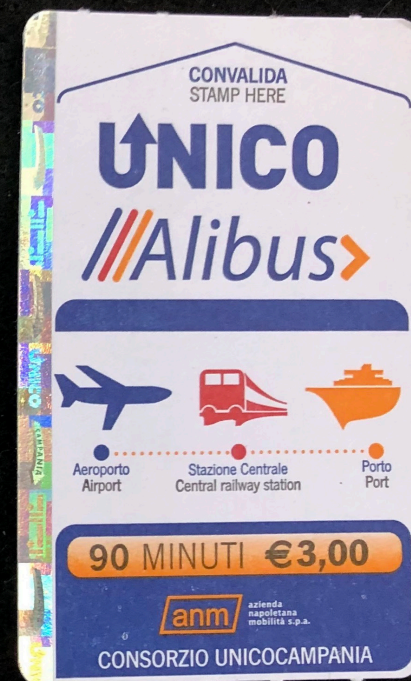
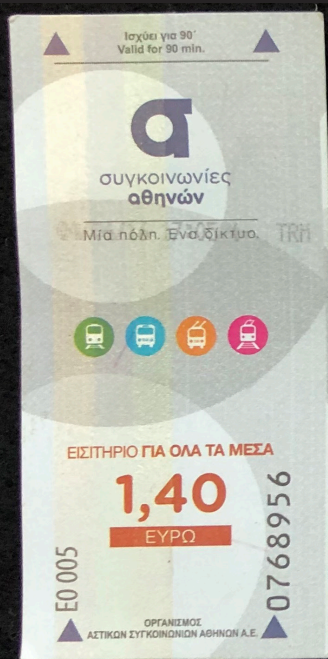


Governing Structures for Successful Regional Transit Coordination and their Formation

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Report 24-27

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16. Abstract The expansion of metropolitan areas in California has further prompted the need to improve transportation options for all, more effectively linking origins and destinations through key enhancements to the existing network of transit services. This study provides planners and policymakers examples of effective regional transit coordination agencies. To improve multimodal connections and enhance transit services at the local and regional levels, this study explores regional coordination, focusing on entities charged with coordinating multiple transit agencies in a single metropolitan area. The study identified 16 regional transit coordinators (RTCs), identifying the structure, scope, and management of each. The results revealed that there are many factors involved in creating an organization with the authority to coordinate regional transit, including how the organization was established and elements related to the formation of an RTC (e.g., regional dynamics and board composition). It is also important to study the powers vested in different types of boards and members, as well as the executive director. There is a wide range of state legislation for the legal establishment of RTCs. Voluntary transit federations, another option, fall into two categories: loose federations, based on consensus and strong federations, based on binding arrangements to coordinate fares, services, and information. The authors offer options for establishing an RTC in California, including a multi-county owned corporation with an ex officio board; an agency of the state or regional government; and a special district with an ex officio board representing counties, cities, planning staff, operator staff, and state transport agencies. Finally, suggestions for creating the board are provided along with a recommendation that the state develop a legislative framework to establish RTCs in its metropolitan areas.			
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CONTENTS

Acknowledgments	vi
List of Figures	xi
List of Tables	xii
Executive Summary.....	1
1. Introduction	5
1.1 Project Purpose	5
1.2 Description of Regional Transit Coordinating (RTC) Authorities	5
1.3 Existing Transit Coordination in California.....	7
1.4 Terminology	9
1.5 Contents of the Report	11
2. Literature Review	12
2.1 Introduction.....	12
2.2 Principal Findings.....	12
2.3 Need for this Specific Research.....	13
2.4 <i>Verkehrsverbund</i> : The German Model for Regional Transit Coordination Governance ..	14
2.5 Transit Integration in the U.S. and Canada	16
2.6 Governance	18
2.7 Ridership and Transit Coordination/Integration	23
3. Case Studies	24
3.1 Introduction.....	24
3.2 Process for Selection of Case Studies.....	24

3.3 Selected Case Studies.....	25
3.4 Levels of Coordination Regarding Fares, Marketing and Planning	29
3.5 Non-Transit Agency Special District Case Studies	32
4. Agency Governance.....	33
4.1 Organization Type	33
4.2 Analysis.....	35
4.3 Board Role and Authority.....	37
4.4 Summary	54
5. Basis of Authority.....	55
5.1 Summary of Findings.....	55
5.2 Key Findings on the Role of Legislation.....	67
6. Executive Director/Management	70
6.1 Summary of Findings.....	70
6.2 Key Findings	77
7. Findings and Discussion.....	81
7.1 Literature Review.....	81
7.2 Organization Type.....	82
7.3 Board Structure and Composition	83
7.4 Legislation Establishing the RTC	88
7.5 Chief Executive and Management.....	92
7.6 Political and Geographic Boundaries	92

8. Conclusions and Recommendations.....	95
8.1 Summary of Findings and General Conclusions	96
8.2 Recommendations and Implications for Establishing U.S. and California RTCs	100
8.3 Recommendations for Future Research	103
Appendix A. Brief Facts About Each Case Study.....	105
Appendix B. Agencies Coordinated by an Alliance RTC	115
Appendix C. Non-Transit Agency Special District Case Studies	118
Appendix D. List of Agency Boards and Board Members	121
Bibliography	145
About the Authors	152

LIST OF FIGURES

Figure 3.1 Levels of Fare Unification/Coordination Among the 11 Alliance Case Studies	30
Figure 3.2 Levels of Marketing Coordination Among the 11 Alliance Case Studies	31
Figure 3.3 Levels of Planning Coordination Among the 11 Alliance Case Studies	31

LIST OF TABLES

Table 1.1 American and Foreign Terminology	10
Table 3.1 Case Studies	26
Table 3.2 Type of Regional Transit Coordinators	27
Table 3.3 Transit Agency Members of the Transit Alliance	28
Table 4.1 Organization Type (Governance Structure) of the Case Studies	36
Table 4.2 Case Studies Board Composition Overview: Citizen vs Ex Officio Boards.....	43
Table 4.3 Members of Ex Officio Boards	47
Table 4.4 Appointed Citizen Boards	51
Table 4.5 Background /Expertise of Members of the New Jersey Transit Board.....	53
Table 5.1 Enabling Legislation Establishing the Case Study RTCs.....	56
Table 6.1 Executive Director Structure of the Case Studies	72
Table 6.2 Executive Director versus Type of Agency/ Ultimately Authority*	79
Table 7.1 Coordination Type vs. Board Composition	83
Table 7.2 Agency Type vs. Board Composition.....	84
Table 7.3 Boards with Professional Expertise on the Board	85

Executive Summary

As metropolitan areas throughout the U.S. have expanded to encompass larger regions, transit services in these cities have increasingly been provided by numerous transit agencies, with little or no coordination of fares, schedules, customer information, or short- or long-range planning. In some cases, there are also different transit agencies providing regional services within the same metropolitan area (e.g., BART, Caltrain, ACE, and SMART in the San Francisco Bay Area).

It has become increasingly apparent to passengers, including choice- and transit-dependent riders, that California's public transportation infrastructure needs better regional integration to increase connectivity and ridership and to meet the state's transportation and climate goals. The goal of this project is to provide policy makers, including urban planners and decisionmakers, with instructive examples of governance structures for an agency charged with coordinating multiple transit agencies and modes in a single metropolitan area, enhancing service at both the local and regional levels.

Many transit professionals and advocates recognize that a solution is to establish a Regional Transit Coordinator (RTC). This study will use the definition of a Regional Transit Coordinating Authority (RTC) provided in Buehler et al. (2015): "an agency which coordinates (transit) planning, services, fare structures, ticketing, marketing, and customer information throughout an entire metropolitan area, and in some cases, entire states." Buehler et al. (2019) studied six RTCs and found that, since 1990, all "have increased the quality and quantity of service, attracted more passengers, reduced ... subsidies" and reduced automobile mode share. This and other research have documented their purpose and effectiveness. What past research has not focused on is how their governance is structured, given different contexts, and the role, if any, of any legislative directives.

Thus, the purpose of this research is to answer questions that would help inform future decisions on how to structure an RTC: (a) were existing case study RTCs created by law or a voluntary consortium, and what specific types of authority were they granted? (b) if there is a governing board, how is it structured? (c) how is the executive director selected, and are there measures to insulate the executive director from political influence?

This report seeks to provide policy makers with instructive examples of governance structures that effectively coordinate multiple transit agencies in a single metropolitan area. After initial analysis, we identified 16 organizations with roles in regional transit coordination to study, identifying the structure, scope, and management of each case. Importantly, we acknowledged that our case studies are located in seven different countries and each of the cases is unique, with different cultures, governance structures, government levels, and legal frameworks.

This research included case studies ranging from informal transit agency alliances to transit operators that effectively coordinate some or all transit services in a metropolitan area, to sole (consolidated) transit providers in a metropolitan area that internally integrate system components. Ten case studies were virtually complete, fully functioning RTCs, while five case studies were somewhere along the integration continuum, and one case study (U.S.) was beginning to work through coordination efforts.

A synthesis of the study findings led to the following conclusions concerning the formation of governing structures for the purposes of coordinating regional transit:

- Successful RTC coordination types include Type 1 (coordination only), 2 (coordination through a regional transit provider), and 3 (sole transit provider/consolidation), categories identified by the authors in a previous study (DeRobertis et al 2020). Consolidation to become a Type 3 RTC is one path to achieving greater regional transit coordination, but it is not the only one. Type 1 and 2 alliances can achieve the same regional transit coordination results.
- There are many factors involved in creating an organization with the authority to coordinate regional transit, including the following:
 - The manner in which the RTC was created and established; state laws may be effective.
 - The elements central to the formation of an RTC: agency structure, metro, area dynamics, board composition, and entities empowered to appoint the board and executive director (ED).
- It is important to identify the powers that are vested in the board and roles to be assigned.
- There are two types of board members: ex officio and appointed citizens, with the latter largely confined to the U.S. and Canada. While many European boards require that members have transit expertise, among U.S. boards, New Jersey Transit (NJT) has the most transit-knowledgeable-professional board in both its ex officio and its appointed citizen positions.
- A wide range of legislation for the establishment of RTCs was found in the course of this research. In most instances, legislation at a higher level of government (state-level in the U.S.) forms the legal basis for RTCs, but significant variations are possible:

- A state can mandate the creation of an RTC and mandate responsibilities.
- A state can mandate the creation of a regional transit provider but leave the details of its operations and how it integrates with other transit operators to the metro area.
- Where there is no state mandate, agencies form a voluntary consortium.
- Voluntary transit federations further fall into two categories, as defined by the authors: the “loose” federation, which operates by consensus; and the “strong” federation, which enters into legally binding arrangements to coordinate fares, services, and information dissemination/marketing.
- While executive management plays a key role in providing support to member transit agencies, internal decision-making and control can vary by individual RTC. Ideally, the CEO or executive director of an RTC should only be responsible to the passengers of the area, its constituents, and agencies served; however, in some of the cases, high ranking government officials had some direct influence on the CEO. In areas that are composed of multiple counties, one model to consider would be the multi-county owned corporation with a board.

The authors offer the following recommendations for establishing an RTC in California:

- In areas that are composed of multiple counties, one model to consider would be the multi-county owned corporation with a board.
- A good model for an ex officio board for the San Francisco Bay Area would have members drawn from some or all of the following agencies:
 - Counties / cities that operate their own transit
 - One representative from each county in the metropolitan area
 - Mayor (or designee) of a major city, such as San Francisco, Oakland, and San José
 - High-level staff of the larger regional transit agencies
 - High-level staff from the larger bus agencies (or a representative of these entities)
 - State transportation commissioner
 - Ex officio or appointed citizens with professional transit expertise

- The state of California should consider developing a supportive legislative framework to facilitate the creation/evolution of RTCs rather than mandate one solution. Such a framework would encourage the formation of RTCs in all metropolitan areas of the state and allow each of them to have their own unique structure, given the diversity of options available as found by this research.

Finally, the report identifies several promising topics for further research.

1. Introduction

1.1 Project Purpose

U.S. metropolitan areas, especially in California, tend to have numerous transit agencies independently servicing multiple municipalities in multiple counties, with little or no coordination of fares, schedules, customer information, or short or long-range planning. In some cases, there are also different transit agencies providing regional services within the same metropolitan area (e.g., BART, Caltrain, ACE, and SMART in the San Francisco Bay Area).

California's transit infrastructure needs better regional integration in order to increase connectivity and ridership, which, in turn, will help meet the state's transportation and climate goals, such as cutting anthropogenic emissions by at least 85 percent below 1990 levels and attaining carbon neutrality by 2045 (EPA, 2024). More integrated transit has many potential benefits, including (but are not limited to) reducing pollution, greenhouse gas (GHG) emissions, traffic congestion, road infrastructure costs, and improving road safety. The goal of this project is to provide policy makers with instructive examples of governance structures for an agency charged with coordinating multiple transit agencies and modes in a single metropolitan area, enhancing service at both the local and regional levels.

Given that past research has shown that Regional Transit Coordinators (RTCs) are necessary and effective in providing coordinated seamless transit in a region, the purpose of this research is not to document their effectiveness at improving transit and therefore ridership, but to answer related questions that would help inform future decisions on how to structure an RTC. Relevant questions include the following:

- Does the RTC have a governing board and if so, how is it structured?
- How are the board members selected, and how do the board members relate to the individual municipalities and transit agencies being coordinated?
- Were existing case-study RTCs created by law or a voluntary consortium, and what specific types of authority were they granted?
- How is the executive director selected, and are there specific measures to insulate the executive director from political influence?

1.2 Description of Regional Transit Coordinating (RTC) Authorities

This study will use the definition of a Regional Transit Coordinating Authority (RTC) from Buehler et al.: “an agency which coordinates (transit) planning, services, fare structures, ticketing, marketing, and customer information throughout an entire metropolitan area, and in some cases,

entire states” (Buehler et al., 2015). Geier (2023) describes six primary functions an RTC can do, the first two being essential: integrated fare system, customer service, ticketing and sales channels, integrated service planning, contract awarding, and tender procedures.

First developed in Hamburg Germany in 1965 (Homburger & Vuchic, 1972), the *Verkehrsverbund* spread throughout Germany over the ensuing decades and is now commonplace throughout Europe (Buehler et al., 2019).¹ *Verkehrsverbund* (VV) translates roughly as “transport alliance” and it is variously translated into English as “Transport Authority” (TA), “Regional Transit Coordinator” (RTC), and “Network Manager” (NM), but only the first term encompasses the fact that this type of organization has the authority to create a unified customer-facing image that includes single branding regardless of owner/ operator, coordinated schedules, and a unified fare system for all federation members. This unified fare system creates a single ticket system regardless of mode or operator. The VV/TA/RTC/NM also collects revenues and distributes them back to the individual transit agencies. The VV/TA/RTC/NM have the responsibility for all customer-facing tasks such as sales, marketing, and maintaining a single website for transit information. They are also responsible for behind-the-scenes tasks such as short- and long-range planning and often procurement of rolling stock and other large purchases for all members. These tasks result in cost savings due to economies of scale.

As background, all large cities and counties in Germany are responsible for providing transit within their jurisdictions. In a VV, each jurisdiction continues to do so, but the VV is the overarching organization charged with coordinating the fares, schedules, planning, and marketing. Thus, German VVs do not typically have any operations responsibilities, only coordination of the member agencies. However, Sweden, inspired by Hamburg’s success, chose to ensure transit coordination in a single region by vesting all transit operations and coordination in a single agency run by the government level equivalent to a state (below the national level and above municipal level) (DeRobertis et al, 2020).

These two principal coordination models plus a third, where the VV have regional transit responsibilities, were identified in prior research (DeRobertis et al, 2020) and are outlined below.

Type 1 Coordination of Separate Transit Agencies: Alliance or Federation of Agencies

This is, essentially, an alliance or federation of agencies that is responsible for coordinating fares, planning, and marketing for all the separate independent transit agencies in the metropolitan area (i.e., a German-style *Verkehrsverbund*). It is responsible for setting a unified fare structure for all the agencies in the region. It collects and distributes revenue, does short- and long-range planning and all marketing and customer service activities. The federation style of regional transit

¹ The names and summaries of the laws in each of the German states can be found at: <https://www.n3.de/rechtsarchiv/4oerecht/5Infrastruktur/1verkehr/nahverk.html#hess>.

coordination exists in areas that range from having only a few (VVS Stuttgart) to having dozens of separate transit “entities” (e.g., RMV Frankfurt).

Type 2 Regional Transit Operator and Coordination of Other Transit Agencies

This type of organization has the role of the TA/RTC of all other transit agencies in the metropolitan area. But unlike Type 1 above, it is also responsible for the principal regional transit mode (commonly the rail mode, usually as the owner/ operator).

Type 3 Sole Transit Provider/ Consolidated Transit Agency in the Metropolitan Area

A single transit agency that provides (or is responsible for ensuring the provision of) all the fixed route transit service in the entire metropolitan area. Consequently, it is the sole decision-maker responsible for establishing fares and fare policies. It is also responsible for short and long- term planning and all marketing and customer information including the website, sales, and wayfinding. Some, but not all, Type 3 agencies began as multiple separate agencies but, over time, were consolidated into a single agency serving the metropolitan area. Although there are no other agencies to “coordinate,” there are multiple modes for which single fare policies and scheduling are key to customer needs and satisfaction. Not all Type 3 agencies, for example, provide single ticketing for all the modes that they operate, (which would enable free transfers between modes); thus, not all sole provider agencies would be considered a fully functional TA/RTC.

Clearly, a Type 3 sole provider is a different kind of agency than the alliance model of Types 1 and 2; yet we include Type 3 in this research as it is often held up as the *only* solution to the thorny problem of integrating transit within a single metropolitan area. However, as will be seen in this report, Types 1 and 2 are also employed quite often. Also, as will be seen in Chapter 4, there are many governance and ownership forms for Type 3 as well as for Types 1 and 2.

This report will use the term “Regional Transit Coordinating Authority” (RTC) when referring to all three types of organizations: an “alliance” when referring to Types 1 and 2 and a “sole transit provider” when referring to Type 3.

1.3 Existing Transit Coordination in California

Until now, state government in California has not played a direct role in the integration of transit agencies in the largest metropolitan areas, although it has often played a role in the formation of some transportation agencies (e.g., Metropolitan Transportation Commission). The California Department of Transportation (Caltrans) has established a program for coordination and partnership between federal, state, regional, and local agencies; however, it is not focused on service integration (Caltrans, 2023). Thus, the state’s two largest metropolitan transit markets, the five-county Greater Los Angeles Area (18.5 million) and the Greater San Francisco Bay Area (7.7 million) (Demographia, 2023), consist of multiple transit agencies, each with a vested interest in

providing transit services to its constituent jurisdictions. In each case, however, coordination among individual agencies is limited.

In the Los Angeles area, transit agencies largely plan for their specific service areas, coordinating very little, if at all, with other agencies. While the Southern California Association of Governments (SCAG), the region’s Metropolitan Transportation Organization (MPO), works with the region’s transit operators, transport planning agencies and the state “to develop goals, objectives, plans and policies to provide effective and sustainable transit options” for the metropolitan area (SCAG, n.d.), the Connect SoCal plan does not emphasize integration (SCAG, 2020). In practice, it is the county transportation authorities that have integrated some transit services within their individual jurisdictions (e.g., LACMTA, OCTA); however, as the primary transit agency in the county, many have prioritized their own planning and operations. As a result, individual transit agencies are often not adequately planned to form part of an integrated regional system.

In the nine-county Bay Area, little transit coordination among the six regional transit agencies and 20+ local agencies have been achieved. The only regional transport entity, the Metropolitan Transportation Commission (MTC), is the Bay Area MPO and has a limited role in transit coordination: collecting all operational data, providing pass-through federal funding (a portion of which is discretionary), and funding real-time bus information for bus stops (MTC, 2021). While the MTC spearheaded the initiative to establish a regional transit card, its role beyond that project remains advisory, with no direct governing power over individual transit agencies. More recently, MTC supported regional efforts to make transit “simpler, easier to use and more affordable, exploring the creation of a Regional Network Manager” that can improve the network and customer experience (MTC, 2023).

It should be noted, however, that in the nine-county San Francisco Bay Area, regional transit services like BART, Caltrain, SMART, and ACE, present another challenge. At a minimum, clear guidance on how best to coordinate transit services within a multi-county metropolitan area is warranted. No other U.S. metropolitan area has as many separate agencies providing long-distance transit—i.e., intercity and commuter rail or bus services.

In the state’s next two largest transit markets, namely Greater San Diego (3.3 million) and Greater Sacramento (2.4 million) (Demographia, 2023), while there are fewer individual transit agencies, ongoing coordination is limited. In the case of Greater San Diego—included as a case study in this report—there are two transit agencies that coordinate fares. In Greater Sacramento, there are at least nine separate transit agencies that participate in a transit smart card program and coordinate at a limited number of hubs; however, they do not collectively offer discounts or schedule integration.

Finally, there are additional transit markets in metropolitan areas of less than 2 million. In most cases, they are dominated by a large transit agency (centered on the largest city) that provides most of the areawide service, sometimes in conjunction with one or more smaller agencies (e.g., Fresno

Area Express (FAX), Clovis Stageline Service, and the Fresno County Rural Transit Agency in Greater Fresno).

1.4 Terminology

The case studies that form the basis of this report are from seven different countries. As would be expected, these countries have different legal frameworks, different governance structures, and different terminology. In addition, not all have the same government levels, and even if they do, they may use different terms to describe them. Even within English speaking countries, the same words often mean different things—e.g., a “lieutenant governor” in Ontario is not the same as a “lieutenant governor” in California. Table 1.1 presents the most common terminology variations in the case studies evaluated in this report.

Table 1.1 U.S. and Foreign Terminology

Term	United States	Foreign
Municipality-smallest government level: this report will use “city” and “municipality” interchangeably.	Varies by state including city, town, village.	Varies by country. English terms include “city,” “town,” and “parish.”
Government level below the national. This report will use the word “state” for this level.	State	Australia: State Canada: Province German: Land Spain: Autonomous Region or Community (in English) Switzerland: Canton (in English) U.K.: No national consistency but in Manchester: Greater Manchester Combined Authority
Government level above the city/ town/ village; This report will use the word “county” for this level.	County	Australia: none Canada: no national consistency; called “regions” and “amalgamated cities” in Ontario; none in British Columbia German: <i>Landkreis</i> (1) Spain: County (in English) Switzerland: none U.K.: no national consistency but in Greater Manchester: borough, district
Region/region	Ambiguous word for a geographic area, with no defined political boundaries and often no defined geographic boundaries.	U.K.: national subdivisions used for statistical but not political purposes. France: political division under the national level, as in a U.S. state. Italy (<i>regione</i>): same as France.
Lieutenant Governor	Elected position serves as vice-governor	Canada: Appointed by the Governor General of Canada on the advice of the prime minister of Canada ; the role of the lieutenant governor is largely, but not entirely, ceremonial. (2)
Lieutenant Governor in Council	Not applicable	Canada: Practically speaking ‘Lieutenant Governor in Council’ means the cabinet of the province of Ontario. (2)
<p>Large cities in Germany are not part of the Landkreis, thus, can be considered city-counties like city and county of San Francisco. Personal communication. Tharshika, Metrolinx Customer Relations, March 27, 2023.</p> <p>Note: In this report, foreign words will be in italics, German nouns will be capitalized as they are in German, and German plural forms will be used for German words, e.g., <i>Landkreis/Landkreise</i> and <i>Verkehrsverbund/Verkehrsverbände</i>.</p>		

1.5 Contents of the Report

The following chapters provide summaries of these case studies in several different areas as well as an analysis of our findings. We will provide a literature review (Chapter 2), followed by a discussion of the case studies (Chapter 3), and a description of the governing board structure (Chapter 4) of each case. We will identify each agency's basis of authority (Chapter 5), as well as its executive and management functions (Chapter 6). Next, we will present findings and discussion (Chapter 7), before ending the report with our conclusions and recommendations (Chapter 8).

2. Literature Review

2.1 Introduction

This chapter presents a review of the literature pertaining to regional, multi-agency transit coordination and governance.² This literature review is organized as follows. We first present our overall findings from the literature review, drawing some general conclusions on the state of the literature on transit coordination. Based on these findings, we present some questions that remain to be answered as justification for this specific research.

The bulk of this chapter provides discussion on each of the reports we reviewed. These documents are organized as follows. First, we present a review of papers that focused on the German *Verkehrsverbund*, as this was the origin of the concept. We then discuss literature about U.S. and Canadian efforts on transit integration and coordination. We also review several reports and papers that purported to discuss RTC “governance.” In the literature, the term “governance” has a variety of definitions. In these and other sources that addressed “transit governance,” we found that their definition of the term differed from ours. For our study, we include both the governing board or boards (or the equivalent) of a regional transit coordinator, as well as the legislation, if any, that gives them the authority to function. Where other papers have a different definition, that definition is provided. Finally, the literature review also includes papers that analyzed transit ridership to determine if any ridership increases were correlated with RTCs.

2.2 Principal Findings

The literature indicates that, in general, U.S. transit researchers, planners, and policymakers, as evidenced by both practice and published research, are not familiar with RTCs and the benefits they can yield. First, the United States National Transit Database (NTD) does not provide a definition of them. As discussed below, RTCs are typically only explicitly mentioned in the research when at least one author is European. U.S.-based research that we reviewed does not acknowledge them, even when they conduct one of the roles of an RTC, such as revenue redistribution. This is surprising, especially for research conducted after 2000. Several publications in the past ten years acknowledge that strategies such as fare coordination, shared monthly passes, and coordinated route planning/scheduling are factors in ridership increases; however, the role of overarching agencies—i.e., an RTC—in establishing these changes is not acknowledged.

Numerous studies highlight the benefits of developing an RTC where multiple transit agencies provide service in a metropolitan area, including Homburger and Vuchic (1972), Wilson and Bell (1985), Pucher and Kurth (1995), Koch and Newmark (2017), and DeRobertis et al. (2020). For example, Homburger and Vuchic cite multiple advantages, including optimum transit service for

² In the review of the literature here, we often retain the author's terminology for describing the transit coordinator, but the terms defined earlier will be provided in parentheses if it is not clear.

the public, an enhanced public image of transit, cost savings for operating agencies, and increased operating efficiencies. Similarly, Pucher and Kurth cite direct benefits coming from transit coordination, such as increased ridership and indirect social and environmental benefits related to mode shift, including congestion relief, pollution reduction, and increased traffic safety.

Regarding overseas examples, many sources describe Hamburg HVV's board at various points in its history, and Topp (1988) writes of the existence of numerous alliances in Germany, distinguishing between a "transit cooperative" (*Verkehrsgemeinschaft*) and "transit federation" (*Verkehrsverbund*). Several papers write of the presence of transit alliances in Austria and Switzerland but do not provide much discussion of the board structure. DeRobertis et al. (2020) discuss both German and non-German speaking countries which have adopted the transit alliance approach and its roles and duties; however, this report does not evaluate the board structures but recommends it as a topic for future research.

While Simon and Simon (2002) explicitly focus on transit boards, their research centers on single transit agency boards rather than on transit alliances that coordinate multiple, separate transit agencies, each with its own board and internal management. Grant et al. (2011) look at many aspects of governance from a regional perspective in eight U.S. metropolitan areas; the authors identify the five existing governance models for U.S. transit agencies including state-run and special-purpose agencies. This appears to have parallels to the RTC agencies as well.

A parallel and complementary aspect of board structure revealed by some of the literature is the increasing recognition of the importance of representation on boards in general and transit boards in particular (ENO 2015, p. 80). Mobility Lab's 2019 blog argues that transit boards should represent their biggest investors, riders (Furillo 2019). A recent example is the current revision of the composition of the Santa Clara (California) VTA board which has come under criticism for not being appropriate for its mission and geographic area (Baldassari, 2019).

2.3 Need for this Specific Research

While some past research has documented the benefits of RTC, it has not comprehensively studied different types of overarching regional agencies to analyze how they are governed and how their boards are structured. Board composition is important to achieve the mission of an agency, and regional agencies have particular challenges. The following questions, which could help inform future decisions in the U.S. and California on how to structure an RTC (particularly transit alliances), remain to be answered:

- How are the agencies structured? Are they organized as a department of a government jurisdiction, as a state-owned corporation, as an independent authority, or as a voluntary consortium?

- How are the boards of RTCs structured, particularly those that are transit alliances? How are the board members selected, and how do they relate to the different cities and transit agencies being coordinated?
- How were the RTCs created—i.e., by law or a voluntary consortium, and what specific authority were they granted? Does this make a difference in the composition of the board?

2.4 *Verkehrsverbund*: The German Model for Regional Transit Coordination Governance

Homburger and Vuchic’s “Transit Federation: A Solution for Service Integration” (1972) was one of the first publications in English to discuss the *Verkehrsverbund*, soon after Hamburg Germany created the first one in November 1965.³ Their article begins by describing the multiple uncoordinated public and private (at the time) transit agencies in the 12 largest U.S. metro areas and the many problems that they have faced. It described possible strategies, ultimately focusing on the one that Hamburg developed, the transit federation, or *Verkehrsverbund*. The article describes how, after five years of preparatory planning, *Hamburger Verkehrsverbund* (HMainVV), a voluntary alliance of eight transit providers in the area, was founded; each remained an independent agency while participating in this coordinating federation. The article describes many of the technical and practical agreements that were made including unified fares and revenue sharing (implemented in January 1967). It also describes HVV’s complex board and governance. Homburger and Vuchic conclude that “cities in the United States are facing problems of transit integration similar to those which Hamburg solved through creation of the HVV; the need for improvement of transit through integration is even greater due to the much more critical position of transit in the United States than in many European cities. There do not appear to be any legal, financial, or other obstacles that would make formation of a transit federation a priori impossible in the United States, since similar arrangements have been used by railroads and airlines in interstate travel” (p. 91).

It seems that few U.S. metropolitan regions heeded the call or took the initiative to investigate this strategy. Indeed, little more seems to have even been written about the *Verkehrsverbund* until the 1980s, and these were all published in Europe: Dunn (1980) in The Netherlands; Wilson and Bell (1985) in the U.K.; and Topp (1988) in Netherlands. Dunn describes Hamburg’s transit federation and how its actions improved transit; Wilson and Bell outline five German federations: Hamburg, Frankfurt, Munich, Stuttgart, and Rhine-Ruhr, and they describe Hamburg’s in more detail. They find that the major factors contributing to the success of the “*Verkehrsverbund*” were “the restriction of modes to their most appropriate roles (in terms of guaranteeing maximum benefit), the integration of routes to give the best overall level of service, the construction of interchanges (points of transfer) and park-and-ride sites, and the unification of all fare schemes.” Topp (1988) analyzes

³ “The HVV was founded on 29 November 1965, with the four initial partners, the first results that the new organization delivered came on 1 January 1967 with a unified fare structure, pooling of receipts and coordinated systemwide timetables across all modes of transport” (https://en.wikipedia.org/wiki/Hamburger_Verkehrsverbund).

numerous transit associations that had been created since 1965 and finds that they fell within two distinct categories of transit agreements which he called (1) a “transit cooperative” (*Verkehrsgemeinschaft*), where transit agencies mutually agree on measures to integrate transit, without a formal head agency and (2) a “transit federation” (*Verkehrsverbund*), where transit agencies establish “a new federated authority” with the power to develop integrated services. Topp explains that the former is more suitable for smaller to medium-sized towns, while the latter is more suitable for larger cities.

Pucher and Kurth (1995) analyze five *Verkehrsverbände* in “*Verkehrsverbund: the success of regional public transport in Germany, Austria and Switzerland*” (those of Hamburg, Munich, and Berlin, Germany; Vienna, Austria; and Zurich, Switzerland). The purpose of the article is to assess the potential for *Verkehrsverbände* to address “the problem of providing an integrated regional public transport service for the increasingly suburbanized metropolitan areas of Europe and North America,” while documenting their successful record at increasing ridership and maintaining, if not increasing, transit mode share: “service expansion, improvement in service quality, more attractive fares, and extensive marketing campaign.” This article also contains an analysis of an important component in providing good reliable transit: adequate government funding to finance it.

Two recent papers describe the western European-style *Verkehrsverbund*’s successes after two decades of experience. Koch and Newmark (2017) document the increase in the number of *Verkehrsverbände* in Germany, from one in 1967 to 59 in 2005. Buehler et al (2019) provide an updated analysis of six RTCs in Germany, Austria, and Switzerland. The principal purpose is to analyze whether and how performance has improved since 1990; they find that all six regions “have increased the quality and quantity of service, attracted more passengers, reduced subsidies,” and automobile mode share has also declined.

Verkehrsverbund: The Evolution and Spread of Fully Integrated Regional Public Transport in Germany, Austria, and Switzerland by Buehler et al. (2019) also touches on the organizational structure of the *Verkehrsverbund* RTCs, given that they coordinate up to 55 different transit operators and dozens of jurisdictions. They note that although there are three main organizational structures within the alliance-type of RTC, these structures can and have changed over time within individual *Verkehrsverbände*. They also note that each of the three categories of structures within the RTC has specific roles and responsibilities which vary from region to region. The three structure-categories are as follows:

- An RTC agency that is the *Verkehrsverbund*
- An RTC made up of government jurisdictions: cities, counties, state(s)
- An RTC made up of operators

Buehler et al (2019) conclude “The *Verkehrsverbund* model has spread quickly because it is adaptable to the different degrees and types of integration needed in different situations” (p. 48) .

