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Ideas + Action for a Better City

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#ProjectDelivery

What they did not tell you about
project delivery*

*But really, really should have.

Why do projects fail?

- Almost never for technical reasons
- Seldom for financial reasons
- Most common cause of death: loss of political support

Porcari's maxim: Major projects are a series of near-death experiences.

- It's hard. Get over it.
- The Woodrow Wilson bridge
- Columbia River crossing
- Gateway

What is the value proposition?

- Gateway
- Purple line

Building the external support structure

- Project management/delivery team not enough. It's just the beginning.
- Political support
 - Internal and external champions
 - Internal: strong, collaborative project director. Senior-level guardian angel.
 - External: Usually elected official(s). Can also be business community CEO, community leader(s).
 - Champions need to be willing to expend political capital for the project. And they will.
 - Zombie projects
- What is your plan to bridge electoral cycles?
 - Every 2 or 4 years
 - Local, state, federal level.
 - Ex: Federal transit grants, state and local funding
 - Is it perceived to be a bipartisan project?
 - Does it have utility to multiple stakeholders?
 - What milestones are you building in? Celebrate early and often.
 - Don't build a one-legged stool

Building external support structure (continued)

- No substitute for broad, durable community support
 - Build from the ground up
 - Community Benefits agreements
 - Infrastructure is a means to an end, not an end in itself
 - What long-standing community need can you address?
 - Build it into the NEPA Purpose & Need statement
 - It is now an eligible use of project funds
 - Trails, parks, brownfield remediation, small/DBE business development, skills training, local employment.
 - Business community as well.

Building support structure (internal)

- Build out the skills toolbox
 - The Big 3: Budget, procurement, HR. Project leadership will need all 3.
 - Strong understanding of legal, regulatory framework.
 - Project management process should focus on building skills toolbox for entire team.
- Grab the best & brightest
 - Second key staff from other agencies. Build an IPT.
 - Another way to build intra-institutional support.

Your project success checklist:

- Concise value proposition?
- Internal and external champions?
- Multi-legged stool?
- Built to span administrations?
- Financial resiliency?
- Achieves multiple ends?
- Building team skills and capabilities across the IPT?

MORE FOR LESS

How to plan and deliver the Bay Area's next generation of transit projects more quickly and cost-effectively

