



# Governing Transit Seamlessly: Options for a Bay Area Transportation Network Manager

A report by  
Seamless Bay Area

April 2021

← Flea Market  
↑ Bike Station  
BART Police  
Berryessa  
Station Way →

↑ VTA Bus Transit Center  
Drop-off / Pick-up →  
Berryessa Station Way →  
↑ Bicycle Storage  
↑ Upper Penitencia Creek Trail



# Table of Contents

<b>Executive Summary</b>	<b>3</b>
<b>Chapter 1: Introduction</b>	<b>9</b>
<b>Chapter 2: Poor Outcomes, Root Causes, and Solutions</b>	<b>11</b>
Poor outcomes	11
Root causes	13
Solutions	16
Increased investment	16
Transit-supportive land uses	16
Reformed transportation institutions	16
<b>Chapter 3: Network Manager Key Considerations &amp; Conceptual Models</b>	<b>18</b>
Functions a network manager should oversee	18
Conceptual models of network management	19
Geographical coverage considerations	20
Governing board considerations	21
Approach to geographical representation on boards	22
Relationship to existing institutions	24
<b>Chapter 4: Network Manager Alternative Options</b>	<b>26</b>
Option A: Altered MTC Network Manager	27
Option B: Regional Transit Agency Network Manager	31
Option C: Universal Transit Agency Network Manager	38
Option D: Enhanced Executive Board	43
<b>Chapter 5: Evaluation</b>	<b>46</b>
<b>Chapter 6: Conclusions &amp; Next Steps</b>	<b>49</b>
Conclusions	49
Next Steps	51
<b>Acknowledgments</b>	<b>53</b>
Seamless Bay Area Board	53

## Executive Summary

“If you want to get people to do something, make it easy,” Nobel-prize winning behavioral economist Richard Thaler often says. “Remove the obstacles.”

Seamless transit is about making transit easy so more people use it - giving people from all backgrounds true freedom of movement to live their fullest lives. It’s the reason why Principle #1 in the Seamless Transit Principles, endorsed by dozens of organizations and cities, is *Run all Bay Area transit as one easy-to-use system*.

Easy-to-use transit isn’t a luxury that only matters to some people - transit that is easy is fundamentally also accessible, usable, and equitable.

The extent to which transit is easy reflects our values as a society. We have chosen to make driving privately owned cars extremely easy, with a seamless network of highways and streets supported by plentiful inexpensive parking across the Bay Area. Our seamless driving network didn’t evolve by accident - it was designed that way, and continues to be governed by public authorities that prioritize that seamless driving experience across jurisdictional boundaries. But that experience is only available to those who have the means and ability to drive, and it comes at a significant cost to the environment, our health, and our quality of life.

Having a difficult to use transit system -- where taking transit often takes 2-4 times as long as driving; connections between services are poor; buses get stuck in traffic; and signage and fares differ from agency to agency -- is not an inevitability, but a deliberate policy choice. It perpetuates inequality between those who have access to a car and those who do not, encouraging driving, hurting our environment, and driving up our cost of living.

So how do we make transit easy? Learning from our own seamless driving network, and the easy-to-use transit systems that exist in other regions, we know that making transit easy means making it someone’s job. While the Bay Area has 27 transit agencies and numerous regional bodies that do various degrees of coordination, there is no entity responsible and accountable for improving the transportation system as a whole.

**The Bay Area needs to set up a lead authority - what we call a *network manager* - with the mandate and resources to integrate and expand all forms of public transportation in our region into a cohesive, easy-to-use network.**

An entirely new agency, layered onto the existing 151 agencies and jurisdictions that govern parts of our transit system<sup>1</sup>, is not the solution. Repurposing, streamlining, and even consolidating some of our existing public agencies is the best way to create a network manager entity to best serve riders.

Seamless Bay Area’s new report, *Governing Transit Seamlessly: Options for a Bay Area Transportation Network Manager* is the culmination of years of research, interviews, and advocacy on how to restructure our transportation institutions so that transit works as one easy-to-use system.

---

<sup>1</sup> The Definitive List of Bay Area Transit Agencies, Nov. 27, 2019, Seamless Bay Area <https://www.seamlessbayarea.org/blog/transitagencieslist>



**Key Network Manager Responsibilities:**

Long range planning, fares, service design, wayfinding, marketing, customer experience, service quality monitoring, collecting and distributing data, major procurement, contracting.



**Operator Responsibilities:**

Day-to-day operations, maintenance, local service planning, service delivery, customer relations.

In this report, we identify **key functions of our transit system that should be overseen at a regional scale** by a Bay Area network manager entity to make transit easy for riders - **including setting common fares, service design, major route planning, wayfinding, marketing, and more**. Other functions not always visible to passengers, such as service quality monitoring, collecting and distributing data, major procurements, and contracting, contribute to a consistent and high quality customer experience, and should also be led regionally by a network manager. A network manager must have clear authority over each of these functions that does not conflict with the authorities of individual operators, with legislation making clear the division of authorities.

We recommend that a Bay Area network manager be set up to have a governing board that has a clear, defined link to elected officials; that includes a significant share of members who represent the region as whole instead of just one part of the region; and that includes a significant number of appointed experts with relevant experience or backgrounds. All members of a network manager governing board should be transit riders.

Building off these recommendations for network manager authorities and governance, the report outlines four proposals for discussion and comparison. The first three were developed by Seamless Bay Area based on the dominant models identified in research of effective network managers; the fourth is a proposal that has been discussed conceptually among transit agency leaders at a number of recent public meetings as a potential alternative model:

- **Option A:** A network manager based within MTC that coordinates transit only but doesn't directly run any of it, achieved by altering MTC's board structure, authorities, staff resources, and relationship with transit agencies.
- **Option B:** A network manager that both coordinates transit services across the region and directly operates the regional rail, bus, and ferry networks, based on a merger of BART, Caltrain and other

regional transit services under one unified governing board.

- **Option C:** The creation of a universal transit agency, achieved by merging together all existing transit agencies under one governing board, with existing agencies becoming wholly owned operating divisions or subsidiary companies.
- **Option D:** The enhancement of the existing Clipper Executive Board, a board made up primarily of transit agency general managers, to have an expanded set of responsibilities to promote greater coordination across a set of network management functions.

Keeping in mind best practice research and the identified shortcomings of the Bay Area transportation system, Seamless Bay Area analyzed each option’s optimal institutional structure. We then evaluated each option based on key effectiveness and feasibility criteria, with the assistance of Seamless Bay Area’s Policy Advisory Group, a group of academics, agency staff, and other policy professionals (see tables).

According to our analysis, a network manager that is led by a combination of some or all existing transit agencies - Options B and C - outperformed Option A, the MTC-led option, based on several of the effectiveness criteria. In particular, we believe Options B and C would be more likely to bring about an integrated, seamless, and easy-to-use transit network in line with the goals of the Seamless Transit Principles. Based on these criteria, we also concluded that Option D would provide minimal advantages over the status quo as a long-term option.

*Evaluation of network manager options based on effectiveness criteria<sup>2</sup>*

Effectiveness Criteria	Network Manager led by:			
	Option A Altered MTC	Option B Regional Transit Agency	Option C Universal Transit Agency	Option D Enhanced Executive Board
Ability to bring about outcomes of the Seamless Transit Principles	6	9	8	5
Distinct, clear authorities of key functions without overlap	5	8	9	4
Adequate representation of shared regional interests	6	8	8	4
Independent, professional expertise informs decision-making	5	8	8	4
Clear accountability to policymakers and the public for the overall transit experience	5	7	7	3
Ability to streamline decision-making	5	8	9	5
Ability to leverage economies/geographies of scale	6	9	9	5
Stability and flexibility to adapt & change over time	6	7	7	5
Ability to support raising additional revenue	6	6	6	4
Ability to support more transit-supportive land use	6	6	6	4
<b>3, 4</b> same as today/unclear <b>5, 6</b> a bit better than today <b>7, 8</b> significantly better than today <b>9, 10</b> very significantly better than today				

<sup>2</sup> Scoring reflects average assessments from Seamless Bay Area’s Policy Advisory Group

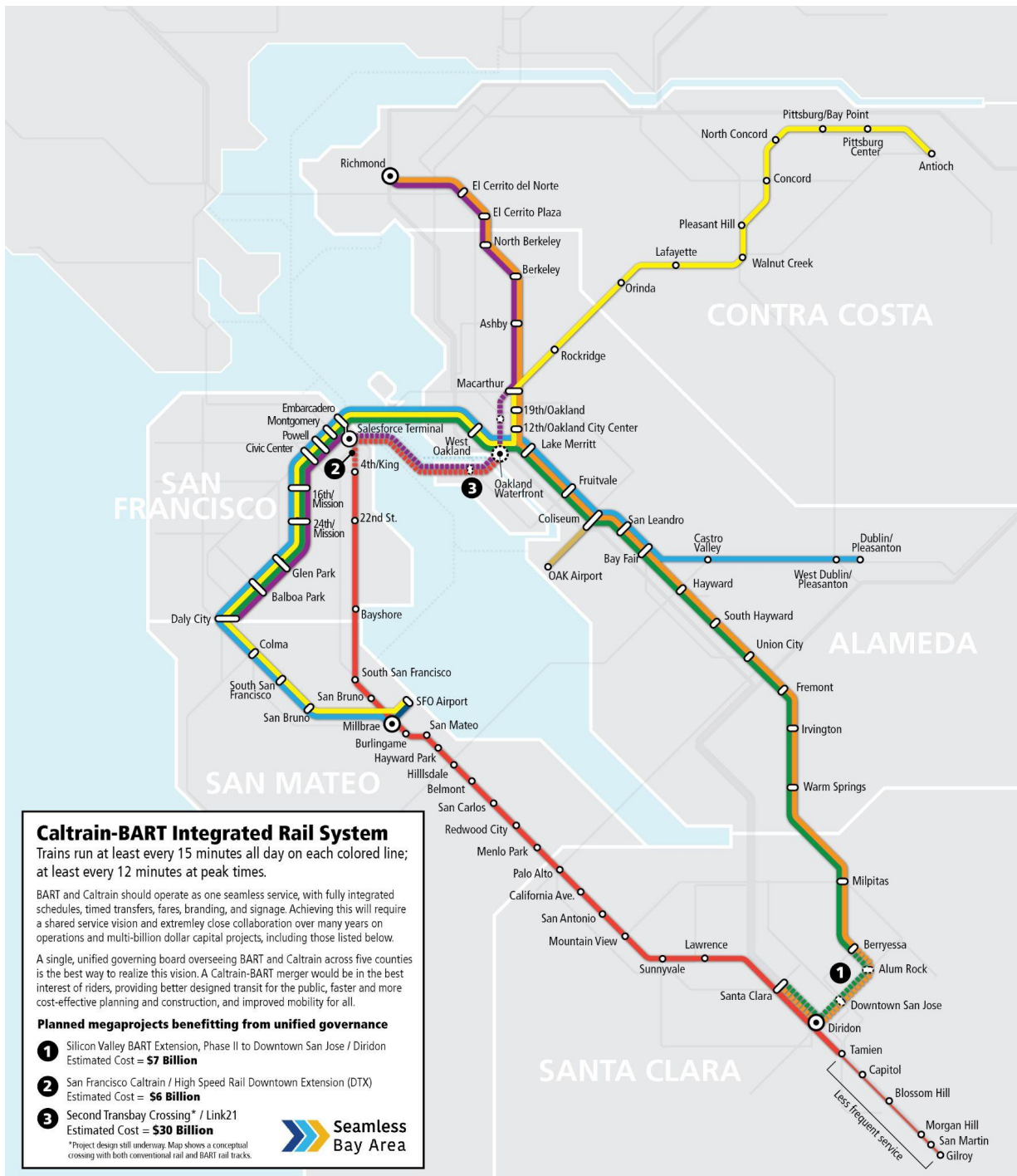
When evaluating these options based on feasibility criteria, Option D appears to be the most feasible, followed by Option A. Option B was found to be more difficult to achieve than Option A, but appeared significantly more feasible than Option C based on several of the criteria.

**Taking into account all of these criteria, we ultimately concluded that Option B, a network manager led by a Regional Transit Agency, represents the option most likely to achieve a seamless, rider-first transit system.** Among the options we assessed, a nine-county agency that brings together BART, Caltrain, and other regional bus and ferry services under one roof, led by a board with a significant number of appointed experts with relevant backgrounds, is best positioned to be effective in delivering a seamless customer experience, expand access to all, and adapt and change over time. Despite Option A, the MTC-led option, being easier to implement, the realities of Bay Area transit agency funding, and the institutional and political landscape, led us to conclude that an MTC-led network manager would be less effective than Options B or C in achieving these goals.

*Evaluation of network manager options based on feasibility criteria*

Feasibility Criteria	Network Manager led by:			
	Option A Altered MTC	Option B Regional Transit Agency	Option C Universal Transit Agency	Option D Enhanced Executive Board
Dependence on state legislation	×	×	×	∅
Dependence on consensus by independent general managers and transit agency boards	×	×	×	×
Potential labor challenges	×	×	×	∅
Dependence on additional funding to have desired customer outcomes	×	×	×	×
Potential for opposition from public / transit riders	×	×	×	×
Potential for opposition from transit agencies	×	×	×	∅
Potential for opposition from locally elected officials	×	×	×	×
∅ few/no challenges    × some challenges    ×× significant challenges    ××× extreme challenges				

Regardless of which path for Network Management the region may choose to pursue, **we concluded there are clear advantages to riders to bringing together BART and Caltrain under one governing board, planning them and operating service as a unified integrated rail system.** With the two agencies operating increasingly similar types of service, BART now operating in all three Caltrain counties, and both agencies working on some of the most expensive and complicated planned transit expansion projects in our region, a merger conducted with goals of speeding up integration of fares, service, customer experience and wayfinding would offer clear and immediate benefits, and would set up a much strong foundation for megaprojects like the Downtown extension and a new transbay crossing (Link21).



*Potential integrated service map of an integrated BART-Caltrain rail system, overseen by a five county governing board. Regardless of which network manager option the Bay Area chooses to pursue, a unified Caltrain-BART agency with a single board should be prioritized to operate fully integrated service that would best serve riders and deliver major capital projects effectively (image: Seamless Bay Area).*

Finally, our report acknowledges these reforms won't all happen at once, and need to be phased over a number of years, starting with a few immediate next steps in the next year:

1. **Complete the region's Transit Transformation Action Plan**, and set up efficient interim decision-making structures with clear links to both policymakers and expert advisors to advance near-term network management initiatives.
2. **Advance a business case analysis to do a full evaluation of governance reform and network manager options**, including options for an Altered MTC Network Manager, a Regional Transit Agency Network Manager and a Universal Transit Agency Network Manager.
3. **Fully study a BART-Caltrain merger** and other regional options through the Caltrain governance reform process and regional rail study
4. Upon substantial completion of a business case, **advance state legislation to put in place a permanent network manager institutional structure in 2022.**

Some have argued that now is the not right moment for this conversation in the Bay Area, as we look to recover from the devastating impacts of the COVID-19 pandemic. We disagree. The devastation of COVID on transit agencies, forcing steep cuts in service, has highlighted how fragile our current system is, and how difficult it is to adapt in a coordinated way to meet the needs of riders across the Bay Area and build back ridership. The region has been given a lifeline in the form of significant federal relief in three emergency COVID relief bills. The recently announced American Jobs Plan gives us hope of significantly more transit funding in years to come - and it compels us to think big about what we really want our transit system to do, and how we want to rebuild it to create a fundamentally more equitable, accessible, and resilient system.

We currently have unprecedented political will to do something big to fix transit governance - political champions in the state legislature like Assemblymember David Chiu introduced legislative proposals in 2020 and 2021 to promote transit coordination; a governance reform process at Caltrain taking place over the next 9 months, and a Blue Ribbon Transit Recovery Task Force slated to publish a Transit Transformation Action Plan by July. Rarely do such conditions converge to provide the opportunity for transformative change. If we don't seize this moment to set up a network manager that can create a seamless, easy-to-use transit system, we could miss the best chance in a generation.

Finally, we want to be clear that we view this report as a tool to guide and inform local and regional conversations about transit coordination, not a collection of proposals to be adopted wholesale. While these options reflect results of case studies and the input of dozens of advisors, including Seamless Bay Area's Policy Advisory Group, they can and should be improved upon with the help of transit leaders and staff, elected officials, policymakers, labor experts, transit advocates and riders, and members of the public. We welcome and encourage all readers to share their ideas and feedback by emailing [info@seamlessbayarea.org](mailto:info@seamlessbayarea.org), and to stay engaged with their local and regional transit agency boards and bodies on these issues.



## Chapter 1: Introduction

Seamless Bay Area has long advocated that the Bay Area must set up a regional *transportation network manager* entity with the authority, mandate and resources to unify the region's 27 fragmented transit systems, to get more people onto transit and out of cars and provide more equitable access to mobility. Clear accountability to the public for the transit system as a whole is needed to convince voters to support the major new funding sources that are needed to increase and improve transit service over the coming years.

Thanks to sustained advocacy, the region's Blue Ribbon Transit Recovery Task Force - set up in May 2020 to guide transit's recovery from the COVID pandemic - endorsed an ambitious vision of transit transformation in November 2020 that includes "unified service, fares, schedules, customer information, and identity." By summer 2021, the Task Force, made up of transit agency leaders, elected officials, and advocacy groups, seeks to complete a Transit Transformation Action Plan, a key goal of which is to **identify near-term actions to implement beneficial long-term network management and governance reforms.**

The Task Force's commitment to identifying network management and governance reforms is exciting and historic. With this commitment, the hard work really begins.