2.5 Transit Integration in the U.S. and Canada

In the 1990s, several U.S. states and Canadian provinces conducted research on the issue of coordinating transit in the larger regions of their states (e.g., the Puget Sound area in Washington, the New York/New Jersey metro area, Florida, and Toronto). The 1994 Toronto area study recommends the creation of a transit federation, fare integration, and service coordination across municipal boundaries (Metrolinx, 2016).⁵

Since 2000, there have been many publications and reports on transit integration and “what makes transit work” published in English addressing experiences in both the U.S. and western European countries. Surprisingly, while many focus on ridership, and others address a broad range of policies and strategies, few directly address RTCs. For example, while the title of TRB Special Report 257 *Making Transit Work: Insights from Western Europe, Canada, and the United States* (2001) suggests it would address RTCs, in fact it does not, focusing instead on a broad array of city policies on urban form (a city’s physical characteristics), land use, transit service quality, and strategies that discourage automobile use. While the report cites many examples of how European cities consider transit an integral part of the transportation system and have transit-first policies (as opposed to auto-oriented urban policies such as vehicle Level of Service standards), it does not directly address the role RTCs play in western European metropolitan regions to help implement these visionary policies and practices.

Similarly, Nielsen et al. (2005) describes the European Union research project called “Hi-Trans,” whose purpose was “the development of principles and strategies for introducing high quality public transport in medium size cities and urban regions.” One of the many strategies it cites is the existence of a regional body that ensures institutional coordination between different levels of public transport (p. 65). The report offers suggestions for better practices and examples of “less good practice.” For example, “better practice emerges from regulation which allows coordination,

⁵ It is noted that the recommendation for a transit federation was finally accomplished in 2006, when the province of Ontario passed the Metrolinx Act (effective 2007), which created the Greater Toronto Transportation Authority, adopting “Metrolinx” as its brand name. This was done to “ensure the region’s transportation system would function as a whole—greater than just the sum of its parts—to meet current and future needs of the growing population.”

while less good practice appears to be associated with full deregulation.” But this source does not directly discuss RTCs.

On the other hand, Rivasplata, Iseki & Smith (2012) administer a nationwide survey of transit operators to explore numerous areas of transit integration in the U.S.: fare policy, service scheduling, information dissemination, facility and vehicle coordination, and interagency agreements. Their results reveal that “the nature and extent of integration varies by size of region and type and that major challenges to coordination included financial and political commitment” (p. 53). They conclude that transit agencies and regional transportation agencies need to take a “holistic approach to incorporating regional transit coordination in their provision and planning, particularly in response to the need of transit dependents and the threats of environmental degradation associated with widespread automobile dependence” (p. 68). For transit integration to be successful, regional and local transport entities must ensure that service providers participate in coordinative strategies, balancing the interests and needs of passengers, operators, and residents. However, their study does not discuss legislative mechanisms for guaranteeing further coordination.

Directly addressing RTCs, recent MTI research “Characteristics of Effective Metropolitan Areawide Public Transit: A Comparison of European, Canadian, and Australian Case Studies” (DeRobertis et al. 2020), selects ten case studies of good regional transit mode share in seven countries. It describes the commonality of each region having an RTC, how the RTCs came about, and what their principal tasks were. This study classifies the RTCs in these ten regions as having one of the following functions: Coordination Only (Type 1), Coordination and Regional Transit Provider (Type 2), or Complete Consolidation of all transit into a single agency (Type 3). The report concludes that all models are effective but recommends further research in many areas including, “case studies of successful regional governance models, particularly in regions with rings of suburban communities surrounding medium and large cities,” and “identification of the key elements that Regional Transit Coordinators need in their authorization that give them both the mandate and the tools to be effective.”

TCRP Report 173: *Improving Transit Integration Among Multiple Providers* (Goldman et al., 2014) is meant to be “a guide for understanding the array of issues that arise in a transit coordination effort. In no two communities will the issues—or the solutions—be the same.” It provides examples of “integration” from 19 agencies, 17 in the U.S., one in Madrid, Spain, and one in Quebec, Canada. The 25 types of integration activities vary widely from complex (e.g., merging, consolidation) to informal (e.g., joint training programs, shared use of busways, joint transit centers) and from customer-oriented (e.g., fares) to agency-oriented (e.g., procurement and maintenance issues). Some of the more complex activities appear to be within the purview of an RTC or explicitly involve the creation of an RTC (Madrid’s CTRM, Quebec’s ATUQ, and possibly Valley Metro in Phoenix or Northwest Transit Alliance in Oregon).

However, TCRP 173 does not distinguish minor integration activities from major changes (such as the creation of an RTC), nor does it distinguish between the role that an RTC plays versus a transit agency; for example, when discussing joint pass revenue sharing, it merely states the following: “commonly, agencies where the fare/pass is used are fully or partially reimbursed by the agency collecting the fare” (p. 13) and “often, one of the largest transit agencies or a regional planning agency is responsible for managing the collection and distribution of fare revenues” (p. 15). Since this report does not acknowledge the existence of RTCs, it does not discuss the roles of an RTC; for example, one of its key responsibilities is revenue distribution. It remains to be seen whether any of the 19 agencies has any other RTC roles.

Volume 2 of TCRP 173 looks at six case studies in detail, each of which has implemented a different integration issue, ranging from simple to complex. Common problems faced included dealing with issues of local control and autonomy and equitably allocating costs and revenues. Since each case study presents different governance approaches, these challenges are all resolved differently. The report finds that “the places that have been most successful accomplishing their integration vision have created processes where all transit providers, especially smaller providers, believe their interests are adequately represented and that their voices are heard. In most successful cases, stakeholders built inclusive and representative structures and processes that were trusted by stakeholders. Bottom-up strategies tended to yield more long-lasting results than centralized or top-down approaches” (p. 11).

In sum, TCRP Report 173 Volumes 1 and 2 highlight the many ways agencies have sought to coordinate and collaborate with other transit agencies in the same region and the challenges they have encountered. However, the report does not explicitly address entities that have been created specifically to accomplish such coordination and integration (i.e., an RTC) let alone their governance. This seems to be a glaring omission, given that that is their primary function. It does, however, provide some leads on potential agencies that the current study could consider as a U.S. case study of an RTC.

2.6 Governance

Several publications and reports address RTC governance, but it is noteworthy that their definitions of governance vary widely.

ENO (2015) assesses the role of governance in (U.S.) regional transit by taking a broad definition of governance; they look beyond the transit agencies themselves and investigate interactions between all levels of state, regional (including metropolitan planning organizations (MPOs), local governments, and transit agencies that affect the way investments and decisions are made. It seeks to determine if regional governance could be at the root of problems faced by U.S. transit systems in a metropolitan area by examining six U.S. regions (Chicago, Boston, Dallas/Fort Worth, Minneapolis/St Paul, New York/New Jersey/Connecticut Metropolitan Area, and the San Francisco Bay Area).

Given that none of the six regions has an RTC, they do not address the governance of such an entity. But in each region, there is an agency (typically the MPO) that has more planning authority, and they conclude that the method used to select members of a board of directors of this planning agency affects regional funding priorities. The report also concludes that since regional transit will, by definition, cross city, county, or even state lines, some way of addressing equitable funding (both revenues and expenditures) is essential. Equitable representation is also important: “Regions need to ensure that the balance of representation on agency boards reflects the composition of transit users” (p.80). However, the report does not describe or analyze the board composition of any of its case study agencies. Finally, it concludes that states should play a role in ensuring effective regional transit but that “the level of variation in state-government involvement in transit across the case study regions is striking,” with Texas, Illinois, and California on the limited-state-involvement end of the spectrum.

Volvo Research and Educational Foundations (VREF) published a series of reports on *Governance of Metropolitan Transport* (Lönnroth 2019). The aim of this research is to provide VREF “with an initial understanding of why metropolitan transport systems are shaped as they are, and how they can be improved.” There is an overall synthesis of findings (Lönnroth 2019a) which are based on five specially commissioned background papers on governments of metropolitan transport in 20 countries across the world. Two of these papers focus on the governance of metropolitan transport in western democracies (Lönnroth 2019b and 2019c), while the remaining three focus on the governance of BRT in developing countries. One of the overall conclusions is that “there appears to be a dearth of comparative studies of governance of metropolitan transport under different stages of modernization and forms of political order” (2019a, p. 6).

This research defines “governance” of metropolitan transport as “networks of public institutions through which political power over transport in metropolitan regions is exercised,” which is adapted from the definition published by the World Bank. This definition of governance is much broader than our current study which is confined to how RTCs are governed. Nevertheless, the findings illustrate the complexities involved in developing and maintaining a transit system for a metropolitan region. Lönnroth acknowledges upfront that metropolitan regions are “organizationally messy” with many private and public organizations as well as partially autonomous and partially interdependent organizations that have overlapping purposes and that represent different interests. He writes that “politics and governance of metropolitan transport go together” (2019a, p. 9), and then he describes the variations and similarities between countries when it comes to the many aspects of governance or politics that affect transit. These include the country’s constitution (which affects the division of power over taxation, user fees, and land use decisions between different levels of government), its economic philosophy (market-dependent versus more state-involved decisions making), and the political support of the urban and suburban middle classes for high quality transit. Both the working and middle classes have to be regular users in order to support necessary taxes and fees (2019a, p. 10).

Regarding his analysis of governance in nine western European countries, including city and other local authority powers and roles in providing transit, Lonnroth concludes that the “only pattern in metropolitan transport governance is the lack of a pattern” (2019a, p. 13). Nevertheless, all nine countries have “quite good metropolitan transport systems” (with the caveat that, in the U.K., this was true only of London) (2019a, p. 13). Lonnroth attributes this to “politics” which he defines differently than “governance.” He explains that “This is where politics enters. A high-quality metropolitan transport system is a system that contributes to making a high-quality metropolitan region socially inclusive, environmentally sustainable, and economically productive. Of these three qualities, social inclusion is by far the most challenging; even more so than environmental sustainability.” On the other hand, regarding the metropolitan areas of the U.S., Canada, and Australia, Lönroth concludes that “governance is similar in these three countries while politics differs” (2019a, p. 17). He concludes that the wide variations in the nature of metropolitan transit in these case studies (in particular how to organize and manage the transit systems in the metropolitan area) can be attributed to differences in financing and funding, attitudes towards placemaking, and land use and transport decisions, rather than governance.

Grant et al. (2011) examine the processes of governance transformation in transit in light of population growth in suburban and exurban areas of the U.S. and the growth in regional travel. This report analyzes the reasons why and how eight transit agencies undertook a change in their governance in order to “develop a conceptual roadmap for a transit agency to learn from others and take the steps to achieve governance change” (p.1).

Based on a literature review, Grant et al. (2011) identify the five existing governance models for U.S. transit agencies:

- State transit agencies
- General purpose transit authorities
- Special purpose regional transit authorities
- Municipal transit agencies
- Joint exercise of powers or joint powers authorities

They then look at eight U.S. case study transit agencies to determine why they were seeking a governance change and how they went about it. The study identifies two basic reasons for seeking change: (1) expansion of service boundaries and (2) coordination or consolidation of multiple transit providers. It also identifies two basic ways to go about change: voluntary agreement and statutory change. While all eight case studies focus on transit agencies (not RTCs), the second reason, the desire for coordination or consolidation, could conceivably lead to the creation of an RTC. While some steps may have been taken toward forming an RTC, in most cases, they pursued

consolidation rather than a federation. It cites San Diego MTS as an example that initially followed the voluntary cooperative model of a transit federation but eventually became a single consolidated agency (via California legislation in 2002). The report stresses that the 2002 legislation only put the final legal authority in place (to acquire assets, etc.), formalizing a series of local voluntary agreements among the three agencies.

Other than San Diego, the report states that there were few examples in the U.S. of agencies that coordinate services like the German *Verkehrsverbund*. However, it describes how Davenport, Iowa has made significant steps towards voluntary coordination. The goal was to improve coordination among four different transit agencies, three in Iowa (two of which are municipal agencies) and one in Illinois (a multijurisdictional, general purpose, regional transit authority). In 2002, there was a study of the possible consolidation of the three Iowa transit agencies. Even though consolidation did not occur, they pursued closer coordination and voluntarily agreed to create a single regional marketing entity, Quad Cities Transit, for all four agencies. Another key decision was the mutual acceptance of a single monthly pass. It is unclear what governance structure the entity ultimately implemented, or how decisions on revenue sharing are made. These questions would be worthy of further exploration.

Two of the eight case studies in Grant et al. (2011) accomplish regional coordination through consolidation. In the Syracuse region (New York), consolidation came about because two nearby cities nearly went bankrupt as a result of changed FTA funding rules. They were compelled to reach out to the already existing Regional Transit Authority of Syracuse to provide services (which involved a one-time payment and future finance guarantees). The result has been the creation of a truly regional transit agency without any change in legislation.

The second example was StarMetro, a single county transit agency serving Tallahassee, Florida. It was seeking a statutory change to allow expansion of service boundaries to serve surrounding counties (Wakulla, Gadsden, and Jefferson), transitioning from a Municipal Transit Authority to a General Purpose-Regional Transit Authority. The first step they took was the creation of a Regional Community Transportation Coordinator role. (However, it is unclear what they coordinate and whether there was prior transit service in those three counties.) Future steps will involve agreeing on the board's composition for a new agency that would serve multiple counties, board voting rights, funding, and the necessary legislative changes. The vision is for this transit agency to serve a total of seven Florida counties and, ultimately, two Georgia counties as well. This entity, the Regional Community Transportation Coordinator, is worthy of further exploration.

Finally, Grant et al. (2011) describes how in one of its case studies, the governance change was the creation of an overlay agency: Santa Fe's North Central Regional Transit District (NCRTD). It states that NCRTD's purpose is to provide "regional collaboration as well as provide service to areas outside Santa Fe." However, it is unclear exactly how much authority it has as an RTC. This is also worthy of further exploration.

In sum, Grant et al, (2011) describe how numerous transit agencies have been working toward changing their governance to fit changing circumstances. However, the report does not identify or acknowledge the creation of a regional transit coordinator, in general, or a German-style transit federation, in particular, as solutions. With respect to changes in governance, the report emphasizes that there is no single pathway to achieving change, since laws and conditions vary from state to state. For example, in the Syracuse region, the existing agency was able to expand transit services by agreement, since existing state legislation already permitted expansion beyond the city limits of Syracuse. However, in the Santa Fe region, new legislation was necessary to create an agency that could provide transit service to communities and tribes beyond the Santa Fe city limits.

TCRP 159 “Transforming Public Transit Institutional Models” (Henkin et al. 2012) provides “an analysis of and strategy for defining and implementing transformative change in institutional and business models for operating and maintaining public transportation systems.” Transformative change is defined as impacting one or more of the following areas: mission shift, funding, governance, measuring goal achievement, resource management, retooled workforce and organization, collaboration and integration, or technology applications. The findings are based on 14 case studies (13 in the U.S. and one in Canada) of transit agencies that have implemented transformative fundamental change. When governance reform was the primary change or was necessary for other transformative changes, the report describes the board changes, but this is not the principal focus of the report. The 14 case study agencies were chosen for being transit agencies, not RTCs, yet many of those agencies that made changes in collaboration and integration, service expansion, or mission shift adopted a consolidation model to deliver regional transit and could be considered a consolidated RTC, particularly TransLink in Vancouver and possibly UTA in Salt Lake City, CATS in Charlotte, or CCTA in Burlington VT. A rarer form of transit consolidation was the state-operated approach: Washington State DOT shifted its role from that of a grants manager that provided subsidies to other agencies to being the active manager of intercity bus service in the state.

Simon & Simon (2002) in TCRP Report 85 “Public Transit Board Governance Guidebook” focus on the boards of transit agencies. It bases its findings on survey responses from 213 U.S. transit agencies and delves deeper into six case studies. The report describes the organization and composition of transit boards, board selection methods, board size, board committee structure, compensation, and board administrative support. It also develops guidelines for the structure and governance of committees’ core areas of transit board roles and duties. However, these agencies were not RTCs but transit agencies. (Some might be considered examples of the full consolidation model—e.g., the Regional Transit District (RTD) which serves Denver, Boulder and four other counties in Colorado.) Nevertheless, this report may be a useful starting point in terms of further analyzing boards, since it identifies the characteristics of effective board members, keeping in mind that a regional board has different priorities than a single-agency board. Lastly, the report does not attempt to stratify board structure and composition versus type of transit agency (e.g., city-owned,

county-owned, special district, or JPA, etc.). It does point out, however, that one of the six case studies was a municipal transit agency; it had a board, but it was strictly advisory to the city council on matters of budget and policy (Kenosha Transit, Wisconsin).

Hirschhorn et al. (2019) in “Organisation and Performance of Public Transport: A Systematic Cross-Case Comparison of Metropolitan Areas in Europe, Australia, and Canada” analyzes governance from the perspective of the combined effects that multiple elements of transit organization have on performance outcomes. Several of the elements of “organization” fall within the purview of an RTC. For example, integration of planning responsibilities within an authority at the regional/metropolitan level, long-term metropolitan transit planning, and fare integration. However, the research does not directly address the formation of an RTC nor the structure of RTC governance.

2.7 Ridership and Transit Coordination/Integration

In addition to studies that focus on RTCs, we also looked at recent research on ridership to determine if any of them attributed ridership increase to RTCs or RTC-like activities. Watkins et al. (2019) first summarizes 15 reports that had been published between 1976 and 2015 which analyzed reasons behind ridership trends in the U.S. Watkins et al. then analyze ten U.S. case studies and identify seven specific strategies that agencies implemented to address falling ridership. Indeed, two of these, mode integration and fare media and integration, are primary functions of an RTC. Yet none of the agencies had the functions of an RTC, and indeed, the examples for fare integration were merely fare technology/fare media, which is not the same as a system with true single fare/single ticketing that RTCs have implemented in Europe. It appears that none of the case studies nor any of the reports in its literature review evaluated the impacts of the creation of an RTC on ridership, suggesting that this is not a common strategy in the U.S.

Another recent report that looks at Israeli fare reform. Sharaby and Shiftan (2012) analyze Haifa, Israel’s revised fare policies and find that instituting a zonal ticket fare policy, composed of a five-zone fare system with free transfers, halts the downward trend in transit riders. They also conduct a survey of passengers in which 45 percent report changes in travel behavior, and 30 percent report making more trips by bus.

3. Case Studies

3.1 Introduction

The purpose of this chapter is to introduce the individual case studies of regional transit coordination that are evaluated in this report. First, the process for selecting the case studies is described. Then the 16 case studies for which the research questions will be evaluated in future chapters are presented. The case studies are categorized into one of three types of RTCs. Those case studies that are an alliance of several transit agencies are further described in terms of the name and type of transit agencies that are part of the alliance—e.g., city-, county-, or state-owned entities or independent authorities. A preliminary assessment was then made of each case study to determine where on the spectrum of regional coordination they lie.

Lastly, given that the state of California has hundreds of special districts covering a dozens of specific missions in addition to public transit, some of these special districts were evaluated in order to determine if there were any lessons to be learned from the organizational structure of these entities.

3.2 Process for Selection of Case Studies

The methodology involved first identifying organizations that were known or thought to have the role of regional transit coordination. These agencies were then presented to the project's Study Advisory Group (SAG) for the final selection of up to 16 case studies for California.

Finding European organizations was easy, since over 60 exist in Germany alone (Dümmler 2015), and the European organization of such agencies, European Metropolitan Transport Authorities (EMTA), has 35 members including 32 outside of Germany (EMTA, n.d.). Prior research had made us aware of several Canadian and Australian organizations (DeRobertis et al. 2020). We were also aware of some examples of sole source agencies functioning as RTCs in cities of the Global South (e.g., Santiago, Chile; Bogota, Colombia); however, these were discarded due to a lack of structural information.

It was much harder to identify U.S. agencies responsible for regional transit coordination for multiple reasons. In the first place, there appear to be few of them. There is also no single commonly used term to describe them. The NTD does not identify this type of agency, and there is no organization like EMTA to which they could belong. Nevertheless, several potential U.S. RTCs were identified including some that were suggested at the second SAG meeting in 2022. However, without doing more extensive research, it is not known how much coordination such U.S. agencies actually are responsible for.

Over 40 organizations were presented to the SAG along with advantages and disadvantages of including them as case studies. It was agreed that it would be best to have more than one U.S.

example even if they were not a fully functioning European-style RTC. Information on their progress and the lessons learned could prove valuable to metropolitan areas in California and other parts of the country. The case studies ultimately selected for this study are presented on the following pages.

3.3 Selected Case Studies

3.3.1 List of Case studies

The 16 case studies are shown in Table 3.1. There are eight from the U.S. and eight from outside the U.S. Basic facts about each agency such as the year formed, a brief description of the agency, the number of political areas within the metropolitan region/transit coverage area, and the number of transit agencies coordinated (for alliances) is presented in Appendix A.

In all the case study metropolitan areas, there are at least three of the following modes: bus, tram/light rail, streetcar, metro, suburban/commuter rail, and ferries. In Europe, there is also another layer of intercity rail which is owned/run by the state government, (which may or may not be a part of the coordinated fare system) as well as another layer of rail run by the national railway.

It is acknowledged that several of our U.S. case studies (NWOTA, MP, RTA and SANDAG) are in the early stages of becoming an RTC and, therefore, are in varying states of implementing fare reciprocity, schedule coordination, and coordinated marketing among their member agencies. Although they are not fully functioning RTCs, at the very least, each of these entities has set up a process through which it could coordinate at least some of these elements of an RTC. The extent to which they function as an RTC is further discussed below in Section 3.4.

In the case of the San Diego metropolitan area, we have decided to include two potential RTCs, representing two distinct levels of coordination: MTS and SANDAG. The first is a sole transit provider (Type 3) that operates in the metropolitan area of the city of San Diego. When initially created, it had a much narrower role, that of the regional light rail provider, but soon began to coordinate its light rail service with those of local bus agencies in the immediate area, similar to a voluntary German-style *Verkehrsverbund* (Larwin, 2012). They ultimately consolidated with these bus agencies into a single agency serving the entire metropolitan area and providing the requisite coordination between modes. Later, through state legislation in 2002, (California Senate Bill (SB) 1703) SANDAG (San Diego County Association of Governments, created as the metropolitan planning organization and the council of governments) was granted the authority to coordinate transit services (e.g., fare structures) between MTS and its transit agency counterpart in the northern part of the county. Thus, each of these cases provides a different model and pathway for coordinating transit.

Table 3.1 Case Studies

Name of RTC	Abbreviation	Name of metro area	Year formed as an RTC (1)
U.S.			
Northwest Oregon Transit Alliance	NWOTA	Northwest Oregon	2012
Mobility Partnership	MP	Seattle	2019
New Jersey Transit	NJT	State of New Jersey	1979
Valley Metro RTPA	VM	Phoenix	1993 (1985)
Regional Transit Authority of Southeast Michigan	RTA	Detroit /Southeast Michigan	2012
San Diego Metropolitan Transit System	MTS	San Diego	1986 (1975) (2)
Tri-County Metropolitan Transportation District	TriMet	Portland (Oregon)	1969
San Diego Association of Governments	SANDAG	San Diego County	2002 (1966)
Foreign			
Metrolinx	Metrolinx	Toronto	2006
TransLink	TransLink	Vancouver	1999
Transport for New South Wales	TfNSW	Sydney	1988
Transport for Greater Manchester	TfGM	Manchester	2011
Autoritat del Transport Metropolità (Authority of Metropolitan Transport)	ATM	Barcelona	1997
Verkehrs-und Tarifverbund Stuttgart	VVS	Stuttgart	1978
Rhein-Main Verkehrsverbund	RMV	Frankfurt	1995
Zürcher Verkehrsverbund	ZVV	Zurich	1988
See Appendix A for more details about each agency. (1) Year established or given authority to do regional transit coordination functions. (Year founded as an agency but not an RTC) (2) MTS was slightly more complicated than this; see Larwin 2012.			

3.3.2 Type of RTC

The case studies were stratified according to whether they were Type 1 (alliance or federation that only coordinates), Type 2 (transit operator that also coordinates the other transit agencies in the region), or Type 3 (sole transit provider in the metropolitan area or state). As shown in Table 3.2, five case studies are classified as Type 3, i.e., they are the only transit entities in the metropolitan area (and sometimes the state) responsible for providing fixed route transit. Three are in the U.S., and two are located elsewhere. While there are European examples of Type 3, most notably those in Sweden, our international case studies are from Canada and Australia.

Eleven of the case studies are alliances of multiple agencies that run and operate the transit. Eight case studies are Type 1. That is, they only coordinate and do not have operations responsibilities. Three case studies are Type 2, providing transit services and coordinating these with the other agencies.

Table 3.2 Type of Regional Transit Coordinators

	U.S. (8)	FOREIGN (8)
TYPE 1: Agency is a formal or informal alliance of transit agencies that has implemented or is working towards the coordination of all public transit in the region	<ul style="list-style-type: none"> • Mobility Partnership (Seattle MA) • Northwest Oregon Transit Alliance (Rural Oregon) • RTA of Southeast Michigan (Detroit MA) • SANDAG (San Diego MA) 	<ul style="list-style-type: none"> • ATM (Barcelona MA) • RMV (Frankfurt MA) • VVS (Stuttgart MA) • ZVV (Zurich MA)
TYPE 2: Transit operator who also coordinates the other transit agencies in the region.	<ul style="list-style-type: none"> • Valley Metro (Phoenix MA) 	<ul style="list-style-type: none"> • TfGM (Manchester MA)) • Metrolinx (Toronto MA)
TYPE 3: Sole transit provider in the metropolitan area or state (Consolidated transit provider)	<ul style="list-style-type: none"> • New Jersey Transit • MTS (San Diego MA) • TriMet (Portland, OR MA) 	<ul style="list-style-type: none"> • Transport for New South Wales (Sydney MA) • TransLink (Vancouver MA)
MA: metropolitan area		

3.3.3 Alliance Members

For Types 2 and 3, multiple entities are providing the transit service in the region, and the RTC must work with all of them. These transit agencies are typically referred to as members of the transit organization or alliance. In our case studies, the number of members of the alliance ranges

from five to 27. As shown in Table 3.3, these individual transit agencies are most often either city-, county-, or state-owned entities or independent authorities. See Appendix B for the names and general characteristics of the individual transit agencies comprising these eleven RTC alliances.

Table 3.3 Transit Agency Members of the Transit Alliance

Name of RTC	Number of separate transit agencies that part of the RTC Federation (a)	Type of Agencies that are coordinated by the RTC (b)
U.S. (5)		
NWOTA Northwest Oregon	5	Three county-owned and two independent authorities
MP (Seattle)	10	City-owned, county-owned, state-owned, and independent authorities
RTA Southeast Michigan	6	One city-owned, three independent, one nonprofit, one collaboration
Valley Metro- (Phoenix)	6	One independent, four city-owned agencies, and one publicly chartered corporation
SANDAG	2	Two independent authorities
Foreign (6)		
ATM (Barcelona)	~35	All government-owned: agencies of the city of Barcelona, region of Catalonia, nation of Spain and several smaller cities, and 1 PPP
RMV (Frankfurt)	27	All government-owned (15 <i>Landkreise</i> (rural counties).11 city-counties and one state
VVS (Stuttgart)	8	All government-owned (one city, one regional government, one state, and five <i>Landkreise</i>)
ZZV (Zurich)	8	Five government-owned: (two city-owned; one canton, one Swiss), and three tendered by the canton of Zurich)
TfGM (Greater Manchester)	~10	Variety of public and private agencies (c)
Metrolinx (Toronto)	11	Variety of government-owned and independent authorities
<p>See Appendix B for list of the agencies that are part of these RTCs. Government-owned means that a political jurisdiction (city, county, or state) has taken the responsibility for providing transit, either: a) as an internal department; b) government- owned corporation; or c) through tendered contracts. Situation in transition; TfGM taking on responsibility for regional bus and rail from private operators, (who would still be eligible to bid on the tenders)</p>		

3.4 Levels of Coordination Regarding Fares, Marketing and Planning

While the objective of this research was to analyze agencies that are fully functional regional transit coordinators—i.e., defined as single branding, single website, single ticketing across all modes and agencies—, we realized there were few agencies in the U.S. that feature single-ticket journeys and central planning. Given that there have been coordination attempts in the U.S., we included agencies that have started to coordinate but that may not have advanced much. (Some non-U.S. organizations were not as advanced as the German cases, e.g., TfNSW and Metrolinx.) Figures 3.1 to 3.3 show where our eleven alliance case studies are on the continuum of the three principal functions:

1. Unified fare policy: Single fare/ticket policy regardless of owner/operator or mode (often distance-based or zonal fares in larger metropolitan areas)
2. Marketing/branding /customer interface
3. Short- and long-range planning

As shown in Figures 3.1, 3.2, and 3.3, five of the eleven alliance case studies are full-authority RTCs including one U.S. example, Valley Metro. The others are VVS, RMV, ZVV, and ATM. Five are in the middle of the continuum in at least one area: RTA, NWOTA, TfGM, Metrolinx, and SANDAG. Thus, while they are not fully functioning RTCs, they can be considered emerging RTCs. In addition, TfGM has announced definitive plans that will increase their rating to “medium” in two more categories. Mobility Partnership of Seattle is still a loose alliance and has achieved limited coordination among its members. We consider MP to be a proto-RTC (i.e., in its infancy stage), rather than a de facto RTC with functional results that distinguish the agencies.

For the most part, the five sole provider case studies (NJT, MTS, TfNSW,⁶ TransLink, and TriMet) are fully coordinated with respect to fares, marketing, and planning, a milestone that is easier to accomplish when there is only one agency involved. However, MTS only allows free transfers between rail and bus with the use of the electronic card, not a single ride paper ticket. Given the size of the state of New Jersey and its seven metropolitan statistical areas (MSAs), (some of which extend into other states), ticketing and fare transfer policies are a bit more complicated, but there is some unification. For example, (1) the NJ TRANSIT monthly or weekly rail pass (imprinted with a zone number) is valid on any light rail trip at no additional charge, and (2) a two-zone or greater NJT bus pass can be used on Hudson-Bergen Light Rail at no additional charge.

⁶ Opal card and contactless fares are calculated according to the distance traveled, from where one taps on to where one taps off. Each mode of transport is divided into distance-based fare bands (<https://transportnsw.info/tickets-opal/opal/fares-payments/how-opal-fares-are-calculated>).

Figure 3.1 Levels of Fare Unification/Coordination among the 11 Alliance Case Studies

		LOW	MED	BEST
	No fare coordination between agencies.	Some discounted transfers or some fare passes are accepted by all agencies in the region, but each agency still sells individual tickets for their own systems.	Day and monthly passes accepted by all, and /or Free transfers between rail and bus and between all buses.	Unified Fares: Single ticket /single fare regardless of mode or agency.
U.S. (5)	Seattle MP	Northwest Transit Alliance (3-day & 7-day pass accepted by all; each agency has single ride and day pass fares but only for their own agency).	RTA: Four pass types good on three agencies (4 hours, 1 day, 7 days, 31 days). SANDAG (only with use of Pronto card, not with cash).	Valley Metro
Foreign (6)		TfGM (2023)	Metrolinx: (free between GO and most buses, with Presto card, paper single ride, or paper day pass) (TfGM planned for 2025 for bus, tram, bus, and rail).	VVS RMV ATM ZVV

Figure 3.2 Levels of Marketing Coordination Among the 11 Alliance Case Studies

NONE	LOW	MEDIUM	BEST
No coordination: each has agency its own name, own website for sales, and customer information	Website exists to find fare information for all, but each agency still has its own website	Single website, “one stop shop” to buy tickets, find schedule, and fare information	Single unified name regardless of agency owner and single website
Seattle MP	SANDAG (provides overview of transit, but MTS and NCTD; each have separate websites and separate customer information)	NWOTA (“One-stop shop” for schedule and fare information for all agencies and started efforts for single brand) RTA Lists all agencies on its website with links to each provider’s website. One must go to other websites to find fare and specific route information. However, the RTA website does give an overview of the geographic areas serviced by the agencies	Valley Metro
Metrolinx - no transit information (all still have separate websites)	TfGM	(TfGM planned for 2025)	VVS RMV ATM ZVV

Figure 3.3 Levels of planning coordination among the 11 alliance case studies

	LOW	MEDIUM	BEST
Not involved	Minimum level: Timed transfers between major rail mode and buses in some/most cases	Short term (e.g., scheduling, coordinated transfers) Long-term Development (including design and construction management)	All aspects of short- and long-term planning
Seattle MP	SANDAG (local)	NWOTA Valley Metro RTA	SANDAG (long term regional)
	TfGM (2023)	Metrolinx TfGM (in 2025) plans to transfer short-term and long-term planning to TfGM (e.g., bus, light rail and possibly, heavy rail)	VVS RMV ATM ZVV

3.5 Non-Transit Agency Special District Case Studies

In addition to the regional transit coordinator case studies analyzed in this chapter, we studied a number of non-transit agencies and special districts in California to see if there were valuable lessons to be learned from their organizational structures. Indeed, there are several hundred special districts in California alone with responsibility for everything from transit, to parks, to mosquito abatement. It was believed that, perhaps, there were lessons to be learned from the governance structure and other characteristics of these special purpose regional agencies that could be applied to the development of successful RTCs.

The analysis of these other types of special districts is presented in Appendix C. However, after having sifted through dozens and having looked at 20 case studies in more detail, it became apparent that these various agencies (representing a variety of services), while regional in scope, did not have the role of coordinating other agencies within their region. Thus, they were structured differently and offered neither areas of insight nor application to our study purpose. In a few cases, while these agencies' services were indeed regional (e.g., advising local agencies within their area of jurisdiction), they did not have the legal authority to require that the local agencies coordinate on an ongoing basis, and/or there was no benefit to the consumer in doing so, as there is in the case of regional transit. In many cases, the regional agencies had exclusive responsibility for service delivery.

4. Agency Governance

In this phase of the research, we investigated agency governance as defined by the research question: How are the boards of RTCs structured, particularly those that are transit alliances? How are the board members selected, and how do they relate to the different cities and transit agencies being coordinated?