March 31, 2020

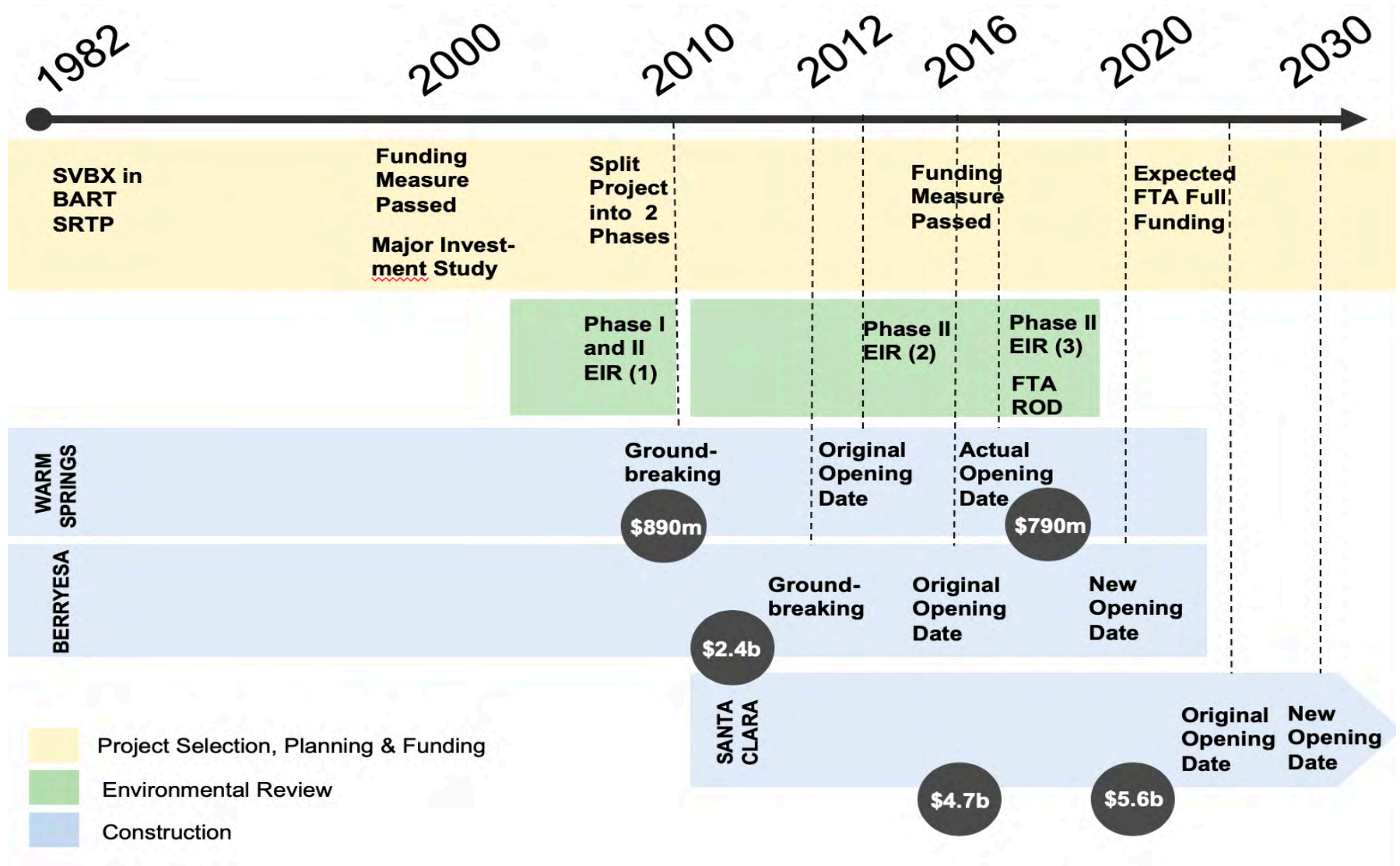


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for a Better City

**How can the Bay Area build
transformative transit projects
faster, more cost-effectively, and
with better value?**

Faster.



Cost-effectively.



BARCELONA SUBWAY L9 and L10

30 miles, 52 stations
\$7.9 billion
17 years (1999—2016)
\$263m/ mi



SILICON VALLEY BART EXTENSION (PHASE 1+2)