The region must now grapple with some fundamental questions: How should a network manager that oversees the Bay Area's transit system be structured? What specific functions should it oversee or centralize? Who would be on its governing board? How would it relate to the existing 151 agencies<sup>3</sup> involved in Bay Area transportation decision making -- and avoid simply adding yet another layer of bureaucracy? If a new agency is not added, which existing agencies would be reformed to perform Bay Area network management functions? Which agencies would remain independent? How would funding for transit be affected, and how would we ensure that local travel needs continue to be addressed?

These questions get at the heart of the challenge of reforming Bay Area transportation governance. But these challenges are worth grappling with head on, as the potential benefits for riders, the environment, and the economy are tremendous. After three years of research and interviews with leaders across the region and internationally, Seamless Bay Area has assembled a complex picture of the root causes that contribute to the Bay Area's poorly integrated transit system. We have also developed an understanding of the institutional and funding structures that can lead to a more widely-used, equitable, and financially secure system.

With that background, this report lays out three options for long-term transit governance reform in the Bay Area that include a network manager, as well as a fourth option that has been developed by transit agencies and presented at a conceptual level at recent transit agency board meetings. All options take into account the current realities of Bay Area transit funding and support preserving levels of local service in communities across the region. They also lay a stronger foundation for substantial new revenue, better connections, greater efficiency, and a more effective and coherent overall system. The fourth option, an enhanced version of the region's current Clipper Executive Board, is also a potential interim step toward any of the long-term options - a step that transit agency general managers have expressed willingness to take on.

---

<sup>3</sup> The Definitive List of Bay Area Transit Agencies, Nov. 27, 2019, Seamless Bay Area <https://www.seamlessbayarea.org/blog/transitagencieslist>

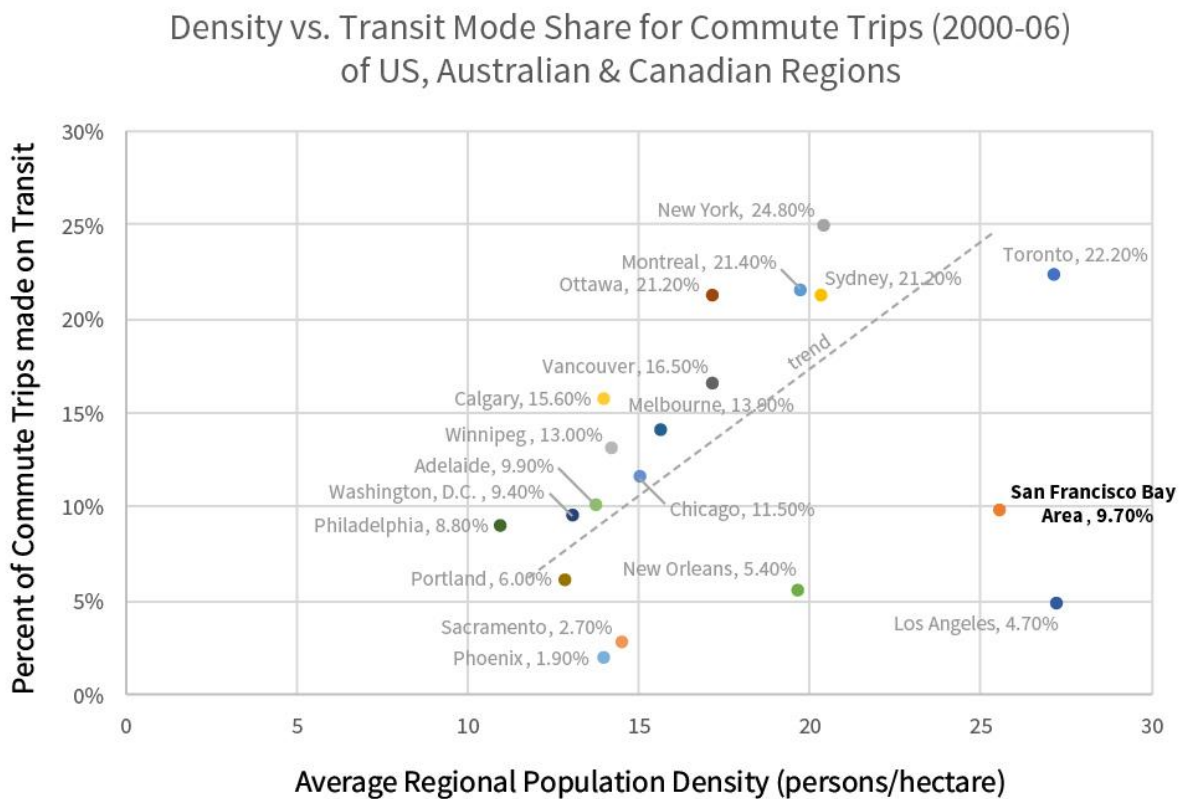
Our goal in providing these options is to share our own analysis and evaluation, adding to other research that the Blue Ribbon Task Force may reference as it considers different long-term paths to change. We view these proposals as starting points for additional conversations about the benefits and drawbacks of different governance models. While they reflect the input of dozens of advisors, including Seamless Bay Area's Policy Advisory Group, they can and should be improved upon with refinements and the insights of others. Ultimately, we believe a detailed, objective analysis of numerous alternatives for network management should be conducted through a business case framework, as is currently planned, supported by a professional consultant team with international expertise.

This report begins with an overview of the poor transit outcomes our region needs to overcome, the root causes that lead to them, and why establishing a network manager is an essential part of the solution. Chapter 3 summarizes key considerations for setting up a network manager in the Bay Area based on our research of other regions - including organizational structure, geographic reach, and board composition. In Chapter 4, we outline four distinct Bay Area network manager options, mapped out in detail to help visualize different conceptual paths. In Chapter 5, we provide a high level evaluation of each of the options based on key criteria, and finally in Chapter 6 we provide recommendations for the Task Force and other regional leaders to consider.

## Chapter 2: Poor Outcomes, Root Causes, and Solutions

### Poor outcomes

Too few people use transit in the Bay Area to get around. Prior to COVID, transit was used for no more than 5% of all trips.<sup>4</sup> For commute trips, a greater share of people use transit - 12% in 2018 - but still 75% of commute trips involve cars. Worse, the use of transit has declined in recent years, with per capita transit trips going down by 11% between 2000 and 2016.<sup>5</sup> While more in the Bay Area ride transit compared to most other American regions, the Bay Area has low transit use when compared to international regions, including regions of similar wealth and land use density. [insert chart]. Significant increases in transit use are needed to meet our region's goals; MTC has identified the need to increase transit mode share to 20% of all trips by 2050.



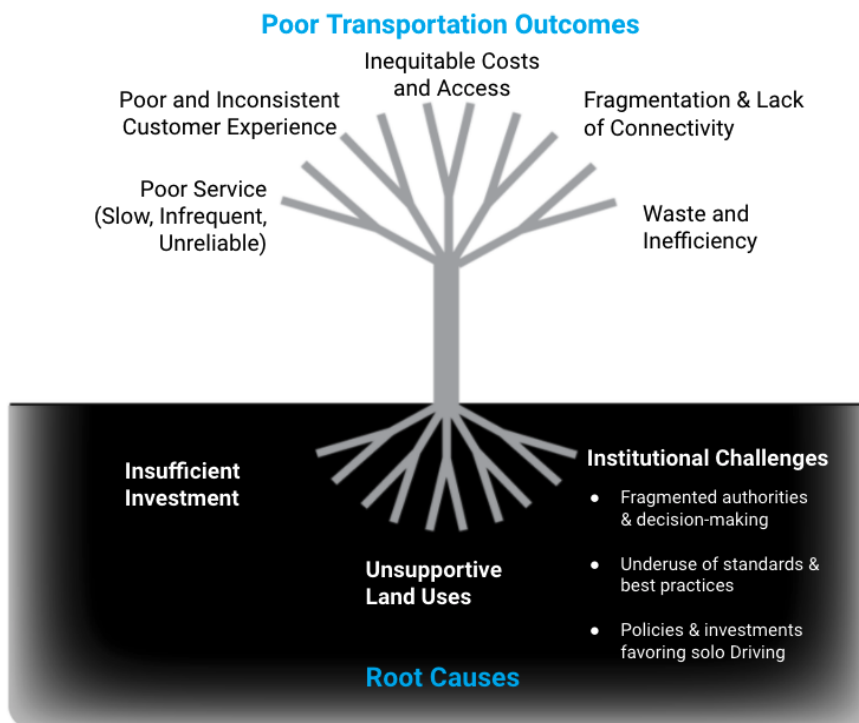
**Figure 2.1** According to data in *Transport for Suburbia* by Paul Mees, the San Francisco Bay Area has one of the highest average population densities among US, Canadian, and Australian regions. While generally there's a correlation between population and transit mode share, the Bay Area has significantly lower transit use than one would expect based on its population density - just 9.7% of all commute trips between 2000-2006. Less dense regions than the Bay Area, particularly in Canada and Australia, have much higher rates of transit use.

<sup>4</sup> Based on 2000 Bay Area Travel Survey data and 2017 National Household Travel Survey Data.

<sup>5</sup> <https://www.vitalsigns.mtc.ca.gov/transit-ridership>

So why don't more people in the Bay Area use transit? We have grouped the poor outcomes that contribute to low ridership of our current transit system into five general categories, depicted as the branches of a tree in Figure 2.2:

- **Poor service.** Bay Area transit service is often too slow, too infrequent, or too unreliable. It often takes too long for riders to get to their destination, which leads many to not use transit at all or take transit less. Those with no other choice suffer from less access to opportunity and more time spent travelling.
- **Poor and inconsistent customer experience.** Many riders avoid transit because it appears overwhelming, complex, uncomfortable, unsafe, or stressful, even in cases where it might be a relatively fast or affordable option. The lack of predictability and simplicity of riding transit, especially when transferring between services, erodes passenger trust in the transit system, and keeps more people from riding.
- **Inequitable costs and access.** Transit underserves groups who depend on it the most; transit is also highly stratified by income and race. Fast and more reliable services are designed to primarily serve white collar commuters, are priced much higher, and often exclude low income passengers. Riders who must use multiple agencies to complete their trip are penalized by having to pay extra for transfers; and are more likely to be low income.<sup>6</sup> Many low income people who don't have commutes and travel needs outside of peak hours are forced into car ownership many times more expensive than transit because transit doesn't work for their schedule.



**Figure 2.2** Key root causes and poor transportation outcomes for San Francisco Bay Area transit (image: Seamless Bay Area).

<sup>6</sup> *Regional Means-Based Transit Fare Pricing Study: Policies and Conditions Memo* (2016), p. 62, MTC [https://mtc.ca.gov/sites/default/files/1\\_MTC\\_Means\\_Based\\_TM\\_1\\_DRAFT\\_FINAL.pdf](https://mtc.ca.gov/sites/default/files/1_MTC_Means_Based_TM_1_DRAFT_FINAL.pdf)

- **Fragmentation and lack of connectivity.** Often, riders just “can’t get there from here.” Many types of trips aren’t feasible by transit because efficient links in the network just don’t exist. Transit agencies and operating separately leads to planning for a ‘one seat ride’ trips rather than planning for fast end-to-end journeys with high quality transfers, which can allow for greater access and efficiency of the transit system.
- **Waste and inefficiency.** While at times less visible, the inefficiency of our current transit system exacts a huge cost on riders of all incomes. Bay Area residents don’t get as much service as they could for the amount of money we spend. In 2011, the Metropolitan Transportation Commission (MTC) found that the Bay Area’s large operators had the highest administrative costs as a share of total operations costs of other large US metropolitan areas.<sup>7</sup> Other symptoms of inefficiency are capital project costs that are among the highest in the world and projects that take years longer to deliver than in other regions. While inefficiency is often used by anti-transit groups as a reason to cut spending and reduce service, we stress the importance of efficiency and eliminating waste because we want our transit investment to have the greatest possible impacts on expanding equity and shifting people out of cars.

## Root causes

These poor outcomes have a complex set of interrelated root causes, and therefore require multiple different policy responses. Governance reforms and the establishment of Network Manager will not magically solve all of these issues, but are one essential part of a three pronged-solution.

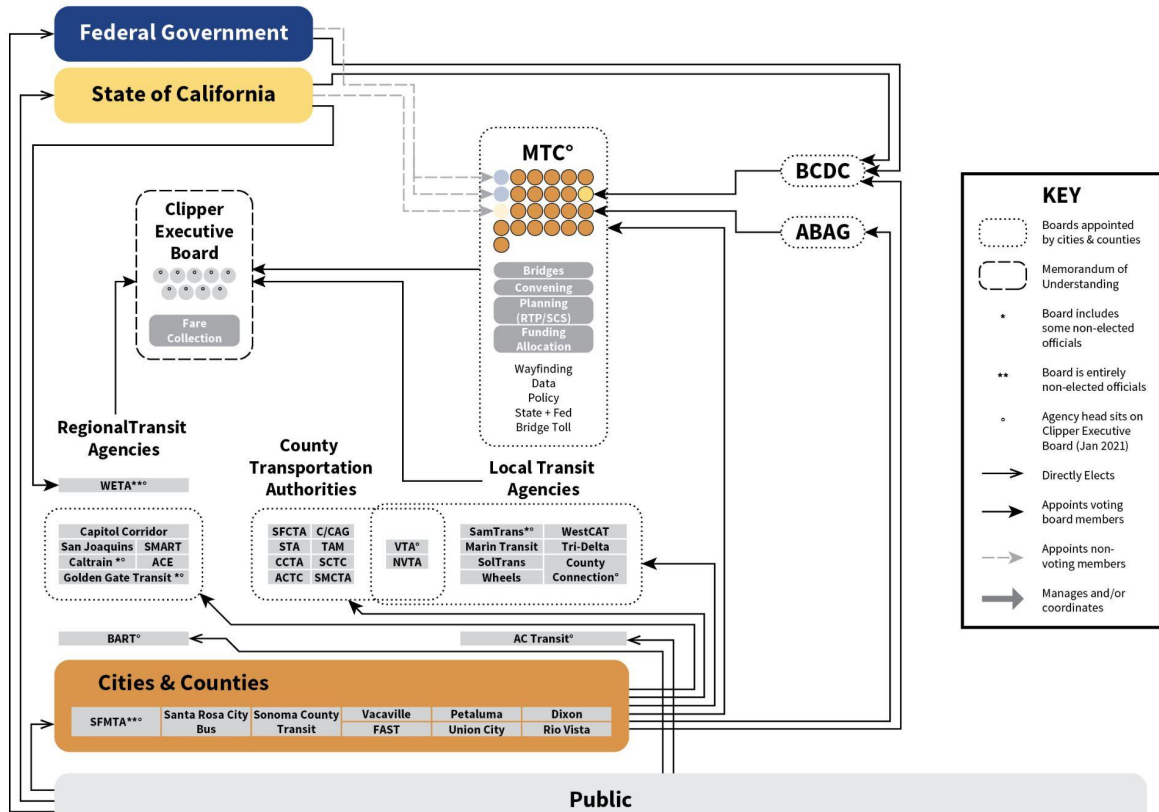
As shown in Figure 2.2, we have grouped root causes that lead to our poor transit outcomes into three categories: **insufficient investment**, **unsupportive land uses**, and **institutional challenges**. If our transit system were a car (or, more appropriately, a bus), investment corresponds to the amount of fuel we put in; land uses would be the quality of the road, and the institutions would be the quality of the engine. If we want a high quality transit system that enables us to travel far, we need plenty of fuel, good roads, *and* an excellent engine.

Our network manager proposals primarily seek to address these challenges with the Bay Area’s institutional arrangements - fixing our engine so that the fuel we put in goes further.

---

<sup>7</sup> Transit Sustainability Project, [https://mtc.ca.gov/sites/default/files/3-b\\_Select\\_Comm\\_Feb\\_Presentation.pdf](https://mtc.ca.gov/sites/default/files/3-b_Select_Comm_Feb_Presentation.pdf)

## Existing Agency Landscape



**Figure 2.3:** Diagram showing the organization of and complex interrelationships between the Bay Area’s existing 27 transit agencies, county transportation authorities, cities and counties, and regional planning agencies.

Within the category of institutional arrangements, we have identified three subcategories of challenges: **fragmented authorities and decision-making**, **sub-optimal practices**, and **policies and investments favoring solo driving**. The following table lists specific challenges within each subcategory, and whether each challenge is most relevant to the MTC, regional transit agencies (e.g. BART, Caltrain, Golden Gate Transit), local transit agencies (e.g. VTA, SamTrans, County Connection), or other entities, like Congestion Management Agencies or state agencies like Caltrans, or a combination.

**Table 2.1:** Summary of Bay Area transportation institutional challenges, and which entities they are most relevant to.