For each case study, we determined its top-level governance, by which we mean the presence or absence of a board, how the board is selected, and who has ultimate authority over the organization. Pursuant to this last issue, we identified how each agency is structured—i.e., its organization type, such as a department of a government jurisdiction, a state-owned or other government corporation, an independent authority, or a voluntary consortium. Then, for those with a board of directors, we determined the specific composition of its board and how the members of the board are selected. Other aspects of the board governance, such as selection of the chair and board committees, are described. Where present, we also describe unique aspects of several agencies' governance structures. Further analysis of board types is presented in Chapter 7 Findings and Discussion.

4.1 Organization Type

The first thing to determine when considering the governance of an agency is what type of agency it is—i.e., what was it created as, and who has the ultimate authority? The United States National Transit Database (NTD) lists over ten different types of transit agencies,⁷ while (Grant et al. 2011) determine there are five principal types in the U.S.: state transit agencies, general purpose transit authorities, special purpose regional transit authorities, municipal transit agencies, and joint powers authorities (JPA) (Grant et al. 2011).

RTCs are different in that, being regional in nature, they would not be under (or “owned by”) a single city. Thus, the only municipal-owned agencies in this study were members of the alliance but were not the RTC itself. In our case studies, we found no JPAs, but we did find corporations and special purpose transit districts. In this study, we have separated out corporations by the level of the government that owns them—that is to say, the state or a block of local governments. Thus, our 16 case studies fall into four principal types of organizational structure, as shown in Table 4.1. Most, but not all, organizations were established by state law (described in more detail in Chapter 5).

⁷ These types include: Area agency on aging; City, County or Local Government Unit or Department of Transportation; Independent Public Agency or Authority of Transit Service; Metropolitan Planning Organization (MPO), Council of Governments (COG) or Other Planning Agency; Other Publicly-Owned or Privately Chartered Corporation; Private-For-Profit Corporation; Private-Non-Profit Corporation; State Government Unit or Department of Transportation; Subsidiary Unit of a Transit Agency Reporting Separately; Tribe; University.

1. **Government-owned Corporation:** These corporations were initially formed as companies that were wholly owned by multiple political jurisdictions. The two German case studies, VVS and RMV, are in this category.
2. **State Government Agency / Department / Corporation:** These function as state agencies within the governance of the state, or in the case of Manchester, the Greater Manchester Combined Authority.⁸ Three of our case studies are legally defined as “corporations” but are owned solely by a state or province, so we list them here. Specifically, the Metrolinx Act of Toronto, Ontario technically calls Metrolinx a “corporation,”⁹ but it is also referred to as a “board-governed agency,” per Ontario Regulation 146/10 (Ontario Laws, 2006). This is also the case for other provincial agencies. NJT was established as a corporation as “an instrumentality of the State exercising public and essential governmental functions,” so it is a government agency. Even the legislation that established TfNSW called it a corporation, but this term is never used in other descriptions.
3. **Special Purpose Independent Authority:** Special Purpose Independent Authorities are created by state law and do not answer directly to any one political jurisdiction; in some cases, one or more mayors or other elected officials are on the board. This is a uniquely North American structure for transit, found in our case studies in Vancouver (British Columbia), California, Arizona, Oregon, and Michigan. Boards of this type vary quite a bit.
4. **Voluntary Alliance/Consortium:** Voluntary consortia of transit agencies exist in metropolitan areas. These can be informal (loose) or formal (strong) alliances. In our case studies, there are three voluntary alliances. Two are on the informal-loose side: NWOTA and MP (Seattle). While NWOTA has formal open public meetings (NWOTA), MP does not. In contrast, the ATM of Barcelona has a formal board structure and authority per established rules, and the autonomous region of Catalonia plays a significant role.

It should be noted that the very first *Verkehrsverbund*, Hamburg’s HVV, was also founded as a voluntary consortium in 1965, with many others following suit (Homburger & Vuchic 1972). Even in the early 1990s, RMV began as a voluntary organization of the largest cities (which are city-counties) and all counties after observing the success of HVV in Hamburg and VSS in Stuttgart over two decades. RMV eventually formed as an LLC corporation in 1995.

⁸ GMCA comprises ten boroughs (or counties) in the Manchester Metropolitan Area called Greater Manchester. GM has an elected mayor and a cabinet which is composed of elected representatives of the counties.

⁹ The Corporation is composed of the members of its board of directors.

4.2 Analysis

As shown in Table 4.1, there is no specific pattern to the governance structure with respect to its coordination model (what we call Type 1, 2 or 3). The eight Type 1 case study RTCs that coordinate an alliance of multiple agencies fall into one of four organizational structure categories: (1) RMV Frankfurt and VVS Stuttgart are LLC Corporations; (2) RTA of Southeast Michigan and SANDAG are independent authorities; (3) NWOTA Oregon, MP Seattle, and ATM Barcelona are voluntary alliances; and (4) ZVV of the Zurich canton is an agency of the state.

Of the three Type 2 RTC federations, which also have regional operational responsibilities, two are departments of the state (Metrolinx in Ontario, Canada and TfGM in Manchester, U.K.) and one is an independent authority (Valley Metro in Phoenix, U.S.). Of the Type 3 agencies (sole transit providers in a metropolitan area), three are independent authorities (MTS of San Diego, TriMet of Portland, and TransLink of Vancouver), and two are state entities (NJT Corporation and TfNSW). Another unique aspect of Type 2 organizations is how they came to be “regional coordinators.” In these three case studies, the agency itself was established by law to be the regional transit provider, but being the coordinator of all other entities (i.e., the RTC) came later. For example, although Valley Metro was established by Arizona state law as the regional bus and rail provider, it appears that their role to be the single brand and to create a single fare structure came about under voluntary intergovernmental agreements rather than being mandated by said state law (Fischer et al. 2021, TTI 2012).

The only commonality among the seven countries represented in this study is that the Special Purpose Independent Authority is only seen in North America (U.S. and Canada). Conversely, the state-run model is found in Europe, Canada, Australia, and the U.S. Some of these state-run agencies were established as corporations, both with and without a board of directors. Interestingly, the province of Ontario established Metrolinx both as a corporation and as a “board-governed provincial agency.” The decision to establish such agencies as “corporations,” rather than state departments, and the decision whether or not to have a board of directors are worthy of further research, especially given the fact that there are other U.S. state Departments of Transportation responsible for providing transit service (e.g., Connecticut, Rhode Island, Maryland, Florida, Pennsylvania, and Washington). These operate a wide variety of services, from ferries to trains (FTA, n.d.).

Table 4.1 Organization Type (Governance Structure) of the Case Studies

Type of Regional Transit Coordinator	Corporation LLC (wholly owned by multiple governments)	State Responsibility (a) (agency or corporation)	Independent Authority	Voluntary Alliance or Consortium
TYPE 1 - Alliance of Transit Agencies - Coordination only	RMV GmbH (Frankfurt) VVS GmbH (Stuttgart) (b)(f)	ZVV (Zurich) canton of Zurich	RTA SE Michigan SANDAG (MPO)	MP (Seattle) informal alliance NW Oregon Transit Alliance (informal rural alliance) ATM (Barcelona) formal alliance (c)
TYPE 2 - Transit Operator which also coordinates other transit agencies		Metrolinx (province of Ontario) (d) TfGM Greater Manchester) (e)	Valley Metro (Phoenix)	
TYPE 3 - Sole Transit Provider in the Metropolitan Area		New Jersey Transit Corporation (NJT) TfNSW (Sydney) (State of NSW)	MTS San Diego TriMet (Portland) (f) TransLink (Vancouver) (f)	
Total	2 (2 German)	5 (1 Swiss, 1 U.K., 1 Australian, 1 Canadian, 1 U.S.)	6 (5 U.S., 1 Canadian)	3 (2 U.S., 1 Spanish)

(a) In our case studies, this level of government (just below the national level) is referred to as a “state” in the U.S. and Australia, “province” in Canada, “canton” in Switzerland, and “combined authority” in Manchester U.K.

(b) VVS is a public-private company (PPP). Source: Måns Lönnroth 2019b.

(c) ATM is a voluntary public consortium. The shareholders are the Catalonia government, city of Barcelona and AMB. (email from Luis Alegre 6/7/23) and with a board of directors.

(d) Metrolinx is designated as a board-governed agency of Ontario. It is not organizationally part of the Ministry, but it is considered to be within the Government. (Source MOU).

(e) The Combined Authority of Greater Manchester (GMCA) comprises ten metropolitan area jurisdictions called districts, or boroughs.

(f) Even though there is regional governance in Stuttgart, Portland and Vancouver, these regional entities are separate from and do not have jurisdiction over the RTC, nor do they have responsibility for or control of transit functions, with the exception of VRS, which operates S-BAHN regional trains.

4.3 Board Role and Authority

Three of the case studies had no board of directors. Two of these are volunteer alliances (NWOTA and MP), and the third is an agency of the state of New South Wales. While ATM is also a self-described voluntary consortium, it does have a board.

Thirteen of the sixteen case studies are overseen by a board of directors. In most of our cases, the board is the legal governing body of the organization, exercising its powers by resolution or ordinance, and there is no “higher authority.” However, this is not the case for our two Canadian case studies, as described below. Also, the governor of the state of New Jersey can override board actions by vetoing board meeting minutes. TfGM is also unique in that, being an agency of the metropolitan governance, the board is the metropolitan government (called GMCA), also discussed further below.

4.3.1 Board Committees

Boards are often given the powers to set up board committees, and/or specific board committees are designated in the authorizing legislation. However, in at least one case, TriMet (Portland), the board’s website specifically states that the committees meet merely to review issues, and “do not make decisions and do not make recommendations to the board as a committee” (TriMet, 2022).

Another common practice is to have one or more citizen/passenger advisory committees. Examples include the Passenger Advisory Board (*Fahrgastbeirat*) of VVS, the Citizens Advisory Committee and Public Transportation Provider Advisory Council of RTA of SE Michigan, and the Customer Experience Advisory Committee of Metrolinx.

4.3.2 Chair

While most boards select their own chair, sometimes the authorizing legislation establishes the chair as an ex officio position (e.g., the mayor of Stuttgart for VVS and the Commissioner of Transportation for NJT). One case study, RTA-SEM, has a designated nonvoting chair appointed by the governor of Michigan.

4.3.3 Unique Governance Aspect

RTCs with two boards or other unique governance circumstances are described below.

TransLink (Vancouver) – Two Boards

TransLink is governed by two boards: (1) TransLink Board of Directors and (2) Mayors’ Council.

- The TransLink Board of Directors is TransLink's legal governing body that guides the day-to-day business of the organization. It appoints the CEO of TransLink, as well as its own chair and vice chair.
- The Mayors' Council approves transportation plans and long-term transportation strategies. The Mayors' Council also appoints the citizens that serve on the board of directors, creating a level of authority over it. The citizens are selected from a candidate list appointed by an independent screening panel, whose composition is set by BC law.
- The screening panel recruits candidates to replace the TransLink directors when their terms end then provides a shortlist of candidates to the Mayors' Council by September 15 of each year. Per law, each of the following entities appoints one member to the screening panel:
 - Greater Vancouver Gateway Society
 - Organization of Chartered Professional Accountants of British Columbia
 - Mayors' Council on Regional Transportation
 - Minister Responsible for TransLink
 - Greater Vancouver Board of Trade

TransLink is one of the two agencies that compensates its board of directors with a large stipend: the chair receives a CA\$100,000 flat fee, and each director receives a director annual retainer of CA\$25,000.

Valley Metro (Phoenix) - Two Boards

Valley Metro is governed by two boards of directors.

- The Regional Public Transportation Authority (RPTA) board sets regional policy direction for all modes of transit except light rail. It currently consists of 19 members representing 18 cities and Maricopa County. Any city in Maricopa County, the service area can opt to serve on the board.
- The Valley Metro Rail Board sets the policy direction for the light rail/high-capacity transit program and provides general oversight of the agency and its responsibilities. Only cities with light rail can serve on this board. These are Chandler, Mesa, Phoenix, and Tempe.

The VM RPTA Board is considered the board of the regional transit coordinating agency. In 2012, the RPTA and Valley Metro boards integrated the agency staff to ensure a coordinated

approach to transit. There is a Regional Marketing Committee that manages branding and marketing and a Regional Fare Committee that oversees the fare structure.

Transport for NSW (TfNSW) - State Agency

TfNSW is an agency of the state of New South Wales, technically established as a corporation.¹⁰ TfNSW does not have a board of directors. The affairs of TfNSW are “managed and controlled by the Transport Secretary of NSW. As a state agency, it operates under a variety of state laws.”¹¹

TfNSW has five operational divisions of which one is called Greater Sydney. Its chief is the Deputy Secretary Greater Sydney, responsible for the Sydney Trains, Sydney Metro, and the buses under the name “State Transit Authority.” The division called “Regional and Outer Metropolitan” is responsible for regional trains, known as “NSW trains.” TfNSW is also responsible for contracting passenger ferry services throughout the state. The actual ferry services are provided by both state government and privately-owned operators.¹²

In addition to TfNSW, in 2020, a separate state-owned company, Transport Asset Holding Entity (TAHE),¹³ was formed as a holding company to be the owner of the extensive railway networks across the state of NSW, including tracks, trains, stations, and significant land holdings around stations including retail spaces. TAHE was given a specific role in the NSW rail system to be the strategic asset manager with a focus on holding, establishing, financing, acquiring, and developing transport assets. It does have a board that sets overall strategy and direction, as well as a board charter,¹⁴ CEO and staff, and it publishes annual reports.¹⁵ Powers, functions, responsibilities, and membership details of the board are outlined in the board charter.

Metrolinx (Toronto) - State Agency

Since Metrolinx is a board-governed agency of the province of Ontario, the board of directors is accountable, through the chair, to the Minister of Transportation for the “oversight and governance of the agency.” The roles assigned to the board, the board chair, the minister, and the deputy minister are complex; thus, they are outlined in a separate MOU and in other Government directives, including those that apply to all board-governed agencies of the province (Metrolinx, 2020). For example, the minister, not the board, appoints the CEO of Metrolinx. Technically the “minister recommends to the lieutenant governor in council of the province” of Ontario; this means that the minister selects the potential directors, and then they are formally approved by the cabinet

¹⁰ This Act constituted a corporation with the corporate name of Transport for NSW.

¹¹ See <https://www.transport.nsw.gov.au/about-us/our-mandate/legislation>.

¹² See <https://www.transport.nsw.gov.au/about-us/who-we-are/our-organisation>.

¹³ See <https://www.tahensw.com.au>.

¹⁴ See <https://tahe-static.dev.cds.transport.nsw.gov.au/assets/TAHEBoardCharter.pdf>.

¹⁵ See <https://www.tahensw.com.au/publications>.

of the province of Ontario.¹⁶ The chair of the board of directors is also appointed by the “lieutenant governor in council on the recommendation of the minister of transportation.”

The board does not approve plans or the budget but rather submits the annual budget and business plan to the minister for his/her approval. However, the board does “establish the goals, objectives, and strategic directions for the agency within its mandate.”

Metrolinx is one of the two agencies of our case studies that compensates its board directors significantly more than mere expenses (approximately CA\$5,000 depending on how many meetings and committees they attend).¹⁷ There are ten board committees and, therefore, there are up to 70 meetings per year.¹⁸ Even though they only receive a per diem allowance, directors have been compensated between CA\$3,600 and CA\$11,800.¹⁹ Furthermore, the chair of the board has a number of explicit responsibilities (outlined in the MOU) and an annual remuneration of CA\$146,000.²⁰

TfGM (State Agency) plus a Transport Committee

Greater Manchester (GM), a metropolitan area government encompassing ten boroughs, is considered a de facto “state” for our purposes, and its “parliament” is called the GM Combined Authority (GMCA). TfGM is an agency of the government of GMCA; thus, the elected body of the GMCA is the governing board. The GMCA is composed of one local elected official from each of the ten boroughs in Greater Manchester, plus the elected mayor of GMCA.

The GMCA executive board is responsible for operating TfGM, largely acting in an oversight (organizational) role. Until 2023, it delegated some policy powers to a 22-member TfGM transport committee; however, the combined authority and the ten Greater Manchester boroughs have delegated or referred most of their transport governance functions to a joint committee, the Bee Network Committee. (This is because, at the time of the writing of this report, the roles and structure of the oversight of transit, as well as the responsibility for the provision of regional bus and rail, is in transition from private companies to being under the purview of TfGM.)

¹⁶ From a practical perspective, you can read ‘lieutenant governor in council’ as the Cabinet. In practice, the Minister is responsible for the recommendation of directors. These individuals are then formally appointed by the Cabinet. The role of the lieutenant governor themselves is largely, but not entirely, ceremonial” (Personal communication. Tharshika Kalaiarasan, Metrolinx Customer Relations, March 27, 2023). These appointments are made publicly available by the government. In this instance it is a reappointment of an existing director. Administratively, appointments made by the government are also published by the Public Appointments Secretariat.

¹⁷ See <https://www.ontario.ca/page/agencies-and-appointments-directive#section-6>.

¹⁸ Personal communication. Tharshika Kalaiarasan, Metrolinx Customer Relations, March 27, 2023.

¹⁹ “Per diems are paid on formal business which may include attendance at, or provision of training, attendance at meetings (Board and Committees), preparation time, etc. Per day refers to a calendar day. Only one per diem payment can be made to an appointee for a calendar day. As outlined in the Agencies and Appointments Directive, “Per diem is to be interpreted as the amount payable for work periods over three hours; when less than three hours of work is involved, one-half of the established per diem rate must be paid.” Personal communication Metrolinx May 4, 2023.

²⁰ See <https://www.ontario.ca/orders-in-council/oc-10192018>.

Bee Network Committee Composition

Each local authority appoints one of its executive members with responsibility for transport matters to sit alongside the mayor, a member of the GMCA, and up to four other councilors appointed by the mayor (e.g., two Tory representatives, one Labor representative, and one Liberal Democrat representative) (Rivasplata interview with Fairclough, 2023). While the Bee Network Committee is in the process of assuming responsibilities historically granted to the GM Transport Committee, the current regulation delegates the following transport functions to the GM Transport Committee, “subject to the GM Transport Committee exercising these functions in accordance with any transport policies of the GMCA and the mayor, the local transport plan and the agreed transport budget and borrowing limits” (TfGM, 2021). This is without prejudice to the GMCA’s or mayor’s right to discharge such functions:

- Monitoring and overseeing the activities and performance of TfGM
- Ensuring that the TfGM secures the provision of appropriate public passenger transport services pursuant to Section 9A(3) of the Transport Act 1968
- Considering what local bus information should be made available and the way in which it should be made available
- Ensuring that the TfGM implements those actions delegated to it for promoting the economic, social, and environmental well-being of Greater Manchester and its residents
- Monitoring performance against the Local Transport Plan and other transport policies of the mayor and the GMCA
- Formulating, developing, and monitoring procedures for public consultation on the GMCA’s and the mayor’s transport policies
- Promoting Greater Manchester’s transport and travel interests as set by the GMCA and the mayor
- Determining the operation, performance, contract management, and development of tendered bus services, bus stations/stops, and passenger transport services
- Monitoring the operation and performance of Metrolink and bus and local rail services and initiating appropriate action, including recommendations to the GMCA and/or the mayor

The Bee Network Committee has four key responsibilities (GMCA, 2023):

- Decision-making over significant operational matters across the transport network (including the ability to draw down funding for investment)

- Monitoring the performance and financial stability of the network
- Developing policy to support the local transport plan
- Facilitating coordination between the ten local authorities around highway maintenance and infrastructure delivery

New Jersey Transit - State Agency

The New Jersey statute that created New Jersey Transit Corporation intended that it function as an “instrumentality of the state exercising essential governmental functions” (New Jersey Legislature, 1979). Although it technically allocates NJT within the Department of Transportation, the law further states “notwithstanding that allocation, the corporation shall be independent of any supervision or control by the department or by anybody or officer thereof.” It gives the governance of the organization to the board of directors, but the governor can override board actions by vetoing board meeting minutes. In addition, there are two non-voting members who are recommended by labor organizations representing the plurality of employees. “The agency is structured to encourage broad public participation in the formation of transit policy for the state.”

4.3.4 Board Composition

How the boards of the case studies are composed and specifically how their members were selected was then determined. The number of voting board members ranged from seven to 29. The smallest was ZVV, while VVS had the most at 29. Occasionally, nonvoting board members were also specified by the founding regulations.

Board members fall into two basic categories:

1. **Ex officio members:** individuals that hold another office or position of importance or relevance and are also part of a body, such as a board, committee, or council. In our case studies, it is due to their official position as either an elected politician, (mayor, county leader, or member of the city or the county council), or the head of a city, state department, or other senior-staff position. In a few European cases, the staff could be a senior executive from the transit department or the transit company, but it must be pointed out that, in most cases, such transit companies are owned by the city, county, or state.²¹

2. **Appointed citizens:** chosen by one or more government officials or political bodies. Sometimes, but not always, legislation or bylaws specify the range of expertise that the citizen board members should have. In addition, sometimes the regulations exclude certain categories of positions from serving.

²¹ VVS Board has representation of the tendered private companies, which typically serve the hinterland.

Of the 13 case studies with boards, eight were only composed of ex officio members (in other words, “100 percent ex officio”), five of which were exclusively composed of elected officials, (RMV, VM, TfGM, MTS, and SANDAG), while the boards of three case studies were a mix of senior staff and elected officials (VVS, ATM, and ZVV). Three boards were only composed of citizen appointees (100 percent citizen appointees), and two boards (NJT and TransLink) were a mix of mostly citizens but some ex officio members. This is summarized below and with more detail in Table 4.2.

- Eight boards: 100 percent ex officio
 - 5: Elected officials only
 - 3: Mix of elected officials and staff
- Two boards: mix of citizens and ex officio members
- Three boards: appointed citizens only

A list of the current members of the boards of directors of the case studies is presented in Appendix D. This appendix also identifies, where applicable, the specific ex officio position the member occupies, and for citizen appointees, their current occupation and/or area of expertise.

Table 4.2 Case Studies Board Composition Overview: Citizen vs Ex Officio Boards

Board Composition	Number case studies	Alliances (Type 1 or 2)	Sole Provider (Type 3)
Appointed Citizens Only	3	RTA Southeast Mich, Metrolinx	TriMet
Mix of Appointed Citizens and Ex Officio	1		NJT (8 citizens + 3 ex officio)
Mix of Appointed Citizens and optional Ex Officio	1		TransLink (9 citizens plus 2 ex officio at their option)
Ex Officio	8		
● Only elected officials	5	Valley Metro RMV TfGM SANDAG	MTS (San Diego)
● Mix of elected official and senior staff	3	ATM VVS ZVV	

Note: These agencies have no board of directors: NWOTA, MP, TfNSW.

4.3.5 Boards with Ex Officio Members

Eight boards were composed of 100 percent ex officio members, while two were predominantly composed of citizens with two or three ex officio positions (e.g., NJT has three ex officio members and eight citizen appointees). Even among the eight that were solely ex officio members, there was a wide variety in the composition of the boards since the members could be either:

- Elected officials of cities, counties, regional and/or state governments
- Staff
 - From one or more of these levels of government
 - Officials from transit companies owned by these levels of government
 - From transit companies that receive tenders

The criteria (or ex officio position) for the members of ex officio boards are presented in Table 4.3. New Jersey Transit is also included in this table, as it has three permanent ex officio members, all of whom are executive level staff, plus two nonvoting ex officio members.

4.3.6 Ex Officio Boards and Elected Officials

Eight boards had some or all ex officio positions for elected representatives such as mayors or members of city or county councils. The government levels represented on the ex officio boards varied, even in the same country. Five boards' ex officio positions were all elected, and three were a mix of elected positions and staff (ATM, VVS, and ZVV).

Of the five boards whose ex officio positions were only for elected officials (Valley Metro, MTS, SANDAG, TfGM and RMV), the composition was relatively straightforward, composed of one elected representative from each of the service area cities (Valley Metro, MTS, and SANDAG), or boroughs (TfGM) and, in the case of RMV, both the large cities and counties. Given that TfGM is an agency of the metropolitan government, the TfGM board is the regional governmental “parliament”—i.e., the GMCA. (As described previously, this authority is composed of local elected officials from the ten boroughs in Greater Manchester.)

Three boards' ex officio positions were a mix of elected officials and staff, two of which were roughly half staff and half elected officials (ATM and VVS). For the VVS (and for RMV) board, elected officials from large cities and the counties were the predominant government entity, since they are the party responsible for providing the local transit. For ATM Barcelona, however, the state of Catalonia had more seats than any other government entity (nine of 18), reflecting the fact that Catalonia provides most of the funding, and they tender the bus service in a large part of the metropolitan area outside of the city of Barcelona. The composition of the board of ZVV is

different, with two elected officials from the state (canton), two from the large cities, and three representing smaller municipalities (in addition to two ex officio positions for staff).

As can be seen in Table 4.3, in Germany and Greater Manchester, the ex officio board members come mainly from the county level of government, not the city level; only the largest cities in the region have a position on the board. This contrasts with members of U.S. ex officio boards (VM, MTS, and SANDAG) which were almost 100 percent city-elected officials—i.e., all the cities in the service area regardless of size. (This is common board composition for California Special Transit Districts.)

Given the difference in the role of cities, counties, and states in providing transit, Table 4.3 distinguishes between the ex officio board members from government jurisdictions as follows:

- The board member is from a jurisdiction which owns/operates transit services. This would be all major cities in Germany, Spain, and Switzerland as well as the states (e.g., Hesse and Catalonia) and some counties. U.S. examples among our case studies are the cities of Phoenix and Glendale (within Valley Metro) and the state of New Jersey. (Other Californian examples of government jurisdictions, assuming the responsibility of providing transit, are the city and county of San Francisco, the city of Fresno, and the county of Sonoma).
- The board member is from a jurisdiction that receives transit service from another entity/authority but does not transit itself. These ex officio members are mostly on boards in North America. For example, among our case studies, Valley Metro has 14 ex officio members from cities in its service area that have no transit responsibilities and four from cities that do. In the case of the MTS Board, none of the 15 cities within its service area (including the city of San Diego) has any responsibility for transit (discussed further in Chapter 7).

4.3.7 Boards with Ex Officio Staff Positions

Three boards have both elected officials and staff positions on the board. These three cases were all European, and often the staff was a senior of the transit department or transit company. ATM and VVS have the most staff (11 of 18 and 16 of 29 members, respectively, while for ZVV, two of nine members were staff, while seven were elected officials). A fourth board, New Jersey Transit Board, has both ex officio staff and citizens; the three ex officio members are all senior state employees. The most salient aspects of these boards are described below.

VVS: The board of VVS, although in Germany, is different from RMV. For one, its service area is monocentric with one large city, Stuttgart, and five counties. While VVS is also a corporation, it does not call its board “shareholders,” as RMV does. The VVS board composition was one of the most complicated of our case studies, as it has roughly half senior staff and half political

representatives. The staff are representatives of the national rail-DB Regio (4), the state of Hesse (2), private-tendered firms (3), and six from SSB AG (a corporation which is wholly owned by the city of Stuttgart). Interestingly, three of the six SSB representatives represent labor. See Table 4.3 and Appendix D.)

ZVV: Switzerland, unlike Germany, does not have a political level between the state (canton) and the municipalities. Therefore, to fill this void, the canton of Zurich is divided into eight market areas: six districts plus the cities of Zurich and Winterthur. ZVV is responsible for tendering the PT service to the six districts. The canton of Zurich provides the transit in one district, and three private-tendered firms provide the transit in the remaining five. Due to this situation, ZVV has representatives on their board from municipalities that do not provide transit. The governing council of the canton of Zurich officially elects the suggested five representatives of the cities and municipalities. The Swiss Office of Transport and Swiss Federal Railways (SBB) appoint their representatives on their own. All the members of the council have one equal vote. There can be no abstaining during a vote; in case of a tie, the president of the Transport Council casts the deciding vote. The members of the transport council meet eight times a year. They receive a small compensation for their attendance and time for preparation.²²

ATM: This entity is an unusual case in that it calls itself a voluntary organization, yet half of the board is composed of representatives of the state (i.e., the Autonomous Region of Catalonia). The remaining board members are elected officials from the city of Barcelona (2), senior staff from the city of Barcelona (2) and elected representatives of the suburban cities in the metropolitan area of Barcelona (5).

NJT: NJT has three ex officio members in addition to the citizen members described in the next section. These are the State Commissioner of Transportation, the State Treasurer, and a state official appointed by the governor of New Jersey. In addition, there are two nonvoting representatives of labor recommended by labor organizations.

²² Lucia Frei, ZVV, personal communication. January 25, 2023.

Table 4.3 Members of Ex Officio Boards

	U.S.				Foreign (Spain, Germany, U.K., Switz.)				
	Valley Metro	MTS	SAN DAG	NJT*	ATM	RMV	VVS	ZZV (f)	TfGM
RTC Coordinator Type	2	3	1	3	1	1	1	1	2
Government Level Transit (public sector provision)									
Elected Official: City	4				7	11	4	2 (g)	
Elected Official: County						15	5		10
Elected Official: regional government							5		1
Elected Official: State (a)					1	1		2	
Senior Staff: State (a)				3	7		2		
Federal Office of Transport								1	
Senior Staff: National Railway					1		4 (b, d)	1	
Senior Staff: Major City					2				
Senior Staff: City-owned company							6 (c)		
Government level does not “do” transit									

	U.S.				Foreign (Spain, Germany, U.K., Switz.)				
	Valley Metro	MTS	SAN DAG	NJT*	ATM	RMV	VVS	ZZV (f)	TfGM
RTC Coordinator Type	2	3	1	3	1	1	1	1	2
Elected Official: City**	14	14	19					3	
Elected Official: County**	1	1	2						
Non-Government Representatives of Private (tendered) Transit Operators									
Private (tendered) transit operators							3		
TOTAL number of board members	19	15	21	11*	18	27	29	9	11
Non-voting members									
Representing labor				2					
Spain					2				
<p>* There are also eight citizen appointees on the NJT Corporation Board.</p> <p>**Some cities may have more than one representative, so this does not represent the number of cities/counties.</p> <p>(a) canton of Zurich (ZVV), Autonomous Region of Catalonia (ATM), Land of Hesse (RMV), Land of Baden Wurttemberg (VVS).</p> <p>(b) Includes one representative of employees.</p> <p>(c) Includes three representatives of labor/employees.</p> <p>(d) DB regio, (a subsidiary of Deutsche Bahn, a state-(nation)-owned company) runs the S Bahn in the Stuttgart metropolitan area.</p> <p>(e) The governing council of the canton of Zurich officially elects the suggested representatives that represent the state/canton, and the smaller municipalities.</p> <p>(f) The federal Office of Transport and Swiss national rail (SBB) appoint their representatives on their own. city of Winterthur and Zurich appoint their representative approved by the canton.</p>									

4.3.8 *Appointed Citizen Boards*

Five agency boards are largely composed of citizen appointees. All of these are in North America: RTA, NJT, and TriMet in the U.S. and TransLink and Metrolinx in Canada. Typically, they have seven to nine citizen members, but Metrolinx has “no more than 15.” Of these five boards, only New Jersey Transit’s was set up as a guaranteed mixed board with eight citizens and three ex officio members (all senior state employees). TransLink allows for two Mayors’ Council representatives (i.e., mayors) at their option, but mayors do not always serve.

A variety of issues unique to citizen boards was investigated, and they are summarized in Table 4.4.

Two boards have appointment methods that ensure equitable geographical representation for the whole metropolitan area (RTA Southeast Michigan and TriMet).

Two boards have expertise requirements: NJT (summarized in Table 4.5) and TransLink. However, most do not specify who should be appointed. Conversely, some laws have explicitly listed who may not be appointed (e.g., Metrolink Act of Ontario states: “the following are not eligible to be a director”). Boards may consist of a combination of the following:

1. A Member of Parliament
2. A Member of the Assembly
3. A Member of a municipal council in Ontario
4. A person appointed under Part III of the Public Service of Ontario Act, 2006
5. A person who is employed by or in a board, commission, or agency of the provincial government, excluding persons appointed to such board, commission, or agency by the Lieutenant Governor in Council and excluding the chief executive officer of the Corporation
6. An employee of the federal government or of a municipality in Ontario or of a board, commission, or agency of the federal government or of a municipality in Ontario (Metrolinx Act. 2009, c. 14, s. 10 (1))

Three of the five agencies, all of which are in the U.S., do not provide remuneration to the citizens for serving on the board, except to reimburse expenses. The other two are Canadian agencies, which provide a substantial remuneration. For example, TransLink directors receive an annual stipend of CA\$25,000, while for Metrolinx directors, remuneration is dependent on the number of board and committee meetings attended. It has ranged from CA\$3,500 to CA\$11,800. See Appendix D (Metrolinx, 2022). In addition, the chair is remunerated at a rate set by the Lieutenant

Governor in Council. The Memorandum of Understanding outlines the chair's duties and responsibilities, and he/she is remunerated at a higher rate than other directors; the annual remuneration is CA\$146,000.²³ This is the norm for board-governed agencies in Ontario.²⁴

²³ See <https://www.ontario.ca/orders-in-council/oc-10192018>.

²⁴ The Chair is remunerated at a rate set by the Lieutenant Governor in Council and more information can be found by clicking here: <https://www.ontario.ca/orders-in-council/oc-10192018>.