21.4 miles, 6 stations
\$ 8.9 billion
20 years (2009-2029)
\$419m/ mi

2X



CENTRAL SUBWAY

1.7 miles, 4 stations
\$ 1.5 billion
13 years (2008-2021)
\$882m/ mi

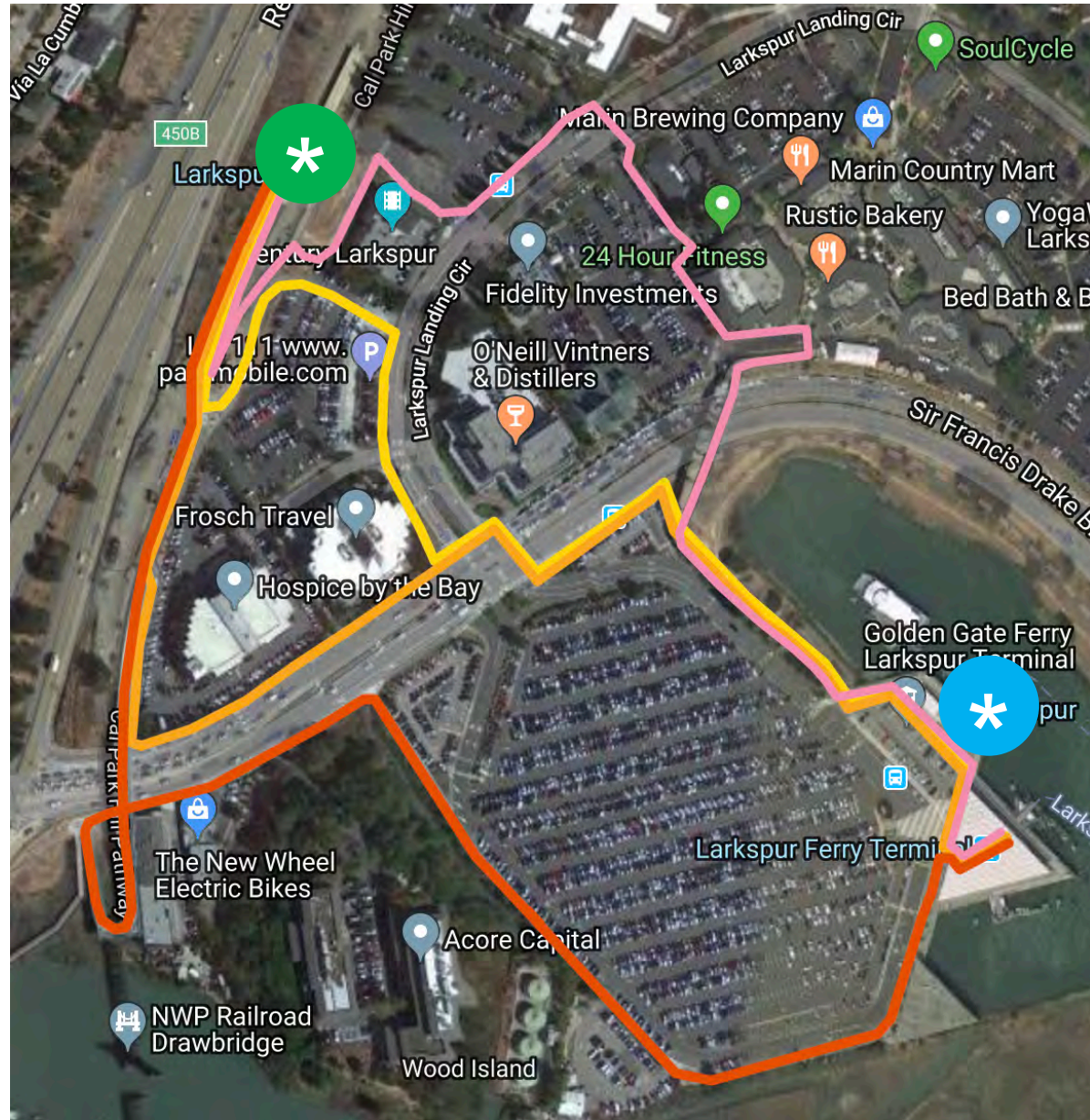
4X

**time from project approval to date all phases are fully in-service*

Photos: The Transport Politic, SFMTA, SPUR

Better value.

How does this (still) happen?



\$423 BN

Cost of state-of-good repair and near-term projects over 30 years

Nearly half of the Bay Area's GDP and \$110 BN more than we can afford.

“For rail projects, an average cost overrun of 44.7 percent combines with an average demand shortfall of 51.4 percent.”

