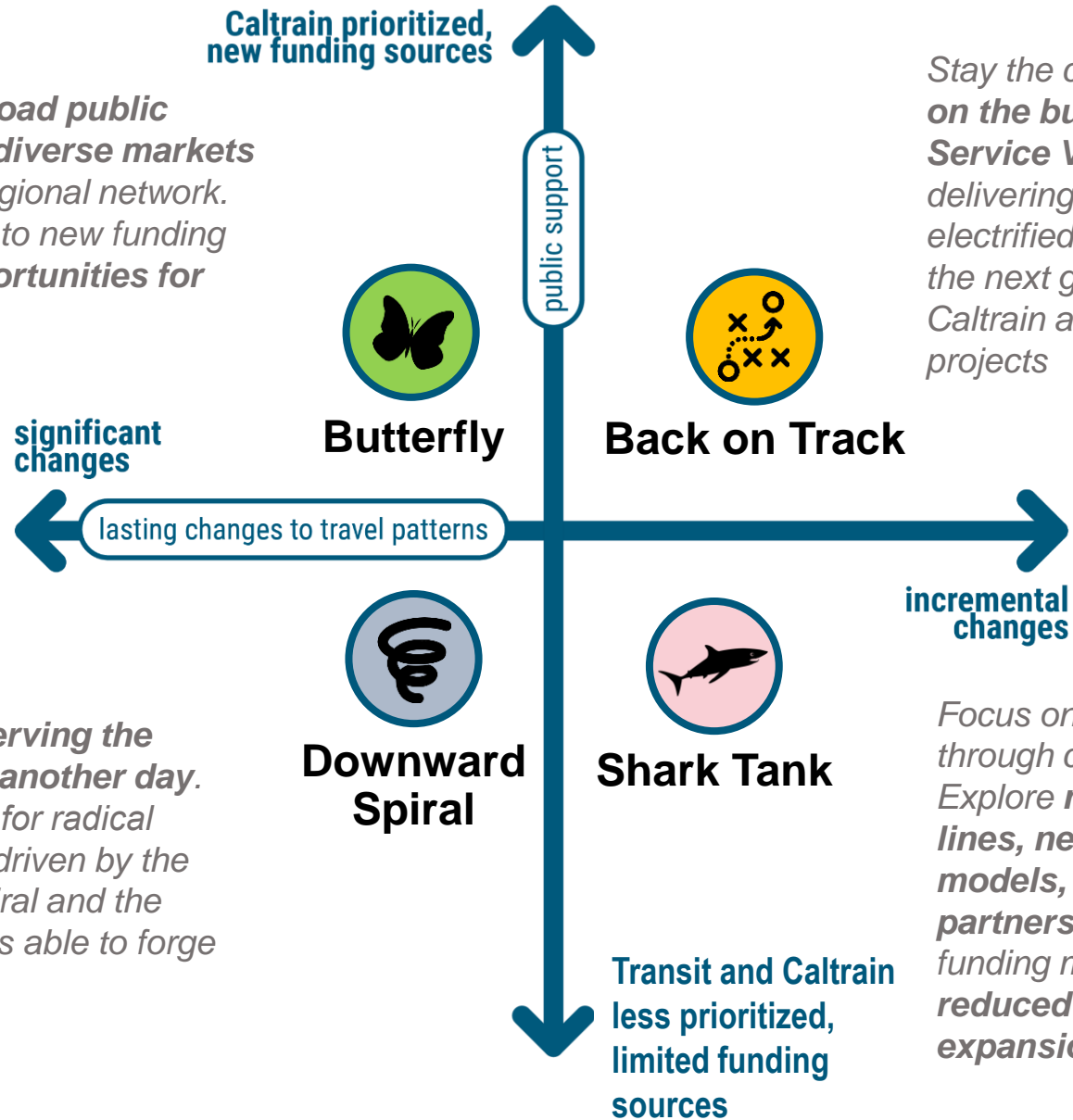
Business Environment

- Vaccines and treatments for COVID-19 will continue rolling out over months or years.
- Some degree of hybrid ways of working (office and home) are here to stay, home deliveries are here to stay, and some auto congestion is also here to stay.
- The economic fallout from COVID and SIP will continue to manifest for months with closures and lower incomes.
- Repurposing and adaptation of land uses will deepen as the nature of work, retail and school in the region change.
- The region's demographics will shift as companies adapt their business strategy and lower wage and hybrid workers move to lower-cost regions
- Sustainability and reducing carbon emissions will become more essential. Climate change events, sea level rise resiliency and recovery will become increasingly important.

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.

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.



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 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**.



Initial thoughts on Robust Options and Actions

"no-regrets" and "must dos"

- **Diversification** of revenue/funding sources and markets with **equity-focus** as a key strategy
- Significantly evaluating, reshaping, **rethinking fares and service** to meet evolving opportunities and needs (during and beyond the pandemic)
- **Asset monetization** and **entrepreneurial approaches** are essential, or at least helpful, in all scenarios as is a **focus on efficiency** and careful **management of financial capacity**
- New **partnerships** with both public and private actors are necessary or helpful in all scenarios
- The need to **address governance and organizational change** is present in all scenarios

Business Strategy Framework

Staff is working to develop a more detailed and structured Business Strategy that responds to our scenarios and that can prepare Caltrain for the coming years.

Caltrain's Business



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(San Francisco – Gilroy)



Corridor Management
(San Francisco – San Jose)

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How Caltrain Delivers Value

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Self-generated Revenues:



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Public Subsidy:

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Business Strategy Framework

The Business Strategy will focus on how Caltrain can drive value for customers and the public during a period of ongoing uncertainty and change.

Key Questions	 Rail Service	 Corridor Management
• How do we drive value for current and future customers?		
• How do we define and deliver value to the public as a whole?		
• What can we afford and how do we sustain ourselves financially?		
• How can organize and partner in a manner that allows us to be a nimble, effective and publicly responsive?		

FOR MORE INFORMATION

WWW.CALTRAIN.COM