<b>Institutional Challenges</b>	<b>MTC</b>	<b>Regional Transit Agencies</b>	<b>Local Transit Agency</b>	<b>Other entities (CTAs, State)</b>
<b>Fragmented Authorities and Decision Making</b>				
27 agencies have mandates to dictate their own service, fares, and policies, overlapping with MTC’s mandate to coordinate <sup>8</sup>	×	×	×	
Board composition of regional agencies focuses on local interests and lacks regional voices	×	×		×
Not enough transportation expertise guides board-level decisions	×	×	×	×
Coordination bodies and committees made up solely of transit agency staff or managers have led to few results evident to passengers	×	×	×	
Multiple regional transit agencies’ incomplete coverage over only a portion of the region complicates long-range planning, project delivery, and accountability to riders		×		
Most regional transit agencies’ narrow mandate on a single mode limits their focus to fixing broad mobility challenges		×		
Regional agencies’ dependence on fares makes them less willing to share revenue during good times, and more vulnerable during hard times		×		
No entity identifies and strategically plans or manages the regionally significant network	×	×	×	
Transit planning is often not aligned with road/right-of-way planning, resulting in insufficient priority for transit on roads.		×	×	×
<b>Underuse of good business practices &amp; standards</b>				
Lack of shared standards that would benefit riders and/or reduce costs	×	×	×	
Lack of economies of scale / pooling of expertise for highly specialized functions, disciplines	×	×	×	
Lack of a customer-oriented culture or institutional structure	×	×	×	
<b>Policies &amp; investments favoring solo driving</b>				
State laws focus investments on reducing congestion by keeping cars moving				×
Driving feels inexpensive or “free” relative to transit due to lack of user charges	×			×
Parking minimums that result in excessive free parking encourage more auto use and creates urban form that discourages transit use.				×

<sup>8</sup> Three reasons why MTC isn’t working as the Bay Area’s network manager, Jan 7, 2021, Seamless Bay Area <https://www.seamlessbayarea.org/blog/2021/1/7/three-reasons-why-mtc-isnt-working-as-the-bay-areas-network-manager>

## Solutions

Corresponding to the three categories of root causes, we identify three sets of solutions critical to increasing accessibility and transit use:

### *Increased investment*

To substantially increase transit use, the Bay Area must run more buses and trains, period. Even if improvements to efficiency and customer experience are made, significantly more operations funding is needed for transit to attract more riders. Seamless Bay Area and Voices for Public Transportation recently published a study comparing transit ridership in regions across North America; the study found a strong correlation between amount of service and ridership. The Greater Toronto region, which has a similar population and mix of densities as the Bay Area, delivers 55% more service hours per capita than the Bay Area, and attracts 163%, or 2.5 times more riders per capita. Even areas of Greater Toronto that have comparable density to the Bay Area have far more service and ridership. If the Bay Area hopes to substantially increase transit use, a significant new source of operations funding must be identified; approximately \$1 billion per year of additional operations funding would be needed to operate Greater Toronto levels of service.<sup>9</sup>

### *Transit-supportive land uses*

Transit expert Christof Spieler writes in *Trains, Buses, People*, “Nothing matters as much to making transit useful and successful as population density.” The more people who live, work, and play in close proximity to transit, the greater the ridership potential - which can lead to a virtuous cycle. Density creates increased demand for transit, helping to justify service increases, which in turn reduces travel and wait time, leading to attraction of even more riders - and so on. Walkable and bikeable streets with generous sidewalks and a high quality public realm are also an important aspect of transit-supportive urban form. While the Bay Area’s long term regional plans, including *Plan Bay Area 2050*, identify growth centers near existing and future transit corridors that lay the foundation for successful transit, land use control is still primarily at the local level in the Bay Area, and many cities across the Bay Area, directly and indirectly, restrict dense land uses that could support better transit. Building a seamless transit system connecting all parts of the Bay Area at reliable frequencies will require that communities do more to promote dense, walkable communities and accommodate future growth.

### *Reformed transportation institutions*

Even with increased density and new investment, the Bay Area must intentionally design our transportation institutions to plan, build and manage a coherent, multimodal, and rider-focused system. Any proposed governance reforms should recognize and seek to address the variety of institutional challenges identified in Table 2.1. Some of those challenges are related to poor coordination, but others are endemic to transit agencies and aren’t related to coordination. A network manager can play an important role in improving both coordination and promoting effective transit practices; it can also significantly support attracting increased investment and improving transportation’s alignment with land use.

---

<sup>9</sup>Kilcoyne, Ron. “Operations Funding for a World Class Transit System,” Report by Seamless Bay Area and Voices for Public Transportation, September 2020.  
<https://www.seamlessbayarea.org/blog/2020/9/21/new-report-shows-importance-of-restoring-and-expanding-transit-service-post-pandemic>





**Figure 2.4** Map of the Bay Area’s 27 Transit agencies; extreme fragmentation by geography and by mode without any overarching coordination leads to fragmented decision-making across agency boundaries, contributing to poor connectivity and access (image: Seamless Bay Area).

Proposals for reformed transportation institutions should seek to bring about three key conditions; and network manager options should be evaluated against these criteria:

- **Sufficient and well-organized authority & decision-making.** A Bay Area transit network management structure should seek to clearly distinguish which agencies have what type of authority and minimize overlapping mandates. Those decisions that would benefit most from regional decision-making and standardization should be made by regional bodies. Regional bodies should have governing structures that are guided heavily by both professional expertise and rider experiences, and are set up to balance shared regional needs with local needs.
- **Orientation toward riders, best practices & innovation.** Ensuring representation from riders on agency boards or advisory bodies and building in senior-level accountability for customer experience can help ensure that all the divisions of a large organization are strategically working toward the same customer objectives. Promoting adoption of best practices and a culture of innovation across all transit agencies should be an explicit priority of reforms.
- **Policies that align with climate, equity & economic goals.** Institutions that manage the Bay Area’s public transit must be empowered to enact policies that take meaningful steps toward mode shift and expanding economic opportunity. They must have a broad mandate to enhance mobility for all Bay Area residents, and be structured to effectively carry out state and regional policy goals, with the right tools to do the job.

## Chapter 3: Network Manager Key Considerations & Conceptual Models

Recognizing key transit challenges a network manager should address, Seamless Bay Area has analyzed six key considerations to inform how to most effectively set up a Bay Area network manager based on research of other regions and the existing Bay Area transit institutions:

- Functions a network manager should oversee
- Conceptual models of network management
- Geographical coverage considerations
- Governing board considerations
- Approach to geographical representation on boards
- Relationship to existing institutions

### Functions a network manager should oversee

Research on regions with high ridership transit systems demonstrates remarkable consistency in the sets of functions that are overseen regionally by a network management entity.<sup>10</sup> Based on that research and our interviews, Seamless Bay Area has summarized what we view as important functions to oversee regionally in the below table. Effective network managers commonly oversee customer-facing functions, like fares, service coordination, wayfinding, and branding, but also various administrative functions - particularly major procurements and contracting<sup>11</sup>, which also serve as a means for many network managers to ensure service quality consistency across operators.

**Table 3.1** Transportation system functions most commonly managed regionally by a network manager entity in regions with high transit ridership.

Most Commonly Managed Regionally	Commonly Managed Regionally <sup>12</sup>	Sometimes Managed Regionally
Service Standards & Performance Measures Monitoring Regional & Rapid Service / Network Design Schedule Coordination Customer Experience Branding/Marketing Wayfinding & Customer Information Fare Collection, Policy, Media Data Management Procurement & Contracts	Capital Planning Capital Project Delivery Information Technology	Operations Maintenance Local Service Planning Service Delivery Customer Relations

The number of transit system functions that network managers oversee in other regions tends to grow over time

<sup>10</sup> List compiled based on Seamless Bay Area research and interviews, and drawing significantly from DeRobertis, Ferrell, Lee, Eells. "Characteristics of Effective Metropolitan Areawide Public Transit: A Comparison of European, Canadian, and Australian Case Studies" 2020, Mineta Transportation Institute. <https://transweb.sjsu.edu/research/2001-Effective-Metropolitan-Transit>

<sup>11</sup> TransitCenter and Eno Center for Transportation's 2017 report, *A Bid for Better Transit* explores contracted operations in more detail and how it can be carried out while ensuring high labor standards, and in a US labor context: <https://transitcenter.org/wp-content/uploads/2020/05/TC-A-Bid-For-Better-Transit-Publication-20170925-Digital.pdf>

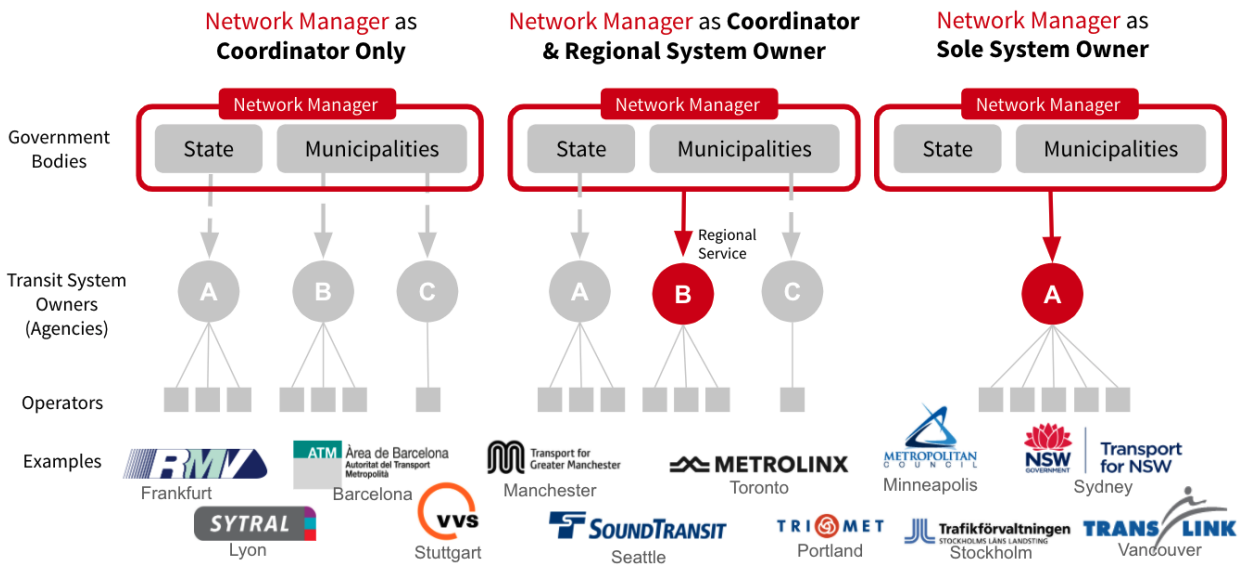
<sup>12</sup> Regions differ more significantly on these functions; for example, in some regions, the existence of other institutions that oversee project delivery at a statewide or national scale eliminate the necessity for a network manager to be responsible for project delivery.

once they are set up. As such, it may be logical for a Bay Area network manager to focus initially on a limited set of core functions, with the intention of expanding to other functions over time.

## Conceptual models of network management

What is the relationship between a transportation network manager and individual transit operators? Does the network manager run transit directly or simply coordinate? Research indicates there are three primary models to consider - summarized in the diagram below - all of which can be associated with high ridership and a more seamless experience for passengers<sup>13</sup>:

- **Coordinator Only:** In many European regions including Frankfurt and Stuttgart, the network manager entity is the coordinating body of many individual transit systems owned and operated by different governmental political jurisdictions at different levels of government: cities, provinces, regions, and/or the state.
- **Coordinator and Regional System Owner:** In Greater Toronto, Manchester, and to some extent in Greater Seattle, a network management entity that coordinates the system also owns and manages the regional (but not local) transit systems.
- **Sole System Owner (Complete Consolidation):** Many regions, from Minneapolis to Vancouver to Sydney, have brought together all public transportation in the metropolitan area into one agency, and this single agency is by default the network manager.



**Figure 3.1:** Three conceptual models for network manager structures, based on global case studies (image: Seamless Bay Area).

While all three models can support a high ridership system, their structures differ significantly and have evolved

<sup>13</sup> DeRobertis, Ferrell, Lee, Eells. “Characteristics of Effective Metropolitan Areawide Public Transit: A Comparison of European, Canadian, and Australian Case Studies” 2020, Mineta Transportation Institute. <https://transweb.sjsu.edu/research/2001-Effective-Metropolitan-Transit>




for a number of reasons across the different regions. Seamless Bay Area’s three primary options for network manager correspond to each of these three models. Determining which of these models should guide the Bay Area’s long term transformation is one of the most important choices the region must grapple with in the coming months.

### Geographical coverage considerations

What should the geographical extents of a Bay Area transportation network manager be? Seamless Bay Area’s proposals all correspond to the nine-county Bay Area - the current extents of MTC, the Blue Ribbon Transit Recovery Task Force, and other regional coordination initiatives like the Fare Integration and Coordination Study. However, the region may wish to consider other options, either as interim or long-term solutions.

- A five-county network manager that leaves out the four North Bay counties would capture the full service areas of the region’s two main rail providers, BART and Caltrain, and would cover 83% of the nine-county region’s population and 96% of its transit ridership.
- A 21-county “megaregion” network manager could proactively plan for greater regional connectivity, but would be less helpful for addressing issues where a majority of the region’s transit use currently takes place.
- A custom boundary not aligning with county boundaries, such as was created for Sound Transit in Seattle, could be drawn to correspond with important major transit corridors and urbanized areas and may provide some advantages, but would require significant additional analysis.






**Table 3.2** Options for geographic extents of a Bay Area network manager.

9-County Bay Area	5-County Bay Area	21-County-Megaregion
		 <p><b>REGIONS</b></p> <ul style="list-style-type: none"> <li>Monterey Bay Area</li> <li>Sacramento Area</li> <li>San Francisco Bay Area</li> <li>Northern San Joaquin Valley</li> </ul>

## Governing board considerations

How should the network manager’s governing board be structured? Looking at examples from around the world, a key consideration is the balance between appointed professionals and elected officials. Table 3.3 summarizes five potential governing board paths based on precedents from other regions, ranging from all elected officials to all professionals.

**Table 3.3** Options for governing board composition for a Bay Area network manager, with different balances of elected officials and appointed professions, and different methods of appointments.

	<b>Directly Elected Governing Body</b>	<b>Locally Elected Official-Majority Governing Body</b>	<b>Professional Expertise-Majority Governing Body</b>	<b>Fully Professional Governing Body</b>	<b>Hybrid / Two-Tier Governance Models</b>
<b>Precedent Examples</b>					
<b>Notes</b>	<p>BART has had district-based system covering 3 counties only; does not include San Mateo (in service area since 1996) or Santa Clara (in service since 2020)</p> <p>AC Transit has hybrid district-based system with 2 “at-large” directors</p>	<p>Can consist of mayors &amp; county executives of constituent cities; local elected official appointees only; or combination of both.</p> <p>Nearly all US MPOs (including MTC) have this structure due to federal requirements.</p> <p>Most Bay Area transit agencies have this structure, as well as Sound Transit (Seattle) and LA Metro.</p>	<p>The ATL (Atlanta) has a 16 member board, 10 representing districts (mostly professionals), 6 state appointees with no districts.</p> <p>Transport for London has majority professional boards with no geographic districts.</p> <p>Mayor of London is chair of Transport for London Board.</p>	<p>Tri-Met (Portland, Oregon) has a district-based system of professional appointees with relevant experience and/or membership with civic groups.</p> <p>Metrolinx (Toronto) has a fully professional board with no geographic districts.</p>	<p>Translink (Vancouver) has a two-tier governance structure; The upper-tier 21-member Mayor’s Council weighs in on major decisions including funding, and performs regulatory oversight; the lower-tier 11-Member Board of Directors, dominated by professionals, addresses administration issues.</p>




Seamless Bay Area has identified that the presence of appointed experts is a best practice in the best performing network managers; this can be accomplished through a number of models while maintaining accountability and involvement from elected officials. One option is an appointed expert-majority board such as was recently created to oversee the ATL, the network management entity for Greater Atlanta. Another option is a two-tiered board structure, such as Vancouver’s Translink, where elected officials occupy the upper tier and weigh in on a limited basis for major funding and policy directions, while a lower-tier professional board oversees operations and can contribute with their professional expertise. These approaches differ significantly from the majority of transit agency boards in the Bay Area, and MTC’s current structure, which do not feature significant oversight of

professionals with relevant experience in transit.<sup>14</sup>

Seamless Bay Area does not recommend setting up a directly elected board for a network manager. One reason is the inability of directly elected boards to guarantee that the people serving have relevant professional backgrounds or expertise. Directly elected boards are also not found in any of the successful network manager examples researched. One positive thing about BART and AC Transit boards, which both have directly elected boards, is that most board members are riders themselves who carry deeply about transit - and such is not the case on many other Bay Area transit agency boards where officials are appointed from jurisdictions. To ensure boards include not only professionals with relevant experience, but also include riders from a variety of backgrounds and communities, we'd recommend that selection criteria for serving on an appointed network manager board include regular transit use, or links to important rider community groups or constituencies.

### Approach to geographical representation on boards

**Table 3.4** Options for how to achieve geographical representation for the board for a future Bay Area network manager.