- Bent Flyvbjerg, 2016

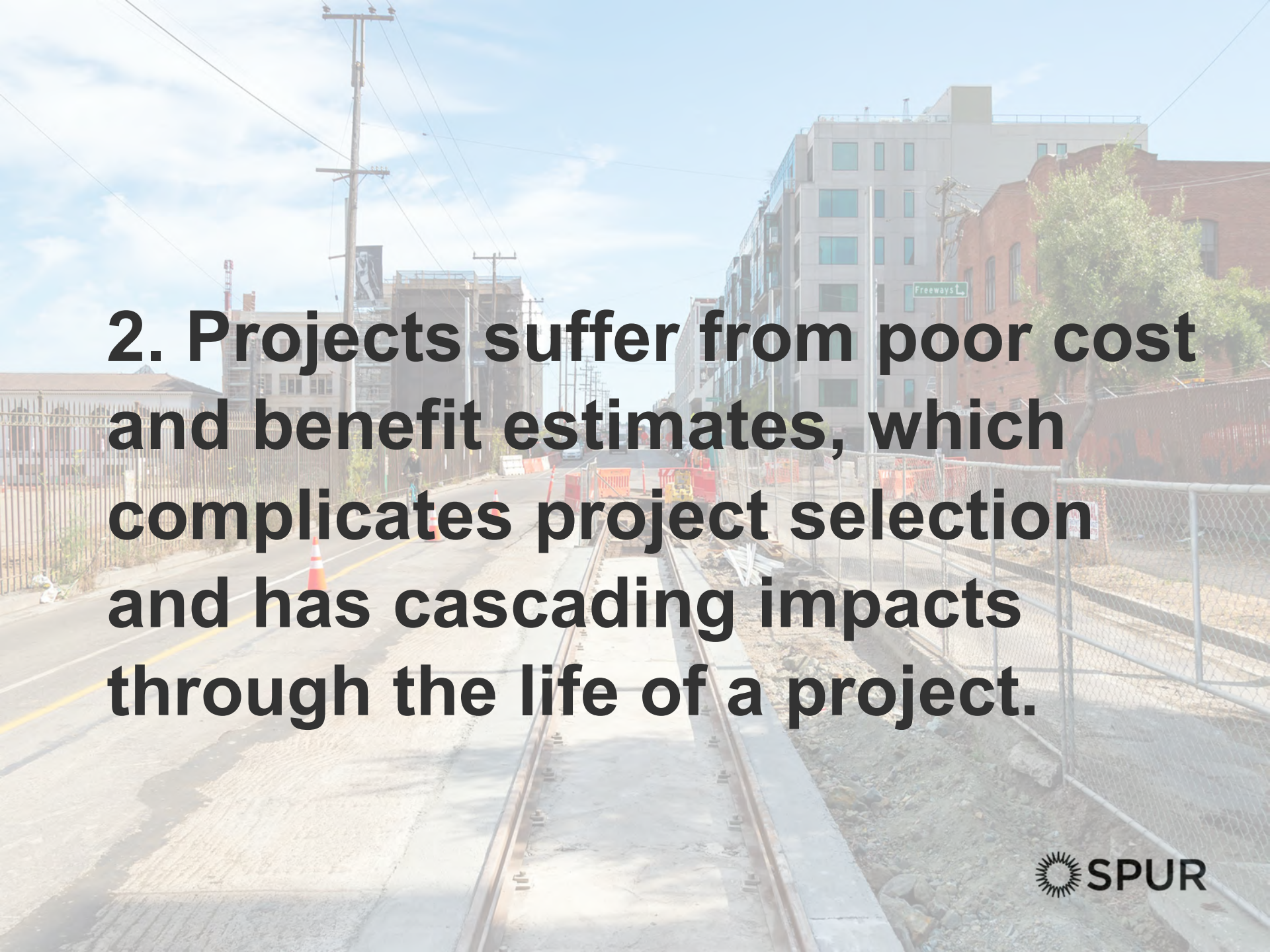
\$100 BN

“Megaprojects”

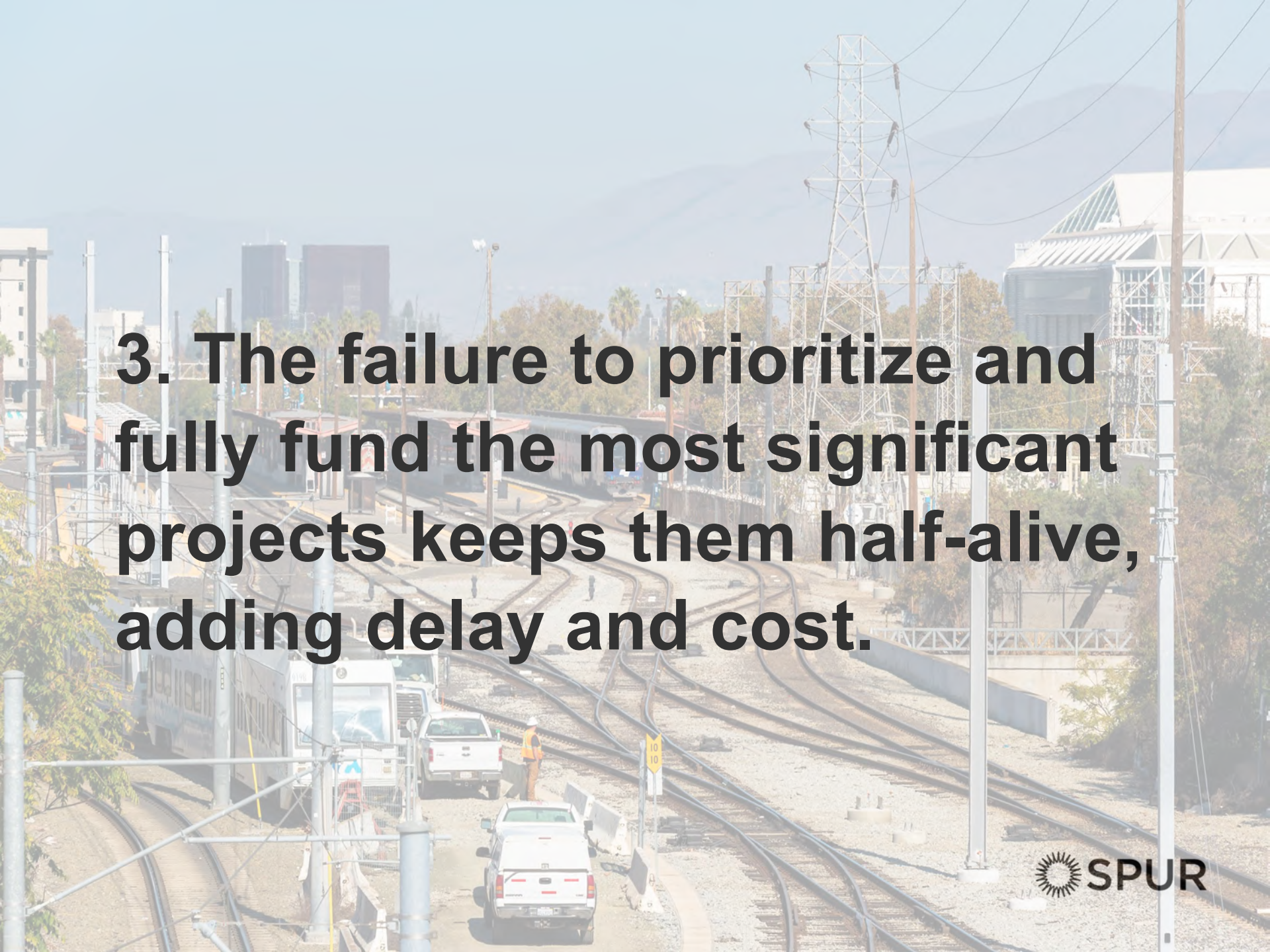
Challenges in Project Delivery

A map of the San Francisco Bay Area with various transit systems highlighted in different colors. Labels include Petaluma Transit, San Francisco Bay Ferry, Marin Transit, SolTrans, FAST, Rio Vista Delta Breeze, TriDelta, Wheels, ACE, Union City Transit, SamTrans, and Dumbarton Express. The text is overlaid on the map.