Table 4.4 Appointed Citizen Boards

	Number of Citizen Appointees	Appointed by whom	Geog. constraint	Experience/ expertise constraint	Selection committee	Exclusions from being on board	Compensation	Mixed Board (i.e., ex-officio members also on board)
RTA Southeast Michigan, U.S.	9	Each county appoints 2 (a) and 1 is appointed by the mayor of Detroit	yes, 1 for city of Detroit and 2 from each of the 4 counties	Vague (b)	No, not currently but each county has their own process	Excluded: elected officials & staff of the counties, the city of Detroit, any transit provider.	Expenses only	No
New Jersey Transit Corporation, U.S.	8	4 by governor of New Jersey* and 4 on recommendation of others (*see Table 4.5)	None	Yes (See Table 4.5)	4 are technically nominated by others, each with their own process (see Table 4.5)	Nothing explicit	Actual expenses	Yes (3 ex officio)
TriMet (Portland Oregon U.S.)	7	Governor of Oregon	1 from each of 7 geographic areas	One member “regularly uses the services provided by a mass transit system.” (c)	Vague (c)	Nothing explicit	Volunteers	No

TransLink (Vancouver, BC Canada)	7 + 2 optional	Mayors Council (+2 members appointed by the province at its option)	None	As a group, they should hold the skills & experiences listed in the articles; each director in at least 2 domains (d)	From a candidate list presented by the Screening Panel (e)	The appointed members do not represent any other interests or constituencies.	Yes, Chair CA\$100,000 flat fee; Each Director Annual Retainer: CA\$25,000 (f)	Optional: 2 from Mayors' Council at their option
Metrolinx (Toronto Ontario Canada)	Up to 15	Minister of Transport & approved by the Cabinet of the province of Ontario (g)	None	Vague ("expertise in a variety of industries") (h)	Vague; board communicates its needs to the Minister (i)	Not eligible: elected officials and staff of any government level	Yes \$CA ~5000 annually. Chairs receive \$150k, provincial reimbursement schedule (nominal amount per meeting (j)	No

- (a) For three counties, County Executive (the elected "mayor" of the County) recommends, and the county board approves; for the fourth county, the county board of commissioners appoints.
- (b) "shall have substantial business, financial, or professional experience relevant to the operation of a corporation or public transportation system."
- (c) Before making an appointment under this section, the governor of Oregon shall solicit recommendations of qualified individuals for the position from one or more local business and civic groups.
- (d) The Mayors' Council on regional transportation must, "endeavor to select appointees in such a manner that the appointed directors of the authority are qualified individuals who, as a group, hold all of the skills, and all of the experience, identified in the current skills and experience profile set out in the articles of the authority." Article lists 20 domains: including corporate leadership • Strategic planning • Policy experience in Transportation • Transportation operations • Capital project oversight • Real estate development • Community engagement and leadership
Source: https://www.translink.ca/-/media/translink/documents/about-translink/governance-and-board/board-of-directors/manuals-and-articles/board_competencies_guidelines_scbcta.pdf
- (e) Per law, five organizations nominate a person to serve on the screening panel. See text.
- (f) Remuneration specified in the Articles of the South Coast British Columbia Transportation Authority; found here <https://www.translink.ca/-/media/translink/documents/about-translink/governance-and-board/board-of-directors/manuals-and-articles/scbcta-articles-june-22-2023-final.pdf>.
- (g) "The board shall be composed of not more than 15 persons appointed by Lt Governor in Council on recommendation of the Minister".
- (h) "The board, as a governance best practice, maintains a skills matrix to help inform the needs of the board concerning skill sets and expertise.
- (i) The board communicates through the board chair to the minister as to its perspectives on its needs. The board is ultimately accountable, through the board chair to the minister. Thus, the minister is ultimately accountable and therefore does have significant discretion concerning appointments." Personal communication, from Metrolinx. 3/27/23.
- (j) "The Corporation shall pay remuneration and expenses to the directors as is determined by the Lieutenant Governor in Council." Metrolinx law. Actual remuneration can be found at these links: <https://www.ontario.ca/orders-in-council/oc-10192018>; <https://www.metrolinx.com/en/about-us/annual-reports>.

Table 4.5 Background /Expertise of Members of the New Jersey Transit Board

Eight public members who shall be appointed by the Governor as follows:			
	Motor bus rider (a)	Rail passenger rider (b)	Professional background in transportation (c)
Appointed by the Governor with the advice and consent of the Senate			
No other recommendation needed:	1	1	2
Appointed by the Governor upon the Recommendation of the following organizations and with the advice and consent of the Senate			
New Jersey members of the Delaware Valley Regional Planning Commission	1 (must be either a, b, or c)		
North Jersey Transportation Planning Authority	1 (must be either a, b, or c)		
Appointed by the Governor upon the Recommendation of the following persons:			
President of the Senate	na	na	1
Speaker of the General Assembly	na	na	1
(a) "experience as a regular corporation motorbus regular route service rider" includes any rider who is a regular corporation motorbus regular route service rider at the time of the member's appointment or reappointment and any rider who has been a regular corporation motorbus regular route service rider in three of the five years preceding the member's appointment or reappointment.			
(b) "experience as a regular corporation rail passenger service or light rail service rider" includes any rider who is a regular corporation rail passenger service or light rail service rider at the time of the member's appointment or reappointment and any rider who has been a regular corporation rail passenger service or light rail service rider in three of the five years preceding the member's appointment or reappointment.			
(c) "professional background in passenger rail service, freight rail management, transportation capital planning, transportation and public transportation capital construction, federal transportation policy, state transportation policy, real estate investment or development, human resources management, communication, or transportation capital finance"			
Three Ex Officio Members (d)			
<ol style="list-style-type: none"> 1. The Commissioner of Transportation 2. The State Treasurer, 3. Another member of the Executive Branch to be selected by the governor 			
(d) Each ex officio member of the board may designate two employees of the ex officio member's department or agency, one of whom may represent the ex officio member at meetings of the board. A designee may lawfully vote and otherwise act on behalf of the member for whom the person constitutes the designee. Any such designation shall be in writing delivered to the board and shall continue in effect until revoked or amended by writing delivered to the board.			
Source: New Jersey Public Transportation Act of 1979. https://repo.njstatelib.org/handle/10929.1/6611 and NJ Rev Stat § 27:25 (2022)			

4.4 Summary

There are two important considerations in the formation of an RTC. The first is what type of organizational structure it has. This can also be reframed as the question: Who is its ultimate authority? What is its relationship to the governmental jurisdictions in the area? We found four principal types: (1) an agency/ department of a governmental jurisdiction, (2) a corporation owned by one or more governmental jurisdictions, (3) an independent authority, and (4) a voluntary consortium of transit agencies. The second consideration is, for those who have a board of directors, the board composition and how to select the board members. The principal types of boards are: (1) ex officio, (2) citizen appointees, and (3) a combination of both. Of those RTCs whose boards are comprised of ex officio positions, these positions are comprised of either elected officials or high-level staff.

Three of the 16 case studies have no board of directors: the two USA voluntary alliances and TfNSW, being an agency of the state of NSW. However other state-run RTCs do have boards, including NJT, Metrolinx, and TfGM.

A noteworthy finding is that citizen boards are only found in North America, while in Europe, citizen boards are unknown. Also rare in Europe is the presence on the board of elected officials from the suburban cities or small towns. Instead, boards from European RTCs are comprised of ex officio positions—politicians and/or high-level staff—all from large cities or counties that provide transit. Rarely are they from small towns and suburbs, since such jurisdictions do not provide transit, as transit is provided by the county level or higher. (U.S. examples of jurisdictions that are responsible for providing the local transit within their borders are the city and county of San Francisco, the county of Sonoma, California, and from our case studies, the cities of Detroit, Michigan and Phoenix, Arizona. This may be the reason the U.S. agencies so often turn to citizen boards: in U.S. metropolitan areas, cities and counties that run transit are the exception not the rule, at least in California.)

With respect to other organizational aspects and authority, again, there is no single structure or pattern. Some agencies have two boards (TransLink and Valley Metro). For some RTCs, veto power is given to a higher authority (NJT), and some boards are technically only advising a higher authority (Metrolinx). Some boards rely heavily on one or more board subcommittees or advisory committees, and some do not. How and why these boards were established in these ways is beyond the scope of this study.

Chapter 7 presents additional analysis on whether there is a correlation between board type and type of coordination model (i.e., Type 1- alliance, Type 2-regional transit operator and alliance, and Type 3-sole provider) or between board type and agency type. Chapter 7 also provides additional analysis of board composition with respect to professional expertise and whether board members represent agencies with transit responsibilities.

5. Basis of Authority

In this chapter, we seek to understand the effective role of RTCs in the ongoing oversight and/or coordination of transit services in a single metropolitan area, whether among individual transit agencies or (in the case of Type 3 agencies) divisions of a single agency. It is important to understand how and the extent to which coordinative powers have been vested in coordinating agencies. That is, we need to explore how each RTC has (or has not) received authority to be an RTC, ranging from a state or national law to a voluntary consortium agreement.

In addition, we document variations in authority among case studies, such as the extent of fare setting authority or responsibility for regionwide information dissemination. What are the principal elements that RTCs need in their development that will provide them with the mandate and required tools to be effective (e.g., ensure ongoing coordination of schedules and fares)?

To answer these questions, the research team performed a combination of literature and internet (web) searches and, as needed, interviews with key RTC and transit agency professionals to collect and evaluate information related to the legislation, contracts, and agreements that established each case study RTC. The project team investigated the basis of each case study RTC's authority (e.g., legislation, contract, formal agreements, etc.) focusing on the following:

- The type of agreement or law was used to establish and enable the RTC
- The scope of their enabling legislation (as judged by the authors as either “narrow,” “medium,” or “broad”)
- Whether a funding source was included with the enabling legislation (if the data are available)

5.1 Summary of Findings

The following section provides information on the manner in which authority to coordinate transit in the entire metropolitan area was historically vested in each of the RTCs studied. For each RTC, the authors collected information on either legislation that directly mandated the creation of a regional entity to coordinate transit service or legislation that further encouraged and/or accommodated cooperation among transit operators (see Table 5-1). In each case, the authors also explored the scope of authority granted to each RTC.

Table 5.1 Enabling Legislation Establishing the Case Study RTCs

TYPE 1 - Federation of Transit Agencies implementing the coordination of all transit in the region		
NW Oregon Transit Alliance (NWOTA), Oregon, U.S.	None (Voluntary)	None, but they adopted an Intergovernmental agreement
Mobility Partnership, Seattle, U.S.	State Law Requiring Reporting of Coordinative Activities (Coordination is Voluntary)	RCW 35.58.2796
Zürcher Verkehrsverbund, Zurich, Switzerland	Federal Law	The Public Transport Law of 6 March 1988 (LS 740.1)
Autoritat del Transport Metropolitana, Barcelona, Spain	Catalonia Law approved voluntary Regional Consortium	Decree 48/1997, of 18 February
Rhein-Main Verkehrsverbund, Frankfurt, Germany	Federal Laws shifting transit financing from federal to state governments and allowing privatization of transit services.	1993 Regionalization Act and 1993 Railway Organization Act
Verkehrsverbund Stuttgart (VVS), Stuttgart, Germany	Founded without enabling legislation on the part of Germany or the State, but currently “under” state of Baden-Württemberg law	1993 Regionalization Act and 1993 Railway Organization Act State law: <i>Gesetz über die Planung, Organisation und Gestaltung des öffentlichen Personennahverkehrs (ÖPNVG)</i> vom 8. Juni 1995
Regional Transit Authority (RTA) of Southeast Michigan, Detroit, U.S.	State Law Establishing Regional Public Transportation Authorities	Senate Bill No. 909
San Diego Association of Governments (SANDAG), San Diego, U.S.	State Law Authorizes but does not require Regional Consolidation	Senate Bill 1703
TYPE 2 - Transit Operator who also coordinates the other transit agencies in the region		
Valley Metro, Phoenix, U.S.	State Law Establishing Valley Metro as Regional Operator and as Voluntary Regional Consortium	Title 48 Chapters 29 & 30
Metrolinx, Greater Toronto, Canada	Provincial Law Authorizes Regional Coordination	Metrolinx Act, 2006, SO 2006, c 16
Transport for Greater Manchester (TfGM), Manchester, U.K.	National Law creating metropolitan transport agencies	Transport Act of 1968

TYPE 3 - Sole Transit Provider (consolidated transit provider) in the metro area		
San Diego Metropolitan Transit System (MTS), San Diego, U.S.	Originally voluntary, 1986 State Law consolidated metro area transit operations with MTS.	SB 101 (1975) established independent special district
TriMet, Portland, U.S.	State Law Consolidates Transit Systems into a Metropolitan Transit District	ORS 267
New Jersey Transit Corporation, New Jersey, U.S.	State Law Consolidates Transit Systems into NJT	2022 New Jersey Revised Statutes Title 27 - Highways Section 27:25-4 - New Jersey Transit Corporation established
TransLink, Vancouver, Canada	Provincial Law Consolidates Transit Systems into TransLink	South Coast British Columbia Transportation Authority Act [SBE 1998] Chapter 30
Transport for New South Wales (TfNSW), Sydney, Australia	State Law Establishes Ministerial Control (Transport Secretary) Over 6 Transit Systems	Transport Administration Act 1988 No 109

Northwest Oregon Transit Alliance (NWOTA), Oregon, U.S.

The NWOTA was created in 2012 as a voluntary regional transit coordinator for Columbia County, Benton County, Lincoln County Transportation Service District, Sunset Empire Transportation District, and the Tillamook County Transportation District in northwestern Oregon. (Hazen, 2023). NWOTA was founded “to increase coordination of services, create opportunities to collectively apply for grant funding, and operate public transit services within and connecting to each party’s service areas.” They eventually adopted an intergovernmental agreement in 2018.²⁵ This agreement established NWOTA’s ability to (1) employ staff, (2) apply for grants and enter into grant agreements, (3) administer budgets for projects and coordination, (4) rent office space, and (5) purchase office equipment.²⁶ Funds for NWOTA’s operations come from a combination of state and federal grants and support funding from each party paying “a proportional share of the CFE’s adopted administrative budget for NWOTA coordination, as well as any special assessment, as approved by the Parties.”²⁷ The scope of authority for this collaborative organization is narrow, with limited powers to coordinate and operate regional transit in northwestern Oregon.

The coordinating committee, composed of the heads of the five partner agencies, makes decisions. Accomplishments to date include a single website for all transit information and unified branding and fare passes for regional connections among service areas of the agencies.

Mobility Partnership, Seattle, U.S.

²⁵ See https://www.oregon.gov/ODOT/RPTD/STIFDiscretionary/NWOTA_IGA.pdf.
²⁶ See https://www.oregon.gov/ODOT/RPTD/STIFDiscretionary/NWOTA_IGA.pdf.
²⁷ See https://www.oregon.gov/ODOT/RPTD/STIFDiscretionary/NWOTA_IGA.pdf.

The Mobility Partnership, a loosely integrated collaboration, was not created through state legislation, but rather formed as the direct result of regional calls for better coordination. A state-funded grant for transit coordination and agency collaboration in the central Puget Sound region provided much of the impetus for the regional transit operators to work together (Cerise, 2022). In parallel, through State Law RCW 25.58.2796(2) (Washington State Legislature, 2015), the Washington State Department of Transportation (WSDOT) commissioned the Puget Sound Regional Council (PSRC), the metropolitan planning organization for the Greater Seattle area, to develop an annual report summarizing the status of transit system coordination in and between counties with a population of 700,000 or more that border Puget Sound (PSRC, 2022). However, it was the transit agencies of the three counties that voluntarily decided to create the Mobility Partnership, choosing a director from one of the agencies represented (Cerise, 2022). While some agency coordination in the Seattle area dates back to 2009, with the launch of the ORCA transit smart card (Harnack, 2010), the Mobility Partnership was established through a charter document established on February 11, 2019 (Mobility Partnership, 2019). Apart from the availability of some competitive state grant money through WSDOT for individual agencies, however, there is no dedicated funding source for regional coordination. The scope of authority for this collaborative organization is narrow, with no explicit powers or mandate.

Zürcher Verkehrsverbund, Zurich, Switzerland

As the largest city of Switzerland and a hub for local, regional, national, and international transit services, many planners have pointed to Zurich's transit integration as ideal for improving services. However, it was largely construction of the city's S-Bahn network in the late 1980s and success of the *Verkehrsverbund* model in Germany that prompted local authorities to prioritize better collaboration among transit operators in Zurich—i.e., the need for a legal foundation for integrating all elements of the Zurich Transport Network (Buehler et al. 2019). The Public Transport Act (PVG) 740.1, dated March 6, 1988, legislated the creation of the *Zürcher Verkehrsverbund* (ZVV) to provide the Zurich canton with a viable transit system, “based on economic principles to tap into promotional measures.” In addition, a corresponding measure was approved by the local electorate, leading the state (Kanton Zurich) government and the Swiss federal government to commit to jointly financing the new Zurich S-Bahn, as well as the new ZVV, which was formally established in May 1990. It features a unified fare system with a coordinated network of trams, *S-Bahn*, and buses. Currently, ZVV has an expense financing system whereby it pays for all of the costs incurred by operators but collects all of the revenue and government subsidies. The scope of authority for this agency is broad, with key responsibilities and powers given to the *Zürcher Verkehrsverbund* to coordinate transit operations, fares, and manage transit financing in the region (Buehler et al, 2019).

Autoritat del Transport Metropolitana, Barcelona, Spain

Initially, the Framework Agreement of July 1995 of the *Generalitat de Catalunya*, city of Barcelona, and existing metropolitan transport authority, was created to establish an integrated system that

would allow for the promotion of collective transit in Greater Barcelona (Ventura i Teixidor, 2003). Technically, it was Decree 48/1997 of February 1997 that approved the formation of a voluntary consortium of transport agencies charged with enhancing coordination of the metropolitan transit system in Greater Barcelona. This included a budget of more than U.S. \$650,000 to establish the entity to cover expenses incurred by the *Generalitat de Catalunya*, the city of Barcelona, and the ATM, as well as an annual budget agreed upon by all parties (ATM Area de Barcelona, 2021). Since 2003, this entity has been known as the *Autoritat del Transport Metropolitan (ATM) Area de Barcelona* to differentiate it from other existing Catalanian transit authorities in the nearby *Girona*, *Camp de Tarragona*, and *Lleida* areas (ATM Area de Barcelona, 2021). A voluntary consortium of about 50 private operators was formed in the early 2010s to further address the need for regional coordination. The scope of authority for this agency is medium, with voluntary membership in the consortium, but a robust mandate to coordinate regional transit.

The German Case Studies (Frankfurt and Stuttgart, Germany)

In Germany, the *Personenbeförderungsgesetz* (PBefG), a Passenger Transportation Act, was created in 1961, regulating all transit, excluding intercity trains, and creating federal subsidies by way of discounted fares for students, the elderly, and disabled people (Koch and Newmark, 2016). It required that these agencies coordinate and offer integrated services to ensure seamless and efficient passenger transport. In principle, later versions of this act have supported the integration of schedules, ticketing systems, and sharing of information among various modes of transport such as buses, trams, and trains.

It was not until 1965 that the first *Verkehrsverbund* was created in Hamburg, leading to the establishment of other *Verkehrsverbände* in major German cities, including Munich in 1972 and Rhein Ruhr (Dusseldorf- Dortmund-Essen) in 1980 (Buehler et al., 2019). In the early 1990s, two pieces of federal legislation supported the creation of *Verkehrsverbände*: the 1993 Regionalization Act, which shifted authority for transit functions and financing from federal to state, thereby favoring alliances and the 1993 Railway Organization Act, which opened markets to privatization and amended the General Railway Act to make it the foundation for regional passenger transport (Koch and Newmark, 2016).

Currently, the federal government is responsible for determining the overarching transportation strategy, while the 16 constituent states handle the logistics of planning, implementation, and management for most transportation projects (Koch and Newmark, 2016). In the following two cases, state legislation was introduced further to acknowledge a link to state regulations.

Rhein-Main Verkehrsverbund, Frankfurt, Germany

The Rhein-Main *Verkehrsverbund* (RMV) is a transport association operated by 15 counties, 11 independent cities, and the *Bundesland* of Hesse (RMV, 2018). Founded in 1995, it is the successor of the *Frankfurter Verkehrsverbund*, which was established in 1974.

Formal state legislation includes the 2005 Hesse “Law on local public transport in Hesse” (ÖPNVG),²⁸ which came into effect a decade after the establishment of the RMV.

A provision stemming from the 1993 Regionalization Act is that funds earmarked for transit are now disbursed by the state but funded by the federal government. States usually delegate disbursement to transportation associations or authorities, but the RMV is responsible for the planning, organizing, and financing of regional transport, alongside the local transport organizations. Thus, there is a distinction between the RMV “ordering” public transport and transport companies carrying it out (*Aufgaben der RMV GmbH*, 2018). The scope of authority for this agency is broad, with significant responsibilities and powers given to it in planning and financing coordinated transit in the region.

Verkehrsverbund Stuttgart (VVS), Stuttgart, Germany

In contrast to the RMV, the VVS Stuttgart was initially founded in 1978, during an early period of *Verkehrsverbund* expansion in Germany when the local *Stuttgarter Vorortverkehr* was replaced by the S-Bahn Stuttgart. Pursuant to the federal legislation described above, the state of Baden-Württemberg passed a law on the planning, organization and design of local public transport (ÖPNVG) in 1995.²⁹ Some details of its structure and board may have changed since 1978, but the overall role of the VVS as the regional transit coordinating authority remained the same: to ensure uniform fare as well as a coordinated timetable. Called a “traffic-tariff union” (*Verkehrs- und Tarifverbund Stuttgart GmbH*), it collects revenue, distributes income to carriers, prepares schedules, does the marketing of transit, and is engaged in the development of the system.

VVS Stuttgart is considered a mixed association, jointly supported by transport companies and public authorities (Knieps, 2009). On the one hand, while VVS Stuttgart is an example of regional governance, it has no responsibility for or control over transit functions and merely coordinates services in the Stuttgart metropolitan region. Indeed, there is a regional governance agency called *Verband Region Stuttgart* (VRS) which has a regional parliament with elected representatives. VRS is the only regional government level (above the counties and below the state) in Germany. It is also the entity responsible for the regional S-Bahn commuter rail system and has representatives

²⁸ See https://www.lexsoft.de/cgi-bin/lexsoft/justizportal_nrw.cgi?xid=1400006,1.

²⁹ See <https://www.nw3.de/rechtsarchiv/4oerecht/5Infrastruktur/1verkehr/nahverk.html#hess> and <https://www.landesrecht-bw.de/bsbw/document/jlr-%C3%96PNVGBWrahmen>.

on the VVS board.³⁰ Nevertheless, even though there is a regional government (VRS), VVS is a fully functioning RTC with a broad scope of authority and a robust mandate to coordinate transit.

Regional Transit Authority (RTA) of Southeast Michigan, Detroit, U.S.

The RTA was created in 2012 by the state of Michigan to manage regional transportation resources to benefit the quality of life of residents and enhance the economic vitality of the Detroit region. Michigan's Public Act No. 387 of 2012 established the RTA as an RTC with certain regional transit authorities, including the coordination of routes, schedules, fares, and points of transfer; provide information to help riders transfer between providers; and "eliminate or reduce service overlap and duplication" between the region's transit service providers.³¹ Their accomplishments to-date (see Tables 3.1, 3.2, and 3.3) indicate that they are one of the better examples of the American Type 1 *Verkehrsverbund* found in this study.

Public Act No. 387 also established a ten-member board (nine voting members and one non-voting member) whose members have three-year terms as appointed by the county executives of Wayne, Oakland, and Macomb counties, the chair of the Washtenaw County Board of Commissioners, the mayor of Detroit, and the governor of Michigan. The governor's appointee serves as chair and without a vote (RTA, n.d.). Enacted at the same time, Public Act Nos. 388 and 391 provide revenues from vehicle and vehicle fuel taxes and fees collected by the state and given to RTA for capital and operational purposes. The scope of authority for this agency is broad, with mandatory membership in the consortium, and a robust mandate to coordinate regional transit.

San Diego Association of Governments (SANDAG), San Diego, U.S.

In 2002, California Senate Bill 1703 authorized SANDAG to create a "consolidated transportation agency in San Diego" from the two of the county's existing transit agencies: the Metropolitan Transit Development Board (MTDB) and the North County Transit Development Board (NCTD). While this consolidation would combine "certain responsibilities and functions of those agencies," it did not explicitly endorse a wholesale consolidation and dissolution of these existing agencies, but rather, "an incremental step toward establishing a regional agency having authority over a range of regional issues." The Bill sets forth these "regional issues," including "planning, programming, project development, and construction activities of various transportation agencies" in San Diego County.³² Thus, the state provided SANDAG with control over key aspects of the planning, financing, and operations of these two transit operators in the region, a broad scope and level of control that extends well beyond that of the typical MPO. It is

³⁰ See <https://www.region-stuttgart.org/en/>.

³¹ See <https://tng.f93.myftpupload.com/wp-content/uploads/2012-PA-0387-1.pdf>.

³² See <https://www.sandag.org/-/media/SANDAG/Documents/PDF/footer/legal/senate-bill-no-1703.pdf>.

an example of an American alliance-style RTC. Senate Bill 1703 also established the governing structure of SANDAG, with a 20-person board of directors” overseeing the agency.³³

Valley Metro, Phoenix, U.S.

Valley Metro was established in 1986 as the Regional Public Transportation Authority (RPTA) in Maricopa County for the Phoenix Metropolitan Area (in Section 48-5102 the Arizona Revised Statutes). The establishment of this authority was contingent upon the voters’ approval of a transportation excise tax. Section 48-5103 authorized Valley Metro to manage a public transportation fund for the county, with monies appropriated by each member municipality in the county to the fund from each in an amount as determined by Valley Metro’s board. The public transportation fund would also receive and manage fare revenues from Valley Metro’s transit operations. In addition, monies from a transportation excise tax are allocated to the public transportation fund for a light rail system, capital costs for other public transportation, and transit operations and maintenance costs. According to the legislation, “cities may elect to enter the authority,” and “a member may withdraw at the end of fiscal year.”³⁴

In 1993, the first step of voluntary agreements to operate a coordinated system was taken when the transit providers voted to operate all buses in the region under the brand name Valley Metro. This began other unifying efforts at regional transportation decision-making and coordination as including a unified passenger fare structure (TTI, 2012).

In 2004, Proposition 400 renewed an “expiring countywide ½-cent transportation tax for another 20 years, directing revenue to RTPA/Valley Metro to support regional planning, as well as transit initiatives,” with the latter receiving one-third of the tax revenue (Ketcherside and Menon, 2014). As a result, Valley Metro is now responsible for promotion and public information of services, as well as funding the call/one click program, the design of the Valley Metro vehicle brand, and regional transit marketing activities (TTI, 2012). This, along with the unified fares and unified brand, effectively establishes them as the one of the closest examples of an American alliance-style *Verkehrsverbund* found in this study.

From 2012, a single CEO directs both RPTA/Valley Metro (buses) and Valley Metro Rail, resulting in greater collaboration with the individual cities (Ketcherside and Menon, 2014). The cities of Phoenix, Peoria, and Glendale continue to operate their own buses under the Valley Metro brand (Daily Independent, 2022). Arizona Section 48-5105 establishes the structure of Valley Metro’s board of directors. The scope of authority for this agency is broad; even with voluntary membership in the consortium, there is a robust internal consensus among the operators in the region to be coordinated and to operate under a single brand name.

³³ See <https://www.sandag.org/-/media/SANDAG/Documents/PDF/footer/legal/senate-bill-no-1703.pdf>.

³⁴ See <https://www.azleg.gov/viewdocument/?docName=https://www.azleg.gov/ars/48/05103.htm>.

Metrolinx, Greater Toronto, Canada

Metrolinx was established in 2006 as a Crown agency for the Greater Toronto region to (1) “provide leadership in the coordination, planning, financing, development and implementation of an integrated transit network;” (2) “act as the central procurement agency for the procurement of local transit system vehicles, equipment, technologies and facilities and related supplies and services on behalf of Ontario municipalities;” and (3) “be responsible for the operation of the regional transit system and the provision of other transit services.” Critically, Metrolinx is responsible for funding—or arranging and managing the funding for—“an integrated transit network” in the region’s transportation area.³⁵ In addition to operating this regional system, Metrolinx is responsible for coordinating transit services provided by other operators in the region via “the integration of routes, fares, and schedules of the regional transit system and of local transit systems in the regional transportation area.”³⁶ The scope of authority for this agency is broad, with mandatory membership in the consortium, and a robust mandate to coordinate regional transit.

Transport for Greater Manchester (TfGM), Manchester, U.K.

In the United Kingdom, the coordination of regional transit services was originally tied to a wider need to form metropolitan county governments that could more efficiently provide regional urban services, including transit. The establishment of passenger transport authorities (PTAs) in the largest U.K. metropolitan regions—i.e., originally established through the Transport Act 1968; brought structural reforms to local government structures, further promoting the coordination of regional transport and land use planning (Rivasplata 2006). In 1974, the Southeast Lancashire Northeast Cheshire (SELNEC) Passenger Transport Executive was established as the regional transport authority for Greater Manchester, eventually changing its name to become the Greater Manchester Passenger Transport Executive (GMPTE). In 2011, the Greater Manchester Combined Authority (GMCA), including the historic metropolitan region of Manchester, was created under Order 2011, No. 908, and Transport for Greater Manchester (TfGM), the successor of the old GMPTE, was placed under the direction of the GMCA (AGMA 2011).

In addition to providing bus, tram, and train services through a comprehensive set of private sector concessions, the TfGM promotes transport integration in the area through annual funding outlays from the GMCA and competitive Central Government block grants (TfGM 2021). The scope of authority for this agency is broad, with significant responsibilities and powers granted to it in planning, contracting, and financing coordinated transit in the region. As a result of the 2021 Greater Manchester Franchising Scheme for Buses (stemming from the 2021 U.K. National Bus Strategy), TfGM is transitioning toward a Type 3 organization, where it will have direct fare, branding, and planning responsibilities over the entire conurbation by 2025 (Fairclough, 2023).

³⁵ See https://www.canlii.org/en/on/laws/stat/so-2006-c-16/latest/so-2006-c-16.html#sec2_smooth.

³⁶ See https://www.canlii.org/en/on/laws/stat/so-2006-c-16/latest/so-2006-c-16.html#sec2_smooth.

San Diego Metropolitan Transit System (MTS), San Diego, U.S.

“The Metropolitan Transit Development Board (MTDB) was created as an independent special district in 1975 through the passage of California Senate Bill 101 and came into existence on January 1, 1976.” MTDB was originally formed with the intent of developing mass rail transit—i.e., the first of the “second generation light rail systems in the U.S.” The legislation provided that “...at any time after the first segment of an areawide guideway system enters revenue service...the board may assume the operation of (city-owned) San Diego Transit Corporation (SDTC),” which it did in 1985, acquiring the assets from the city of San Diego. In 1984, the Governor signed Senate Bill 1736, which expanded the MTDB governing board from eight to 15 members.

Also in 1984, inspired by the *Verkehrsverbund* of Germany, MTDB then created an umbrella organization (called MTS) to cooperate and coordinate with other local transit agencies with respect to fares and scheduling (Larwin, 2012). While this cooperation was essentially voluntary, MTDB eventually legally merged/consolidated with all the other local transit agencies (such as the city of Chula Vista Transit, National City Transit, and County Transit System) to become the sole transit provider of transit services in the entire metropolitan area.³⁷ Today, “MTS” is now its legal name, and it is responsible for all fixed route bus, paratransit, and four lines of light rail service (The Trolley) in the San Diego metropolitan area. According to Larwin, “it had taken some time but by 2003, in a series of steps that began in July 1981 with the start-up of LRT service, a transit federation-like institutional structure was in place at MTDB.”

In 2002, Senate Bill 1703 merged MTDB’s long-range planning, financial programming, project development, and construction functions into the regional metropolitan planning organization, the San Diego Association of Governments (SANDAG). In 2005, MTDB changed its name to the San Diego Metropolitan Transit System (MTS).³⁸ The scope of authority for this agency is broad, with all agencies now merged under one single transit operator.

TriMet, Portland, U.S.

An interest in providing an integrated, well-organized set of transit services initially came because of ongoing disputes between the Portland City Council and Rose City Transit Company, the private company operating the bus system in the city of Portland, but not its suburbs. In addition, with Portland’s transit ridership steadily falling in the 1950s and 60s, Rose City Transit Company was faced with bankruptcy (TriMet, 2019). As a result, in January 1969 the Portland City Council passed a resolution to create the Tri-County Metropolitan Transportation District of Oregon, called “TriMet,” to take over the local bus systems and provide regional transit service (TriMet, n.d.). In March 1969, the Oregon legislature passed House Bill 1808, allowing the statewide creation of transit districts and providing them with the power to raise revenue through a payroll

³⁷ See <https://www.sdmts.com/about/history>.

³⁸ See <https://www.sdmts.com/sites/default/files/attachments/2023-state-and-federal-legislative-program.pdf>.

tax (Oregon State Legislature, 2012; Oregon State Legislature, 2021). Under this legislation, TriMet immediately took over all of Rose City Transit's service and fleet and eventually replaced five private bus companies that operated in the three counties comprising Greater Portland: Multnomah, Washington, and Clackamas. The law established TriMet as a municipal corporation of the state of Oregon, with powers to tax, issue bonds, enact police ordinances, and be governed by a seven-member board of directors appointed by the governor of Oregon (City Club of Portland, 1969). The scope of authority for this agency is broad and comprehensive, with sole responsibilities for planning, operating, and financing transit in the region.

New Jersey Transit Corporation, New Jersey, U.S.