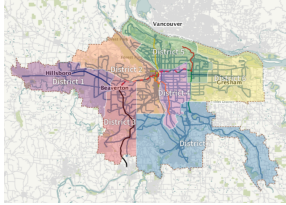
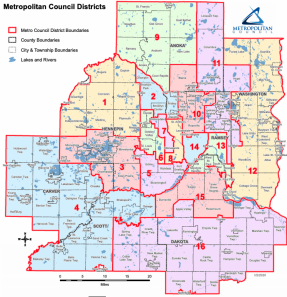
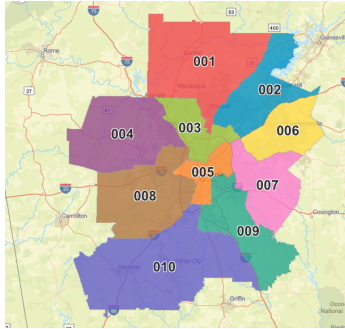
	<b>Jurisdictional Representatives, # seats distributed by population</b>	<b>Jurisdictional Representatives - votes weighted by population</b>	<b>Equal-population custom districts</b>
<b>Precedent Examples</b>			
<b>Pros</b>	<p>Current approach at MTC and among most Bay Area multi-jurisdictional agencies; representatives correspond clearly to existing jurisdictions</p> <p>Simple voting procedure</p>	<p>Clear connection to population levels</p> <p>Voting corresponds to relative population.</p>	<p>Equal population in each district; equal representation</p> <p>Simple voting procedure</p> <p>Insulation from local politics as district boundaries may span multiple jurisdictions</p>
<b>Cons</b>	<p>Representatives tightly connected to local politics; hinders prioritizing regional issues</p> <p>Unequal representation: often, large jurisdictions are underrepresented, and small jurisdictions overrepresented</p>	<p>Large jurisdictions represented by one person</p> <p>Complicated voting procedure</p> <p>Disempowering to smaller jurisdictions who may always get overruled</p>	<p>Risk of weak alignment with local jurisdiction priorities</p> <p>More complex appointment process (see Table 3.5 for examples)</p>

How can the governing board of a Bay Area network manager be structured to achieve fair representation of the

<sup>14</sup> SFMTA and WETA are notable exceptions, and have all-professional boards. Caltrain's board also includes some professionals, in recent years appointed to represent SFMTA or the San Francisco Mayor.

different parts of the region, yet ensure that it prioritizes the needs of riders across the region? The dominant model of transit agencies and regional bodies in the Bay Area, in which individual jurisdictions appoint local city councillors or county supervisors to sub-regional or regional boards, has a number of shortcomings. Elected official board members appointed through these methods tend to be oriented toward serving their local municipality rather than the region as a whole. Because jurisdictions are not of equal population, this approach also leads to inequality of representation, as exists in the U.S. Senate, where smaller jurisdictions are often overrepresented, and large ones -- which may include more transit riders -- can be underrepresented.

**Table 3.5** Options for how to achieve geographical representation for the board for a future Bay Area network manager.

Region	<p><b>Greater Portland, OR</b></p> 	<p><b>Greater Minneapolis, MN</b></p> 	<p><b>Greater Atlanta, GA</b></p> 
<p><b>Number of Districts</b></p>	<p><b>7 Districts (on Board of 7)</b></p> 	<p><b>16 Districts (on Board of 16)</b></p> 	<p><b>10 Districts (on Board of 16)</b></p> 
<p><b>Appointment Process</b></p>	<p>Governor must solicit recommendations from all cities and counties in each district</p> <p>Governor appoints, Senate confirms</p> <p>One director must regularly use services of a mass transit system.</p>	<p>Anyone can apply to be Councilmember</p> <p>12-person Nominating Committee interviews 5 candidates, and selects 3 finalists for each district to Governor</p> <p>Governor selects from 3 finalists</p>	<p>Based on majority vote of a caucus within each district; each caucus comprised of:</p> <ul style="list-style-type: none"> <li>● State Members of House of Reps &amp; State Senators within district;</li> <li>● Chairperson of county board of commissioners with district;</li> <li>● One mayor from the municipalities within the district;</li> <li>● and Mayor of Atlanta, if district includes Atlanta</li> </ul> <p>Must have relevant experience; may be elected official or private citizen</p>

One alternative approach would be to weight each jurisdiction's votes by population, as is done by Translink's upper-tier board in Greater Vancouver. However, this creates a complicated voting procedure, and risks completely shutting out the voices of smaller jurisdictions. Seamless Bay Area sees potential advantages of setting up equal-population custom districts, including keeping a board to a more manageable size, maintaining

a simple voting procedure, and allowing representatives to be more insulated from local politics because due to their districts spanning multiple different jurisdictions.

There are several examples in the U.S. where appointed professionals or community members with relevant ties to rider groups represent districts of a network management board, such as in Portland (TriMet), and Minneapolis (Met Council), and the recently formed ATL in greater Atlanta (see table). Seamless Bay Area believes these models are worth exploring as they could serve the goal of having a board that includes both broad geographic coverage and experts with relevant backgrounds.

## Relationship to existing institutions

A final and essential consideration for setting up a Bay Area network manager is determining how it would relate to existing transportation institutions. In our interviews with Bay Area leaders over the past several years, we have heard repeatedly that the solution to network management cannot be simply the creation of *another agency*, layered on top of everything else. We must fix and reform what we have, and where advantageous, look to streamline and reduce the number of agencies.

We agree, but also believe that no existing public agency, in its current form, is positioned to succeed as the region's network manager. Substantial reform to an existing agency or multiple agencies is needed.

So, which existing agency or agencies should be reformed into being the network manager? As explored in SPUR's 2020 paper, A Regional Transit Coordinator for the Bay Area<sup>15</sup>, MTC is one choice. Should we seek to evolve MTC into an entity that can carry out network management -- or reorganize some number of our transit agencies into a merged operator with a broadened governance structure, and have that new entity oversee network management?

The two main paths are compared in Table 3.6.

Some key advantages to evolving MTC into a network manager include: MTC already is structured to oversee transportation across the whole nine-county region; MTC controls a significant share of transit funding; and MTC already performs some shared functions of a network manager, notably the administration of Clipper. On the surface, MTC seems well-positioned to be a network manager.




However, as detailed in Chapter 2, MTC has faced serious challenges in taking on network management responsibilities. Its lack of progress in coordinating Bay Area transit over fifty years despite multiple pieces of legislation indicate that major changes to MTC's governance, mandate, structure, and even organizational culture would be necessary for it to succeed as network manager.

---

<sup>15</sup> <https://www.spur.org/publications/spur-report/2020-12-01/regional-transit-coordinator-bay-area>



**Table 3.6** Options for evolving existing institutions to take on the role of a Bay Area network manager.

	<b>Evolve MTC to be Network Manager</b>  	<b>Evolve Transit Agencies to be Network Manager (Joined-Up Operator option)</b>   +  + <b>Others</b>
<b>Potential Advantages</b>	<p>MTC already carries out some key functions, including regional transit wayfinding, administration of the regional Clipper fare payment system, and management of regional tolls.</p> <p>Aligns with planning role &amp; federal/state funding responsibility.</p>	<p>A transit agency that directly controls, runs, and is accountable for the regional transit system may be well-positioned to design &amp; plan for integrated regional service that touches all communities</p> <p>Reduces overlap of authorities policymakers &amp; transit agencies</p> <p>Can address existing governance &amp; planning challenges of existing agencies</p>
<b>Potential Risks / Drawbacks</b>	<p>MTC has would have to address past barriers:</p> <ul style="list-style-type: none"> <li>• Overlapping mandates with transit agencies</li> <li>• Excessively local focus</li> <li>• Lack of expertise</li> </ul> <p>Federal rules mean MPO must be run by elected representatives, state officials, or transit agency officials</p> <p>Doesn't address challenges endemic to existing agencies</p>	<p>Would involve shifting away some authorities from MTC</p> <p>If not all transit agencies are joined up, which transit agencies are included / "joined-up" may affect service priorities</p>

The option of a transit agency-led network manager faces an initial challenge that there isn't currently a good single candidate agency positioned to succeed as a network manager for a 9-county, or even a 5-county, region. A merger of one or more agencies to create a clear lead regional transit authority covering a majority of the Bay Area would need to occur to have a transit-agency led network manager. Uncertainty about what agencies ought to be merged and the governance structure of a merged regional agency presents many variables associated with this path that make it difficult to visualize or even evaluate. A key goal of this report is to provide some robust thinking of what a transit agency-led network manager could look like for the purposes of allowing for a proper evaluation of this option versus an MTC-led option.

Assuming a transit-agency-led network manager would involve, at a minimum, a merger between BART and Caltrain to create a dominant regional operator covering the region's most populous and highest-ridership counties (see Chapter 4 for further discussion), this path could provide several advantages. A transit agency that directly controls, runs, and is accountable for the regional transit system may be well-positioned to design and plan for integrated regional service that touches all communities. Staff resources currently focused on agency-specific functions could be broadened to a regional scope. Organizational culture change would certainly also be needed for a merged transit agency to succeed as a network manager, especially to ensure that any services not run directly by the network manager are not deprioritized.

## Chapter 4: Network Manager Alternative Options




Combining all these considerations, the following matrix describes three key options developed by Seamless Bay Area in greater detail. These options correspond to the three models for Network Management that emerged from our research of best practices, and the two paths of evolving existing institutions.

**Option A**, the **Altered MTC Network Manager**, would make changes to MTC’s board structure and authorities and designate MTC as the network manager within the “coordinator only” model.

**Option B**, the **Regional Transit Agency Network Manager**, would involve combining at least two Bay Area Transit Agencies, with BART and Caltrain as essential, to establish a lead regional transit agency - and vesting that combined agency with the authority and mandate to coordinate transit under the “coordinator and regional system owner” model.

**Option C**, the **Universal Transit Agency Network Manager** would establish a single ‘system owner’ for the Bay Area transit system, bringing together all local and regional transit agencies under one overarching governing board.

**Table 4.1** Overview of Bay Area network manager options developed and evaluated by Seamless Bay Area.

		Relationship to Existing Institutions	
		Evolve MTC to be Network Manager	Evolve Transit Agencies to be Network Manager
<b>Network Manager Conceptual Model</b>	Coordinator Only	<b>Option A: Altered MTC Network Manager</b> 	
	Coordinator + Regional System Owner		<b>Option B: Regional Transit Agency Network Manager</b> 
	Sole System Owner		<b>Option C: Universal Transit Agency Network Manager</b> 
		<b>Option D: Enhanced Transit Executive Board</b>	

A fourth option, **Option D**, an **Enhanced Transit Executive Board**, has been discussed recently at transit agency meetings as an option, doesn't fit squarely within this matrix, has been developed by others and is described for comparison; it may be considered as an interim step toward achieving any of the described long-term options.

We have sought to develop a feasible network manager concept within Options A, B, and C, addressing many of the underlying challenges identified and learning from best practice research. All options recognize the uniqueness of transit funding in California, where a significant share comes from local sales tax measures that are overseen by County Transportation Authorities (CTAs). All of the options maintain County Transportation Authorities in their current form as a primary funding source for transit.

For each network manager option we propose:

- Network manager board composition
- Network manager key functions
- Existing agencies that would need to be reformed
- Existing functions that may need to be transferred to a different agency
- Other reforms that would be helpful in parallel, but which are not required to achieve the option

These options are presented for discussion purposes, and are not presumed to be fully optimized or reflective of all stakeholders' perspectives. Many more voices and perspectives would need to weigh in - particularly from groups representing transit-dependent riders - to develop a truly comprehensive, equitable, and robust network management framework. In Chapter 5, we evaluate these options based on key criteria.

## **Option A: Altered MTC Network Manager**

If the Bay Area were to pursue the “coordinator only” model of a network manager, MTC is the most logical entity to serve as its foundation. MTC's mandate is to coordinate transportation in the nine-county region, and the agency oversees some network-manager-like functions such as administering the Clipper fare payment program and overseeing a transit wayfinding initiative. However, to be effective as a network manager, the underlying issues that have prevented MTC from becoming an effective Bay Area network manager in the past would need to be addressed.<sup>16</sup>

To overcome two of the challenges identified with MTC - insufficient board-level professional expertise and a lack of board members who represent the interests of the region as a whole - Option A includes key changes to MTC's board structure:

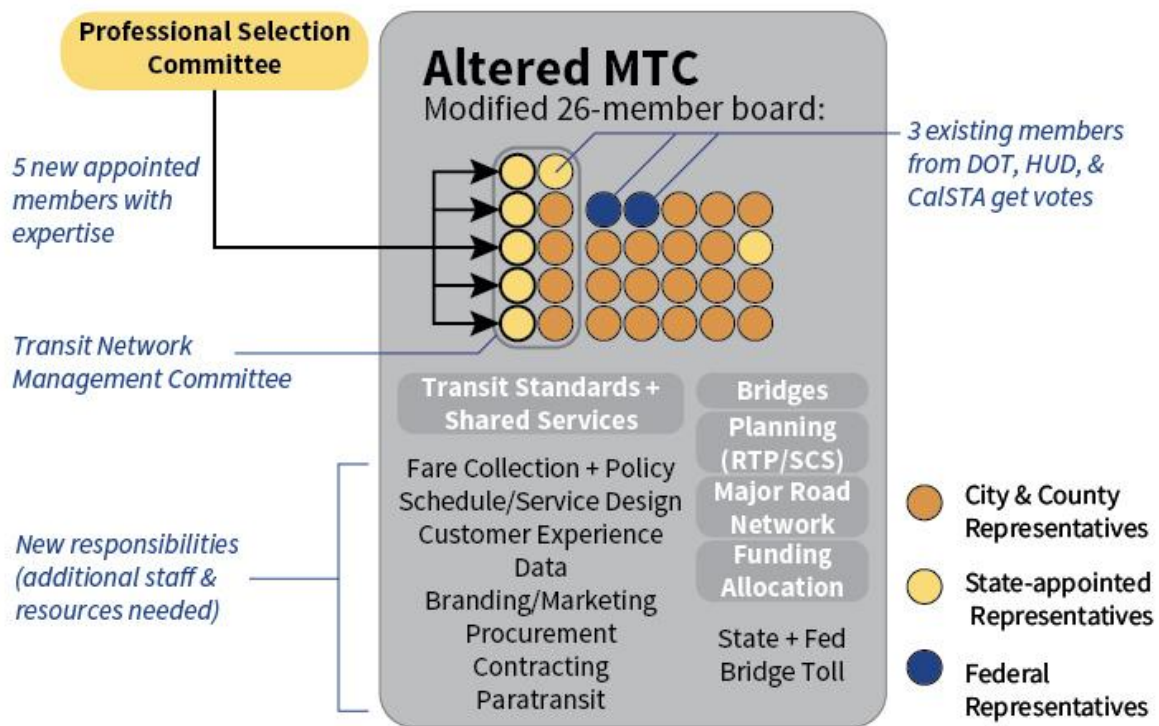
- **Give the three non-voting MTC commission members a vote.** Representatives from California State Transportation Agency (CalSTA), the U.S. Department of Transportation (DOT), and the US Department of Housing & Urban Development (HUD) already have seats on MTC, have relevant professional backgrounds and aren't tied to a specific part of the region. However, because they are currently

---

<sup>16</sup> “Three reasons why MTC isn't working as the Bay Area's network manager”, Seamless Bay Area, Jan. 7, 2021, <https://www.seamlessbayarea.org/blog/2021/1/7/three-reasons-why-mtc-isnt-working-as-the-bay-areas-network-manager>

designated as non-voting commissioners, their contributions to and influence on MTC has historically been limited. Making them full voting members of the Commission could make these commissioners more engaged in MTC’s decision making, add professional expertise, and bring more regional perspectives to the commission.

- **Add five appointed members with relevant expertise or ties to important rider populations to the Commission.** New, non-elected expert members should be selected by a quasi-independent selection committee set up by the state to ensure objectivity and transparency in appointments, similar to Translink’s Independent Screening Panel.<sup>17</sup> Expertise in finance, transportation operations, customer experience, or capital project delivery could be valuable qualifying criteria for selection.
- **Establish a transit network management committee of MTC.** Much substantive discussion and decision-making at MTC occurs within committees rather than at the full commission. The proposed additional appointed members of MTC with relevant experience should form the core of a new committee that focuses entirely on transit coordination issues, overseeing all related projects and initiatives. Key transit agency general managers could be ex-officio members of this committee.