1. The Bay Area's fragmented transportation governance system makes it difficult to align around a shared vision for both the transit network and individual projects.

A photograph of a city street undergoing construction. In the foreground, a concrete track for a transit system runs down the center of the road. Orange traffic cones and construction barriers are placed along the track. To the right, a chain-link fence separates the construction area from a dirt lot. In the background, there are multi-story buildings, including a modern one with large windows and a brick building. A street sign for 'Freeways L' is visible on a building. The sky is blue with some clouds.


2. Projects suffer from poor cost and benefit estimates, which complicates project selection and has cascading impacts through the life of a project.



3. The failure to prioritize and fully fund the most significant projects keeps them half-alive, adding delay and cost.

The background image shows a modern transit station with a high ceiling and large white pillars. Two buses are visible, one with the number '5' and the word 'FULTON' on its destination sign. People are walking on the platform. The text is overlaid on this image.

4. Agencies mobilize just once in a generation to deliver capital projects, making it difficult to transfer lessons learned from one project to another and accrue expertise.

An aerial photograph of a city intersection. A white bus with the number 7454 is stopped at a crosswalk. Several cars are visible, including a white sedan and a silver car. Pedestrians are crossing the street, and a cyclist is riding across the intersection. The scene is set in a sunny, urban environment with trees and buildings in the background.

5. The misuse of environmental and approvals processes can add uncertainty and delay, especially for projects that cross jurisdictions.

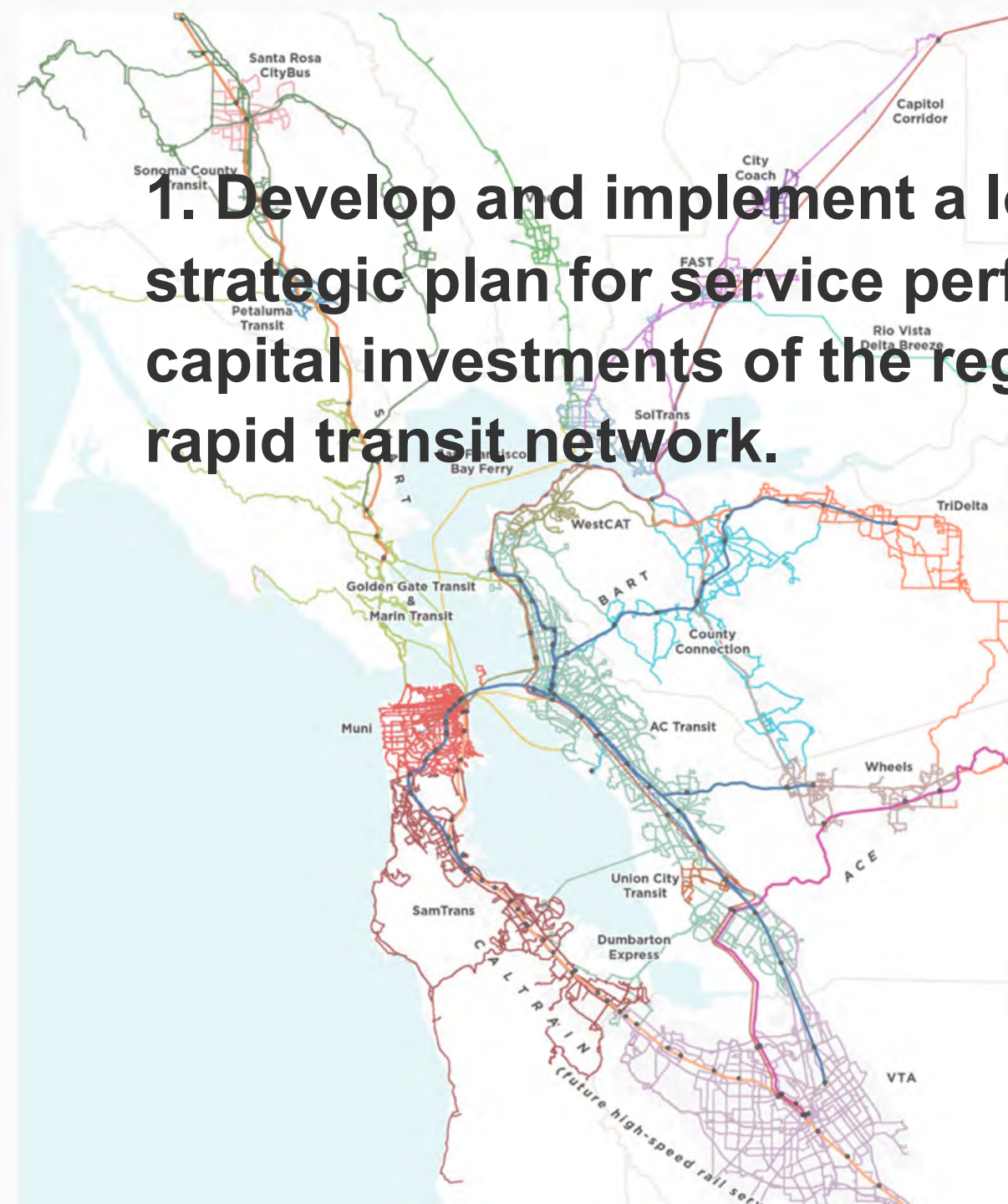
An aerial photograph of San Francisco, California, showing the city's skyline, the San Francisco Bay, and the Golden Gate Bridge in the distance. In the foreground, several Amtrak trains are visible on the tracks, and the city's streets and buildings are clearly visible. The text "6. Agencies face difficulties obtaining the skillsets they need to delivery these unique projects." is overlaid in a large, bold, black font.

