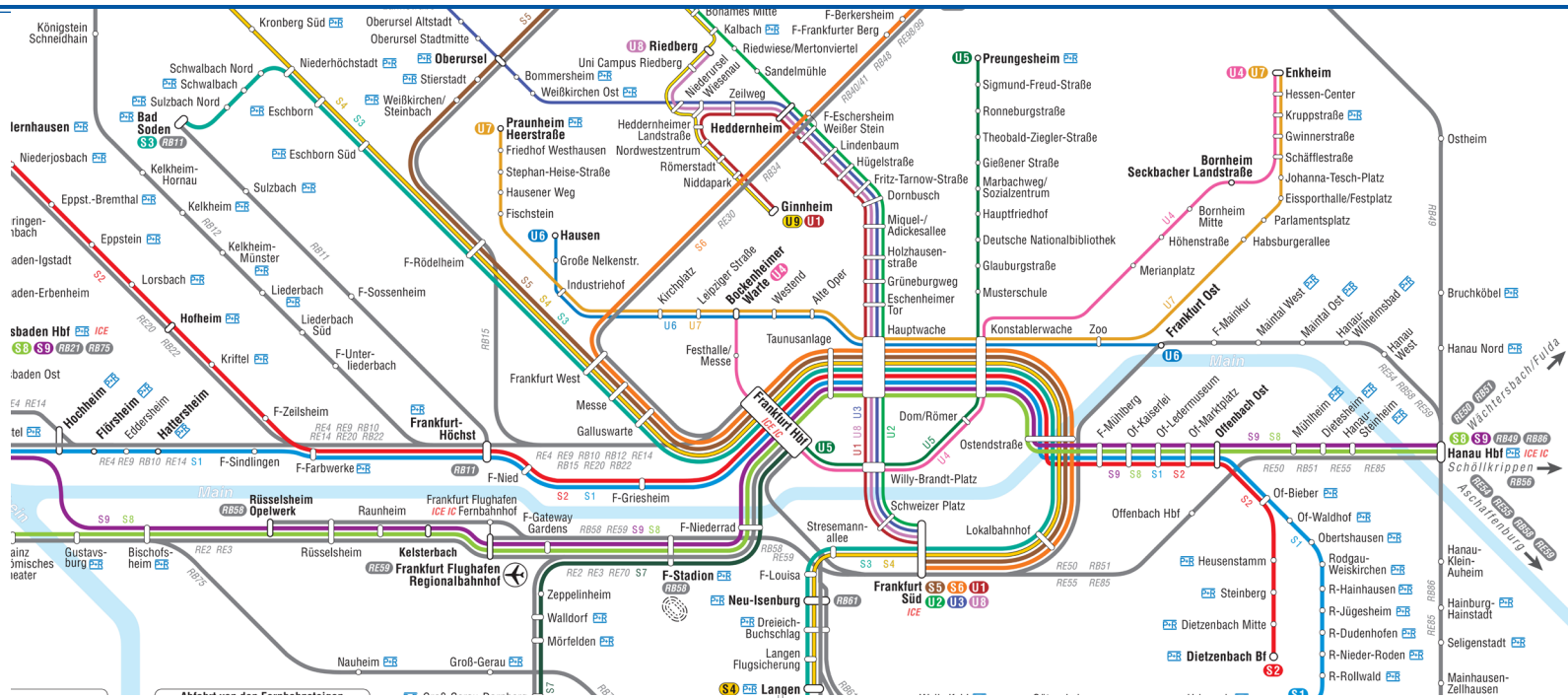


Characteristics of Effective Metropolitan Areawide Public Transit: A Comparison of European, Canadian, and Australian Case Studies

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The purpose of this research is to identify the specific characteristics, policies, and practices that are associated with well patronized world-class metropolitan transit systems. This research examines the regional aspects of public transit for an entire metropolitan area rather than focusing on individual agencies or modes. Three policy areas were considered: customer-apparent features, behind-the-scenes or organizational structures, and funding.

Study Methods

Ten case studies of foreign metropolitan areas were researched, all of which have high regional transit mode share compared to the U.S. Information was obtained primarily through a scan of the available documents and literature, published reports, and agency websites. For clarification, agency staff or regional planners were interviewed. The case studies were selected from the developed western

countries of Canada, Australia, and western Europe since their cities and metropolitan areas are similar to those of the U.S. in terms of population, density, and culture, including wealth and car ownership. The ten cases study areas were those of Barcelona, Frankfurt, Lyon, Milan, Stockholm, and Stuttgart in Europe as well as Vancouver, Toronto, Sydney, and Perth. The regional transit mode share for the ten areas ranged from 10% to 37% and the major city transit mode share was even higher, between 23% and 40%.

Findings

All ten case studies have a metropolitan areawide regional transit coordinator (RTC) which ensures that schedules between modes are synchronized, long-range planning among the modes is coordinated, and that there is a single regionwide fare policy. In most cases, regional transit coordination evolved over a period of decades.

Regarding fare policy, most of the case studies have fully embraced a regionally integrated fare policy. Each system owner (or mode-operator) does not set its own fares; there is only one fare structure for the whole region regardless of transit system owner or mode. From the customers' perspective, one single ticket (or pass) is needed regardless of how many modes or systems are used. The fare is mode- and operator-blind: the whole journey is priced from origin to destination, not individual trips.

From a transit system design perspective, there is a regionwide trunk rail network supplemented by regional buses, and within the major cities there is a citywide metro (subway) and/or light rail as well as local buses.

RTCs yield benefits in terms of ridership and operating efficiencies that are discernable from the effects of high transit funding and subsidies. Overall, public transit is reliable, frequent, affordable, and abundant. There is a financial commitment, both past and present, to build and maintain the infrastructure and the requisite operations. A steady, sufficient, reliable funding stream is the backbone to world-class, reliable transit.

All case studies sufficiently fund their transit systems to be fast, frequent, reliable, and affordable.

Policy Recommendations

A regionwide public transit coordinator (RTC) is an integral part of providing high quality public transportation in today's metropolitan areas. A successful RTC has authority to manage the many pieces of the regional transit network puzzle, particularly fares and schedules. There are several pathways to and variations of an RTC. A higher (state or national) level of government is almost always involved, either to grant the RTC the authority it needs or to be the RTC itself.

This research found three basic models of RTCs, all of which appear to be effective:

1. There is one coordination agency that coordinates the many separately-owned systems (ubiquitous in Germany and present in Italy, Spain, and France).
2. A variation of the first model is that the RTC also serves as the operator of the regional rail and bus modes (Toronto's metrolinx).
3. There is complete consolidation of all public transit modes in the metropolitan area under a single public agency (as in Vancouver, Stockholm, Sydney and Perth).

A regionwide single-fare policy that is journey based, (mode and operator-blind) improves customer satisfaction and ridership. A coordinating entity with sufficient authority to set fares appears to be essential to creating a single fare policy.

About the Authors

Michelle DeRobertis, Christopher Ferrell, Richard W. Lee and John Eells are Principals with Transportation Choices for Sustainable Communities. All have more than 25 years' experience in sustainable transportation planning. Michelle DeRobertis, the Principal Investigator, was the lead author of the Institute of Transportation Engineers (ITE) State of the Practice report *Transit and Traffic Impact Studies*, published in 2019.

To Learn More

For more details about the study, download the full report at transweb.sjsu.edu/project/2001



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