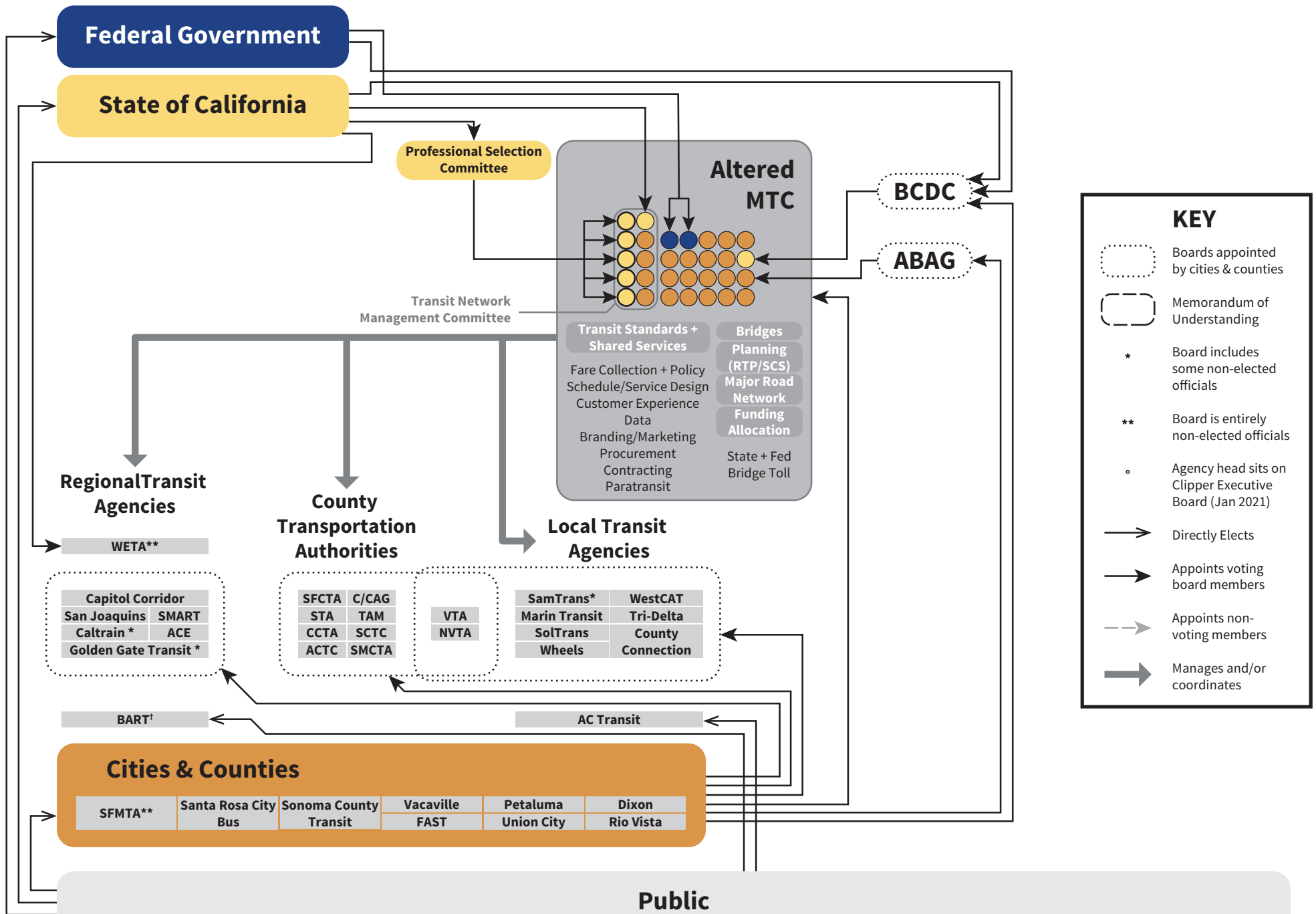


**Figure 4.1** Detail of Option A, Altered MTC as Network manager, with key responsibilities (see full org chart for relation to other agencies).

Unlike Options B and C, which have majority-professional boards, Option A maintains a board primarily made up of elected officials, building off the current MTC structure. One reason for this is because MTC is designated by the federal government as the Bay Area’s Metropolitan Planning Organization (MPO), and federal law dictates that MPO boards must consist *only* of: local elected representatives, transit agency officials, and state officials.

<sup>17</sup> <https://www.translink.ca/about-us/about-translink/governance-model>

# Option A: Altered MTC as Network Manager



Seamless Bay Area strongly supports having elected officials guide high level transportation policymaking, as this is important for public accountability and legitimacy. This is also an attribute of successful regional transit governance structures from around the world. A key challenge is ensuring the proper division of responsibilities between elected official policymakers and non-elected managerial boards.<sup>18</sup>

As such, a second reason for maintaining much of MTC’s current board composition under Option A (and in Options B and C, even though those options put the network management function outside of MTC), is pragmatic. While MTC isn’t perfect, it does a reasonable job of balancing representation from across the region, and a complete overhaul of MTC’s board structure would be difficult.

To overcome the third key challenge identified with MTC - that its mandate to coordinate overlaps with the mandates of 27 transit agencies - legislation to bring about Option A should explicitly recognize MTC’s authority over key network manager functions including fare policy, schedule/service design, customer experience, and other functions listed in Table 3.1. The legislation should also explicitly modify the mandates of *each of the individual transit agencies* to recognize MTC’s authority over these functions, so there is no ambiguity or overlap of responsibility.

**Table 4.2** Option A: Altered MTC Network Manager Summary

<b>Network manager base institution</b>	Metropolitan Transportation Commission
<b>Board composition</b>	26-member board made up of existing 21-member MTC Commission plus 5 appointed at-large members with relevant backgrounds; the 3 current non-voting members of MTC would become voting members
<b>Existing agencies that would need to be reformed</b>	MTC: Legislation would need to modify board structure and mandate  All transit agencies: Legislation would need to revise each agency’s mandate and recognize MTC’s authority over key functions including fares, service design, wayfinding, marketing, data, etc.
<b>Existing functions or staff that would transfer to a different agency</b>	MTC would set up key shared functions including fare policy, service design, wayfinding, marketing, data; key staff from agencies would transfer to MTC (though not necessarily physically), and take on a region-wide rather than agency-specific responsibility.
<b>Other reforms that would be helpful in parallel</b>	<ul style="list-style-type: none"> <li>● Mergers of regional transit providers, especially regional rail, to create a lead regional transit agency</li> <li>● County-scale mergers of local agencies;</li> <li>● County Transportation Authority / Transit agency boundary alignment and/or consolidations;</li> <li>● Reform of the Congestion Management Act to remove focus on automotive level of service &amp; congestion</li> </ul>

<sup>18</sup> For more information on this, see Seamless Bay Area’s recent blog post with a summary of transit agency accountabilities and the relative importance of having elected officials involved in each decision, developed by Canadian governance expert Tamim Raad:

<https://www.seamlessbayarea.org/blog/2021/1/7/three-reasons-why-mtc-isnt-working-as-the-bay-areas-network-manager>  
Also see the presentation at the September 2020 SPUR/Seamless Bay Area webinar “Transit Governance: Lessons for the Bay Area.” <https://www.spur.org/events/2020-09-10/transit-governance-lessons-bay-area>

A challenge with Option A is that MTC does not currently possess staff with many of the key relevant skills needed to oversee key network management functions - for example, MTC has little expertise in transit service planning or operations. New staff would need to be brought in, likely from transit agencies, requiring either new MTC funding or a transfer of budget resources.

## **Option B: Regional Transit Agency Network Manager**

For a major regional transit agency to be an effective Bay Area's network manager, that transit agency would need to have jurisdiction over and a governing board that represents a significant share of the region. Because such an agency does not currently exist, Option B requires joining together at least two existing major transit agencies. A combined transit agency that brings together a minimum of Caltrain and BART under one governing board would be well-positioned to be the Bay Area's network manager under the "regional transit agency as network manager" model.

Independent of the question of what entity should be the Bay Area's network manager, there are strong arguments for merging Caltrain and BART, the region's two largest rail providers, into a combined regional transit service, led by a single board covering the five counties of San Francisco, San Mateo, Santa Clara, Alameda and Contra Costa. Based on effective practices elsewhere in the US and the world, we believe a reconstituted board should include people with expert knowledge.

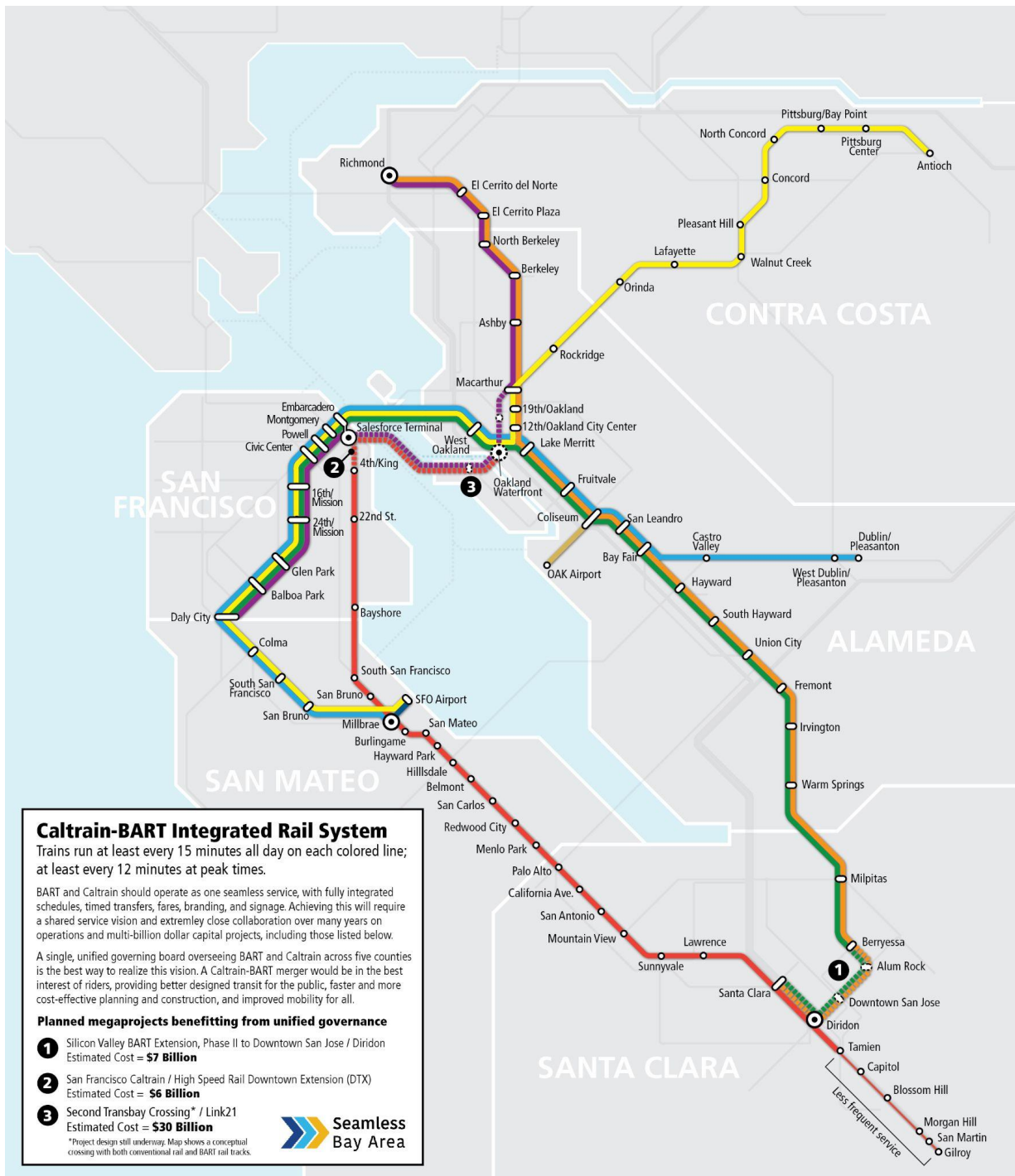
Such a combined board should not be an "expansion" of the BART Board, but rather a new agency entirely with a board appointment process that learns from the strengths and weaknesses of both the BART and Caltrain board models.

A merger with goals of integrated service and planning, with fully aligned fares, schedules, and branding across the two systems, could provide enormous benefits to transit riders across the Bay Area. The Bay Area would finally have one clear lead agency responsible for planning and operating an integrated regional rail system across the whole region.

In addition to providing customer experience benefits and clearer accountability for interconnected mobility to riders, a thoughtful merger could greatly improve both agency's ability to effectively plan and deliver major capital and service improvements that would provide far more access to destinations and bring far more riders to the system. The two agencies are already planning to operate increasingly similar levels of service - Caltrain's ongoing electrification and approved business plan will increase train frequencies to every 15 minutes at some stations as early as 2022,<sup>19</sup> effectively matching current BART service at some times of the day. As it increases service, Caltrain will increasingly cater to a mix of both commuters and riders making trips throughout the day for a range of purposes, as BART currently does. The number connection points between the systems will increase from the current single transfer point at Millbrae to three within 10-15 years. Major capital projects that connect both systems, including the San Francisco Downtown Extension, the BART extension to downtown San Jose, and a second tube between San Francisco and the East Bay would benefit enormously from unified governance, and very likely could be designed and delivered more cost-effectively.

---

<sup>19</sup>[https://www.caltrain.com/Assets/\\_Agendas+and+Minutes/JPB/2020/Regular+JPB+Session+following+closed.pdf](https://www.caltrain.com/Assets/_Agendas+and+Minutes/JPB/2020/Regular+JPB+Session+following+closed.pdf)



**Figure 4.2** Potential integrated service map of an integrated BART-Caltrain rail system, overseen by a five county governing board. Key major capital projects planned to connect the two systems are projected to cost at least \$43 billion to construct; integrating governance could support greater cost effectiveness in delivering the megaprojects and ensure design that supports seamless connectivity (image: Seamless Bay Area).



Both agencies also suffer from significant governance challenges. BART already provides service to five counties, including all three that Caltrain operates within; yet BART's board only represents three counties, presenting fundamental problems of accountability to the riders in San Mateo County and Santa Clara County. BART's complex and fragile agreement with VTA is one of the factors that has contributed to a severely delayed and increasingly expensive subway extension to Downtown San Jose, now planned to be complete by 2030 at the earliest.<sup>20</sup> The project is still beset by inter-agency disagreements with no clear mediator to resolve conflicts and keep the project on track, so further delays and cost increases are a real possibility. Riders in all counties suffer the consequences of these delays.

Now, BART and Capitol Corridor are embarking upon a 21-county engagement process for a new transbay crossing, dubbed "Link21," estimated to cost at least \$30 billion, which could include standard gauge rail tracks and create a way for Caltrain service to extend to serve East Bay riders. With no clear lead agency for that project and dozens of stakeholders, the project is at significant risk of making poor and costly design decisions that aren't in the best interest of riders, and being significantly delayed due to political disagreements.<sup>21</sup>

Now is also a unique window of opportunity because Caltrain is in the midst of a governance reform process of its own. To meet the needs of increased capability identified in Caltrain's business planning process, and to address dissatisfaction from San Francisco and Santa Clara County board members with the level of accountability of shared senior management at SamTrans, in 2021 the Caltrain Board is investigating a range of future governance options, including regional options that could provide a combined governance structure for BART and Caltrain.<sup>22</sup>

Given the Bay Area's lack of a clear network manager, the argument in favor of a merged BART-Caltrain regional transit agency, covering at least five counties, appears even more urgent -- and it becomes a compelling and logical alternative to MTC as the Bay Area's transportation network manager.

A merged 5-county BART-Caltrain entity would be the minimum prerequisite for a regional transit agency-led network manager as envisioned by Option B. Prior to COVID, the two agencies collected 57% of the region's fare revenue and the five counties they traverse represent 86% of the Bay Area's population and 96% of its transit ridership<sup>23</sup>. Unlike Option A, a merged BART-Caltrain would have a critical base of dedicated staff and revenue that already specialize in transit operations and customer relations, whose focus could be broadened to support more agencies and objectives of regional integration.

The merged agency should build on existing staff resources to establish a center of excellence for transit

---

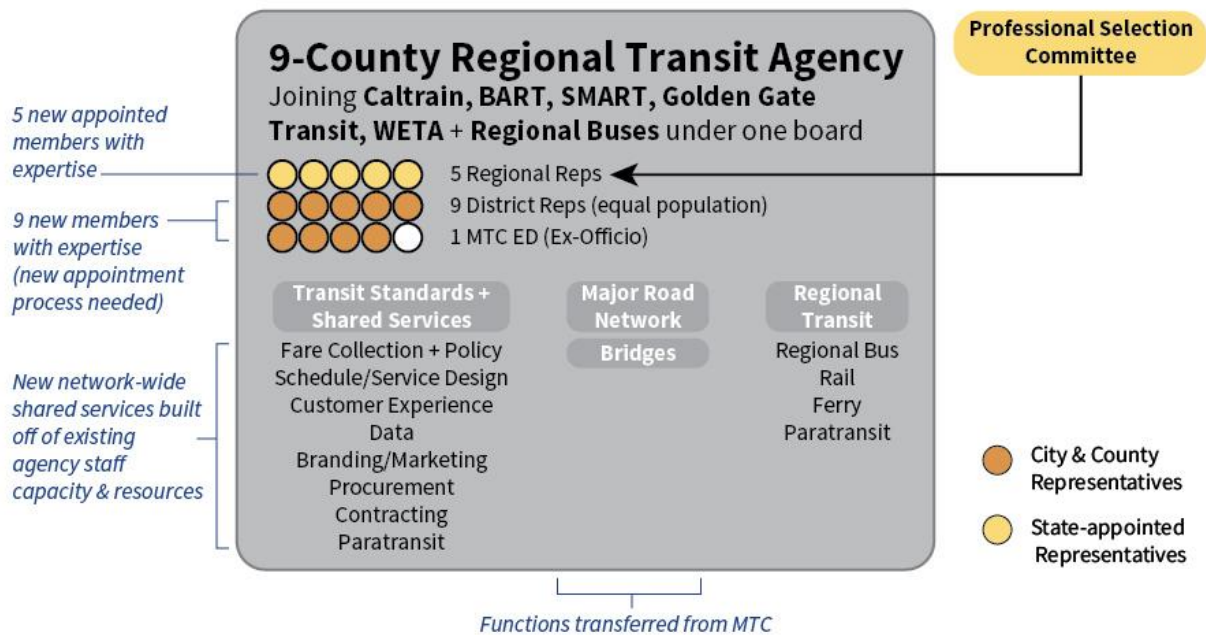
<sup>20</sup><https://www.mercurynews.com/2020/03/29/barts-san-jose-extension-is-woefully-delayed-and-the-hardest-part-is-still-to-come/>

<sup>21</sup> <https://www.seamlessbayarea.org/blog/link21-governance-needs>

<sup>22</sup> [https://www.caltrain.com/Assets/Governance+Mtg+\\$I231+PowerPoint.pdf](https://www.caltrain.com/Assets/Governance+Mtg+$I231+PowerPoint.pdf)

<sup>23</sup> Based on ridership data provided in SPUR's 2015 report Seamless Transit, [https://www.spur.org/sites/default/files/2015-04/SPUR\\_Seamless\\_Transit.pdf](https://www.spur.org/sites/default/files/2015-04/SPUR_Seamless_Transit.pdf)

customer experience to focus on improving passengers experiences from origin to destination and across all modes. Many other transit agencies across North America have created senior-level accountability for customer experience by establishing focused departments and even the role of Chief Customer officer.<sup>24</sup> Transforming into more customer-focused agencies would require a significant shift in organizational culture, and could be supported by bringing in user experience experts that may not be working in the public transit industry currently.