6. Agencies face difficulties obtaining the skillsets they need to delivery these unique projects.

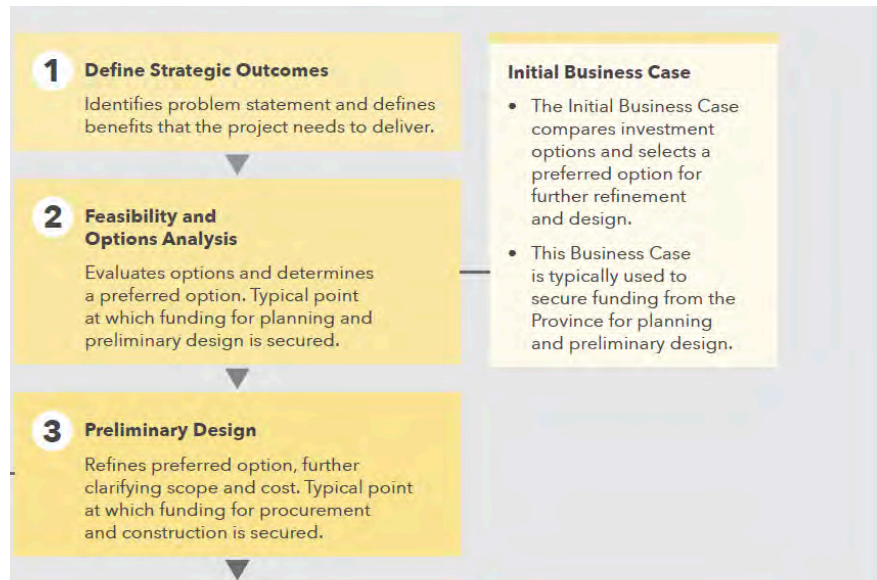
Recommendations

Big Idea #1: Improve regional transportation planning so that the projects that offer the best value are advanced.

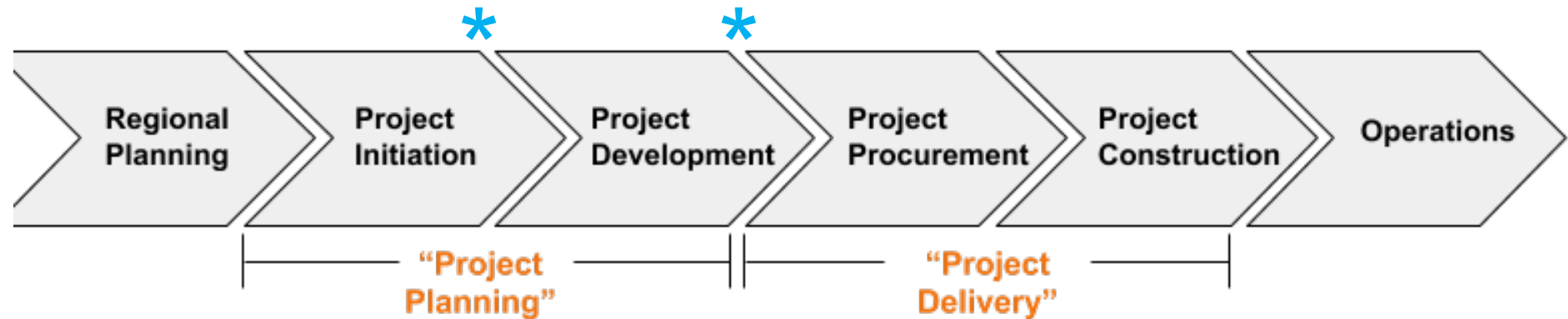
1. Develop and implement a long-term, strategic plan for service performance and capital investments of the regional, trunk-line rapid transit network.