The New Jersey Transit Corporation (NJT) was established in New Jersey Public Transportation Act of 1979 with a mandate to “acquire, operate, and contract for transportation service in the public interest.”³⁹ In January 1980, NJT took its first steps to fulfilling this mandate by acquiring Transport of New Jersey, the state’s largest private bus company at the time and the owner/operator of Newark City Subway.⁴⁰ In doing so, it also fulfilled a second mandate in their founding legislation directing the corporation, which stated “it is desirable to encourage to the maximum extent feasible the participation of private enterprise and *to avoid destructive competition* (emphasis added).”⁴¹ In 2022, the New Jersey legislature amended NJT’s founding legislation, moving it out of the direct control and direction of the state’s Department of Transportation in the executive branch into the direct control of a board of directors answerable directly to the state. The scope of authority for this agency is broad, with required involvement in the corporation and a robust mandate to coordinate regional transit.

TransLink, Vancouver, Canada

Initially, in the 1970s a decision was made to transfer many transit responsibilities from the province of British Columbia (BC) to a regional statutory authority covering transport in Greater Vancouver. TransLink, an agency responsible for transit, major roads, and bridges in Greater Vancouver, was created in 1998 under the South Coast British Columbia Transportation Authority Act (BC Laws, 1998; Chapter 30). It was initially known as the Greater Vancouver Transportation Authority (GVTA) and was fully implemented in April 1999 by the government of British Columbia, replacing BC Transit in the Greater Vancouver Regional District and assuming many transportation responsibilities previously held by the provincial government, under the South Coast British Columbia Transportation Authority Act. Subsequently, in 2007 the B.C. Minister of Transportation announced a major restructuring of the entity. These changes included new revenue-generating measures, a restructuring of the executive position, and increases in the areas under TransLink's jurisdiction (CBC News 2007). As in the case of TriMet in Portland, TransLink is not an agency of the regional corporate entity representing the metropolitan area, the

³⁹ See <https://www.njtransit.com/first-run/how-it-all-began>.

⁴⁰ See <https://www.njtransit.com/first-run/how-it-all-began>.

⁴¹ See <https://repo.njstatelib.org/bitstream/handle/10929.1/6611/L1979c150.pdf?sequence=1&isAllowed=y>.

Greater Vancouver Regional District (GVRD), which was established in 1968 (ordinance in Council no. 1873/1968, 2017). The scope of authority for this agency is broad and comprehensive, with sole responsibilities for planning, operating, and financing transit in the region.

Transport for New South Wales (TfNSW), Sydney, Australia

Transport Administration Act of 1988 No 109 established Transport for New South Wales (TfNSW) and its executive, the state's Transport Secretary, as the agency in direct control over the state's six transit systems: State Transit Authority, Sydney Ferries, New South Wales (NSW) Trains, Sydney Trains, Residual Transport Corporation (RTC), and Sydney Metro. Later in 2020, a separate state-owned corporation, the Transport Asset Holding Entity (TAHE) of New South Wales, was established by law as a holding company for all transportation assets in the region consolidated under the act.⁴² The legislation specifies that the board consists of no fewer than three and not more than seven directors appointed by the voting shareholders, and the Transport Secretary.⁴³ The objectives of the TAHE are the following:

1. To hold, manage, operate, and maintain transport assets vested in or owned by it
2. To establish, finance, acquire, construct, and develop transport assets
3. To promote and facilitate access to the part of the NSW rail network vested in or owned by TAHE
4. To acquire and develop land for the purpose of enabling TAHE to carry out its other functions

TfNSW is the more pertinent agency for our study, being tasked by law with the following:

- The responsibility for transport planning and policy (including for integrated rail network, road network, maritime operations, and maritime transport and land use strategies for metropolitan and regional areas)
- Transport public funding (including the administration of the allocation of public funding for the transport sector, including the determination of budgets and programs across that sector)
- Transport infrastructure, (planning, oversight, and delivery of transport infrastructure in accordance with integrated transport and land use strategies and available financial resources, including prioritizing of expenditure and projects across the transport system)

⁴² See <https://www.tahensw.com.au/community-and-partners>.

⁴³ See <https://legislation.nsw.gov.au/view/whole/html/inforce/current/act-1988-109>.

- Capital works programs and budgets (coordination of capital works programs and budgets across the transport sector)
- Contracting for transport services (contracting with transit agencies or the private sector, for the delivery of transport services, including the setting of performance targets and service standards)
- Transport services coordination (including timetabling for transport services and providing for effective transport interchanges); incident management (management of incidents affecting the efficiency of road and transit networks, including the coordination of communications with and responses by relevant agencies)
- Transport information (provision of information about transport services and transport infrastructure to assist people to use those services or infrastructure); provision and deployment of staff and services; ticketing (integrated ticketing arrangements for transport services, and regulating the types of tickets and other ticketing arrangements for the setting of fares for transport services)
- Precinct land planning (assisting the Minister for Planning and Infrastructure and other relevant agencies with the preparation of precinct plans for the development of land for, or in the vicinity of, transit stations or wharves and transport interchanges)
- Procurement (coordinating and carrying out the procurement of transport infrastructure and transport vehicles, rolling stock and vessels) and transport innovation (developing policy and facilitating research and testing for the purposes of promoting innovative transport solutions)⁴⁴

All funding for TfNSW is allocated by the state's parliament through the budgetary process, and the Transport Administration Act of 1988 No 109 gives no other explicit revenue funding sources beyond those generated by user fees and fares. The scope of authority for this agency is broad, with sole responsibilities for planning, operating, and funding transit in the region.

5.2 Key Findings on the Role of Legislation

This research revealed several patterns in the composition and nature of these RTCs as envisioned and detailed in their founding legislation. In each case, the team identified the founding documents (legislation, cooperative agreements, etc.) for each RTC, looking for patterns that emerged from comparing those classified as one of the research team's three category RTC typology.

⁴⁴ See <https://legislation.nsw.gov.au/view/whole/html/inforce/current/act-1988-109>.

In all but two case agencies, NWOTA and Mobility Partnership, we found evidence that some form of legislation had been introduced to create them. In these 14 cases, it was the state government that developed the legislation, indicating the importance of a higher level of government in the creation of an agency charged with coordinating transit service in a major metropolitan area. In fact, in Germany, where the federal government played a key role in rail investments for decades, federal laws introduced in the early 1990s transferred the responsibility of supporting coordination to individual states when they transferred responsibility for intercity rail operations to the states.

The legislation itself varied widely, in some cases merely authorizing the creation of an agency better to coordinate metropolitan services or extend each agency's ability to coordinate with other transit agencies in the metropolitan area. In the case of the sole transit providers (Type 3), the legislation authorized bringing all services under one operator, which if taken at face value, does not necessarily guarantee coordination between components of the same agency. In a limited number of cases, separate divisions of a large agency may not necessarily pursue ongoing service coordination.

However, while legislation often did not specifically mandate coordination, the fact that it called for the creation of a regional transit entity meant that it was understood that some form of integration would be seriously pursued, often based on the institutional nature of transit provision. In countries like Germany or Switzerland, local cities and counties play a different role, assuming direct responsibility for planning and delivery of services. In the United States, state legislation was similarly vague with respect to specific types of coordination (e.g., fare, informational, and route); however, without a direct commitment to serve the public, a number of constraints to full integration can persist.

One exception within the U.S. appears to be Valley Metro. A unique aspect of Valley Metro is that while the law created RPTA as an independent agency with its own board of directors to own and operate regional multi-city transit, it did not mandate either a single regional coordinating entity or a sole transit provider. As cities surrounding Phoenix increasingly needed bus service, they considered purchasing service from the existing operators, one of the biggest being the city of Phoenix; however, they did not want buses labeled "city of Phoenix" to be operating in their communities. Consequently, the region's municipalities (including the city of Phoenix) worked with RPTA to create Valley Metro, featuring a regional brand and identity for the vehicles, as well as an ongoing marketing effort. It began operating as an integrated regional transit service in 1993. Apparently, "political will of the municipalities played a large role in the successful implementation of the Valley Metro brand" (TTI, 2012). Thus, we consider Valley Metro as a sort of hybrid: there was legislation to create Valley Metro as an entity with some regional transit responsibilities. Then, voluntarily, other local transit agencies within the same region entered intergovernmental agreements with Valley Metro, essentially making it an RTC.

In sum, legislation establishing an RTC typically considered some or all of the following elements:

- Agency type: laws reflecting whether it is a corporation, city department, or independent authority
- Board and board composition: number of individuals on the board and who do they represent
- Compensation for the board: if any level of commitment to board participation
- Executive Director (ED) appointment method: the entity that appoints the ED
- Roles and authority of the agency: level of agency decision-making
- Roles and authority of the board: areas that the board is responsible for overseeing
- Members of the alliance: specific agencies that are collaborating/being coordinated (for those RTCs that coordinate other transit agencies)

In addition, there is the issue of funding for the regional mode of transport, as well as the short-term/long-term planning and fare coordination which are not always addressed in the enabling legislation. For example, when SANDAG acquired the development functions from MTS, they presumably received funding to hire staff; however, this is often not the case.

When Type 2 regional agencies have ongoing responsibilities for providing transit operations within a metropolitan area (e.g., Metrolinx and Valley Metro), we found that an important question is whether enabling legislation also specifies that these agencies are authorized to operate other modes in addition to rail.

6. Executive Director/Management

In addition to the board, RTCs require ongoing day-to-day management that provides support to member transit agencies and is free from external interference and control. For this reason, in most cases, an executive director (or general manager) is appointed by the board to direct the RTC and manage the primary coordinative functions that it oversees. In this chapter, we review the role of each of the case study executive directors, seeking to understand any other important internal management structures that could enable RTCs to be effective. This research provides information on the manner in which each executive director is chosen and the measures taken to insulate the executive director from political influence.

The research team investigated the executive management structure of the various case studies, focusing on the following areas:

- How the highest executive overseeing the coordinative structure (e.g., executive director, general manager, or chief executive officer (CEO)) is ultimately selected and by whom
- Information on the functional areas within the RTC that the executive director has direct control over
- The executive director's relative authority to make decisions with minimal board or outside agency involvement

6.1 Summary of Findings

We collected data on the role of the CEO or executive director for all the case study RTCs. (See Table 6.1.) By comparing the experiences of these RTCs in establishing and defining the executive director's relative role as a manager of the entity, in each case, we identified the body responsible for appointing the executive director (e.g., an RTC board), the areas that she/he has direct responsibility over, and the annual salary of the executive director.

We placed each of the executive directors in one of four categories:

- A high-power executive, with substantial management power over the RTC
- A moderate-to-high-power executive who may share management responsibilities, but only requires board approval for a limited number of items
- A moderate-power executive, often sharing responsibility with another manager or requiring frequent board approval

- A low-power executive (or no single manager), with little or no direct control over the coordination-related functions of the entity

Nevertheless, our research indicated that even at agencies where the executive director had a moderate level of power, the agency was fully effective at regional transit coordination. For example, in Germany, both case studies revealed that even though the executive director of each only exerted a moderate level of power, the agency itself offered the elements of a fully functioning RTC, such as single ticketing across all modes and operators, coordinated and unified marketing, and information dissemination. This merely shows that there are cases in which the executive director shares powers, as described in the individual cases below.

Table 6.1 Executive Director Structure of the Case Studies

TYPE 1 - Federation of Transit Agencies implementing the coordination of all transit in the region		
NW Oregon Transit Alliance (NWOTA), Oregon, U.S.	No director. Actions taken by individual agencies	Not applicable, as coordinating committee has no direct authority
Mobility Partnership, Seattle, U.S.	No director. Actions taken by individual agencies	Not applicable, as Mobility Partnership has no direct authority
Zürcher Verkehrsverbund, Zurich, Switzerland	Chief executive elected by the governing council	Chief executive directly oversees seven major ZVV divisions (high power)
Autoritat del Transport Metropolitana, Barcelona, Spain	Director general appointed by the ATM Consortium, an agency of the <i>Generalitat</i>	Director general oversees seven key functions (moderate power)
Rhein-Main Verkehrsverbund, Frankfurt, Germany	Managing director appointed by the RMV supervisory board	Managing director only involved in coordinating infrastructure and service planning (moderate power)
Verkehrsverbund Stuttgart (VVS), Stuttgart, Germany	Managing director appointed by the VVS supervisory board	Managing director involved in coordinating regional tariff and passenger information (moderate power)
Regional Transit Authority (RTA) of Southeast Michigan, Detroit, U.S	General manager selected and appointed by the board.	General manager responsible for daily operation of the authority; management of authority functions; preparation of budget to board; employee supervision (moderate power)
San Diego Association of Governments (SANDAG), San Diego, U.S.	General manager selected and appointed by the board.	Executive director is secretary of the board and each policy advisory committee. Responsible for six key agency functions, including regional transit system planning, funding allocation and infrastructure planning (moderate power).
TYPE 2 - Transit Operator who also coordinates the other transit agencies in the region		
Valley Metro, Phoenix, U.S,	General manager selected and appointed by the board	The general manager of the Regional Public Transportation Authority may organize the employees into units for various functions as the board deems necessary. (moderate power)
Metrolinx, Greater Toronto, Canada	Lieutenant Governor in council, on the recommendation of the minister, appoints a chief executive officer of the corporation, an employee of the corporation.	The board accountable, through the chair, to the minister for the oversight and governance of the agency; setting goals, objectives, and strategic direction for the agency within its mandate; and for carrying out the roles and responsibilities assigned by the act, this MOU, and applicable Government directives. (moderate power)

Transport for Greater Manchester (TfGM), Manchester, U.K.	Chief executive of GMCA and TfGM appointed by the GMCA board, in consultation with the GMCA Resources Committee	Board exercises powers at the regional level, but most day-to-day transport planning and operation is conducted by the operating officer of TfGM, in consultation with the Bee Network Committee (moderate power)
TYPE 3 - Sole Transit Provider/ (consolidated transit provider) in the metro area		
San Diego Metropolitan Transit System (MTS), San Diego, U.S.	Appointed by board of Directors (15 Members)	Relatively independent (high power)
TriMet, Portland, U.S.	General manager appointed by board of directors (7 members appointed by governor)	Annual performance review (high power)
New Jersey Transit Corporation, New Jersey, U.S.	General manager: Appointed by board of directors (7 members appointed by governor)	Board is relatively powerful, although governor forced executive director resignation in 2018 (moderate power)
TransLink, Vancouver, Canada	CEO responsible for day-to-day planning and operation of all aspects of TransLink multimodal services (bus, rail, and ferries) as well as longer term planning initiatives.	CEO responsible for day-to-day planning and operation of all aspects of TransLink (moderate-to-high power)
Transport for New South Wales (TfNSW), Sydney, Australia	Secretary of the Department of Transport is the executive. Appointed by NSW government (premier nominates)	Secretary has responsibility for all modes of transport. Premier can fire without cause (moderate power)

The following sections summarize our findings concerning the role of the executive director for each of the RTC case studies. In each case, project staff identified the principal areas of responsibility for each executive director and gauged the relative strength of the executive director's authority relative to the board.

Northwest Oregon Transit Alliance (NWOTA), Oregon, U.S.: This alliance is a loose-knit, voluntary grouping of individual agencies striving to coordinate largely rural routes throughout a vast geographic area. It is organized under a coordinating committee composed of individual agency representatives with no direct authority. Thus, the alliance does not have a salaried managing director with a staff, nor does it have functional areas that are managed through the alliance. Without an executive director or managing executive, there is not a single manager.

Mobility Partnership, Seattle, U.S.: This body is a voluntary consortium of Puget Sound transit agencies (in four counties) that meets periodically but coordinates through committees composed of agency representatives (Mobility Partnership, 2019). There is no salaried director, nor staff supporting this regionwide coordinating body (Cerise, 2022). The partnership meets to discuss coordinative opportunities in the region, but actual implementation comes at the individual-agency level (Avila-Mooney, 2023). Without an executive director, there is not a single manager.

Zürcher Verkehrsverbund, Zurich, Switzerland: This *Verkehrsverbund* for the Zurich canton is led by a full-time chief executive who is directly elected by the entity's governing council and regularly submits agency reports to the latter. The chief executive, a salaried position (latest salary figure unavailable), directly oversees six major ZVV agency divisions (communications, staff, marketing, traffic, planning, and finance), with autonomy to operate (ZVV, n.d.). Based on the chief executive's ability to make numerous decisions on her/his own, this is considered a "high-power" position.

Autoritat del Transport Metropolitana, Barcelona, Spain: This voluntary consortium is led by a director general that is appointed by the ATM Consortium, under the auspices of the *Generalitat de Catalunya*, an autonomous region of Spain (*Generalitat de Catalunya*, 2022). The director general is a full-time, salaried position (€112,600 per year in 2021) who has direct responsibility for the management of seven functional areas: planning, operator relations, finance, fares, communication, strategic planning, and mobility. Based on the ongoing role of the *Generalitat* and other local agencies in ensuring representation, this is considered a "moderate-power" position.

Rhein-Main Verkehrsverbund, Frankfurt, Germany: This *Verkehrsverbund* for the Frankfurt Rhein-Main area is led by a full-time managing director who is appointed by the RMV supervisory board. This is a salaried position (latest salary figure unavailable) that is only involved in coordinating regional infrastructure and service planning in the metropolitan region. It directly oversees only four functional areas: planning, contracting, finance, and marketing (RMV, n.d.). Based on the managing director's relatively limited role in managing individual agency operations, this is considered a "moderate-power" position.

Transport for Greater Manchester, Manchester, U.K.: This transport agency is led by a salaried chief executive who also serves as the director of the Greater Manchester Combined Authority (GMCA), under the auspices of the GM mayor (GMCA, 2023). The chief executive is appointed by the GMCA board, with responsibility for operator relations, Metrolink (light rail) operation, investment in active transport, limited bus operation, and fare coordination (TfGM, 2023). The day-to-day transport planning/operation is conducted by the operating officer (under the chief executive). This is a “moderate-power” position.

VVS Stuttgart (VVS-Aufsichtsrats board), Stuttgart, Germany: This *Verkehrsverbund*, which coordinates the local transit in the city of Stuttgart and neighboring areas, has a full-time managing director who is appointed by the VVS supervisory board, comprised of 26 regional representatives, including the Lord Mayor of Stuttgart. The managing director is responsible for the tariff and passenger information of the association. Together with the commercial manager, the managing director represents the VVS to the outside world. This is a “moderate-power” position.

Regional Transit Authority (RTA) of Southeast Michigan, Detroit, U.S.: This regional transit coordinator has a full-time general manager (GM) selected and appointed by the board. The GM is responsible for the daily operation of the authority, the control and management of authority functions, the preparation and submission of a budget to the board, and the supervision of authority employees. This is a “moderate-power” position.

San Diego Association of Governments (SANDAG), San Diego, U.S.: SANDAG plans and programs transportation projects for the county and serves as sales tax authority for TransNet, the county transportation sales tax. Regarding transit coordination and operations, SB 1703 gives the responsibility for transit planning, funding allocation, project development, and construction in the county. The MPO is led by an executive director (ED) who serves as secretary of the board and on each policy advisory committee. The ED is a full-time, salaried position earning \$426,484.76 in 2022.¹ The ED is responsible for: (1) developing program objectives, definition, directions, and priorities; (2) managing and coordinating staff; (3) developing financial support programs; (4) recommending and submitting an annual budget to the board; (5) executing board-adopted systems for personnel, purchasing, and budgetary management; and (6) recommending annual administrative policy to the board for review. This is a “moderate-power” position.

Valley Metro, Phoenix, U.S.: This regional transit operator and coordinator has a full time, board appointed executive director of the regional transportation authority who also acts as the ED of the transit authority. The board also appoints a general manager of the Regional Public Transportation Authority who handles the daily operations of the agency, responsible for administration, design and construction, planning and operations, property acquisition, and community relations. This is a “moderate-power” position.

Metrolinx, Toronto, Canada: The chief executive operator (CEO) of Metrolinx is appointed by the provincial Lieutenant Governor on recommendation from the provincial minister of transportation who, as a full-time employee of the corporation, earned C\$838,961 in 2021. The CEO is responsible for procurement of transit vehicles for the region’s operators; operates the regional transit system; and leads the coordination, planning, financing, development, and implementation of an integrated transit network in the regional transportation area. This is a “moderate-power” position.

San Diego Metropolitan Transit System (MTS), San Diego, U.S.: MTS is led by a CEO, selected and appointed by the board of directors. The CEO is a high-powered position, as exemplified by the fact that the CEO from 2004 to 2020 is credited with “transforming MTS into an efficient multi-modal transit provider with one the best state-of-good-repair records in the country.”⁴⁵ When the CEO unexpectedly died in 2020, he was replaced by the deputy CEO, signifying that the board values experience within the organization (MTS, 2020).

TriMet, Portland, U.S.: TriMet is led by a GM, appointed by a board of directors, all seven of whom are appointed by the governor. The GM’s duties are outlined in TriMet’s state enabling legislation (ORS 267), which states that the GM will “have full charge of the acquisition, construction, maintenance, and operation of the transit system of the district” and “have full charge of the administration of the business affairs of the district.” The GM is charged with running the agency and has no definite term. Although the general manager can be removed by the board, this has not happened to date. By resolution, the board has delegated to the general manager the authority to enter into contracts, excluding contracts for personal services, in amounts not to exceed \$1,000,000. The general manager can enter into personal services contracts for an amount not to exceed \$500,000. Overall, the GM is in a moderate-power position. Although the GM has considerable power, there have been four GMs since 2010, perhaps indicating a degree of outside political pressure on the GM. As of 2022, the GM salary was \$364,950.⁴⁶ Overall, this is a “high-power” position.

New Jersey Transit Corporation, New Jersey, U.S.: Section 27:25-4 -New Jersey Transit Corporation NJ TRANSIT is led by a president and CEO. The CEO is responsible for the statewide public transportation system with more than 11,000 employees, 252 bus routes, three light rail lines, 12 commuter rail lines, and a paratransit service. The board and the governor exercise considerable (high) power, and the transit needs of a statewide agency are diverse. The CEO has only moderate power illustrated by the fact that the governor replaced the president in 2018, and there were pressures to again replace the president in early 2020, although the CEO retained his position. The CEO’s salary was \$279,999 in 2021.⁴⁷

⁴⁵ See: Late MTS CEO Paul Jablonski Receives Hall of Fame Award for Storied Career from the American Public Transportation Association | San Diego Metropolitan Transit System (sdmts.com).

⁴⁶ See Resolution 23-09-43 Adopting Mercer Market Study for General Manager Position.pdf (trimet.org).

⁴⁷ See NJ Transit paid more in overtime in 2021. Here are the reasons why that happened. - nj.com.

TransLink, Vancouver, Canada: TransLink is run by a CEO appointed by a board of directors. The CEO is responsible for day-to-day planning and operation of all aspects of TransLink multimodal services (bus, rail, and ferries) as well as longer term planning initiatives (TransLink, n.d.). It is a fairly high-power position. There have been three incumbents since 2015, and the turnover suggests there may be political pressures from the board and the mayors council, which acts as a second governing board.

Transport for New South Wales (TfNSW), Sydney, Australia: The Secretary for Transport has responsibility for all modes of transport and leads delivery of both customer services and infrastructure across New South Wales (NSW), Australia. The secretary is appointed by the premier. Because the span of authority extends beyond transit and the Sydney commuter-shed, the position is subject to political pressure from many quarters. Since the NSW Premier can fire the secretary without cause, this appears to be a moderate-power position. NSW's Secretary for Transport, Rodd Staples, was removed "without reason" six weeks after a positive performance review with the premier.⁴⁸

6.2 Key Findings

This study revealed a number of patterns in the composition and nature of the case RTCs, particularly those that have a full-time executive director who is directly responsible for managing the regional entity. Since data were limited, particularly for the German RTCs, the authors focused on available information. The research team's analysis resulted in the following findings:

6.2.1 Alliance RTCs: Types 1 and 2

Our analysis of the Type 1 and Type 2 executive directors revealed that, in most cases, these executive directors exert a moderate level of power, with the exception of the ZVV in Zurich, who enjoys a high level of power. Nevertheless, all RTCs with an executive director are highly effective, suggesting that many of the moderate-power case studies prefer to distribute power among two high-level executives appointed by the board. For example, at a few of the RTCs studied, the executive director is focused on policy development and long-range planning, with a general manager in charge of the day-to-day planning and operations of the regional network.

Our two U.S. Type 1 RTCs (RTA and SANDAG), our four European Type 1 RTCs (VVS RMV, ATM, and ZVV), and our three Type 2 RTCs (Valley Metro, Metrolinx, and TfGM) all have executive directors possessing various levels of power. SANDAG is a statutory agency and, accordingly, has a greater scope of powers as an RTC and an executive director with greater powers as well. Valley Metro enjoys a relatively broad scope of powers within Maricopa County but distributes power between the executive director, who is also the ED of the Phoenix regional

⁴⁸ See Sydney news: Transport boss Rodd Staples takes \$800K severance as agency seeks "new direction."

transportation authority and the general manager of the Regional Public Transportation Authority, who handles the daily operations of the agency.

In contrast, for the two case studies that do not have an executive director (NWOTA and Seattle MP), there is little if any ongoing network management, given that without a dedicated staff, the only areas of integration are in response to perceived needs (e.g., ORCA card in Seattle).

6.2.2 Voluntary Transit Federation RTCs

Among our two voluntary U.S. Transit Federation case studies (Type 1s), a pattern is discernible in the nature of their scope of responsibilities, the design of their governance structures, and the power given to their executive directors. First, these RTCs typically have limited powers in terms of the scope of their responsibilities. This is particularly true of voluntary U.S. RTCs such as the Northwest Oregon Transit Alliance (NWOTA) and Seattle's Mobility Partnership, where their scope of responsibilities is limited to coordinating rural regional transit connections between member transit operators (NWOTA) and performance reporting on regional transit providers (Mobility Partnership). Thus, it is unsurprising that just as the scope of powers for these voluntary Type 1s are constrained, so too is the power of their executive directors vis-à-vis their governing boards; in fact, both NWOTA and the Seattle Mobility Partnership profiled in this research had no executive directors at all.

On the other hand, Valley Metro seems to have implemented all the principal components of a full-fledged RTC, including fare, marketing, and planning coordination, without a clear statutory mandate. We believe that this indicates that in the U.S., despite historic barriers to full integration in many markets, a strong and effective voluntary association is indeed possible.

The differences between our two loose voluntary Type 1s in the U.S. compared to Valley Metro and to our one European voluntary Type 1s case study (ATM) suggests that in the U.S., the inertia of voluntary Type 1 RTCs is hard to overcome, and the fact that they do not have Eds is likely part of the reason they have not matured further into full RTCs. Further research is needed to confirm whether loose voluntary associations in the U.S. can evolve to be stronger (as far as they are stable over time), or whether Type 1s in the U.S. really need to be statutory with strong Eds, if they are expected to wield a wide scope of power in regional transit coordination.

6.2.3 Relationship Between Executive Director Power and Agency Type

In addition to our analysis of the strength of executive directors according to RTC-type, we sought to understand the relationship between the relative strength of these executive directors and their agency types, as defined in Chapter 4:

- Government-owned Corporation
- State Government Agency
- Special Purpose Independent Authority
- Voluntary Alliance/Consortium

We found that in the case of the government-owned corporations and the state government agencies, all but one of the executive directors in each category had moderate power. In contrast, of the Special Purpose Independent Authorities, half of the executive directors had moderate power, and half had high power. Finally, neither of the purely voluntary alliances even had an executive director—i.e., no power.

Table 6.2 Executive Director versus Type of Agency/ Ultimately Authority*

Type of Agency	High	Moderate	Low	None
Government-owned Corporation	ZVV	ATM RMV VVS		
State Government Agency/Department		Metrolinx TfGM NJT TfNSW		
Special Purpose Independent Authority	MTS TriMet TransLink	RTA SANDAG Valley Metro		
Voluntary Alliance/ Consortium				NWOTA Seattle MP
* These categories were defined in Chapter 4.				

6.2.4 Relatively High-Power Executive Directors at Independent Authorities

Statutory RTCs tend to have more powers and stronger executive director management. Among statutory sole provider (Type 3) authorities, the executive directors overseeing an RTC tended to exercise a higher level of power where this regional entity is independent of a higher-level authority (a state or provincial government). This is the case in Vancouver, where the CEO is responsible for day-to-day planning and operation of all aspects of TransLink services (bus, rail, and ferries), as well as planning initiatives. In the case of the San Diego MTS, where the ED is appointed by a board, s/he exercises a great deal of independence, particularly in the day-to-day planning and

operation of bus and rail services, and the MTS coordinates with other transit agencies in the county. Both sole provider cases suggest that due in part to their capacity to consolidate coordination under one entity, sole-source agency managers often wield greater power and have greater control over the coordination of their services. Nevertheless, Type 1s and 2s do not necessarily have low-power Eds. In fact, in Zurich, where an independent *Verkehrsverbund* (Type 1) coordinates transit, the chief executive is relatively powerful.

In most of the RTC cases studied, particularly with Type 2 (Coordinating Transit Agencies) and Type 3 entities, the executive director exercises a moderate level of power. In some cases, these RTCs (e.g., Sydney, Toronto, Barcelona, and New Jersey) are controlled or significantly influenced by higher levels of government because they are all state agencies, except for ATM. In some Type 2 RTCs, such as Greater Manchester, where the combined authority board oversees the metropolitan government, the executive director exercises a medium level of power. Perhaps, this overall pattern is a result of greater control (e.g., involvement in decisions or courses of action) on the part of state, provincial, or regional authorities. These higher levels of government may have a larger political agenda to pursue, such as providing these higher-level authorities with the power to control more directly local transport decisions and gain political influence. By using their greater representation on the board, they wield more power to select and direct the ED. For example, in at least one of the case studies, the executive director was terminated by a high-level government official without cause.

7. Findings and Discussion

Having collected RTC case information presented in previous chapters of this report, in this chapter we present the primary findings coming out of this research, synthesizing them for further discussion and analysis. For context, our findings are consistent with both the Volvo Research and Educational Foundations and Lonroth, in his *Governance of Metropolitan Transport* series of studies:

- There is a “dearth of comparative studies of governance of metropolitan transport” (VREF, 2019a, p.6).
- The “only pattern in metropolitan transport governance is the lack of a pattern” (Lonroth, 2019a, p.13).

While the results of our study provided few indications of an overall pattern among the 16 case studies, we have identified several significant findings that are worthy of further discussion. These findings have been grouped under the following headings:

- Literature Review
- Organization Type
- Board Structure and Composition
- Legislation Establishing the RTC
- Chief Executive and Management
- Political and Geographic Boundaries

7.1 Literature Review

Our literature review revealed that much has been written on various topics related to regional transit coordination. However, our overall impression is that U.S.-based authors writing on these topics are generally not familiar with the concept of an RTC-type organization or the benefits that they offer. For example, there are several instances of European or European-based authors who have covered European RTCs (e.g., Buehler et al., VREF). Conversely, publications focused on U.S. transit—even those that address or acknowledge that strategies such as unified fares, shared monthly passes, and coordinated route planning/scheduling were factors in ridership increases—fail to mention the role of an overarching agency, i.e., an RTC, in establishing these changes (e.g., TCRP Report 173/Goldman et al, 2014; ENO, 2015; Grant, 2011).

Other U.S.-based literature falls short when it comes to understanding the range and variety of RTC structures. One publication created a chart indicating a spectrum with a loose association of transit operators sharing information (e.g., Mobility Partnership in Seattle) on the left. At the other end of this continuum, they show one option: total integration, where all functions would be merged under a single entity and there would be a “legal transfer of authority to a single legal entity” (e.g., NJT or TriMet). While we do not disagree that Type 3 models such as New Jersey Transit and TriMet are successful examples of regional transit coordination, we find there is a lack of literature about other successful models—i.e. in Types 1 and 2. Again, we concur with VREF in concluding that there are a few comparative studies of metropolitan transport governance under various stages of modernization and political order (VREF, 2019a, p. 6). We hope that this research is one of many more studies to come on this issue.

We corroborate the conclusion reached in the MTI 2020 research on regional transit coordination (DeRobertis et al., 2020) that once agencies formalize their collective coordination, there is normally a divergence to one of two paths: (1) that of a formal alliance/federation of multiple agencies and (2) that of a consolidation of agencies to create a sole provider of transit services.

7.2 Organization Type

There is no discernable pattern to the governance structure with respect to its coordination model (categorized as Type 1, 2, or 3) based on the case studies evaluated in this study. The eight Type 1 RTCs fall into all four categories: LLC Corporations, independent authorities, voluntary alliances, and an agency of the state.

Of our three Type 2 RTCs, two are entities of the state (Metrolinx in Ontario Canada and TfGM in the U.K.), and one is an independent authority (Valley Metro). Of the five Type 3 RTCs, three are independent authorities: MTS of San Diego, TriMet of Portland, and TransLink of Vancouver. And two are state entities: NJT and TfNSW.

One interesting finding was that the independent authority model is exclusive to North America (U.S. and Canada), whereas the state-run model of transit coordination was found in a number of cases: ZVV (Zurich), Metrolinx (Toronto), NJT (New Jersey) and TfNSW (Sydney). Some of these state-run agencies were established as corporations, both with and without a board of directors. Finally, the corporation model was also used by RMV (Frankfurt) and VVS (Stuttgart), where the shareholders were members of the alliance.

Interestingly, the province of Ontario established Metrolinx both as a corporation and as a “board-governed provincial agency.” The choice to establish such agencies as corporations (rather than as state departments or entities) would be worthy of further research, especially given the fact that there are other U.S. State Departments of Transportation responsible for providing/operating multimodal transit service. Further research could explore the choice to establish a government

owned RTC or transit agency (e.g., NJT, Metrolinx Toronto) as “corporations,” rather than state agencies or departments, especially given the fact that there are other U.S. state DOTs responsible for providing/operating transit service. What are the possible costs and benefits of such an arrangement?