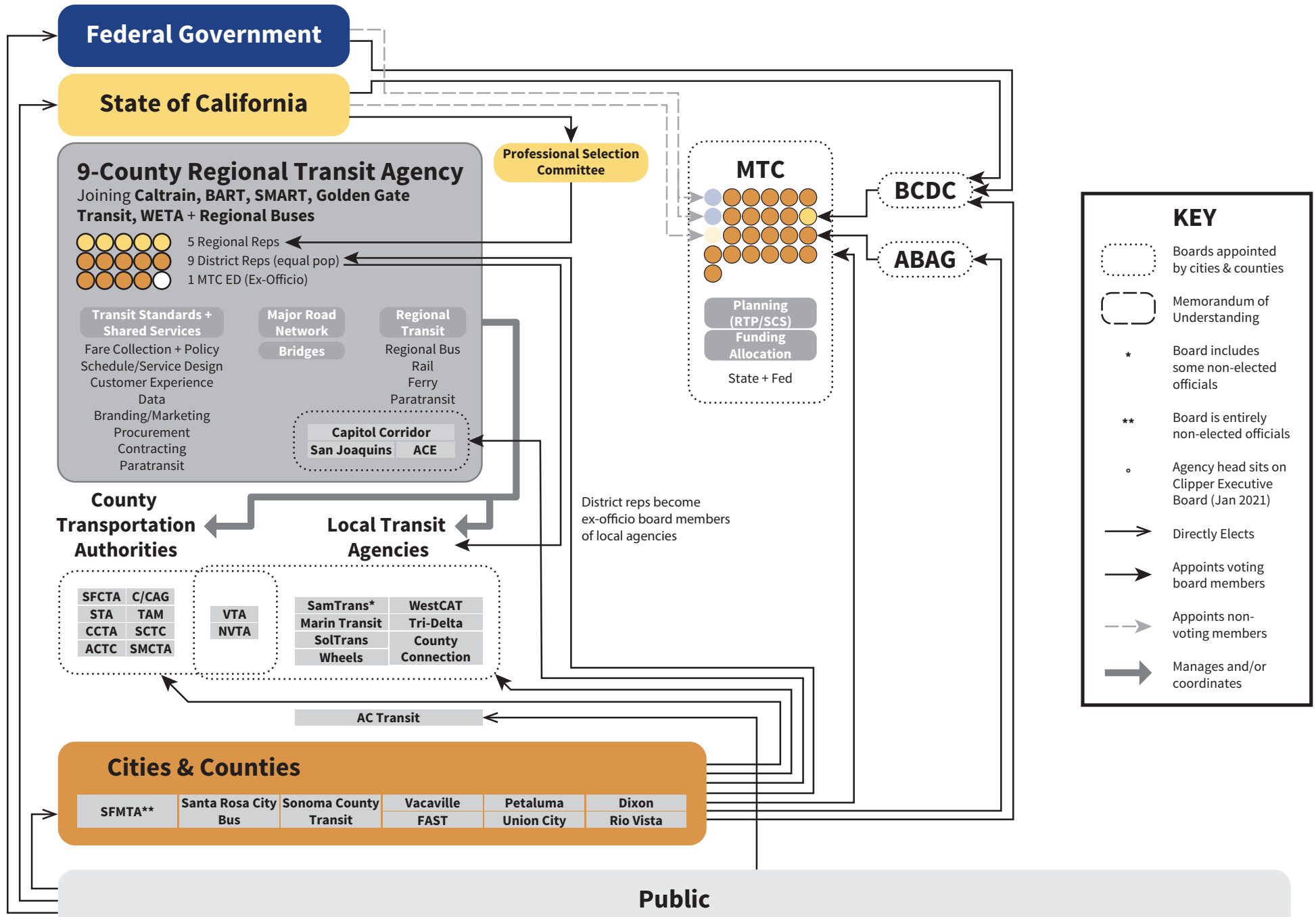


**Figure 4.3** Detail of Option B, Regional Transit Agency as Network Manager, with key responsibilities (see full org chart for relation to other agencies).

While such a 5-county network management option may be worth exploring further, it leaves out important and fast-growing parts of the Bay Area, and could suffer from being too focused on rail. Seamless Bay Area has therefore gone a step further with Option B, envisioning a potential governance and organizational structure for a multi-modal regional transit agency covering the entire nine-county region, and aligning with MTC’s boundary. In addition to bringing together BART and Caltrain, Option B proposes bringing three additional agencies - Golden Gate Transit, the Water Emergency Transportation Authority (WETA), and Sonoma-Marín Area Rapid Transit (SMART) - within one overall governing board. The new agency would have the mandate to plan and operate all Bay Area regional train, bus, and ferry service, and provide shared transit services and standards for seamless connections with local services in all nine counties.

<sup>24</sup> A simple first step to improving Bay Area transit, Jun 4, 2019, Seamless Bay Area <https://www.seamlessbayarea.org/blog/2019/6/4/no-bay-area-transit-agencies-have-chief-customer-officers>

# Option B: Regional Transit Agency as Network Manager



Option B proposes a unified nine-county Regional Transit Agency Network Manager with a governing board primarily made up of appointed professionals and community leaders, with a balance of local and regional representatives. The 15-member board, which would replace five existing and geographically overlapping transit agency boards, would include:

- **Five “at large” regional representatives.** As in Option A, members should be selected by a quasi-independent selection committee set up by the state to ensure objectivity and transparency in appointments. Expertise in finance, transportation operations, customer experience, or capital project delivery could be valuable qualifying criteria for selection.
- **Nine district representatives,** representing newly custom-drawn districts of about 850,000 residents each across the nine-county region. Custom districts would ensure equal representation of all Bay Area residents and help provide greater insulation from local county and city politics - and a greater focus on riders. Representatives would be appointed, and could be either elected officials or private citizens, but would need to demonstrate relevant expertise, history of transit use, and/or connection to relevant rider groups. Part of each district representative’s job responsibility would be to engage with members of the public within their district; work with cities, counties, transit agencies on an ongoing basis; and serve as an ex-officio board member of all local agencies that their district overlaps. District representatives could be selected by the same committee that chooses the five at-large representatives, or by a separate process similar to how district representatives are chosen for the ATL in Atlanta, bringing together key local representatives and city officials (see Table 3.5).
- **MTC’s Executive Director** as an ex-officio member, to promote policy alignment with MTC.

In both Options B and C, MTC retains a critical policymaking and accountability role even though it is not the network manager, like the “upper tier” of a two-tier board structure. MTC would continue to be the main forum for regional policymaking and convening of local elected officials; it will oversee its federally- and state-mandated functions such as developing the long range regional transportation plan and sustainable communities strategies, i.e. Plan Bay Area. It would also fulfill its duties to allocate federal and state funding.

Relative to MTC, the new 15-member Regional Transit Agency & Network Manager board of Option B would be a “lower tier” managerial board. The new merged agency would receive funding allocations from MTC, as well as from County Transportation Authorities; it would be required to follow policy directions set out by MTC and the State. But the details of running and coordinating the transit network, including the associated programs, such as the administration of Clipper, and the regional wayfinding initiatives, and the management of the major road and bridge network, would be transferred to the new merged entity, overseen by its professional-led board. This board would be particularly well-positioned to oversee major capital projects underway such as a Second Transbay Crossing, Caltrain’s San Francisco Downtown Extension, Dumbarton Rail, and other regional megaprojects that currently lack clear leadership and which span many regional agencies’ boundaries.

It would also be well positioned to oversee a regional express bus system such as the one envisioned by TransForm<sup>25</sup> and included in the region’s draft regional transportation plan, Plan Bay Area 2050, upgrading and integrating key existing express routes such as those operated by AC transit and Golden Gate Transit, and operating them seamlessly with rail and local transit timetables. Option B would provide the new entity the

---

<sup>25</sup> <https://www.transformca.org/transform-report/rex-connecting-bay-area-regional-express-transit-network>

explicit authority over transit priority on the region’s major highway and road network, enabling express buses to bypass traffic and compete with driving for more types of trips.

**Table 4.3** Option B: Regional Transit Agency Network Manager Summary

<b>Network manager base institutions</b>	Core: BART & Caltrain Possible additional: Golden Gate Transit, WETA, SMART
<b>Board Composition</b>	15-member board made up of professionals and riders including: <ul style="list-style-type: none"> <li>● 9 appointed district representatives with relevant backgrounds,</li> <li>● 5 appointed at-large members with relevant backgrounds;</li> <li>● 1 ex-officio MTC Executive Director seat</li> </ul> Board members may be elected or non-elected officials, appointed by a selection process that weighs various criteria and eligibility requirements.
<b>Existing agencies that would need to be reformed</b>	BART, Caltrain, and any other regional agencies’ existing boards would be replaced with new combined Regional Transit Agency Network Manager board. Staffs would be combined, likely distributed among several Bay Area office locations, and among numerous operating subsidiary divisions. <p>Capitol Corridor, ACE, San Joaquins</p> <ul style="list-style-type: none"> <li>● Would share combined staff with Regional Transit Agency Network Manager, but keep existing separate boards due to extending beyond the 9-county region</li> </ul> <p>Local transit agencies:</p> <ul style="list-style-type: none"> <li>● Where applicable, legislation would revise each agency’s mandate and recognize Regional Transit Agency Network Manager’s authority over key functions</li> <li>● Add Regional Transit Agency Network Manager district representatives as ex-officio board members of local agencies</li> </ul>
<b>Existing functions or staff that would transfer to a different agency</b>	MTC would transfer key operations functions and programs over to Regional Transit Agency Network Manager, including Bay Area Toll Authority (BATA), Clipper, Fare Integration, Wayfinding. <p>Regional bus operations currently overseen by local agencies (e.g., WestCat’s Lynx, AC Transit’s Transbay buses, Samtrans and VTA’s Express buses) would be transferred to Regional Transit Agency Network Manager; yet services may still be operated by local agencies through agreements.</p>
<b>Other reforms that would be helpful in parallel</b>	<ul style="list-style-type: none"> <li>● County-scale mergers of local agencies;</li> <li>● County Transportation Authority / Transit agency boundary alignment and/or consolidations;</li> <li>● Reform of the Congestion Management Act to remove focus on automotive level of service &amp; congestion</li> </ul>

## Option C: Universal Transit Agency Network Manager

Option C builds largely off of Option B and envisions what full consolidation of the Bay Area's 27 transit would look like. While this option may seem inconceivable to some, when one looks at international examples, it has ample precedent. Transport for London in the United Kingdom was created by legislation in 2000, and from 2000-03 brought together the functions of numerous separately operating transit agencies overseeing the metropolitan area's transit modes and streets. Under Transport for London's overall governance, most functions are organized largely as a group of nineteen subsidiary companies, including subsidiaries overseeing the London Underground, London Buses, and Crossrail.<sup>26</sup> Each subsidiary company may have its own managerial board, but is ultimately accountable to Transport for London board, which is made up of mostly appointed professionals and chaired by the Mayor of London.

Translink in Vancouver is another example of a universal transit agency, with numerous wholly-owned subsidiaries overseeing the commuter rail system, its urban rail system, its bus system, major roads and bridges, and its paratransit system. If the Bay Area were to pursue Option C, it is likely that different distinct parts of the network could be organized into similar subsidiary companies, including ferries, rail, buses, and roads, each with distinct internal boards and senior executives to oversee each distinct unit - but still under the overarching governance of the Universal Transit Agency board of directors.

Option C may appear to present the most change from the current status quo in the Bay Area, but it could also provide tremendous benefits for riders. In addition to the benefits of Option B, a Universal Transit Agency Network Manager would provide:

- **Comprehensive integration of local and regional service.** Because a Universal Transit Agency would be responsible for local and regional service across all modes, it may be especially well-positioned to strategically plan for and fully implement excellent connectivity between regional and local services.
- **Flexibility to constantly reorganize and evolve over time.** With just one governing board, a Universal Transit Agency may be better positioned to adapt over time as public transit continues to evolve. Internal functions and organizational structures can be quickly reorganized when everyone is working for the same organization, toward the same common goal; resources can be more easily shifted to important priorities.
- **Unique ability to strategically and proactively shape mobility policy in the Bay Area.** With one clear entity overseeing mobility policy, a Universal Transit Agency would have undisputed responsibility within the region for promoting greater mobility. With this clarity of authority comes a unique opportunity to advance bold, forward-thinking initiatives. The world's first congestion pricing schemes, in London, Singapore, and Stockholm, were introduced in regions with consolidated, comprehensive transportation authorities that oversee both transit and rights-of-way. Similarly transformative policies and programs may be simpler to introduce under a Universal Transit Agency structure.

As with Options A and B, Option C doesn't depend on fundamentally changing how the Bay Area currently funds transit, which includes a significant share of funding raised by local sales tax measures administered by county

---

<sup>26</sup> <https://tfl.gov.uk/corporate/about-tfl/how-we-work/corporate-governance/subsidiary-companies>

transportation authorities like SFCTA and ACTC. Those sales tax dollars, approved for specific service priorities within a specific county by voters, don't go into some regional "pot" under Option C, at risk of being diverted to some other part of the region. Local sales tax dollars are required, by law, to be spent as authorized by voters. A Unified Transit Agency would be required to enter into funding agreements with county transportation authorities, track all local dollars it collects from those agencies, and be accountable to each of the counties, continuing to fund the local service residents voted for.

This type of accounting is not new - it already happens at regional agencies that collect a variety of local sales tax dollars from different countries and local communities. For example:

- BART collects Measure J local sales tax funding from Contra Costa County (via CCTA), Measure B and BB funding from Alameda County (via ACTC), and Prop K funding from San Francisco county (via SFCTA). BART spends those dollars in each of those counties for the specific projects and service priorities as approved by voters.
- WETA was a merger of three different ferry services connecting Vallejo, San Francisco, Oakland, and Alameda, spanning three counties, and now includes service to five counties. Prior to its creation in 2007, local opponents of a merged ferry authority claimed that local sales tax dollars approved by Solano voters would go to Alameda, and vice versa. The fears from opponents proved unfounded - WETA, like BART, is able to track all local revenues received from counties and spend those dollars only in the counties they are approved for.
- AC Transit maintains common branding, fares, and coordinated schedules across all its operations, yet it offers two different levels of service across its service boundaries, corresponding to different levels of local taxation. District 1, spanning from San Pablo and Richmond in the north to Hayward in the south, has a higher level of service due to additional voter-approved parcel taxes since 2002<sup>27</sup>; meanwhile District 2 of AC Transit, Fremont and Newark has elected to avoid additional taxes - it therefore receives proportionately less transit service.

These examples prove that having a unified transit agency with multiple local and regional transit funding sources doesn't have to mean a one-size-fits-all approach to transit, where dollars and service would be spread around uniformly regardless of local funding commitment. A one-size-fits-all approach would be both illegal and not in the interest of communities who may wish to fund local transit at higher levels. Having a consolidated transit agency means that systems can be administered consistently, efficiently, seamlessly, and equitably, taking advantage of potential operational economies of scale; but meanwhile respecting local communities prerogative to tax themselves at higher rates and get more local transit in return.

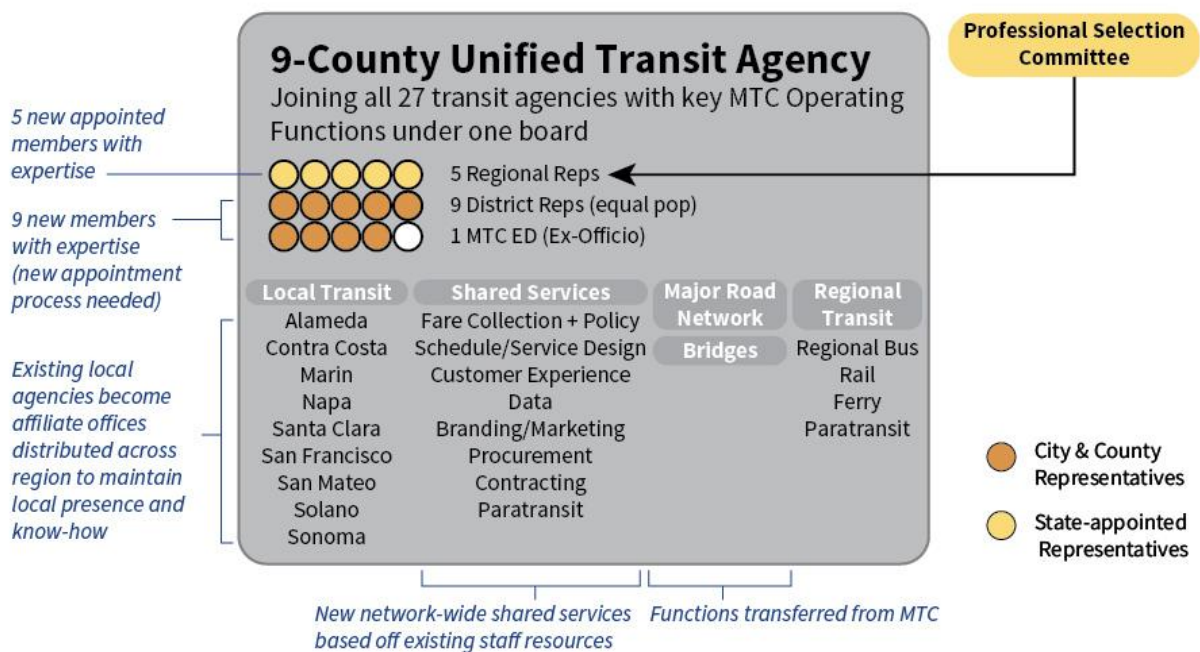
Another fear of a fully merged Bay Area transit agency is that it would necessarily lead to people unfamiliar with local communities making important local transit decisions. Some fear that with a universal transit agency as described in Option C - or even the structure of Options A or B - "someone in downtown San Francisco would get to decide where a bus stop my local community would go."