2. Rigorously evaluate the business case and deliverability assessments for projects before committing regional and state funds to it.



3. Establish stage gates and periodic stage gate reviews to determine a project's readiness to advance and receive funding.



4. Establish integrated project management teams that work together throughout the project's life cycle.

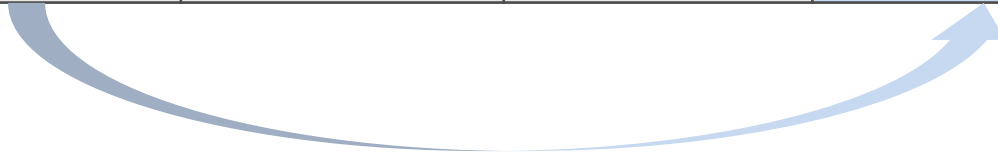
Big Idea #2: Expand and centralize project procurement and delivery expertise so that the region can successfully deliver multiple projects.

5. Create Infrastructure Bay Area, a specialized entity that manages procurement and construction for transformative transit projects estimated to cost over \$500 million with a goal of delivering the best value for money.

Potential Delivery Models

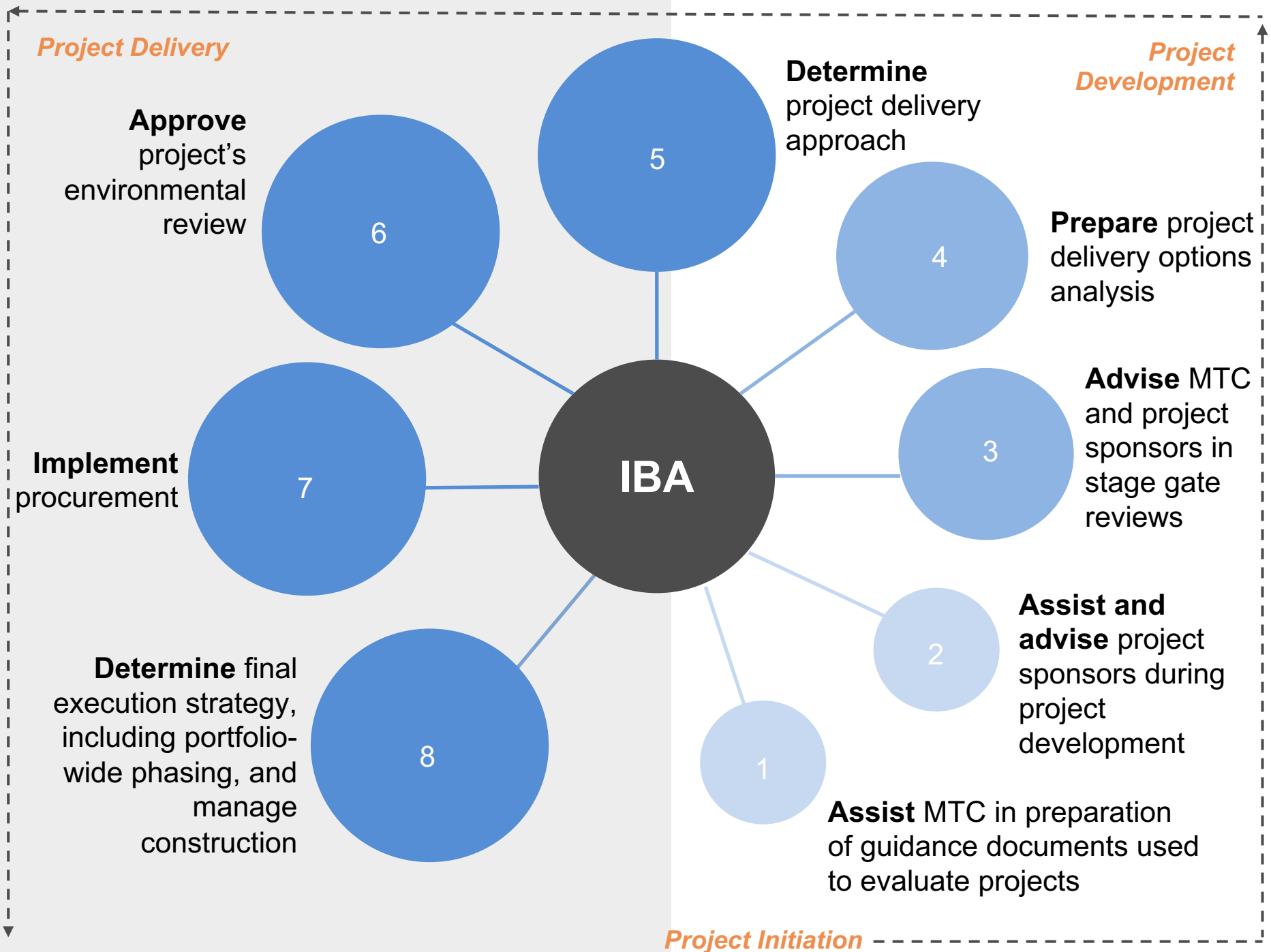
3 Models / 5 Conceptual Organizations

“Center of Excellence”		“Procurement and Delivery Unit”		“Regional Project Sponsor & Construction Authority”
Center of Excellence	Center of Excellence + Delivery Mediator	Project-Specific Procurement & Delivery Unit	Regional Procurement & Delivery Unit	



Infrastructure
Ontario





Types of Projects

- ✓ Downtown Extension
- ✓ Second Crossing
- ✓ CalMod
- ✓ Caltrain Long-Range Service Vision
- ✓ ValleyLink
- ✓ Diridon Station redevelopment
- ✓ Bus Rapid Transit on Geary
- X Bus Rapid Transit on El Camino Real
- X High-speed rail
- ? Bay Bridge (rebuild)



IBA is the **default** project delivery entity. However, it can re-assign project delivery responsibility when:

- The project is <\$500 million, and
- IBA finds that the Project Sponsor has capacity to adequately deliver the project, and
- Project Sponsor commits to follow guidance and procedures for procurement and delivery.



IBA can consult with other projects/ Project Sponsors by mutual agreement and fee for service.



IBA can say “not yet” if the project isn’t ready.

Success factors to replicate

- Prevent good ideas from becoming bad projects.