7.3 Board Structure and Composition

7.3.1 Two Types of Boards

Boards were either entirely or predominantly composed of ex officio members or were predominantly composed of appointed citizen members. There was a variation in the composition of the eight ex officio boards, as the members could belong to one or more of the following groups:

- Elected officials of cities, counties, regional and/or state governments
- Staff from one or more of these levels of government
- Staff or officials from transit companies owned by these levels of government
- Staff of transit companies that receive tenders

Tables representing board composition versus coordination type; board composition versus agency type; and the extent of professional staff are presented in Tables 7.1, 7.2, and 7.3, respectively.

Table 7.1 Coordination Type vs. Board Composition

	Ex Officio			Mixed	Citizen Boards	No board
TYPE	Elected official virtually; 11 cities plus county	Elected official: large cities and counties	Elected official and Staff	Citizen and ex officio staff	Citizen Board	
1	SANDAG*	RMV	VVS ZVV ATM		RTA	MB NWOTA
2	Valley Metro*	TfGM			Metrolinx	
3	MTS *			NJT	TriMet TransLink	TfNSW

* All of these agencies are within one county

In Table 7.2, the composition of each case study agency board is analyzed with respect to the agency type.

Table 7.2 Agency Type vs. Board Composition

	Ex Officio			Mixed	Citizen Boards	No Board
TYPE	Elected official: virtually all cities plus county	Elected official: only counties	Elected officials and Staff	Citizen and ex officio Staff	Citizen Board	
Corp		RMV (a)	VVS (a) ZVV ATM			
State		TfGM		NJT	Metrolinx	TfNSW
Independent	MTS (b) Valley Metro(b)(c) SANDAG(b)				RTA TriMet TransLink	
Voluntary						MB NWOTA
(a) In Germany (RMV, VVS) large cities can be considered city-counties as they are not part of any other county, hence they have board members from their large cities as well (b) These agencies all are within one county (c) Of city elected officials on Boards, only Valley Metro’s board has reps from cities (four) that provide transit themselves, albeit under the single brand of Valley Metro.						

7.3.2 Boards with Members Possessing Professional Expertise

Table 7.3 shows which boards have professional expertise. In general, European boards have more professionals on the boards and/or city and county representatives that have demonstrated interest in ensuring good transit since their agencies are also responsible for providing transit. Of the U.S. case studies, NJT has the most professional board; their requirements for board members are presented above in Table 4.5. Of the North American case studies, NJT along with TransLink have specific expertise requirements, while the others do not specify who should be appointed. Conversely, some laws have explicitly listed who may not be appointed; for example, Metrolinx Act of Ontario states that certain types of politicians may not serve as board members.

Table 7.3 Boards with Professional Expertise on the Board

Agency Board	Explicit Professional expertise		None directly, but are elected officials from city/county/state that provides transit	No professional expertise required	
	Ex Officio Professional Staff	Citizens with Professional expertise		Elected official city/county/state with no responsibility for providing transit	Citizen with no prior professional expertise required
U.S.					
RTA					9
SANDAG				21	
Valley Metro			4	15	
MTS San Diego				15	
TriMet					7
NJT	3 (+ 2 nonvoting labor reps)	8 (a)			
Foreign					
ZVV	2		7		
ATM	10		8		
RMV			27		
VVS	15 (c)		14 (b)		
TfGM			11(b)		
Metrolinx (d)					Up to 15
TransLink		7 (d)		2 mayors at their option	
<p>(a) NJT: 4 must have professional background in transportation, 2 must be passengers and 2 must be one or the other. (b) VVS and TFGM are only agencies that have a representative of the regional government on the board (but Greater Manchester can also be considered a state level) (c) VVS: Three ex officio slots for staff from SSB and 1 from DB Regio are for a representative for employees/labor, see Appendix D. (d) TransLink: As a group, the board members should hold the skills & experiences listed in Article 20s (each Director in at least 2 domains) Article lists 20 domains: including corporate leadership • Strategic planning • Policy experience in Transportation • Transportation operations • Capital project oversight • Real estate development • Community engagement and leadership. Source: https://www.translink.ca/-/media/translink/documents/about-translink/governance-and-board/board-of-directors/manuals-and-articles/board_competencies_guidelines_scbcta.pdf</p>					

7.3.3 General Observations: U.S. vs. Foreign Boards

Upon review of Tables 7.1, 7.2, and 7.3 (above), we draw the following observations:

- Citizen boards were only found in North America. Five of our case studies had citizen boards: RTA, NJT, and TriMet in the U.S.; and TransLink and Metrolinx in Canada.
- Two citizen boards have appointment procedures that ensure equitable geographical representation for the whole metropolitan area (RTA Southeast Michigan and TriMet).
- Cities that have direct responsibility for providing transit were generally found in Europe.
 - In Germany and Greater Manchester, for example, the ex officio board members predominantly came from the county or metropolitan area level of government, not city government.
 - Only in the U.S. do small suburban cities with no role in providing transit have representatives on boards (VM, MTS, and SANDAG). However, in all three cases, the service areas only encompass a single county (or partial county in the case of MTS) which is not characteristic of most of the major metropolitan areas (of more than three million inhabitants), This is discussed further below.

7.3.4 Local Politicians and Cities that Provide Transit

It is worth noting that in our German and Swiss case studies, the large cities and counties are the responsible entities for providing transit—i.e., they are the “owners” (either through a government department, a city- county- or state-owned corporation, or by tendering contracts to private companies).⁴⁹ Small Swiss and German cities are not responsible for transit, instead receiving transit service from the county in Germany. Thus, their boards have representatives of large cities, of counties, and sometimes, of a representative of a group of small cities (ZVV and ATM). But none of their boards (at least among our case studies) has a representative of every small city. This is also true in Greater Manchester, where the elected representatives on the board are from the ten boroughs, called “districts,” which are composed of dozens of smaller municipalities.

In contrast, transit in U.S. metropolitan areas is provided by a mix of ownership types, predominately state-owned or municipal-owned transit agencies, special districts, and joint powers authorities (Grant et al. 2012). In California, it is never the case that all transit agencies in one metropolitan area are owned by a government agency. Thus, given this difference in transit agency ownership, it is not surprising that the only case study RTCs that are independent authorities are

⁴⁹ Government-owned means that a political jurisdiction (city, county, or state) has taken the responsibility for providing transit, either: a) as an internal department; b) government- owned corporation; or c) through tendered contracts.

in the U.S. and Canada and that their boards are different from those of the European case studies. As shown in Table 7.2 and 7.3, the independent authority boards are either citizen boards (RTA, TriMet, and TransLink) or boards with elected officials from jurisdictions that do not have the responsibility to provide transit (MTS, SANDAG, and Valley Metro). In addition, these last three case studies lie within a single county or only part of one county (MTS). Although their boards are composed of only elected city officials, which is common for U.S. independent authorities, most (Valley Metro) if not all (MTS and SANDAG) of their board members come from cities that do not have responsibility for running/providing transit service. (Valley Metro is unusual in that four of the county's 23 cities actually provide transit, albeit under the single Valley Metro brand.) In these three cases, even though cities in the county are represented on the board, the board members do not necessarily represent the members of the alliance—i.e., the actual transit agencies being coordinated. In contrast, the board members of RMV (Frankfurt), who represent the 11 cities and 15 counties, also, by default, represent the transit providers. Their departments or city-owned companies are the members being coordinated. We hypothesize that this difference can change a board member's allegiance and perspective markedly, providing greater transit operations management expertise and more investment for board members making critical decisions for regional transit coordination.

Another U.S. phenomenon is that even when an entity is within a single county, an independent special purpose district is often created (Valley Metro, MTS), and the county does not assume responsibility for service provision. In Germany, it is the *Landkreis* that is responsible for providing transit service. The boards of these independent authorities are predominantly composed of members representing small cities instead of county politicians or persons with regional perspectives.⁵⁰

This difference in the perspectives of elected officials on the boards as well as citizen boards leads us to the following observations:

- It is not clear that these special purpose independent authorities are really “independent,” since mayors of competing cities serve on the board, especially when small cities have vastly different perspectives and constituents versus the whole region.
- The board members are elected politicians who may not have any understanding of transit, and thus, may make decisions based on political leanings and parochial interests rather than transport planning principles.
- Some independent authorities' boards are composed of citizen appointees who may not know any more about transit planning than small city politicians do (see Table 4.4). At a

⁵⁰ Many other California examples exist of such special purpose independent authorities within a single county e.g., VTA of Santa Clara County and SamTrans of San Mateo County.

minimum, organizations should place greater emphasis on choosing citizens with transit expertise, as evidenced at TransLink and NJT.

7.3.5 Conclusion: Board Composition

Although there were no clear patterns differentiating Type 1, 2 and 3 agencies, there were some clear differences between European and North American boards.

Citizen boards are only found in North America. Possibly as a consequence of this, while boards with professional expertise are found on both sides of the Atlantic, only in the U.S. and Canada do we find boards where members need not have professional expertise in any area of transit planning, operations, design, provision, or the peripheral (but still important) disciplines of finance or law. Also, in the U.S., county- and city-elected officials are on the board regardless of whether the county or city has any role in providing transit. Finally, in the U.S., city elected officials are on the board regardless of the city's size. In contrast, in Spain, Germany and Switzerland, the city representatives on boards are only from the metropolitan area's largest cities (i.e., Barcelona, Stuttgart, Frankfurt, ten other city-counties in the RMV, Zurich, and Winterthur.) Furthermore, like San Francisco, these largest cities are responsible (via a city agency or a city-owned corporation) for providing transit service in their city.

7.4 Legislation Establishing the RTC

This research revealed a number of patterns in the composition and nature of these RTCs as envisioned and detailed in their founding legislation. In each case, the team identified the founding documents (legislation, cooperative agreements, etc.) for each RTC, looking for clear patterns among the RTCs of the same organizational type, governance structure, or similar board configuration.

7.4.1 State Involvement and Agency Type

Our research revealed that where transit coordination is generally supported through state transport policy, and state legislation has been established to create a particular RTC, we see that this agency is primarily focused on achieving the objectives set forth. That is to say, where a state or metropolitan government is involved in establishing regional coordination requirements and standards, specific state-level legislation also plays a significant part in defining the regional commitment and scope of the coordinating agency. Of course, this focus can vary greatly, with some legislation aimed specifically at outlining the various functions of the RTC and providing stable funding, further ensuring the ongoing operation of the entity. In other cases, legislation may merely establish the agency and let local leaders and authorities further define the parameters of the coordinating agency.

There is also a difference in authority depending on whether or not the law creates the entity as a state agency. If it is a state agency, the state retains more control even if there is a board; this is true with both Type 2 (TfGM, Metrolinx) and Type 3 (NJT) agencies. If it creates a special purpose independent authority (RTA, MTS, SANDAG, and Valley Metro), then the state tends not to play a direct, significant role, and the RTC is more dependent on the political will of the local governments.

In contrast, where the state and metropolitan area are not actively involved in the creation or development of a coordinative effort, a voluntary authority sometimes does not provide an ongoing source of coordination and collaboration of transit services. In the Northwest Oregon and Seattle examples, while transit agencies have taken the initiative to meet and work through common areas of interest, often they focus on specific areas and lack the commitment to establish a legally binding agreement that guarantees that planning, fare, and service issues are discussed on an ongoing basis. Nevertheless, strong voluntary alliances do exist (MTDB San Diego and Valley Metro), and they seem to rely not on state legislation but on intergovernmental agreements. They may also benefit from funding that comes to them as the regional transit operator and the funding also may have come from state law. The success of some voluntary alliances versus others is worthy of future research.

7.4.2 Statutory versus Voluntary Alliance Organizations

A key finding from the research is that among the transit federation case studies (Type 1 and 2), a distinction can be made between voluntary transit federations and statutory federations. There are also two distinct types of voluntary organizations: loose/informal and strong/formal.

Statutory: As discussed above, there are many types of statutory organizations which have a well-defined board, management structures, roles, and authority. In these cases, the law is promulgated by a higher level of government, such as a regional, state/provincial, or federal entity. Statutory Type 1s and 2s—i.e., created by laws which mandate participation by the transit agencies in the metropolitan area—tend to have stronger executive directors that are paid, full-time positions, are directly responsible for the agency's staff, and have more day-to-day responsibilities for running the agency. These cases include SANDAG (San Diego), the Regional Transit Authority of Southeast Michigan (Detroit), ZVV Zurich, and RMV Frankfurt.

Voluntary-Loose/Informal: Voluntary Type 1 and 2 organizations are loosely bound transit federations, organized and run entirely within and by the collaborative efforts of member agencies, with no requirements for participation placed on them from higher levels of government. Unlike statutorily based RTCs, loose voluntary organizations are marked by a lack of formal documents; when founding documents exist, they typically come in the form of memoranda of understanding and cooperative agreements, rather than more legally binding contracts and the enabling legislation provided to statutory organizations by higher levels of government.

These organizations are commonly staffed by representatives of their constituent individual agencies and, thus, have no permanent staff of their own. The agencies collectively name a committee chair, but this individual is largely a figurehead for the committee, with little or no independent powers. Examples of voluntary Type 1s highlighted in this study are the (1) Northwest Oregon Transit Alliance (NWOTA) and (2) the Seattle (Puget Sound) Area Mobility Partnership.

Voluntary-Strong: A second type of voluntary organization can be considered stronger/formal. These are similar to statutory organizations in that they do have a strong leader and often staff dedicated to the regional coordination effort. Among our case studies is ATM Barcelona, which calls itself a voluntary organization. But the state of Catalonia is very much involved, so without further investigations beyond the resources and time available for this study, it is hard to say how “voluntary” it is. It does have a formal structure with a paid full-time executive director, staff, and a board.

Our research also revealed that several successful RTCs began as voluntary associations and were highly effective due to their formal agreements to abide by mutual decisions. Indeed, Hamburg HVV, the inventor of the RTC concept in 1965, began as a voluntary association, and many other metropolitan areas in Germany formed voluntary associations as well (including VVS Stuttgart), before national and state laws were passed. The most notable U.S. example, in terms of fare reciprocity and unification, is MTS San Diego, which was part of a strong voluntary coordination effort between MTDB (which ran the light rail system) and the numerous local bus agencies, including the city of San Diego Transit, the city of Chula Vista Transit, and National City. They eventually consolidated into a single agency for the metropolitan area of San Diego (Larwin 2012). Even our case study RMV in Frankfurt had begun to voluntarily coordinate a few years prior to the state of Hesse law.

The common element of these strong voluntary associations that did effectively coordinate fares and even customer-facing branding and marketing, seems to be the unquantifiable element of political will and/or the will of the participants (Larwin 2012, TTI 2012). That is to say, these strong voluntary associations are based on a clear will on the part of the participants and local authorities to effect change through closer coordination and ongoing cooperation in specific areas of common interest.

Hybrid Statutory/Voluntary: Another key finding of this research was that some agencies were created by statute to carry out one function (e.g., coordinate multi-operator fare discounts), but then ended up being the RTC through intergovernmental cooperation among the local agencies, not due to the state law. All three of our Type 2 RTCs had unique paths in how they came to be the regional coordinator. In these cases, the agency itself was established by law to be the regional transit provider, and they became the coordinator of all other entities later. Most interesting for the discussion of voluntary organizations is Valley Metro. This transit agency was established by Arizona state law as the regional bus and rail provider; it appears that their role to create a single

brand with the other four separate, city-run bus agencies and adopt a single fare structure came about under voluntary intergovernmental agreements, rather than being mandated by said state law (Fischer et al, 2021, TTI, 2012). This seems to be the case with TfGM as well, but TfGM is also unique in other ways, being an agency of the (equivalent of a) regional government.

7.4.3 Caveats about Loose/ Informal Voluntary Organizations

Whether statutory or a loose or strong voluntary organization, Type 1 and 2 alliances achieve progress along the continuum of regional transit coordination. While loose voluntary organizations may not seem to achieve much, they can play an important role in providing a regional forum to discuss and collaborate on mutually beneficial programs and projects for the participating transit agencies. Furthermore, particularly when these mutually beneficial programs are successful, and good will is firmly established through a positive working relationship and good performance, loose voluntary organizations have the potential to serve as a foundation for further regional coordination of transit services. This is particularly true for critical aspects of interoperability such as a regional fare pricing system, fare medium (e.g., smart cards), inter-system transfers, route and service hours planning, and wayfinding and, indeed, can become a full RTC. Nevertheless, they can suffer from a lack of motivation and resources to take on these more ambitious regional coordination activities.

While a loose voluntary organization is certainly better than none, and while significant regional benefits can be realized through them, the lack of a universal policy mandate, central leadership, and resources that characterize loose voluntary organizations suggests that these agencies are generally formed and operated to meet the minimal needs for regional coordination and/or as a vehicle for focused, common operational interests such as collective capital purchasing. As such, they tend to either be a steppingstone to developing a statutory RTC later, or conceivably, can serve as an impediment to them. Indeed, while confirmation of this hypothesis would require research beyond the scope and resources of this study, it seems possible that the history of federalized, dispersed governing powers in the U.S. naturally lead regional transit agencies to favor retaining as much power and authority over their own operations as possible. As a result, their natural self-interests can lead them to address regional pressures for coordination with efforts to establish voluntary RTCs that give the appearance of coordination without the requirements and resources to achieve it substantially. This pattern is certainly suggested by the lack of coordination beyond a minimum as seen in loose voluntary cases like the Northwest Oregon Transit Alliance (NWOTA) and the Seattle Area Mobility Partnership, while the statutory examples such as SANDAG (San Diego) and the Regional Transit Authority of Southeast Michigan (Detroit), ZVV Zurich speak to the greater potential for regional coordination associated with RTCs formed under statutory requirements.

As a result, even a loose voluntary alliance organization can provide much needed collaboration between regional partners, but because they lack the mandate and resources required, may eventually end up being an impediment to further coordination. Though loose voluntary alliances may sometimes preclude further and more formal coordination, loose voluntary RTCs are not

necessarily inferior, inhibitory, or ineffective. Indeed, in cases like NWOTA where the needs of regional coordination are small for the mostly rural areas covered by the RTC, a voluntary organization is well-suited to the tasks given, and over time, it may yield further regional coordination benefits should the participating operators choose to expand its duties and services. However, in cases such as the Seattle Area Mobility Partnership where the region is more highly urbanized and the transit services offered are geographically divided among several agencies, the coordination achieved under this voluntary RTC is somewhat limited and has not progressed much. Then again, it has only been in existence for four years. Therefore, in these cases, it is reasonable to assume that additional statutory requirements could improve regional transit planning and coordination.

7.4.4 Political Will

While voluntary organizations can suffer from lack of momentum, statutory organizations can also progress slowly. For example, SANDAG has had a law effectively calling for the creation of a “consolidated transportation agency in San Diego” since 2002 and has only recently coordinated fares between the two agencies in the county. We conclude that the creation of the agency is only the first step, and it seems not to matter whether it was created voluntarily or statutorily if the statute does not indicate what the agency *must* do as opposed to what it *can* do. That is to say, it is imperative that legislation be accompanied by concrete plans for implementing the proposed coordination, including the collaboration of participating agencies. In contrast, Valley Metro was created by statute, and the law did not mandate that it be a Type 2 RTC, yet it became one when the affected agencies mutually agreed that it was the best option for their region. In many cases, political will seems to be more important than the establishment of statutes. This is worthy of future research.

7.5 Chief Executive and Management

This research revealed general patterns in the composition and nature of the case study RTCs, particularly those with a full-time executive director (or equivalent) directly responsible for the regional entity. While data was limited, in each of the case studies, agency documents and project staff identified the principal areas of responsibility for each executive director and provided some insight into the relative strength of the executive director’s authority relative to the board.

7.6 Political and Geographic Boundaries

Most of our case studies are not directly comparable to California conditions, especially the foreign case studies, where we found a variety of administrative structures, settlement patterns, and planning principles. With respect to issues surrounding political and geographic boundaries, we made the following observations:

- **The state (within a sovereignty) is the sole transit provider in the metropolitan area (NJT and TfNSW):** This could work in some states but perhaps not in large, geographically diverse states like California where there are many metropolitan areas (although NJT does it for the state of New Jersey which has 7 MSAs). Metrolinx is a board-governed agency of the province of Ontario.
- **The metropolitan area equals the state:** In California, metropolitan areas with multiple agencies (Type 1 and 2) do not have the same boundaries as a single state, as in other examples. California has 26 metropolitan statistical areas (MSAs) plus many rural areas, all of which lie completely in the state:
 - In ZVV metropolitan area, which is also the entire canton of Zurich, this tends to simplify coordination in a polycentric urban area.
 - The TfGM service area is the whole metropolitan area of Greater Manchester, and the TfGM board is the metropolitan government; (i.e., monocentric).
- **The metropolitan areas have multiple counties and multiple large cities (polycentric):**
 - The RMV-style board with one representative from each major city and one from the counties is not directly translatable to the U.S., since most U.S. metropolitan areas (including all of California's) are not composed of agencies that provide their own transit.
- **The metropolitan areas have multiple counties and one large city (monocentric) (VVS, RTA, ATM, TriMet and TransLink), with different approaches to agency type and board:**
 - VVS used a typical European approach with a professional board, part agency-elected officials (all from agencies that do transit), and part professional staff (like ZVV and ATM).
 - RTA is organized as a typical U.S.-style approach as an independent with a citizen board. There are four counties and the city of Detroit.
 - ATM also has a European approach, with a mix of professional staff and elected officials but has a much larger role and influence of the state (autonomous region) of Catalonia.
 - TriMet is three counties and one major city, Portland.
 - The TransLink service area includes the city of Vancouver and surrounding Fraser Valley municipalities. (There are no counties in British Columbia.)

- Some metropolitan areas being coordinated only comprise a single county or partial county and one large city:
 - Valley Metro is within only one county, one large city, Phoenix, and many small cities.
 - SANDAG is within only one county with one large city, San Diego, and has 17 smaller cities.
 - MTS is within only one county, with one large city, San Diego, and has many small cities.

8. Conclusions and Recommendations

To meet its transportation and climate goals, California must focus on better regional transit integration to increase connectivity and ridership. In order for transit to achieve these goals, it must serve a greater share of daily travel needs. The fact that many metropolitan areas have separate transit agencies further highlights the need to coordinate.

Europeans, Australians, and Canadians know that RTCs improve the customer's transit experience, and consequently ridership, which is the ultimate goal to address urban livability and climate targets. Some U.S. transit professionals and advocates know this as well, especially those who have been abroad or come from abroad. As Geier explains, if the goal of the transit system is to be the “mobility backbone” of the region rather than merely being the last resort (i.e., a social service for the poor) or being only a heavy load service (i.e., for commuter trips) (Geier 2023), RTCs ensure that all systems work together optimally in terms of fares, coverage, frequency, customer service information, and behind-the-scenes planning and management.

This report seeks to provide policy makers with instructive examples of governance structures that effectively coordinate multiple transit agencies in a single metropolitan area. After an initial analysis, we identified 16 organizations with roles in regional transit coordination to study at length, identifying the structure, scope, and management of each case. Importantly, we acknowledged that our case studies are located in seven different countries, and each of the cases is unique, with different cultures, governance structures, government levels, and legal frameworks.

Our research has included case studies ranging from informal transit agency alliances, to transit operators that effectively coordinate some or all transit services in a metropolitan area, to sole (consolidated) transit providers in a metropolitan area that internally integrate system components. Ten case studies were virtually all-inclusive, fully functioning RTCs, while five case studies were located somewhere along the integration continuum, and one case study (U.S.) appeared to be working through the initial stages of their coordination efforts. We included these five emerging RTCs and one proto-RTC case study, even though they were not fully functioning RTCs, to see if we could learn anything from their processes to-date.

To reiterate, a fully functioning RTC has the following elements:

- Single-fares structure and ticketing across all modes and operators (i.e., distance-based fares, not mode-based fares or agency/operator-based fares)
- Coordinated schedules and seamless transfers between modes and operators
- Unified customer information /marketing for all modes and operators (including a “one-stop-shop” website)

- Coordinated, long-term planning
- Unified procurement to achieve economies of scale (where possible)

8.1 Summary of Findings and General Conclusions

Successful RTC coordination types include Type 1 (coordination only), 2 (coordination and regional transit provider), and 3 (sole transit provider/consolidation). It is important to note that consolidation to become a Type 3 is one path to achieving greater regional transit coordination; however, it is not the only one. Type 1 and 2 alliances of multiple agencies can achieve the same results, as the successful 60-year history of *Verkehrsverbände* in Germany has shown.

8.1.1 How are RTCs created and composed?

The purpose of this research was to help inform future decisions on how to structure an RTC in California by looking at successful organizations abroad as well as in the U.S. In assessing the structure and governance of an RTC, it is apparent that there are many elements involved in creating an organization with the authority to coordinate regional transit.

This study addressed two principal questions:

1. **How** were the RTCs created, and how did they come about?
2. **What** are the components of an RTC that need to be determined and designed?

How: If it does not come about voluntarily as it did in Germany, MTDB San Diego, and elsewhere, we found that state laws can be effective. We found that state laws did one of the following:

- Created a state agency or corporation as a Type 3 sole provider (NJT and TfNSW)
- Created a state agency or corporation as a Type 2 regional agency (TfGM and Metrolinx)
- Created a state agency or corporation as a Type 1 regional agency (ZVV)
- Created a special purpose independent authority regional agency as a Type 3 (TransLink, TriMet, and MTS)
- Created a special purpose independent authority regional agency as a Type 2 (or which became a Type 2) (Valley Metro)
- Created a special purpose independent authority regional agency as a Type 1 (RTA)

- Gave an existing regional agency authority to be Type 1 (SANDAG)
- Mandated that local authorities create Type 1 regional coordinator (VVS, RMV, and ATM)

What: The principal elements important in the formation of a RTC include the following:

- How the agency is structured
- The form of the metropolitan area
- The board and the board's composition
- The persons or entities empowered to appoint the board
- The persons or entities empowered to appoint the general manager/ executive director
- Other checks and balances to limit the power or authority of the board or general manager/ executive director

Furthermore, it is important to identify the powers that are vested in the board and what roles the board is assigned:

- TransLink's powers are divided between the board and the mayors' council.
- Metrolinx is nominally governed by the board, but as a state-owned agency, decisions are still ultimately made by the Minister of Transportation. The board advises and is "accountable to the Minister, through the chair," whereas the minister "is accountable to cabinet and the legislative assembly."
- TfNSW is an agency of the state, but a separate state-owned corporation was created in 2020 to acquire, hold, finance, and develop all assets (i.e., infrastructure and rolling stock).
- The governor of New Jersey is essentially allowed to veto decisions of the board.
- TfGM is directly controlled at the top by the Greater Manchester Combined Authority, one of ten such entities in the U.K. that derive most of their powers from the Local Democracy and Economic Development and Construction Act 2009—i.e., effectively acting as a sort of regional parliament for the Greater Manchester Metropolitan Area.

General conclusions on each of these elements are presented below.

8.1.2 Organization Type

Our case studies fell into four general ownership categories:

1. Multi-government-owned corporation
2. State government agency/department/corporation
3. Independent authority-special purpose
4. Voluntary alliance/consortium: These were found to be both formal/strong, and informal/loose

There is no pattern to the governance structure with respect to its coordination model:

- **Type 1 RTCs:** Our eight Type 1 case studies fall into all four categories: LLC Corporations, independent authorities, voluntary alliances, and an agency of the state.
- **Type 2 RTCs:** Two of the three Type 2 case studies are departments of the state (Metrolinx in Ontario Canada and TfGM in the U.K.), and one is an independent authority (Valley Metro).
- **Type 3 RTCs:** Three of the five Type 3 case studies are independent authorities (MTS, TriMet, and TransLink), and two are state entities (NJ Transit Corporation and TfNSW).

One interesting finding from this study is that we only found independent authorities in North America: the U.S. and Canada. Conversely, the state-run model was found on all three continents: Europe (ZVV Zurich in Switzerland), North America (Metrolinx in Canada and NJT in the U.S.), and Australia (TfNSW Sydney). Some of the RTCs, including state-run agencies, were established as corporations, both with and without a board of directors. Interestingly, the province of Ontario established Metrolinx both as a corporation and as a board-governed provincial agency.

8.1.3 Board Composition

There are two types of board members: ex officio and appointed citizens. We made the following observations:

- Among ex officio board members, the ex officio could be one of the following:
 - Elected officials of cities, counties, regional and/or state governments, all with responsibility for providing transit service

- Elected officials of cities that have no responsibility for running transit (only in the U.S.)
- Staff from one or more of these levels of government (only in Europe and New Jersey)
- Staff or officials from transit companies owned by these levels of government (only in Europe)
- Staff of transit companies that receive tenders to provide the service (only in Europe)
- Appointed citizen boards are only found in U.S.A and Canada.
- European boards, in general, have transit-knowledgeable professionals on the boards; large city and county representatives are on the board only if they have personal investment by being a transit provider.
- Among U.S. boards, NJT has the most transit-knowledgeable-professional board in both its ex officio and its appointed citizen positions.
- Among citizen boards, NJT along with TransLink have fairly specific expertise requirements, while in the other cases, the laws or bylaws do not specify who should be appointed.

8.1.4 Law/Enabling Authority

A wide range of legislation for the establishment of RTCs was found in the course of this research. In most instances, legislation at a higher level of government (state-level in the U.S.) forms the legal basis for RTCs, but significant variations are possible:

- The state may mandate both the creation and the responsibilities of the RTC (e.g., TransLink).
- The state may mandate the creation of a regional transit provider but leave the details of its operations and how it integrates with other transit operators to the provider and its local partners (e.g., TfGM and Valley Metro).
- There are also instances where there is no state mandate, but agencies form a voluntary consortium to coordinate transit (e.g., NWOTA and Valley Metro).

Voluntary federations further fall into “loose” and “strong” federations. Loose federations operate entirely on consensus. Strong voluntary federations go further, entering into legally binding agreements to coordinate fares, services, branding information dissemination, and/or marketing.

In many if not most cases, political will seems to be more important than establishing statutes. The creation of the agency is only the first step, and it seems not to matter whether it was created voluntarily or statutorily, unless the statute specifies what the agency *must* do as opposed to what it *can* do.

8.1.5 Executive Management

While executive management plays a key role in providing support to member transit agencies, methods and structures of internal decision making and control vary by individual RTC. During the course of this study, noteworthy elements were gleaned from various agencies:

- Metrolinx: The roles and responsibilities of the minister, deputy minister, agency chair, agency CEO, and the agency’s board of directors are outlined in a 23-page MOU. The duties of the chair are time-consuming, which may explain why the chair of the board has compensation that is essentially a full-time salary.
- Other statewide agencies’ (New Jersey and New South Wales) experience suggests that the RTC CEO function can be subjected to political interference by the state executive (governor or premier).

Ideally, the CEO or executive director of an RTC should only be responsible to the passengers of the area, its constituents, and agencies served. In all cases studied, this appeared to be true: the CEO was focused on managing the network of member transit agencies, effectively supporting the coordinative strategies agreed to in the RTC’s long-term plans (as worked out with individual member agencies). Given that the CEO is normally appointed by and reports to a board of regional actors, the CEO is largely free from external interference and political control. However, in some of the cases studied, high-ranking government officials had some direct influence on the CEO (e.g., New Jersey and New South Wales). Or theoretically, they could have indirect influence; the mayor of Greater Manchester sits on the Combined Authority Board, but normally defers much of the work to other members of the board and Bee Network Committee.

8.2 Recommendations and Implications for Establishing U.S. and California RTCs

8.2.1 Models for Establishing the RTC Governance in Multi-County Regions

In areas that are composed of multiple counties, one model to consider would be the multi-county owned corporation with a board. The RTC organization and its board could be a hybrid of the following models with one or more of these characteristics:

- Two board model or board with an advisory committee—e.g., GMCA is the board, but it has a transportation advisory committee (composed of local elected officials) or TransLink, which has two boards, one of which is the mayors’ council
- New South Wales model: a state agency, TfNSW, as the sole provider of transit services (Type 3 RTC) and a state-owned corporation as the holding company with its own board, which owns all the infrastructure and rolling stock
- NJT Board model: a professional board, which is comprised of both senior state of New Jersey staff (ex officio) and appointed citizens who either have professional expertise or are passengers
- VVS model, whose board is half ex officio elected officials from agencies that operate transit and half ex officio staff from transit agencies (city-owned or state-owned) or other transit companies, including labor representatives

8.2.2 Important Principles for the Composition of an RTC Board

Another key finding of this study is that boards of successful RTCs include or are composed entirely of either transit professionals or members representing jurisdictions with a responsibility for providing transit (e.g., Stuttgart and Frankfurt), not small-city politicians or purely political appointees. Particularly in Europe, transit agencies being coordinated are directly represented on the board of directors. This ensures members of the governing body have knowledge of transit issues.

An RTC board should primarily be composed of people with professional transit expertise. This could be a combination of representatives of the regional transit agencies, representatives of local bus agencies, the director of the state transportation agency, and other transit professionals. Any representatives from government jurisdictions should be from higher (state, regional, if any, or county) government levels, with the exception that the largest cities in the metropolitan area could also be represented.

For example, a good model for an ex officio board for the San Francisco Bay Area would have members drawn from some or all of the following agencies:

- Counties/cities that provide their own transit: In Europe, all the large cities in the metropolitan area would be included here, as they all take responsibility to provide their own local transit. In the San Francisco Bay Area this could include:
 - City and County of San Francisco
 - County of Sonoma

- Cities of Santa Rosa, Petaluma, Union City, Vacaville, and Fairfield
- One representative from each county in the metropolitan area
- Mayor (or designee) of the major cities: in the San Francisco Bay Area, this would be San Francisco, Oakland, and San José
- High-level staff of the larger regional transit agencies
- High-level staff from the larger local bus agencies (or a representative of all local bus agencies)
- State transportation commissioner (possibly, the chair as a more “disinterested” party)
- Ex officio or appointed citizens with professional transit expertise

8.2.3 Recommendations for California law

Most organizations were formed by state law, but some are or began as voluntary alliances. Although loose, voluntary organizations may not seem to achieve much relative to more formal and statutorily enabled RTCs, they can play an important role in providing a regional forum to discuss and collaborate on mutually beneficial programs. History has shown that where there is a solid commitment and adequate funding, they can eventually become a full RTC. Ongoing funding strategies supporting the establishment and operation of these organizations are of utmost importance.