In all of our proposals, including Option C, geographic centralization of all staff functions is not a necessary or desirable outcome, and could easily be avoided. In the wake of COVID and more widespread virtual tools,

---

<sup>27</sup><https://web.archive.org/web/20170706111012/http://www.actransit.org/2003/10/31/measure-aa-parcel-tax-information/>

collaboration across multiple offices and workplaces is easier than ever. In a region as large and dispersed as the Bay Area, a unified regional transit agency would logically have a number of local transit affiliate offices distributed throughout the region, enabling staff to be drawn from local communities. These offices would largely include the legacy staff of our existing 27 transit agencies, providing a local presence that promotes greater engagement with Bay Area communities and businesses. Local affiliate offices could have local committees of advisors and elected officials to ensure that issues of particular local concern get addressed. A merged universal Bay Area transit agency with local affiliate offices could provide the best of both worlds: economies of scale and excellence in service and connectivity, combined with a local presence to ensure responsiveness to the unique needs of local communities.

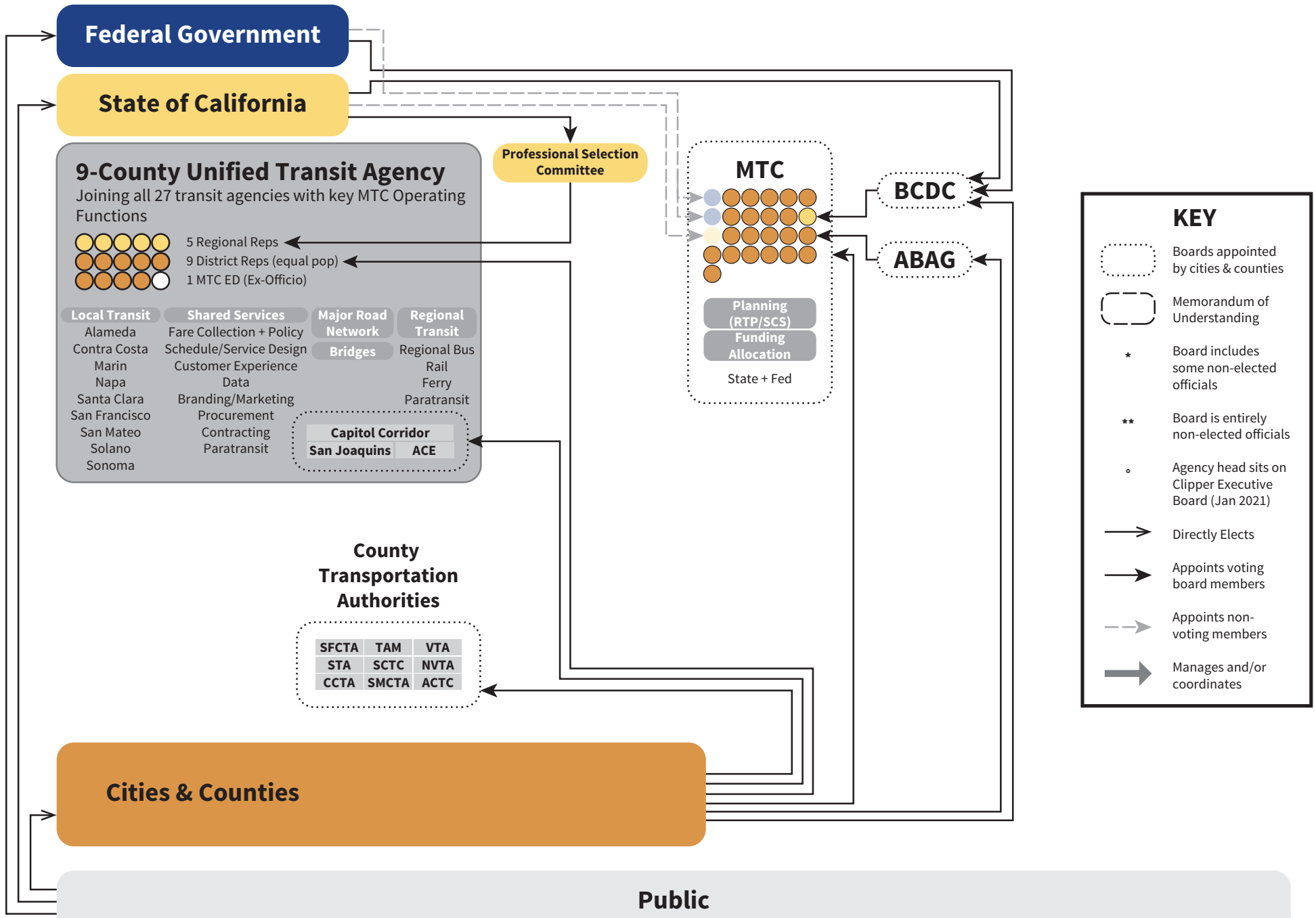


**Figure 4.4** Detail of Option C, Universal Transit Agency Network Manager, with key responsibilities (see full org chart for relation to other agencies).

One of the key challenges of Option C that would need to be investigated further to determine feasibility is implications for labor contracts. Each of the different 27 transit agencies have different labor contracts with various unions; each with different work rules, employee benefits, and wage rates. Some have argued that merging agencies would necessitate aligning the different benefits, rules, and wages of numerous labor contracts, especially when multiple agencies have the same job classifications. This could be a particular challenge in Option C, where many local bus-focused agencies with very similar job classifications would be brought together.



# Option C: Universal Transit Agency as Network Manager



While much more research into this area must be done, on the surface, Option B may present relatively fewer obstacles when it comes to labor, because of less overlap in job classifications across the five agencies that are envisioned to join together under a Regional Transit Agency Network Manager. Based on conversations with some union representatives, Seamless Bay Area understands that BART and Caltrain, due to their different technology and train types, have relatively little overlap in job classifications.

Further input from labor unions and from labor experts will be needed to identify the different opportunities and challenges with these different approaches, and should be a focus of greater research. However, it should be emphasized that the existence of a network manager in other regions is associated with increased transit ridership and investment. Case studies of other regions show transit mode share levels two or more times higher than in the Bay Area in regions with network managers<sup>28</sup>; such increased levels of transit use and investment is essential to the preservation and growth of unionized jobs in public transit in future years.

**Table 4.4** Option C: Universal Transit Agency Network Manager Summary

<b>Network manager base institutions</b>	Core: SFMTA, BART, AC Transit, and 21 other transit agencies fully within the 9-county region.
<b>Board Composition</b>	<p>15-member board made up of professionals and riders including:</p> <ul style="list-style-type: none"> <li>● 9 appointed district representatives with relevant backgrounds,</li> <li>● 5 appointed at-large members with relevant backgrounds;</li> <li>● 1 ex-officio MTC Executive Director seat</li> </ul> <p>Board members may be elected or non-elected officials, appointed by a selection process that weighs various criteria and eligibility requirements.</p>
<b>Existing agencies that would need to be reformed</b>	<p>14 transit agency boards of special-purpose entities (mostly Joint powers agreements and special districts) would be eliminated and replaced with a new combined Universal Transit Agency Network Manager board.</p> <p>8 city councils, 1 county board of supervisors, and 2 CTA boards would no longer oversee transit.</p> <p>Staffs of all 27 agencies would be brought together within a single organization, likely among several Bay Area office locations and subsidiary units, accountable to the Universal Transit Agency board.</p> <p>Capitol Corridor, ACE, San Joaquins</p> <ul style="list-style-type: none"> <li>● Would share combined staff with Universal Transit Agency Network Manager, but keep existing separate boards due to extending beyond the 9-county region</li> </ul>
<b>Existing functions or staff that would transfer to a different agency</b>	MTC would transfer key operations functions and programs over to the Universal Transit Agency, including Bay Area Toll Authority (BATA), Clipper, Fare Integration, Wayfinding.

<sup>28</sup> Among regions profiled for which overall transit mode share was available, transit mode share ranged between 12-37% in world class regions with network managers, compared to just 4% of all trips in the San Francisco Bay Area on transit. <https://www.seamlessbayarea.org/blog/2020/9/9/timely-new-research-on-world-class-transit-systems-offer-striking-lessons-for-bay-area>

<b>Other reforms that would be helpful in parallel</b>	Reform of the Congestion Management Act to remove focus on automotive level of service & congestion
--	---

**Option D: Enhanced Executive Board**

A fourth option for network management that has been discussed recently among transit agencies is an enhanced version of the Clipper Executive Board (CEB). The CEB is an existing decision-making body established through a memorandum of understanding that is made up of the general managers of the seven largest Bay Area Transit Agencies, two representatives of the smaller Bay Area transit operators, and the Executive Director of MTC. The CEB currently manages the administration of the Clipper System and is overseeing the Fare Integration and Coordination Study.

While there is no specific proposal for an Enhanced Executive Board to take on network management functions yet, this proposal has been discussed as an alternative approach to network management at transit agency public meetings. Seamless Bay Area’s understanding of this proposed approach includes:

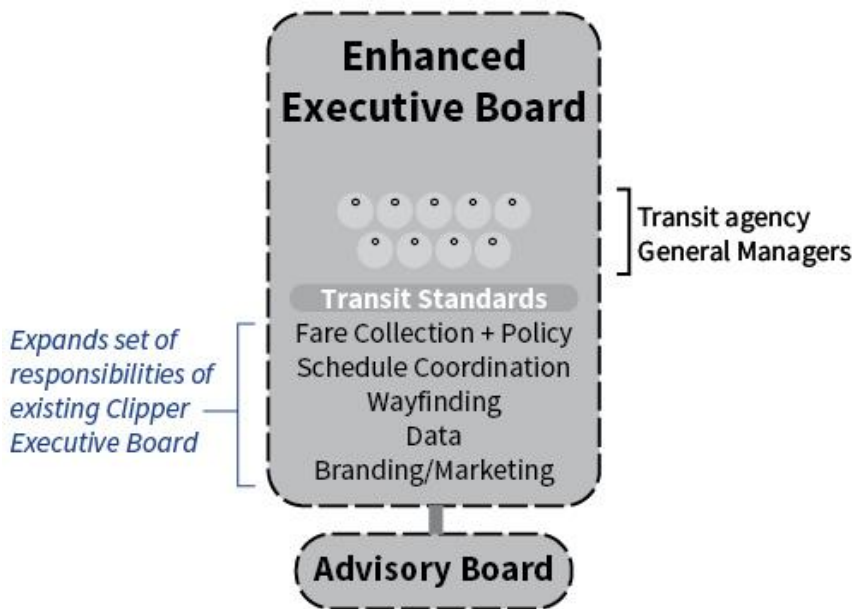
- Expanding the purview of the current CEB through a revised memorandum of understanding between agencies, to oversee next steps of the Fare Integration and Coordination Study, regional equity planning, network design, wayfinding, and other issues of shared interest.
- Potential addition of a number of professional experts to the current CEB.
- Potential inclusion of some kind of policy advisory body of either elected official board members or community members.

Many transit agencies have expressed interest in enacting this reform right away, and without any kind of state legislation. It could help keep the momentum of the unprecedented collaboration between agencies brought about by COVID going, and respect that transit agencies are still very much focusing on providing essential service and recovering from COVID in the near term. It may be a valuable interim step to greater coordination.

However, as outlined in a recent blog post<sup>29</sup>, Seamless Bay Area doesn’t view this option as a sustainable long-term solution for the Bay Area transit challenges. An Enhanced Executive Board composed of executive staff who report to separate boards are not, and cannot be, a policymaking body in charge of and accountable for major and sustainable changes. Executives are accountable first and foremost to their own board, meaning that changes they achieve together are likely to be limited and fragile. Any regional solutions are likely to be “lowest common denominator solutions” that have the least local agency opposition, rather than solutions that provide the most net benefits to riders. If they propose substantive changes, those decisions need to go back for approval to many separate boards. The next section of this report, which evaluates Option D as a long-term option alongside Options A, B, and C, demonstrates that this option doesn’t address many of the core identified challenges that the region must overcome.

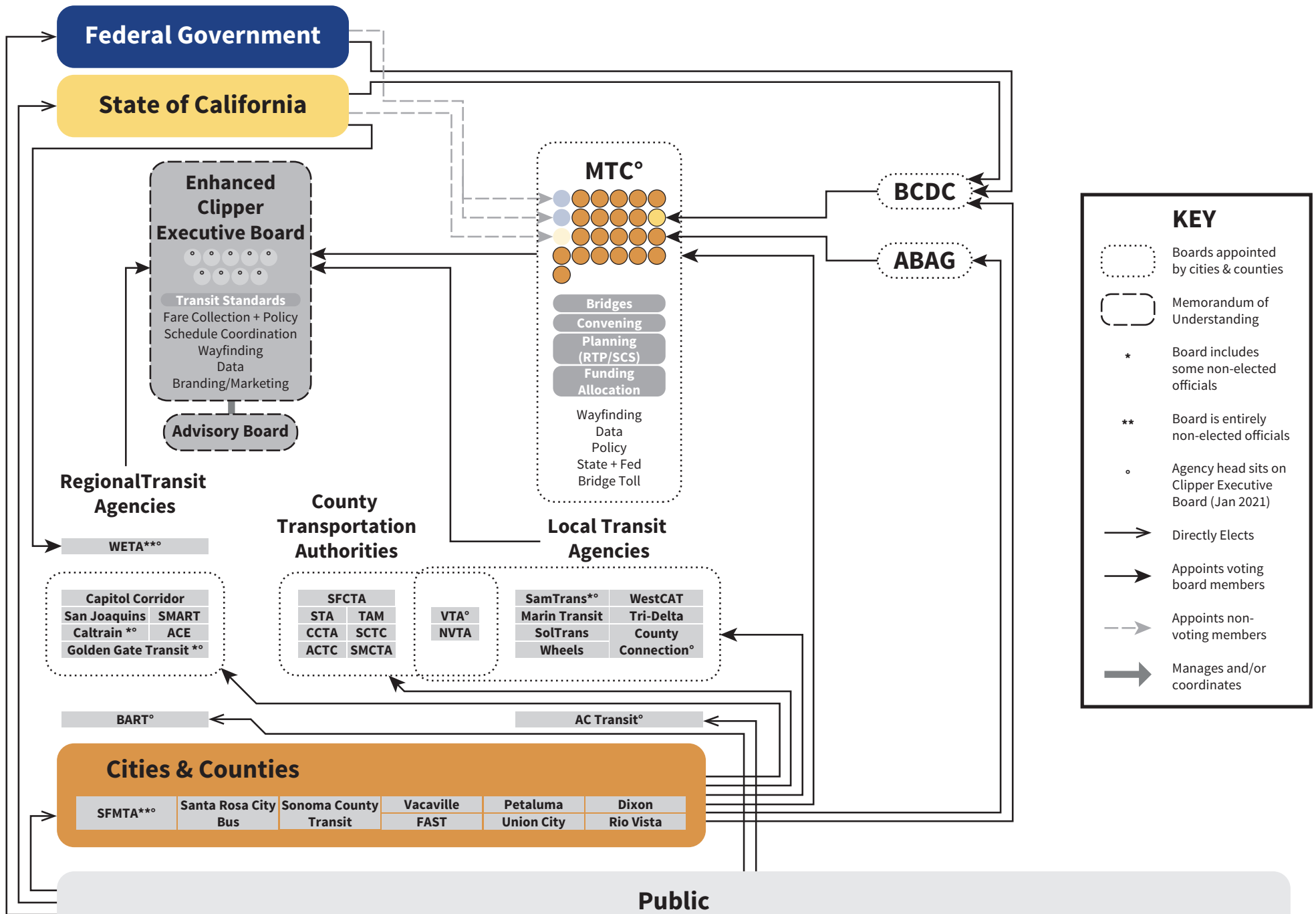
<sup>29</sup>

<https://www.seamlessbayarea.org/blog/2021/1/22/why-the-clipper-executive-board-isnt-a-long-term-solution-for-transit-network-integration>



**Figure 4.5** Detail of Enhanced Clipper Executive Board as network manager (see full org chart for relation to other agencies).