- Make sure that this is not a rubber stamp.
- Integrated into the project life-cycle.
- Minimize political interference in project delivery, but allow politics to play out in early phase.
- Leadership with force of character and project delivery expertise.
- Significant, cross-disciplinary in-house expertise.



Infrastructure
Ontario



Société
du Grand
Paris



insw Infrastructure
New South Wales

Big Idea #3: Remove regulatory obstacles that add undue delay, cost and uncertainty.

6. Certain projects should be exempt from CEQA, by statute.

Types of Projects

- ✓ Bus rapid transit (dedicated lanes)**
- ✓ High-occupancy transit**
- ✓ Transit priority measures**
- ✓ Bicycle ways of all kinds**
- ✓ Facilities that support walking and street safety**

As long as...

- Does not increase right-of way except for efficient transit vehicle movement.**
- Robust public engagement.**
- In an urbanized area.**
- Included in a general, specific or station area plan**
- Sponsored by public agency.**
- No impact on endangered species.**
- Demolishes < 5 buildings.**

7. Establish a certification process for transformative transit projects that would reduce delay and cost.

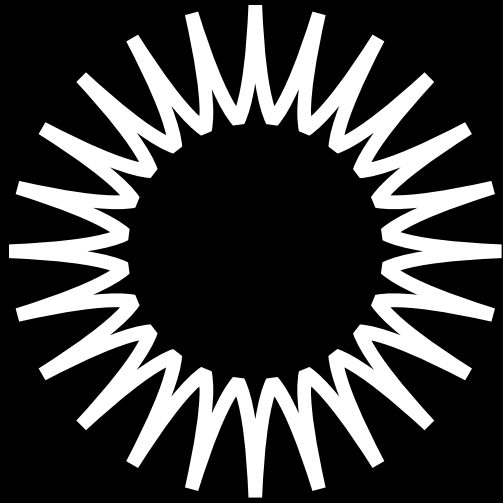
Requirements

- **Located in urbanized area**
- **Meet GHG and VMT thresholds**
- **Reduce criteria air pollutants**
- **Robust public engagement**
- **Sophisticated cost estimation**
- **Complete business case**
- **Complete independent peer review**

Benefits

- **Partial exemption from CEQA (traffic, aesthetic, parking)**
- **If sued, shorter judicial review**
- **Implementation actions cannot be sued**
- **“Grandfathered” into CEQA at time of scoping**
- **Allows nontraditional project delivery method**
- **Allows best value contracting**

Now is the time to reform project delivery. **The next generation of transit projects can't wait for the next generation.** They will cost too much and it will be too late.



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