One major finding here is that in terms of accomplishing the major elements of an RTC (e.g., fare unification, single branding, marketing, and information dissemination), political will or consent of the participants seems to be more important than statute (e.g., both Valley Metro and, to a lesser degree, NWOTA). However, in the absence of the “consent of the participants” a well-crafted state law may be the only solution.

Given that little has been accomplished in the San Francisco Bay Area or elsewhere in the state (with the exception of MTS in the 1990s) by the consent of the governed in the thirty plus years since the issue has been raised, it may well be up to the state to achieve movement on forming RTCs for its metropolitan areas, and as such, the state should recognize that this idea has value for all metropolitan areas, not just the Bay Area. Thus, the state should consider developing a supportive legislative framework to facilitate the creation/evolution of RTCs, rather than mandating one solution. Such a framework would encourage the formation of RTCs in all metropolitan areas of the state and allow RTCs in different parts of the state to have their own unique structure, given the diversity of options available as found by this research.

8.3 Recommendations for Future Research

We concur with the ENO Center’s 2015 publication, *The Role of Governance in Regional Transit*, which states that the level of state-government involvement in transit varies greatly across regions. We found that while the level of involvement of states in the existence of an RTC varied considerably in the U.S., outside the U.S., the state has a much stronger role at many levels. Thus, the role of the state outside of the U.S. versus in the U.S. is worthy of further research.

While this study of governing structures has provided a pathway through which to explore a variety of organizational configurations, identifying strengths and weaknesses in ensuring the creation and maintenance of an integrated set of transit services (e.g., bringing clear benefits to the passenger), many relevant questions are beyond the scope of this study. We briefly outline potential areas of further research below:

- Lonroth (2019a, p. 13) concluded that the wide variations in how to organize and manage the transit systems in the metropolitan areas in his case studies are due both to differences in financing and funding and attitudes towards placemaking, land use, and transport decisions, rather than governance. We believe that future research could look deeper into the role of these elements—first in the presence and then in the structure, organization, power, and authority of regional transit entities.
- Valley Metro’s voluntary intergovernmental agreements to operate under a single brand was by far the most interesting U.S. case study, since it was not formed as an RTC per se but rather to be the regional bus operator and then the light rail operator. This research would discover how and why it and the other city-owned transit operators in Maricopa County would operate under a single brand.
- The choice to establish a government-owned RTC or transit agency (e.g., NJT and Metrolinx Toronto) as “corporations,” rather than state agencies or departments, is important, especially given the fact that there are other U.S. state DOTs responsible for providing/operating transit service.
- The role of the state government (foreign and U.S.) in transit provision as well as transit coordination merits further research.
- Whether or not to have a board of directors for state agencies (e.g., NJT and Metrolinx) warrants consideration.
- The board composition requires clarification:
 - What is the best way to form an organization and governing board for three distinct types of metropolitan areas: single county metropolitan areas, metropolitan areas

with multiple counties and multiple large cities (polycentric), and metropolitan areas and/or organizations that comprise an entire state?

- What is the effectiveness of ex officio positions on the board from the county or the city level when neither is responsible for providing the transit service? Which level best represents the transit riders?
 - What are the advantages and disadvantages of ex officio positions on the board from all cities, versus only the major cities in the metropolitan area?
 - What are the advantages and disadvantages of ex officio positions on the board from all the small cities as opposed to a representative from an organization of small cities (as in ATM and ZVV)?
- The success of some voluntary alliances versus others is worthy of future research. This could include the case studies of this research as well as research on the extent and progress of other U.S. cases of voluntary regional transit coordination that were revealed in the literature review including the following points:
 - Quad Cities Transit (Davenport, Iowa) is a voluntary alliance of four transit agencies. It is unclear what governance structure the entity implemented, or how decisions on revenue sharing are made.
 - Santa Fe's North Central Regional Transit District (NCRTD) was founded to provide regional collaboration as well as provide service to areas outside Santa Fe. However, it is unclear exactly how much authority it has as an RTC.

Appendix A

Brief Facts About Each Case Study

This appendix presents a brief description of each case study organized by coordination level as follows:

1. Alliance of transit agencies to achieve regional transit coordination in the three key areas
2. Transit agency that also coordinates the others in the three key areas
3. Sole transit provider in the region that ensures coordination in the three key areas

Coordination Only-Alliance of Individual Transit Agencies to Achieve Regional Transit Coordination

RTA - Regional Transit Authority of Southeast Michigan (Detroit, Michigan, U.S.)

Year formed: 2012 by state law

Organization Type: Independent Authority

Transit Agencies coordinated (alliance members): 6

Number of political areas within agency's purview /metropolitan region/transit coverage area: Four counties of Oakland, Macomb, Washtenaw, and Wayne (which includes the city of Detroit)

Purpose: the mission is “to manage and secure transportation resources that significantly enhance mobility options, to improve quality of life for the residents, and to increase economic viability for the region” (<https://rtamichigan.org/about/>).

Brief description: The RTA-SEM (or RTA) was created by Public Act No. 387 of 2012 to coordinate transit planning activities, allocate federal and state funding, and secure new regional funding in Macomb, Oakland, Washtenaw, and Wayne Counties. The RTA works in partnership with the Detroit metropolitan area's transit providers and community partners to serve 82 communities in Southeast Michigan (RTA, 2022). In addition, RTA is responsible for adopting a comprehensive transit plan for the metropolitan area and ensuring that there is coordination between all operators of transit in the region (RTA 2022). So far, they have focused on fare coordination; they have also talked about creating a single brand for all of the regional buses, but it has not been implemented (Stupka, 2023).

SANDAG - San Diego Association of Governments (San Diego CA U.S.)

Year formed: Transit coordination functions added in 2002, via California Senate Bill (SB) 1703.

Organization Type: MPO and Council of Governments

Transit Agencies coordinated (alliance members): Two independent transit agencies: San Diego MTS and North County Transit District.

Number of political jurisdictions within metropolitan region/transit coverage area: One county, 18 incorporated cities plus dozens of unincorporated communities.

Purpose: SANDAG is both metropolitan planning organization and a council of governments, “bringing together local decision-makers to develop solutions to regional issues including improving equity, transportation, air quality, clean energy, economic development, goods movement, public health, public safety, housing, and more” (<https://www.sandag.org/about>).

Brief description: The San Diego Association of Governments (SANDAG) is the comprehensive planning body for the region. It conducts long-range planning and manages regional transportation projects. 2002 state law SB1703, in theory, formed a single consolidated agency from SANDAG and the two transit agencies in the County, MTS and North County Transit District. As of 2023, there is not yet a single consolidated transit agency in San Diego County. But the first immediate effect of the law was to take “development” responsibilities (i.e., long-range rail planning and construction) away from MTS and give them to SANDAG (Larwin 2012). Another area that SANDAG has gradually assumed responsibility for is fare coordination between the two transit agencies in the county via the Regional Fare Policy and Comprehensive Fare Ordinance, written in consultation with the two transit agencies and approved by the SANDAG Transportation Committee (SANDAG, 2008). Its most recent effort in this regard was in 2021, which established a new regional fare system branded as PRONTO.

NWOTA - Northwest Oregon Transit Alliance (Oregon, U.S.)

Year formed: 2012

Organization Type: Voluntary alliance

Transit Agencies coordinated (alliance members): 5

Number of political jurisdictions within metropolitan region/transit coverage area: Five counties

Purpose: The intent of the Alliance was to remove barriers to transit use through better connecting communities and to improve coordination of routes, schedules, and fare structures among the five operators.

Brief description: The Northwest Transit Alliance comprises five transit providers operating and marketed under a single brand to provide regional connections between the service areas of the five agencies. Each of the five agencies retains ownership of all its assets and operation of all its services, but they share resources such as transit stops and improve the convenience and cost effectiveness of regional transit services through coordinated transfers and shared resources. Achievements to date include creation of a nonprofit organization to fundraise for multimodal transportation projects and creation of the North by Northwest CONNECTOR website, (<https://nwconnector.org/>) which includes a “one-stop shop” for schedule and fare information, a regional transit trip planner, and a “track our performance” feature. The Alliance also established three- and seven-day visitor passes and started efforts to install unified branded signage and shelters at major transit stops. However, each agency still sets its own cash fares and local pass policy for its own routes.

NWOTA deserves special mention because it is unique in two ways: it is a voluntary organization, and the five member agencies are all rural county agencies. Thus, they do not operate in the same metropolitan area. Yet they collectively recognized the value of coordination. Not only are their long-distance routes coordinated in terms of fares and schedules, but they have also created a single website for transit information for all five agencies.

Mobility Partnership - MP (Seattle, Washington, U.S.)

Year formed: 2019

Organization Type: Voluntary alliance

Transit Agencies coordinated (alliance members): 10

Number of political jurisdictions within metropolitan region/transit coverage area: 100 separate cities throughout the four-county metropolitan area

Purpose: The Mobility Partnership’s aim is to “enhance the region’s quality of life, support economic growth, and protect the environment” through better coordination of transit services in four counties: King, Pierce, Kitsap, and Snohomish (Mobility Partnership, 2019). Furthermore, its Charter Document plans to “ensure that all people have access to the many opportunities in the region by using a regional system that is easy to understand, fast, and reliable.”

Brief description: The Mobility Partnership is a voluntary consortium of ten transit agencies, whereby the region’s transit agency directors identify opportunities to work collaboratively towards specific results. It was initially formed in the early 2010s, in response to state legislation calling for (1) transit coordination in the state’s major metropolitan areas and (2) a state-funded grant for transit coordination and agency collaboration in the Puget Sound region. Thus far, the partnership has held director meetings and coordinated thematic meetings involving professional staff from

the participating agencies. It does not have a dedicated staff but is facilitated by staff from one of the major regional transit operators (e.g., Sound Transit).

VVS-Verkehrs-und Tarifverbund Stuttgart, (Stuttgart, Germany)

Year formed: 1978

Organization Type: Corporation (GmbH)

Transit Agencies coordinated (alliance members): 8 (Those of each of the 7 local and regional government jurisdictions plus the state of Baden-Wurtemberg)

Number of political jurisdictions within metropolitan region/transit coverage area: One city-county, the state capital of Stuttgart, and five *Landkreise* (translates as districts or rural counties) of Böblingen, Göppingen, Ludwigsburg, Esslingen, and the Rems-Murr-Kreis. There is a regional government, VRS (the only such government in Germany), that encompasses these jurisdictions.

Purpose: VVS offers integrated and sustainable mobility from a single source. “Together with its partners, it makes a decisive contribution to securing and improving mobility in the Stuttgart metropolitan area” (<https://www.vvs.de/ueber-den-vvs>).

Brief description: One of the earliest German *Verkehrsverbände*, it oversees and ensures a single fare structure, website, scheduling, and procurement among the eight distinct transit providers in the Stuttgart metropolitan area.

RMV GmbH - Rhein-Main Verkehrsverbund (Frankfurt, Germany)

Year formed: 1995

Organization Type: Corporation GmbH) owned by local governments

Transit Agencies Coordinated (alliance members): 27 (Those of each of the 26 local government jurisdictions plus the state of Hesse.)

Number of political jurisdictions within metropolitan region/transit coverage area: 11 city-counties, plus 15 *Landkreise* (aka rural counties).

Purpose: RMV GmbH “ensures that local public transport keeps rolling: we coordinate and finance transport, order services, and orchestrate the overarching marketing.”

Brief description: Created in 1995, shortly after the passage of two major federal pieces of legislation (the 1993 Regionalization Act and the 1993 Railway Organization Act), it was designed to coincide with the proposed new S-Bahn system. RMV is a classic German *Verkehrsverbund*

(established during the second wave of *Verkehrsverbund* expansion); it oversees and ensures a single fare structure, website, scheduling, and procurement among the 26 cities and counties which, along with the state of Hesse, and they are also the transit providers in the Frankfurt Metropolitan Area. These jurisdictions founded the Rhein-Main-*Verkehrsverbund* GmbH, and together with the state of Hesse, are the shareholders of the GmbH.

ZVV- Zürcher Verkehrsverbund (Zürich, Switzerland)

Year formed: 1988

Organization Type: Agency of the canton of Zurich

Transit Agencies Coordinated (alliance members): 8

Number of political jurisdictions within metropolitan region/transit coverage area: 162 municipalities (there is no Swiss equivalent of a county (i.e., there is no government level in between the municipalities and the canton).1.5 million inhabitants

Purpose: The ZVV plans, finances, coordinates, and markets transit in the canton of Zurich

Brief description: In 1981 voters approved a combined U-Bahn and S-Bahn system. The legal basis for the Zurich Transport Network was established in 1988. The canton is divided into eight market areas for the purpose of public transport. Two cities in the canton (Zurich and Winterthur) have responsibility for transit within their city limits and the canton tenders out transit in the remaining six areas, as well as operates regional trains and ferries. The ZVV is the association that coordinates these 8 principal transit entities.

ATM - Autoritat del Transport Metropolità (Authority of Metropolitan Transport) (Barcelona, Spain)

Year formed: 1997

Organization Type: Voluntary but overseen by the region of Catalonia

Transit Agencies Coordinated (alliance members): approximately 35

Number of political jurisdictions within metropolitan region/transit coverage area: The municipalities in 12 counties of the Barcelona metropolitan area (Alt Penedès, Anoia, Bages, Baix Llobregat, Barcelonès, Berguedà, Garraf, Maresme, Moianès, Osona, Vallès Occidental, and Vallès Oriental.)

Purpose: “The aim of ATM is to organize the cooperation between the public administrations owning the collective public transport services and infrastructures in the area of Barcelona which

form a part of it, as well as collaboration with those administrations which, such as the state government, are committed from a financial point of view or which own their own services or services that have not been assigned to other bodies” (<https://www.atm.cat/en/atm/the-consortium>).

Brief description: ATM is a consortium of all administrations responsible for transit services in the metropolitan region of Barcelona (AMB). Originally founded to coordinate the transit within the first ring of the metropolitan region of Barcelona, AMT gradually evolved and expanded its geographic purview to two more outer rings of suburbs with an additional 124 jurisdictions in AMTU (the organization of municipalities).

Transit Operators also Responsible for Regional Transit coordination

Valley Metro Regional Public Transportation Authority (Phoenix, Arizona, U.S.)

Year formed: 1985/1993 operated as single brand.

Organization Type: Independent Authority-Special Purpose

Transit Agencies coordinated (alliance members): 6 (Valley Metro, Valley Metro Rail, Inc. city of Phoenix, city of Glendale, city of Peoria, and city of Scottsdale)

Number of political jurisdictions within metropolitan region/transit coverage area: one county with 23 municipalities.

Purpose: Valley Metro is the regional transit agency providing coordinated transit services to residents of the metropolitan area of Phoenix. Valley Metro’s core mission is to develop and operate a network of transit services.

Brief description: The Maricopa County Regional Transportation Planning Authority, branded as Valley Metro, is the regional transit authority for most of the Phoenix metropolitan area. It operates regional light rail and buses and created a single brand and website; all transit agencies in the area operate under the Valley Metro brand. Although Valley Metro was created by state statute, regional coordination is achieved through intergovernmental agreements; see Chapter 5.

Metrolinx (Toronto, Ontario)

Year formed: 2007 (via the 2006 Metrolinx Act of the province of Ontario)

Organization Type: Government Agency

Transit Agencies coordinated (alliance members): 11

Number of political jurisdictions within metropolitan region/ transit coverage area: 6 “counties” (2 amalgamated cities of Toronto and Hamilton plus 4 “regions” of Durham, Halton, Peel and York) with a total of about 30 municipalities.

Purpose: Metrolinx was created to improve the coordination and integration of all modes of transportation in the Greater Toronto Area.

Brief description: Metrolinx is an agency of the Government of Ontario created under the Metrolinx Act, 2006. It is responsible for the regional trains and the transit coordination of the 11 members of the alliance.

Transport for Greater Manchester – TfGM (Manchester U.K.)

Year formed: 2011

Organization Type: Government Agency

Transit Agencies coordinated: 3 (phased-in GM buses, Metrolink, and Network Rail lines)

Number of political jurisdictions within metropolitan region/transit coverage area: ten boroughs

Purpose: Transport for Greater Manchester (TfGM) is the local entity responsible for delivering Greater Manchester’s transport strategy and commitments (<https://tfgm.com/about-tfgm>).

Brief description: TfGM is an agency of the metropolitan government known as Greater Manchester Combined Authority. In addition to owning Metrolink (the U.K.’s largest light rail network), they work closely with bus, tram, and train operators to help improve the full journey experience. They are also assuming increasing responsibility for providing much of the bus service and now own Greater Manchester’s bus stations, stops, and shelters. TfGM is in transition from being a Type 2 to being a Type 3 agency, in that until recently, they worked with the local private bus companies to encourage coordination. However, as of September 2023, TfGM has begun a phased-in franchising scheme (“Bee Network”), in which they will systematically tender all bus services to private bus companies. This scheme is expected to cover the entire metropolitan area by 2025, at which time, it can fully be considered a Type 3 agency. In fact, there are also plans for TfGM eventually to oversee Network Rail segments serving Greater Manchester, pending central government approval.

Sole Transit Provider in the Region

The following entities are the sole transit provider within a metropolitan area. (In all cases, this was achieved through a consolidation of multiple private and/or transit agencies under one agency.)

They do not manage or coordinate other agencies; they only need to ensure fare, schedule, and marketing coordination among the various lines and modes which are all under their charge.

New Jersey Transit (New Jersey U.S.)

Year formed: 1979

Organization Type: Corporation owned by the state of New Jersey

Transit Agencies coordinated: not applicable, sole transit provider.

Number of political jurisdictions within metropolitan region/transit coverage area: whole state of New Jersey, which comprises 324 municipalities.

Purpose: “NJ TRANSIT is New Jersey's public transportation corporation. Its mission is to move New Jersey and the region by providing safe, reliable, and affordable public transportation that connects people to their everyday lives, one trip at a time” (<https://www.njtransit.com/our-agency/about-us>).

Brief description: Created by the New Jersey Public Transportation Act of 1979, NJ TRANSIT is considered a component unit of the state of New Jersey. It is empowered with the “authority to acquire, own, operate, and contract for the operation of public passenger transportation services.” To provide these services NJT has three subsidiaries for bus operations (NJ TRANSIT Bus Operations, Inc., NJ TRANSIT Mercer, Inc. and NJ TRANSIT Morris, Inc.), and one for commuter rail operations (NJ TRANSIT Rail Operations, Inc.) (NJT, 2022).

Tri-County Metropolitan Transportation District – Tri-Met (Portland, Oregon U.S.)

Year founded: 1969

Organization Type: Independent Authority-Special Purpose

Transit Agencies coordinated: not applicable, sole transit provider.

Number of political jurisdictions within metropolitan region/transit coverage area: three counties of Multnomah, Washington, and Clackamas.

Purpose: TriMet provides bus, light rail and commuter rail service in the Portland, Oregon, region (<https://trimet.org/about/index.htm>).

Brief description: TriMet was created in 1969, via city resolution and state law. Portland City Council resolution was to take over the private local bus systems and provide regional transit service. The state of Oregon law allowed the creation of transit districts and provided them with

the power to raise revenue through a payroll tax. It became the sole transit provider in the metropolitan area and built the light rail serving the area, which began operations in 1986.

Transport for New South Wales- TfNSW (Sydney, Australia)

Year formed: 1988

Organization Type: State Government agency

Transit Agencies coordinated: not applicable, sole transit provider.

Number of political jurisdictions within metropolitan region/transit coverage area: TfNSW is responsible for the whole state of New South Wales, which comprises 128 “Local Government Areas” (of which 33 are in Greater Sydney). LGA can be many types, the terms used vary by state; in NSW are either city, council, regional council, shires, or municipality.

Purpose: The mandate of TfNSW is “to reform, legislate and ensure the safety of public transport. Transport for NSW is the lead agency of the NSW Transport cluster. Our role is to lead the development of a safe, efficient, integrated transport system that keeps people and goods moving, connects communities and shapes the future of our cities, centres, and regions” (TfNSW, n.d.).

Brief description: An agency of the state of New South Wales, constituted under the Transport Administration Act 1988 (NSW), TfNSW has five operational divisions (Greater Sydney; Regional and Outer Metropolitan; Infrastructure and Place; Customer Strategy and Technology; and Cities and Active Transport). It is responsible for the following government-owned transit agencies: Sydney Trains; NSW Trains and Sydney Metro, Sydney Ferries, and the State Transit Authority, which is the bus agency (NSW Consolidated Acts, 2023).

TransLink (Vancouver, British Columbia, Canada)

Year formed: 1999 (via the South Coast British Columbia Transportation Authority Act of 1998)

Organization Type: Independent Authority-Special Purpose

Transit Agencies coordinated: not applicable, sole transit provider.

Number of political jurisdictions within metropolitan region/transit coverage area: 21 municipalities of the province of British Columbia (BC has no counties, but there is a regional government called Metro Vancouver).

Purpose: Its mandate is “together with our partners, stakeholders, and operating companies, TransLink plans and manages the region’s transportation system.” It develops and manages Metro Vancouver’s transportation network: transit, major roads, bridges, and trip planning.

Brief description: TransLink is an independent authority that is responsible for all transportation in the region of Metro Vancouver. The law gives it the responsibility of creating and planning a regional transportation network, which includes both the transit system and the major road network. The transit system includes rapid transit, commuter rail, ferries, and buses.

San Diego Metropolitan Transit System - MTS (San Diego, CA, U.S.)

Year formed: Initially formed in 1975 per state law SB101 (now California Public Utilities Code (PUC) Div. 11), it evolved over time to be the consolidated transit agency for the San Diego metropolitan area.

Organization Type: Independent Authority-Special Purpose

Transit Agencies coordinated: not applicable, sole transit provider.

Number of political jurisdictions within metropolitan region/ transit coverage area: The southern part of San Diego County including the ten cities of Chula Vista, Coronado, El Cajon, Imperial Beach, La Mesa, Lemon Grove, National City, Poway, San Diego, and Santee.

Purpose: MTS is the regional transit provider serving in the metropolitan area of San Diego in southern San Diego County and is responsible for the service planning, scheduling, operations, and performance monitoring of all MTS transit services (<https://www.sdmts.com/about/about-mts>).

Brief description: San Diego MTS was formed as an independent authority per California state law SB101(1975) (effective 1/1/1976) as the Metropolitan Transit Development Board (MTDB). It was originally formed to have the authority to develop mass rail transit. In 1986, inspired by the *Verkehrsverbund* of Germany, MTDB then created an umbrella organization (called MTS) to cooperate and coordinate with other local transit agencies with respect to fares and scheduling (Larwin, 2012). MTDB eventually merged/consolidated with all these local transit agencies to become the sole transit provider of transit services in the entire metropolitan area, and MTS became its legal name (MTS, n.d.). With the approval of Senate Bill (SB) 1703 in 2002, the planning and programming functions of both MTS and the North County Transit District (NCTD) were consolidated under the San Diego Association of Governments (SANDAG), given that they are both in the same county (San Diego County).

Appendix B

Agencies Coordinated by an Alliance RTC

Zürcher Verkehrsverbund (ZVV)	Swiss Federal Railways (SBB)
	Zürichsee Schifffahrtsgesellschaft (ZSG)
	SZU Sihltal Zürich Uetliberg Bahn SZU AG
	Verkehrsbetriebe Zürich (VBZ)
	Stadtbus Winterthur
	VBG Verkehrsbetriebe Glattal AG
	Verkehrsbetriebe Zürichsee und Oberland (VZO)
	PostAuto AG, Gebiet Nord
ATM Barcelona	Transports Metropolitans de Barcelona (TMB)
	Ferrocarrils de la Generalitat de Catalunya (FGC)
	Rodalies Renfe
	Tramvia Metropolità
	Suburban lines operated by private contractors
	30 municipalities
RMV- Frankfurt	S-Bahn run by state of Hesse
	Transit run by 11 city-counties:
	Bad Homburg v.d.H.
	Darmstadt
	Frankfurt am Main
	Fulda
	Gießen
	Hanau
	Marburg
	Offenbach am Main
	Rüsselsheim
	Wetzlar
	Wiesbaden
	15 Transit systems run by the 15 rural counties/Landkreise of:
	Darmstadt-Dieburg
	Fulda
	Gießen
	Groß-Gerau

	Hochtaunus Lahn-Dill
	Limburg-Weilburg Main-Kinzig Main-Taunus Marburg-Biedenkopf
	Odenwald
	Offenbach
	Rheingau-Taunus Vogelsberg Wetterau
VVS- Stuttgart	Land Baden-Württemberg
	Verband Region Stuttgart
	SSB
	Landkreis Esslingen
	Landkreis Rems-Murr-Kreis
	Landkreis Böblingen
	Landkreis Ludwigsburg
	Landkreis Göppingen
Metrolinx- Greater Toronto	GO Transit Toronto Transit Commission (TTC) Hamilton Street Railway York Region Transit and Viva Rapid Transit
	Brampton Transit
	MiWay- Mississauga Transit
	Durham Region Transit
	Milton Transit
	Oakville Transit
	Burlington Transit
	OC Transpo
	UP Express
NW Oregon Transit Alliance	Columbia County (Columbia County Rider Transportation)
	Sunset Empire Transportation District, (Clatsop County)
	Tillamook County Transportation District, (The Wave)
	Benton Area (County) Transit
	Lincoln County Transit

Mobility Partnership -Seattle	Community Transit (Snohomish County Public Transportation Pierce Transit Everett Transit System King County Metro Kitsap Transit Seattle Streetcar and bus routes SOUND Transit (Central Puget Sound Regional Transit . Washington State Ferries WDOT PSRC
RTA SE Michigan	Suburban Mobility Authority for Regional Transportation
	City of Detroit Department of Transportation (DDOT) Detroit Transportation Corporation - Detroit People Mover Ann Arbor Area Transportation Authority (AAATA) M-1 Rail AKA Q-Line (Woodward corridor) Detroit to Ann Arbor Express MTS
SANDAG	
Valley Metro - Regional Public	North County Transit District Valley Metro
	Valley Metro Rail, Inc. City of Phoenix City of Glendale City of Peoria City of Scottsdale City of Buckeye

Appendix C

Non-Transit Agency Special District Case Studies

In addition to the regional transit coordinator case studies analyzed in this chapter, we studied a number of non-transit agency special districts in California to see if there were lessons to be learned from their organizational structures. It was believed that, perhaps, there were lessons to be learned from the non-transit characteristics of these limited-purpose, regional agencies that could be applied to the development of successful RTCs.

Essentially, in California, special districts are a form of local government created by a community or communities to meet a specific need. Inadequate tax bases and competing demands for existing taxes make it hard for cities and counties to provide all the services their citizens desire. When residents want new services or higher levels of existing services, they can form a district to pay for and administer them (Institute for Local Government, n/d).

Currently, California has over 2,000 independent special districts (California Special District Association, 2022), most of them located in a single county, but in some cases, occupying multiple counties (e.g., East Bay Municipal Utilities District, or EBMUD), including the provision of such urban services as water, irrigation, fire protection, pest control, and parks.

In our study of California special districts, we chose 20 cases, assessing the following for each:

- Jurisdictions served and the population size of the service area
- Agency functions
- Board or commission size and how positions are filled
- Potential agency partners and subcommittees

Nine agencies were selected for more focused analysis and member interviews. These agencies are:

- Bay Area Regional Collaborative (BARC)
- Bay Conservation and Development Commission (BCDC)
- California Air Resources Board (CARB)
- California Dept. of Transportation (Caltrans) Freeway Service Patrol Programs
- Central California Tristeza Eradication Agency (CCTEA)

- Citrus Pest and Disease Prevention Committee (CPDPC)
- Water Emergency Transportation Authority (WETA)

Four interviews were conducted with BCDC, CCTEA, and BARC to better understand:

- How the agency board functions as a governing body
- Procedures for board member selection
- The relation of board members to agencies and cities served
- Interagency communications coordination
- Agency staff relations with local county and city planners

Common Themes

Each special district is directed by a joint powers agreement. Some agencies are created by federal legislation. Board or commission appointments are populated with industry experts via a mix of ex officio positions, elections, and applications requiring approval by an oversight group (e.g., board of supervisors). Board members represent a wide variety of public, private, and nonprofit sector interests. Some boards have non-voting members who take an advisory role. Subcommittee assignments are appointed by the chair or executive director. Generally, these agencies are considered effective and collaborative, though some have limited regulation capabilities. Some boards provide recommendations to a technical advisory committee. Most agencies appear to have relatively cordial relations with their constituents. All meetings are open to the public.

Many of the special districts do not have regulatory authority and function primarily as an advisory council. Interagency communication is most successful when there are dedicated staff responsible for coordination. Increased rates of collaboration indicate higher levels of member agency satisfaction. Participation and commitment are the best indicators for addressing the special district's purpose. Working towards a common goal helps maintain engagement and provides value to member agencies.

Best Practices

The most effective boards include the following features:

- Intentionality about group formation
- Special districts designed around conflict management and communication
- Regular meetings

- Frequent communication between member agencies
- Collaborations on mutually beneficial projects for member agencies
- Building staff teams across agencies to work on joint projects
- Board designated “project manager” who is not necessarily part of a member agency
- Projects are most successful when member agencies commit staff and resources

After having looked at 20 case studies, it became apparent that these various agencies (representing a variety of services) were structured differently and did not offer areas of insight or application. For example, in a few cases, while these agencies were regional in scope (e.g., advising local agencies within their area of jurisdiction), they did not have the legal authority to require that these local agencies coordinate on an ongoing basis. In many cases, local agencies had exclusive responsibility for service delivery.

Appendix D

List of Agency Boards and Board Members

1. TriMet Board (Greater Portland Metropolitan Area)
2. New Jersey Transit Corporation Board (state of New Jersey)
3. Regional Transit Authority Board (Greater Detroit Metropolitan Area)
4. TransLink Board (Greater Vancouver Metropolitan Area)
5. Metrolinx Board (Greater Toronto Metropolitan Area)
6. Valley Metro Board (Greater Phoenix Metropolitan Area)
7. MTS San Diego (city of San Diego and surrounding cities)
8. SANDAG Transportation Committee (San Diego County)
9. ATM Administrative Council (Greater Barcelona Metropolitan Area)
10. Zürcher Verkehrsverbund Board (canton of Zurich)
11. Rhein-Main Verkehrsverbund (RMV) (Greater Frankfurt Metropolitan Area)
12. Verkehrs-und Tarifverbund Stuttgart (VVS) (Stuttgart Metropolitan Area)
13. GMCA and Bee Network Committee (Greater Manchester Metropolitan Area)
14. Transport for New South Wales Board (Greater Sydney Metropolitan Area)

TriMet (Portland) Board of Directors

	Role	Board Member Selection Method: Citizen Appointee (1)(2)	Current member Name	Current Member profession
All are appointed by Governor of Oregon to serve geographical districts.				
1	Member	Appointed by Governor of Oregon to serve District 1: Washington County	Thomas Kim (July 2021—June 2025)	Corporate Attorney
2	Board Secretary and Treasurer	Appointed by Governor of Oregon to serve District 2: N, NW, and portions of SW Portland	Ozzie Gonzalez (June 2018—May 2026)	Environmental Consultant
3	Board President*	Appointed by Governor of Oregon to serve District 3: SW Portland	Dr. Linda Simmons (December 2016—May 2023)	Community College Educator
4	Board Vice President	Appointed by Governor of Oregon to serve District 4: SE Portland	Lori Irish Bauman (June 2015—May 2023)	Corporate Attorney
5	Member	Appointed by Governor of Oregon to serve District 5: N and NE Portland	Keith Edwards (May 2018—May 2026)	Electrician and Union Rep
6	Member	Appointed by Governor of Oregon to serve District 6: E Multnomah County	Dr. LaVerne Lewis (March 2021—March 2025)	Educator, Law Enforcement, and Accountant
7	Member	Appointed by Governor of Oregon to serve District 7: Clackamas County	Kathy Wai (May 2018—May 2026)	Asian Pacific American Community Advocate
<p>Source: https://trimet.org/about/board.htm *Board President chosen among board members. The board shall choose from among its members, by majority vote of the members, a president, vice president, treasurer, and secretary, to serve for terms of two years. As of March 2023</p>				

New Jersey Transit Corporation Board of Directors

	Role	Board Member Selection Method: 8 Citizen Appointee plus 3 ex officio plus two nonvoting	Name of Current member	Member's profession
1	Chair	<p>Eight Citizens Appointed by Governor of New Jersey, four with the advice and consent of the Senate and four upon the recommendation of other entity or person as follows: One each appointed on recommendation of -New Jersey members of the Delaware Valley Regional Planning Commission -North Jersey Transportation Planning Authority: -President of the Senate -Speaker of the General Assembly) In addition, four must have professional experience; two must be transit riders, and two must either have professional experience or be transit riders. See Table 4-5 for details</p>	Diane Gutierrez-Scaccetti	Transportation Administrator
2	Member		Shanti Narra	Public Defender
3	Member		Carlos Medina	Head of Survey Company
4	Member		Rich Maroko	Labor Union Leader
5	Member		Bob Gordon	Corporate Consultant”
6	Member		Sangeeta Doshi	Telecommunications Executive
7	Member		Kiabi D. Carson	HR Manager
8	Member		Evan S. Weiss	Economic Developer
9	Member	State Treasurer, ex officio	Elizabeth Maher Muoio	State Treasurer
10	Chair	Commissioner of Transportation, ex officio		Commissioner of Transportation
11	Member	State official appointed by the Governor of New Jersey	Noreen Giblin	Chief Counsel
12	Non-voting Member	Recommended by labor organizations representing the plurality of employees.	Rashonda A. Brown	SMART United Transportation Union
13	Non-voting Member	Recommended by labor organizations representing the plurality of employees.	Karen Thomas	Amalgamated Transit Union

Source: <https://www.njtransit.com/board>; <https://www.nj.gov/governor/news/news/562022/20220324b.shtml>
 The Chair is always the commissioner of transportation per state law.
 Vice chair selected by the board N.J.S.A 27:25-1 et al.
 As of March 2023 Two advisory committees provide the agency with additional input from the public. The North Jersey Passenger Advisory Committee and the South Jersey Passenger Advisory Committee are each comprised of 15 unsalaried members. Members of the North Jersey and South Jersey Passenger Advisory Committees serve four-year terms

RTA of Southeastern Michigan Board of Directors

	Role	Board Member Selection Method: Citizen Appointee (1)	Current Member	Member's profession
1	Chair non-voting	Appointed by Governor of Michigan	Paul Hillegonds	Energy Company Executive
2	Member	Appointed by the mayor of Detroit (This jurisdiction owns/operates transit.)	Freman Hendrix	Security Consultant
3	Member	Appointed by Macomb County County Executive (2)	Donald Morandin	Adjunct Faculty at Macomb Community College
4	Member	Appointed by Macomb County County Executive (2)	Jon Moore	City Manager for the city of Richmond
5	Member	Appointed by Oakland County County Executive (2)	Jeannette Bradshaw	Construction Trade Advocate
6	Member	Appointed by Oakland County County Executive (2)	Helaine Zack	Employee Assistance Administrator
7	Member	Appointed by Washtenaw County Board of Supervisors (3)	Ned Staebler	VP for Economic Dev at Wayne State University
8	Member	Appointed by Washtenaw County Board of Supervisors (3)	Alma Wheeler Smith	University Bank Board of Directors
9	Member	Appointed by Wayne County County Executive (2)	June Lee	Vice President of Admin. for the Wayne County Airport Authority
10	Member	Appointed by Wayne County County Executive (2)	Dr. Erica Robertson	Education Advocate

Restrictions per state law

A board member shall be a resident of and registered elector in the county or city from which he or she is appointed.
A board member shall have substantial business, financial, or professional experience relevant to the operation of a corporation or public transportation system.”