# Option D: Enhanced Executive Board



## Chapter 5: Evaluation

Seamless Bay Area developed two sets of criteria for evaluating each of these options - effectiveness criteria and feasibility criteria. It's important to consider these separately; the Bay Area's long term direction should be guided by an institutional structure that we feel confident will be effective, even if it may be difficult to achieve. However, feasibility challenges are also critical to recognize in order to select a path forward, and to understand how changes could be phased in over time rather than all at once.

Seamless Bay Area developed ten effectiveness criteria based on both the Seamless Transit Principles<sup>30</sup>, Seamless Bay Area's guiding policy direction that has been endorsed by 34 organizations and at nine public entities, and the identified poor transit outcomes and the root causes described in Figure 2.2:

Proposed criteria for evaluating network management structure effectiveness:

1. Ability to bring about outcomes of the Seamless Transit Principles (Run all Bay Area transit as one easy-to-use system; put riders first; align prices to be simple, fair, and affordable, etc.)
2. Distinct, clear authorities of key functions without overlap
3. Adequate representation of shared regional interests
4. Independent, professional expertise informs decision-making
5. Clear accountability to the public for the overall transit experience
6. Ability to streamline decision making
7. Ability to leverage economies and geographies of scale
8. Stability and flexibility to adapt and change over time
9. Ability to support raising additional revenue
10. Ability to support more transit-supportive land use

Proposed feasibility criteria include a range of issues that have been brought up as challenges by different stakeholders to date, and include:

1. Dependence on state legislation
2. Dependence on consensus by independent general managers and boards
3. Potential labor challenges (e.g. 13(c)<sup>31</sup>, contract alignment issues)
4. Dependence on additional funding to have desired customer outcomes
5. Potential for opposition from public or transit riders
6. Potential for opposition from locally elected officials
7. Potential for opposition from transit agencies

Seamless Bay Area engaged its Policy Advisory Group, which includes over a dozen transit experts in academia, current transit agency and city staff, non-profit policy groups, and consultants, to assess the four options based on these criteria. There was a great degree of alignment among the assessments; the following is a summary of Seamless Bay Area's overall assessment, largely reflecting the views of the advisory group:

---

<sup>30</sup> <https://www.seamlessbayarea.org/seamless-transit-principles>

<sup>31</sup> Refers to a section of 13(c) of the Urban Mass Transit Act, a federal law, which protects the rights of incumbent workers.

**Table 5.1** Evaluation of network manager options based on effectiveness criteria.

Effectiveness Criteria	Network Manager led by:			
	Option A Altered MTC	Option B Regional Transit Agency	Option C Universal Transit Agency	Option D Enhanced Executive Board
Ability to bring about outcomes of the Seamless Transit Principles	6	9	8	5
Distinct, clear authorities of key functions without overlap	5	8	9	4
Adequate representation of shared regional interests	6	8	8	4
Independent, professional expertise informs decision-making	5	8	8	4
Clear accountability to policymakers and the public for the overall transit experience	5	7	7	3
Ability to streamline decision-making	5	8	9	5
Ability to leverage economies/geographies of scale	6	9	9	5
Stability and flexibility to adapt & change over time	6	7	7	5
Ability to support raising additional revenue	6	6	6	4
Ability to support more transit-supportive land use	6	6	6	4
<b>3, 4</b> same as today/unclear <b>5, 6</b> a bit better than today <b>7, 8</b> significantly better than today <b>9, 10</b> very significantly better than today				

Options B and C scored most strongly and almost equally based on the effectiveness criteria; Option A scored below B and C on many of the criteria, but still was viewed as better than the status quo, and better than Option D. Option D was scored as providing some modest benefits over the status quo, but was not viewed as being substantially better than the status quo for many of the criteria.

When assessed for feasibility criteria, however, the options viewed as most effective also tended to be viewed as more difficult to bring about. While there was wider variation in the assessment of each option’s feasibility among Seamless Bay Area’s Policy Advisory Group, there were still broad alignment. Table 5.2 indicates the scoring based on the feasibility criteria.

Option D is clearly the easiest option to implement, given many transit agencies’ general managers apparent willingness to proceed, and its lack of dependence on legislation. Option A was assessed as somewhat more feasible than Option B based on some of the criteria. And Option B was rated as significantly more feasible than Option C. Option C presents a number of significant or unknown challenges, and is perceived to attract the most opposition of any of the options from different groups.

**Table 5.2** Evaluation of network manager options based on feasibility criteria.

Feasibility Criteria	Network Manager led by:			
	Option A Altered MTC	Option B Regional Transit Agency	Option C Universal Transit Agency	Option D Enhanced Executive Board
Dependence on state legislation	×	×	×	∅
Dependence on consensus by independent general managers and transit agency boards	×	×	×	×
Potential labor challenges	×	×	×	∅
Dependence on additional funding to have desired customer outcomes	×	×	×	×
Potential for opposition from public or transit riders	×	×	×	×
Potential for opposition from transit agencies	×	×	×	∅
Potential for opposition from locally elected officials	×	×	×	×
∅ few/no challenges    × some challenges    ×× significant challenges    ××× extreme challenges				

What is the right path for the Bay Area, balancing effectiveness and feasibility? Our evaluation found that Options B and C outperform Option A in terms of effectiveness. Between Options B and C, Option B was found to be significantly more feasible to implement - though Option B still presents some significant challenges.

Overall, Seamless Bay Area has concluded that Option B, a Regional Transit Agency Network Manager, provides the best balance among these options, capable of overcoming root transit challenges and delivering the transformational desired outcomes.

Option B has clear and significant advantages over Option A that make it worth pursuing despite Option A appearing to be a more feasible solution. Despite Option C’s potential benefits, it has significant feasibility challenges. Option C could conceivably be a future evolution of Option B in future years, so it could be pursued at a later date once Option B is in place.



## Chapter 6: Conclusions & Next Steps

To achieve a world-class transit system, the Bay Area must urgently prioritize the institutional reforms that can set us up for success. Setting up a network manager must be a top priority, despite the challenges to change - now more than ever, we need leadership to take on these hard issues. The future of our region, and indeed our planet, depends on our ability to significantly improve the quality and usability of our transit system in order to increase transit use and reduce driving.

We offer a set of several conclusions based on our research, and immediate next steps to pursue over the coming two years:

### Conclusions

- A Bay Area network manager should be set up with state legislation to **oversee key functions of our transit system at a regional scale** to make transit easy for riders - including setting common fares, service design, major route planning, wayfinding, marketing, and more. Other functions not visible to passengers, such as service quality monitoring, collecting and distributing data, major procurements, and contracting, contribute to a consistent and high quality customer experience, and should also be led regionally by a network manager.
- Legislation should **make clear the division of authorities between a network manager and individual operators** so that there is no overlap.
- A network manager governing board should include **a significant share of members who represent the region as whole** as opposed to just one part of the region.
- A network manager board should include **a significant number of decision makers that are experts with relevant experience or professional backgrounds.**
- All members of a Bay Area network manager governing board **should be transit riders.**
- Among the options studied, **a Regional Transit Agency Network Manager (Option B)** is the best option for transforming Bay Area transit into a world-class, rider-first system, out of the four options outlined in this report -- but these are not the only options. The region needs more information, and more well-resourced objective analysis of options, in order to come up with a network management solution that riders and different stakeholders across the region can support and be confident will lead to true transit transformation.
- Regardless of which path for network management the region may choose to pursue, the Bay Area should **prioritize full unification of BART and Caltrain service to create one seamless regional rail network**, with completely integrated schedules, fares, and customer experience, overseen by a single governing board.
- **A board of unified BART-Caltrain should cover at least the five counties of Alameda, Santa Clara, San Mateo, San Francisco, and Contra Costa**, and should include a significant number of appointed expert board members with relevant backgrounds. Bay Area transit riders and residents would benefit from having a lead regional transit agency that covers most of the region and integrates the backbone regional transit services, BART and Caltrain. With Caltrain's current governance reform process underway, and BART major capital expansion projects like the San Jose Extension and Link21, now is a unique window of opportunity to create a unified BART-Caltrain regional transit agency. This should not be designed as a "takeover" of one agency by another, but rather a wholly new agency that combines

and leverages the strengths of BART and Caltrain, and creates something greater than the sum of its parts. The unified regional transit agency resulting from a BART-Caltrain merger should be overseen by a board with at least 50% appointed expert members, to ensure the combined agency can leverage relevant expertise as it leads multi-billion-dollar expansion projects and transitions toward a more customer-responsive agency.

These long-term recommendations will take a number of years to implement, and aren't expected to all happen in one year or with one piece of legislation. Research from other regions indicates that it is typical that comprehensive network management reforms are implemented in phases. A network manager may initially be set up with a more limited scope and budget, with additional capacity added over time.

Funding for all aspects of transit network integration - including increasing service levels to baseline frequencies that enable hassle-free connections, and integrating fares completely across all modes - will require billions of additional transit funding. Full funding for integration has rarely been available in other regions at the outset of the implementation network management reforms; the funding is raised over time.

Funding from the federal government in the form of a major infrastructure spending bill in the next year could significantly support network integration in the Bay Area, and if approved should be tied to network management reforms and equitable access. However, lack of funding for every aspect of integration should not be a reason to delay Bay Area governance reforms that can lead to better decision-making, and which will put the region in a better position to raise the additional funding needed to support increasing service levels. Polling has indicated that voters view seamless network integration as one of the most popular arguments for a regional transit funding measure<sup>32</sup>.

A network manager can be set up with a more limited amount of funding early on, and be oriented to focus on raising additional large sources of funding once governance reforms are in place. Atlanta's network management authority, the ATL, was set up by the Georgia state legislature in 2018 with an initial allocation of \$100 million; the region has now identified the goal of raising \$100 billion or more to fund an ambitious long range transportation vision.<sup>33</sup>

The creation of BART is a helpful Bay Area example, and typical of how institutions get set up with limited funding, then raise more money over time to fulfil their goals. The BART district was created in 1957 with state legislation, with the goal of "Building and operating a regional rapid transit system" with limited funding for the planning of a rapid transit system, but not enough to build or operate it. Between 1957 and 1962, BART developed the plans for the transit system around a compelling vision of a high quality system, enabling it to go to the ballot in 1962 and ask voters in three counties to fund building and the system.<sup>34</sup>

Similarly, creation of the network manager can be advanced without the full amount needed to fund full integration; yet its establishment is a critical step toward building the case for and orienting decisionmakers toward funding an integrated system.

---

<sup>32</sup> Blue Ribbon Transit Recovery Task Force, September 14, 2020, MTC; SPUR & Seamless Bay Area Presentation. <http://mtc.legistar.com/gateway.aspx?M=F&ID=ae8d3f94-2403-4a7e-b2e0-27a4ea44dfbe.pdf>

<sup>33</sup> MARTA chief calls for \$100B long-term investment in transit, Jan 11, 2019, Atlanta Business Chronicle <https://www.bizjournals.com/atlanta/news/2019/01/11/marta-chief-calls-for-100b-long-term-investment-in.html>

<sup>34</sup> Healy, Michael. *BART: The Dramatic History of the Bay Area Rapid Transit System*, 2016, Heyday, Berkeley, California.

A network manager should be set up to enable better decision-making and prioritization of needs upon being set up, with particular attention to the needs of transit-dependent populations. Any changes to service should be thoughtfully considered prior to proceeding with implementation. Some types of system integration will not be possible without new funding. Seamless Bay Area does not support cutting service to transit dependent communities to fund integration. Based on our research we are yet to find an example of where integration in other regions has resulted in major service cuts for transit-dependent groups. Establishing a network manager governing board with relevant professional expertise, and a focus on customer outcomes and equity, can also help protect against reckless policymaking that would result in bad outcomes for riders.

Following from these conclusions, we recommend our region take the following four next steps in the next 1-2 years towards governance reforms that can create a more seamless transit system:

## Next Steps

- 1. Advance a business case analysis to do a full evaluation of governance reform and network manager options, including options for an Altered MTC Network Manager, a Regional Transit Agency Network Manager and a Universal Transit Agency Network Manager.**

A business case for network management reforms has already been identified as a goal of the Blue Ribbon Transit Recovery Task Force.<sup>35</sup> Such a business case should proceed immediately in 2021 and explore a full range of network management alternatives, including those that may seem difficult to imagine within the current Bay Area context, like a Regional Transit Agency Network Manager and a Universal Transit Agency Network Manager. A business case can help provide complete analysis of the full range of benefits and costs of reform options, and ensure consideration is grounded in robust research, objective analysis, and knowledge of best practices. The business case should be planned to have substantial recommendations for a preferred network management framework by the end of 2021 or early 2022 at the latest, to enable key recommendations to be incorporated into 2022 state legislation.

- 2. Complete the region's Transit Transformation Action Plan, and set up efficient interim decision-making structures with clear links to both policymakers and objective professional advisors to advance network management initiatives.**

The Blue Ribbon Transit Recovery Task Force has brought together a unique mix of stakeholders, which has led to the identification of important key needs including for network management, transit priority on roads, and increased funding for transit. A full set of recommended actions are expected to be included within the Transit Transformation Action Plan, due for completion by July 2021.

Implementation of the Action Plan should be stewarded by a focused steering committee made up of a range of stakeholders, with clear links to policymakers (including transit agency board members, MTC commissioners, and state representatives) and expert advisors. CASA, the Committee to House the Bay Area, a recent multi-stakeholder steering committee convened by MTC to advance reforms to tackle the

---

<sup>35</sup> Approved Problem Statement from MTC's 32-Member Blue Ribbon Transit Recover Task Force, March 22, 2021  
<https://mtc.legistar.com/View.ashx?M=AO&ID=100006&GUID=44bd4402-9e6a-482d-a47b-17ab13aa0907&N=QWdlbmRhIFBhY2tldCBmb3lgOUJUUlRGIE1lZXRpbmcgTW9uZGF5IE1hcmNoIDlyLCAyMDIxIDE6MDUgUE0%3d>

region's housing crisis<sup>36</sup>, is an important recent precedent, and successes and shortcomings from that effort should inform the committee that will advance network management reforms. A multi-stakeholder steering committee like CASA should oversee the business case of network management expected to be included in the Action Plan and identified in Recommendation 1. Some recommendations of the Transformation Action Plan may be appropriate to assign to an enhanced version of the Clipper Executive Board as described in Option D, or to MTC.

**3. Fully study a BART-Caltrain merger and other regional options through the Caltrain governance reform process and regional rail study.**

Caltrain's governance reform process, which kicked off in March 2021, has already defined a set of regional governance options for consideration, including a merger with BART, mergers with other rail operators like Capitol Corridor and ACE, and coordination with a regional network manager<sup>37</sup>. Details and governance variants of a BART-Caltrain merger should be analyzed further in 2021 by Caltrain, complemented by additional analysis from an anticipated Regional Rail Study being led by MTC. As an outside party focused on regional outcomes, MTC can play an important role in facilitating discussion between BART and Caltrain staff and boards regarding shared goals and analysis of costs, benefits, and variants of BART-Caltrain merger. Based on thorough analysis, including identification of any compensation owed to individual agencies or counties as a condition of a merger, agencies should focus on the goal of unifying the agencies under a common board. 2022 legislation merging the boards could lead to a unified regional transit agency board by early 2023.

**4. Upon substantial completion of a business case, the Bay Area should advance legislation to put in place a permanent network manager institutional structure.**

Nearly all regions that have put in place effective network management structures have been supported through legislative changes that clearly align authorities and governance structures to enable effective regional decision-making. The business case for developing a network manager should seek to be substantially complete by the end of 2021, positioning state representatives to pass legislation in 2022 identifying the region's network management structure that can realign Bay Area agencies to create a fully integrated network over the next several years. Establishing a network management structure through legislation in 2022 sets the region up to pass a major regional funding measure by 2024, which can generate the substantial funding needed to fund transformative improvements like full fare integration, increased local transit service levels, and regional express bus system, and new capital projects.

---

<sup>36</sup> CASA – The Committee to House the Bay Area, <https://mtc.ca.gov/our-work/plans-projects/casa-committee-house-bay-area>

<sup>37</sup> JPB Special Meeting #1 on Governance, March 19, 2021., [https://www.caltrain.com/Assets/Governance+Mtg+\\$!231+PowerPoint.pdf](https://www.caltrain.com/Assets/Governance+Mtg+$!231+PowerPoint.pdf)

## Acknowledgments

This report was written by Ian Griffiths, Policy Director of Seamless Bay Area. Graphics were completed by Ian Griffiths and Kenji Anzai. It would not have been possible without input and review from Seamless Bay Area's Policy Committee and Policy Advisory Group, which include Adina Levin, Sara Barz, Stephanie Beechem, Ron Kilcoyne, Dave Sorrell, Michelle DeRobertis, Chris Ferrell, Jonathan Kass, Laura Tolhoff, Eric Eidlin, and several leaders working in Bay Area public transit who wish to remain anonymous. Additional thanks to Tamim Raad, Stuart Cohen, Darnell Grisby, Jim Lightbody, Gwen Litvak, Jason Baker, Hayley Currier, Randi Kinman, Allison Brooks and many others for providing feedback and advice. Finally, thank you to Seamless Bay Area's significant 2020 funders, Silicon Valley Community Foundation, Xentrans, Karen Grove, Elaine Uang, and to hundreds of individual donors who support our work.

### Seamless Bay Area Board

Sara Barz  
Stephanie Beechem  
Liz Broekhuysen  
Armand Domalewski  
Ian Griffiths  
Ron Kilcoyne  
Beaudry Kock  
Adina Levin  
Felix Pomerantz  
Dave Sorrell



←  West Oakland  
←



Seamless  
Bay Area