A board member shall not be an employee of the county or city appointing the board member under subsection (1) or an employee of a public transportation provider operating in a public transit region.

A board member shall not be a currently serving elected officer of this state or a political subdivision of this state.”

Recommended by County Executive (the elected “mayor” of the County) with the approval of the County Board of Supervisors.

This County has no County Executive.

Source: <https://rtamichigan.org/about/board-of-directors/>. March 2023

TransLink (Vancouver) Board of Directors

	Role	Board Member Selection Method: Citizen Appointee *(1) (2)	Current member	Member's profession
1	Chair	7 members Appointed by the Mayor's Council (from a candidate list presented by the Screening Panel) Plus, up to two members appointed by the province.	Lorraine Cunningham (Jan. 2023—Dec. 2025)	Economic Development Coordinator
2	Member		Allan Seckel (Jan. 2023—Dec. 2025)	Litigation Attorney
3	Member		Harpinder Sandhu (Jan. 2022—Dec. 2024)	Real Estate Assessor
4	Member		Andrea Reimer (Aug. 2021—Aug. 2024)	Community Organizer
5	Member		Tracy Redies (Jan. 2023—Dec. 2025)	Economic Development Coordinator
6	Member		Karen Horcher (Jan. 2018—Dec. 2023)	Finance Consultant
7	Member		Harj Dhaliwal (Jan 2019--Dec 2024)	Post-Secondary Administrator
8	Member		Jennifer Chan (Jan 2022—Dec. 2024)	Policy Attorney
9	Vice chair		Andy Ross (Aug. 2021—Aug. 2024)	Educator
10	Optional-Chair, Mayors' Council	Mayors' Council Designate to the Board (at their option)	Brad West (Nov. 2022—present)	Mayor of the city of Port Coquitlam
11	Optional (vice Chair, Mayors' council		Mike Hurley (Nov. 2022—present)	Mayor of the city of Burnaby
<p>As of July 2023</p> <p>The appointed members do not represent any other interests or constituencies. https://www.translink.ca/about-us/about-translink/board-of-directors https://www.translink.ca/-/media/translink/documents/about-translink/governance-and-board/board-of-directors/manuals-and-articles/board-manual.pdf#view=fitH The TransLink Board of Directors is composed of seven individuals appointed by the Mayors' Council (from a candidate list presented by the Screening Panel), the Mayors' Council Chair and Vice-Chair (at their option), and up to two members appointed by the province.</p> <p>The TransLink Board of Directors: The board of directors appoints TransLink Chair and Vice-Chair and the CEO Source: https://www.translink.ca/about-us/about-translink/governance-model</p>				

Effective January 2015, the board of directors is composed of up to eleven directors, as follows: • Seven directors appointed by the Mayors' Council ("appointed directors"), from a shortlist identified by the Screening Panel; • chair and vice chair of the Mayors' Council, if they consent to act ("statutory directors"); and • Up to two directors appointed by the province ("minister-appointed directors"). Each appointed director is appointed for a three-year term. They may be re-appointed and may not hold office for more than six consecutive years.

TransLink Mayors' Council

The Mayors' Council is composed of the 21 mayors in Metro Vancouver, the Chief of the Tsawwassen First Nation, and the elected representative of Electoral Area "A"

Metrolinx (Toronto) Board of Directors

	Role	Board Member Selection Method: Citizen Appointee	Current member	Member's profession
1	Member	Up to 15 members “with expertise in various industries” who are appointed by the Lieutenant Governor of Ontario (who is the head of the province; there is no provincial governor)	Donald Wright	Finance Executive
2	Member		Bryan Davies	Finance Executive
3	Member		James Dodds	Finance Executive
4	Member		Janet L. Ecker	Finance Executive
5	Member		Luigi Ferrara	Architect
6	Member		Deb Hutton	Corporate Communications
7	Member		Tony Marquis	Railroad Executive
8	Member		Emily Moore	Civil Engineer
9	Member		Reg Pearson	Labor Relations
10	Member		Robert Poirier	Finance Executive
11	Member		Sylvie Tessier	Technology Executive
12	Member		Paul Tsaparis	Technology Executive
13	Member		Phil Verster	President & CEO of Metrolinx
14	Member		Vacant	
15	Member		Vacant	

Currently 13 members, two vacancies (March 2023)

Prior to 2009, the board was composed of elected officials from nine municipalities, see text.

The Lieutenant Governor in Council, on the recommendation of the Minister, shall designate a chair and vice-chair from among the members of the Corporation's board of directors (See 2006, chapter 16:8)

Source: <https://www.metrolinx.com/en/about-us/the-board>

The following are not eligible to be a director

1. A Member of Parliament.
2. A Member of the Assembly.
3. A member of a municipal council in Ontario.
4. A person appointed under Part III of the Public Service of Ontario Act, 2006.
5. A person who is employed by or in a board, commission, or agency of the provincial government, excluding persons appointed to such board, commission or agency by the Lieutenant Governor in Council and excluding the chief executive officer of the Corporation.
6. An employee of the federal government or of a municipality in Ontario or of a board, commission, or agency of the federal government or of a municipality in Ontario. 2009, c. 14, s. 10 (1). <https://www.pas.gov.on.ca/Home/Agency/486>.

Valley Metro (Maricopa County Arizona) Board of Directors

	Role	Selection Method: Ex officio - Elected Officials (2) (3)	Owens transit?	Current Member
1	Member	Maricopa County	no	Supervisor Sellers
2	Chair (1)	City of Phoenix	yes	Councilmember Pastor
3	Member	City of Avondale	no	Councilmember White
4	Member	City of Buckeye	no	Councilmember Goodman
5	Member	City of Chandler	no	Councilmember Harris
6	Member	City of El Mirage	no	Vice Mayor Dorcey
7	Member	City of Fountain Hills	no	Vice Mayor McMahon
8	Member	City of Gilbert	no	Mayor Peterson
9	Member	City of Glendale	yes	Councilmember Tolmachoff
10	Vice chair (1)	City of Goodyear	no	Councilmember Stipp
11	Member	City of Mesa	no	Vice Mayor Heredia
12	Member	City of Peoria	yes	Councilmember Edwards
13	Member	City of Queen Creek	no	Vice Mayor Brown
14	Member	City of Scottsdale	yes	Councilmember Littlefield
15	Member	City of Surprise	no	Councilmember Cline
16	Member	City of Tempe	no	Vice Mayor Adams
17	Member	City of Tolleson	no	Councilmember Gamez
18	Member	City of Wickenburg	no	Mayor Pereira
19	Member	City of Youngtown	no	Mayor LeVault

1. The Chair and vice-chair are selected by the board (Each June board members are asked to submit a letter of interest to serve as Chair, Vice Chair and Treasurer, the board then votes on those positions. The term of service is one fiscal year July 1–June 30. Source: Pat Dillon 3/22/23)
2. Could be either mayor or councilmember as appointed by their respective mayor or city council or board of supervisors. (The mayor of each city/town sits on the board of directors or selects a council member to be assigned to the Board.)
3. Membership is open to all municipalities in Maricopa County and to the county government. There are 25 cities and towns in Maricopa County (The cities/towns that are not currently members can join whenever that would like to, Source: Pat Dillon) Source: https://drupal-space.nyc3.cdn.digitaloceanspaces.com/s3fs-public/uploads/event-resources/fy_2023_adopted_operating_and_capital_budget_five_year_plan.pdf March 2023.

Metropolitan Transit System (MTS) San Diego Board of Directors

	Role	Selection Method: Ex officio - Elected Officials	Current Member (March 2023)
1	Member	Mayor of the City of San Diego (1)	Mayor Todd Gloria
2	Member	Mayor of the City of Chula Vista (1)	Mayor John McCann
3	Member	Councilmember of the City of Chula Vista (2)	Councilmember Carolina Chavez
4	Member	Councilmember of the City of Coronado	Councilmember Mike Donovan
5	Board Chair	Supervisor of the County of San Diego	Nathan Fletcher, board of supervisors
6	Member	Councilmember of the City of El Cajon	Councilmember Steve Goble
7	Member	Councilmember of the City of Imperial Beach	Councilmember Matthew Leyba-Gonzalez
8	Member	Councilmember of the City of La Mesa	Councilmember Patricia Dillard
9	Member	Councilmember of the City of Lemon Grove	Councilmember George Gastil
10	Member	Councilmember of the City of National City	Councilmember Marcus Bush Council
11	Vice chair	Councilmember of the City of Poway	Councilmember Caylin Frank
12	Member	Councilmember of the City of San Diego	Councilmember Monica Montgomery Steppe
13	Member	Councilmember of the City of San Diego	Councilmember Sean Elo-Rivera
14	Vice Chair	Councilmember of the City of San Diego	Councilmember Stephen Whitburn
15	Member	Councilmember of the City of Santee	Councilmember Ronn Hall
<p>Notes:</p> <p>1) Mayor of San Diego and Chula Vista are always on the board</p> <p>2) Each city council selects their representative (s) from among themselves to serve on the board.</p> <p>The chairperson of the board shall be selected by a two-thirds vote of the board, a quorum being present (PUC Div. 11: 120050.2; 2017)</p> <p>Source: https://www.sdmts.com/about/meetings-and-agendas/board-directors https://www.sdmts.com/about/about-mts</p>			

San Diego Association of Governments (SANDAG) Board of Directors

Role	Selection Method: Ex officio - Elected Officials	Name
Chair	County of San Diego	Nora Vargas
Member	City of Carlsbad	Melanie Burkholder, Councilmember
Member	City of Chula Vista	Andrea Cardenas, Councilmember
Member	City of Coronado	Richard Bailey, Mayor
Member	County of San Diego	Joel Anderson, Supervisor
Member	City of Del Mar	Terry Gaasterland, Councilmember
Member	City of El Cajon	Bill Wells, Mayor
Member	City of Encinitas	Tony Kranz, Mayor
Member	City of Escondido	Dane White, Councilmember
Member	City of Imperial Beach	Jack Fisher, Councilmember
Member	City of La Mesa	Mark Arapostathis, Mayor
Member	City of Lemon Grove	Racquel Vasquez, Mayor
Member	City of National City	Luz Molina, Vice-Mayor
Member	City of Oceanside	Ryan Keim, Councilmember
Member	City of Poway	Steve Vaus, Mayor
Member	City of San Diego	Todd Gloria, Mayor
First Vice Chair	City of San Diego	Sean Elo-Rivera, Council President
Member	City of San Marcos	Rebecca Jones, Mayor
Member	City of Santee	John Minto, Mayor
Second Vice Chair	City of Solana Beach	Lesa Heebner, Mayor
Member	City of Vista	Katie Melendez, Councilmember
<p>May 2023 Source: https://www.sandag.org/meetings-and-events/board-of-directors Each director shall be a mayor, councilperson, or supervisor of the governing body which selected him or her. (SB132351.1.c) https://www.sandag.org/-/media/SANDAG/Documents/PDF/footer/legal/senate-bill-no-1703.pdf</p>		

SANDAG Transportation Committee

	Role	Selection Method: Fixed Board Member Positions of Elected Officials and Transportation Agency Representatives	Current Member
1	Chair	Elected Official from Eastern San Diego County	Councilmember Jack Shu, City of La Mesa Alternate: Councilmember Jennifer Mendoza, City of Lemon Grove
2	Vice Chair	Elected Official from City of San Diego	Councilmember Raul Campillo Alternate: Councilmember Marni von Wilpert
3	Member	Elected Official from Southern San Diego County	Councilmember John Duncan, City of Coronado Alternate: Councilmember Jose Rodriguez, City of National City
4	Member	San Diego County Supervisor	Terra Lawson-Remer Alternate: Joel Anderson
5	Member	Elected Official from North Coast of San Diego County	Mayor Tony Kranz, City of Encinitas Alternate: Vice Mayor David Zito, City of Solana Beach
6	Member	Elected Official from North Inland San Diego County	Mayor John Franklin, City of Vista Alternate: Mayor Steve Vaus, City of Poway
7	Member	Director from Metropolitan Transit System	Vivian Moreno Alternate: Marcus Bush
8	Member	Director from North County Transit District	Priya Bhat-Patel Alternate: Jewel Edson
9	Member	Director from San Diego County Regional Airport Authority	Esther Sanchez Alternate: Rafael Perez
10	Member	Director from Port of San Diego	Sandy Naranjo, Board Alternate: Rafael Castellanos

	Role	Selection Method: Fixed Board Member Positions of Elected Officials and Transportation Agency Representatives	Current Member
11	Advisory Member (non-voting)	Caltrans District 11	Gustavo Dallarda Alternate: Ann Fox
12	Advisory Member (non-voting)	Southern California Tribal Chairmen's Association	Erica Pinto Alternate: James Hill
<p>"The Transportation Committee is composed of elected officials that represent the six subregions as well as representatives from Metropolitan Transit System, North County Transit District, the San Diego County Regional Airport Authority, the Port of San Diego, Caltrans District 11, and the Southern California Tribal Chairmen's Association." Source: https://www.sandag.org/meetings-and-events/policy-advisory-committees/transportation</p>			

Administrative Council of the Metropolitan Transport Authority of Barcelona

Composició Del Consell D'administració De L'autoritat Del Transport Metropolità De Barcelona

	Role	Selection Method: Ex officio - Elected Officials and senior staff	Current Member (Dec 16, 2022)
1	President	Minister of Territory and Sustainability of the Government of Catalonia (Conseller del Departament de Territori.)	Juli Fernández Olivares (GENCAT)
2	Vice President 1st	Mayor of Barcelona. or designee- Currently is Deputy Mayor (Segona Tinenta d'Alcaldia de l'Ajuntament de Barcelona)	Janet Sanz Cid (AJUNTAMENT BCNA)
3	Vice President 2nd	The President of the AMB- (Àrea Metropolitana de Barcelona) or designee; Currently is the vice president in charge of Mobility Transport and Sustainability of AMB (Vice president de Mobilitat, Transport i Sostenibilitat de l'AMB)	Antoni Poveda Zapata (AMB)
	Vocals	Members	
4	Generalitat de Catalunya (8) (Government of Catalonia)	Secretary General of the Department of Territory. (Secretaria General del Departament de Territori.)	Joan Jaume Oms (GENCAT)
5		Secretary of Mobility and Infrastructures of the Department of Territory (Secretaria de Mobilitat i Infraestructures del Departament de Territori)	Marc Sanglas i Alcantarilla (GENCAT)
6		General Director of Transport and Mobility of the Department of Territory (Director General de Transports i Mobilitat del Departament de Territori)	Oriol Martori Gallissà (GENCAT)
7		Director General of Mobility Infrastructures of the Department of Territory (Director/a general d'Infraestructures de Mobilitat del Departament de Territori)	David Prat Soto (GENCAT)
8		General Director of Environmental Quality and Climate Change of the Department of Climate Action, Food and Rural Agenda. (Directora General de Qualitat Ambiental i Canvi Climàtic del Departament d'Acció Climàtica, Alimentació i Agenda Rural.)	Mireia Boya i Busquet (GENCAT)

	Role	Selection Method: Ex officio - Elected Officials and senior staff	Current Member (Dec 16, 2022)
9		President of Railway of the Government of Catalonia (President de Ferrocarrils de la Generalitat de Catalunya)	Antoni Segarra i Barreto (FGC)
10		Director of the Heritage of the Government of Catalonia of the Department of Economy and Finance. (Director del Patrimoni de la Generalitat de Catalunya del Departament d'Economia i Hisenda)	Josep Maria Aguirre i Font (GENCAT)
11		Secretary General of the Department of Social Rights (Secretaria General del Departament de Drets Socials)	Oriol Amorós i March (GENCAT)
12	Admin locals 3 from Barcelona and 2 from AMB (Jointly appointed by city council of Barcelona and AMB)	(The 3rd lieutenant to the mayor of Barcelona) Tercera Tinenta d'Alcaldia-Àrea d'Agenda Urbana 2030, Transició Digital, Esports i Coordinació Territorial i Metropolitana	Laia Bonet Rull (AJUNTAMENT BCNA)
13		City of Barcelona City Manager (Gerent Municipal)	Sara Berbel Sánchez (AJUNTAMENT BCNA)
14		City of Barcelona Deputy manager of Mobility and infrastructures (Gerent Adjunt de Mobilitat i Infraestructures)	Manuel Valdés López (AJUNTAMENT BCNA)
15		Representative from AMB- Currently mayor of Cornellà (Alcalde de l'Ajuntament Cornellà)	Antonio Balmon Arévalo (AMB)
16		Representative from AMB-Currently City Council member of Castelldefels (Regidora Ajuntament de Castelldefels)	Candela López Tagliafico (AMB)
17	AMTU (2)	President of AMTU (who is a mayor of one of the member cities) (Currently is the mayor of the city of Sitges (Alcalde de l'Ajuntament de Sitges) Presidenta de l'AMTU - Alcaldessa de l'Ajuntament de Sitges)	Aurora Carbonell i Abella (AMTU)
18		Vice President of AMTU Currently is the mayor of city of Granollers. (Vice Presidenta de l'AMTU- Alcaldessa de l'Ajuntament de Granollers)	Alba Barnusell i Ortuño (AMTU)
		Sub-delegat del Govern a Barcelona	Carlos Prieto Gómez

	Role	Selection Method: Ex officio - Elected Officials and senior staff	Current Member (Dec 16, 2022)
	MIFO (2) nonvoting (SPAIN)	Director general de Transporte Terrestre, Ministerio de Transportes, Movilidad y Agenda Urbana	Jaime Moreno García-Cano
<p>GENCAT= <i>Generalitat</i>, Government of the Autonomous Region of Catalonia AMB= <i>Àrea Metropolitana de Barcelona</i> (Metropolitan Area of Barcelona which consists of the city of Barcelona and the 35 “first zone” municipalities) AMTU= the association that represents the municipalities outside of AMB (<i>Associació de Municipis per la Mobilitat i el Transport Urbà</i>), Association of Municipalities for Mobility and Urban Transport. FGC=<i>Ferrocarrils de la Generalitat de Catalunya</i> (Railway of Government of Catalonia) MIFO=Organization that represents Spain Source: https://www.atm.cat/web/index.php.</p>			

Zurich Transport Network (ZVV) Transport Council

	Role	Selection Method: Ex Officio Elected Officials plus 2 senior staff	Current Member
1	Member	Canton of Zurich: The governing council of the canton appoints two of its members to the transport council	Carmen Walker Späh, president of the transport council, member of the cantonal governing council
2	Member		Hansruedi Bachmann, cantonal representative
3	Member	City of Zurich City Council chooses its representative (1)	Raphael Golta, city councillor for Zurich
4	Member	City of Winterthur city council of Winterthur chooses its representative (1)	Christa Meier, City councillor for Winterthur
5	Member	The three representatives of the municipalities are chosen by the leading council of the “Verband der Gemeindepräsidien des Kantons Zürich” (https://www.gpvzh.ch/de/lausschuss/stab/) – a group of all the mayors of all the communities in the canton of Zurich. (1)	Mark Eberli, Mayor of Bülach
6	Member		Marco Hirzel, Mayor of Pfäffikon ZH
7	Member		Sandra Rottensteiner, Mayor of Urdorf
8	Member	Swiss Federal Railways (SBB) appoints its own representative; it is always a member of the Division of Infrastructure” within SBB.	Nicolas Germanier, Representative of SBB
9	Member	The federal office of Transport appoints its own representative	Gery Balmer, Representative of the Federal Office of Transport
<p>(1) These are technically “suggested” for election to the cantonal governing council. Source: https://www.zvv.ch/zvv/en/about-us/zuercher-verkehrsverbund/important-committees/transport-council.html https://www.gpvzh.ch/de/lausschuss/stab/</p>			

Rhein-Main Verkehrsverbund (RMV) Supervisory Board (Greater Frankfurt Metropolitan Area) Die RMV-Aufsichtsratsmitglieder

Selection Method: ex Officio - Elected Officials of jurisdictions that are all responsible for providing transit				
	Role	Name of Shareholder Jurisdiction	Type of Political jurisdiction	Current member (2020) (political office))
1	Chair	Mayor: city of Frankfurt am Main (Stadt Frankfurt am Main)	<i>Kreisfreie Stadt</i>	PETER FELDMANN Oberbürgermeister/Mayor
2	Member	Bad Homburg v.d.H.	<i>Stadt mit Sonderstatus</i>	ALEXANDER HETJES Oberbürgermeister/Mayor
3	Member	Darmstadt	<i>Kreisfreie Stadt</i>	OCHEN PARTSCH Oberbürgermeister /Mayor
4	Member	Darmstadt-Dieburg	<i>Landkreis</i>	ROBERT AHRNT Erster Kreisbeigeordneter Landkreis Darmstadt-Dieburg
5	Member	Fulda	<i>Stadt mit Sonderstatus</i>	DR. HEIKO WINGENFELD Oberbürgermeister/Mayor
6	Member	Fulda	<i>Landkreis</i>	BERND WOIDE Landrat Landkreis Fulda
7	Member	Gießen	<i>Stadt mit Sonderstatus</i>	GERDA WEIGEL-GREILICH Stadträtin Gießen
8	Member	Gießen	<i>Landkreis</i>	NITA SCHNEIDER Landrätin Gießen
9	Member	Groß-Gerau	<i>Landkreis</i>	WALTER ASTHEIMER Erster Kreisbeigeordneter Landkreis Groß-Gerau
10	Member	Hanau	<i>Stadt mit Sonderstatus</i>	THOMAS MORLOCK Stadtrat Hanau
11	Member	Hochtaunus	<i>Landkreis</i>	ULRICH KREBS Landrat Hochtaunuskreis
12	Member	Lahn-Dill	<i>Landkreis</i>	WOLFGANG SCHUSTER Landrat Lahn-Dill-Kreis

Selection Method: ex Officio - Elected Officials of jurisdictions that are all responsible for providing transit				
	Role	Name of Shareholder Jurisdiction	Type of Political jurisdiction	Current member (2020) (political office))
13	Member	Limburg-Weilburg	<i>Landkreis</i>	MICHAEL KÖBERLE Landrat Landkreis Limburg-Weilburg
14	Member	Main-Kinzig	<i>Landkreis</i>	WINFRIED OTTMANN <i>Kreisbeigeordneter</i> Main- Kinzig-Kreis
15	Member	Main-Taunus	<i>Landkreis</i>	JOHANNES BARON <i>Kreisbeigeordneter</i> Main-Taunus-Kreis
16	Member	Marburg	<i>Stadt mit Sonderstatus</i>	DR. THOMAS SPIES <i>Oberbürgermeister/ Mayor</i>
17	Member	Marburg-Biedenkopf	<i>Landkreis</i>	MARIAN ZACHOW <i>Erster</i> <i>Kreisbeigeordneter/Councillor</i> Landkreis Marburg- Biedenkopf
18	Member	Offenbach am Main	<i>Kreisfreie Stadt</i>	ABINE GROSS Stadträtin Offenbach
19	Member	Offenbach	<i>Landkreis</i>	CLAUDIA JÄGER <i>Erste Kreisbeigeordnete</i> Landkreis Offenbach
20	Member	Odenwald	<i>Landkreis</i>	FRANK MATIASKE Landrat Odenwaldkreis
21	Member	Rheingau-Taunus	<i>Landkreis</i>	GÜNTER F. DÖRING <i>Kreisbeigeordneter</i> Rheingau-Taunus-Kreis
22	Member	Rüsselsheim	<i>Stadt mit Sonderstatus</i>	NILS KRAFT Stadtrat Rüsselshei
23	Member	Vogelsberg	<i>Landkreis</i>	ANFRED GÖRIG Landrat Vogelsbergkreis
24	Member	Wetterau	<i>Landkreis</i>	JAN WECKLER Landrat Wetteraukreis
25	Member	Wetzlar	<i>Stadt mit Sonderstatus</i>	NORBERT KORTLÜKE Stadtrat Wetzlar

Selection Method: ex Officio - Elected Officials of jurisdictions that are all responsible for providing transit				
	Role	Name of Shareholder Jurisdiction	Type of Political jurisdiction	Current member (2020) (political office))
26	Member	Wiesbaden	<i>Kreisfreie Stadt</i>	ANDREAS KOWOL City Council/ Stadtrat Wiesbaden
27	Member	Hessen	Land/ State	JENS DEUTSCHENDORF <i>Staatssekretär</i> Land Hessen DR. MARTIN WORMS <i>Staatssekretär</i> Land Hessen
<p>Note: For cities and Landkreise: Most of the time, the board member is the mayor (cities) or the county commissioner (counties). Sometimes it is the <i>Dezernent</i> (department head). For the Land of Hesse: In recent years, the State Secretary of Finance and the State Secretary of Traffic were chosen as representatives (In Germany cities are not part of a “county” aka Landkreis) https://www.rmv.de/c/de/informationen-zum-rmv/der-rmv/struktur-des-rmv/rmv-aufsichtsrat https://www.rmv.de/c/de/informationen-zum-rmv/der-rmv/struktur-des-rmv/gesellschafter-des-rmv</p>				

VVS Verkehrs-und Tarifverbund Stuttgart (VVS) Supervisory Board (*Aufsichtsrat*)

Supervisory Board (<i>Aufsichtsrat</i>) of VVS			
Agency	Number of Representatives	Detail	Other
Political jurisdictions			
City of Stuttgart Landeshauptstadt Stuttgart	4	Mayor plus three council members of the municipal council	Mayor of Stuttgart is always the chair
Landkreis Landkreis Esslingen Landkreis Rems-Murr- Kreis Landkreis Böblingen Landkreis Ludwigsburg Landkreis Göppingen	5, One from each <i>Landkreis</i>	Head or “mayor” of the council of the <i>Landkreis</i>	
VRS Verband Region Stuttgart	5	<i>Verband</i> Region Stuttgart: region- stuttgart.org Members of the regional parliament – elected thru the local elections	
State (Land) of Baden- Württemberg Ministry of Transport	2	The two highest ranking employees under the Minister of Transport	
Subtotal: political jurisdictions	16		
Transport Companies			
SSB AG (wholly owned by the city of Stuttgart)	6	3 senior management 3 representing employees	CEO CFO CHR
Private train companies	1	1 representative of the CEOs	
Private Bus companies	2	One representative of the CEOs, One consultant who is representative of the agency that coordinates all the private bus companies	

Supervisory Board (<i>Aufsichtsrat</i>) of VVS			
Agency	Number of Representatives	Detail	Other
DB Regio AG (owns/operates the S-bahn)	4	3 from senior management 1 representing employees	
Subtotal: transport companies	13		
Total	29		

GMCA Greater Manchester Combined Authority (GMCA) de facto board for Transport
for Greater Manchester (TfGM)

	Role	Represents	Topic Area	Name of Member	Other
1	Chair	Greater Manchester	Policy & Reform and Transport	Mayor Andy Burnham	Mayor of GM is always the Chair
Council					
2	Deputy Mayor	Appointed by GM Mayor	Safer and Stronger Communities	Kate Green	Supports Chair, social service background
3	Deputy Mayor	Appointed by GM Mayor, Salford City	Healthy Lives and Homelessness	Mayor Paul Dennett	Supports Chair, Appointed by GM Mayor,
4	Member	Manchester	Economy, Business, and Inclusive Growth	Councillor Bev Craig	Community health background
5	Member	Trafford	Green City-Region	Councillor Tom Ross	Economist
6	Member	Wigan	Resources and Investment	Councillor David Molyneux	Engineer
7	Member	Bury	Technical Education & Skills	Councillor Eamonn O'Brien	Trade Unionist
8	Member	Stockport	Children and Young People	Councillor Mark Hunter	
9	Member	Oldham	Equalities and Communities	Councillor Arooj Shah	
10	Member	Rochdale	Culture	Councillor Neil Emmott	Linguist
11	Member	Tameside	Housing	Councillor Gerald Cooney	Trade Unionist
12	Member	Bolton	Digital City-Region	Councillor Nick Peel	
Source: https://www.greatermanchester-ca.gov.uk/who-we-are/gmca-members/					

Greater Manchester Transport Committee

	Role	Represents	Name of Member	Other
1	Member	Rochdale	Councillor Aasim Rashid	
2	Member	Rochdale	Councillor Phil Burke	
3	Member	Bury	Councillor Jo Lancaster	
4	Member	Bury	Councillor Kevin Peel	
5	Member	Bury	Councillor Eamonn O'Brien	
6	Member	Wigan	Councillor John Vickers	
7	Member	Trafford	Councillor Aidan Williams	
8	Member	Stockport	Councillor Angie Clark	
9	Member	Stockport	Councillor David Meller	
10	Member	Tameside	Councillor Doreen Dickinson	
11	Member	Tameside	Councillor Warren Bray	
12	Member	Oldham	Councillor Howard Sykes	
13	Member	Oldham	Councillor George Hulme	
14	Member	Bolton	Councillor Stuart Haslam	
15	Member	Bolton	Councillor Mohammed Ayub	
16	Member	Manchester	Councillor Naeem Hassan	
17	Member	Manchester	Councillor Dzidra Noor	
18	Member	GM Mayor	Mayor Andy Burnham	
19	Member	Salford	Councillor Damian Bailey	
20	Member	Salford	Councillor Roger Jones	
21	Member	Trafford	Councillor Linda Blackburn	
22	Member	Manchester	Councillor Tracey Rawlins	
23	Substitute Member	Manchester	Councillor Chris Wills	
24	Substitute Member	Bolton	Councillor Mohammed Iqbal	
25	Substitute Member	Bolton	Councillor David Wilkinson	

	Role	Represents	Name of Member	Other
26	Substitute Member	Oldham	Councillor Kyle Phythian	
27	Substitute Member	Tameside	Councillor Jan Jackson	
28	Substitute Member	Rochdale	Councillor Patricia Sullivan	
29	Substitute Member	Wigan	Councillor Christine Roberts	
30	Substitute Member	Bury	Councillor Noel Bayley	
31	Substitute Member	Bury	Councillor Luis McBriar	
32	Substitute Member	Stockport	Councillor Tom McGee	
Source: https://democracy.greatermanchester-ca.gov.uk/mgCommitteeDetails.aspx?ID=193 GMCA Constitution 2022 delegates the certain Transport functions of the GMCA GM Transport Committee: (https://democracy.greatermanchester-ca.gov.uk/documents/s22194/GMCAConstitutionJuly2022.pdf)				

Transport for New South Wales (TfNSW) Sydney

TfNSW is run by the Secretary, Transport for NSW and has no board of directors. “As the Secretary of Transport for NSW, Rob Sharp leads more than 25,000 people across the Transport cluster to plan, manage and deliver transport infrastructure and services for all transport modes. Rob is supported by the Office of the Secretary” (<https://www.transport.nsw.gov.au/about-us>)

While TfNSW has no board, a parallel state-owned corporation, Transport Asset Holding Entity (TAHE) of New South Wales, created in 2020, does have one, as shown below.

Board of the Transport Asset Holding Entity (TAHE) of New South Wales

Role	Current member Name	Current Member profession
Chair	Bruce Morgan	Adjunct Professor University of New South Wales
Member	Anne McDonald	Adjunct Professor University of New South Wales
Member	Trevor Bourne	Not stated
Chief Executive Officer	Bénédicte Colin	CEO of TAHE (Attorney)
Under section 6 of the TAA, the board may consist of no fewer than three and up to seven Directors (including the Chair) appointed by the voting shareholders, and the Transport Secretary. The CEO may be one of the Directors appointed by the voting shareholders		

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