Fair Share: Allocation of Transit O&M Costs Between Multiple Partners

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INTRODUCTION

This paper examines practices employed by transit agencies across North America to allocate light rail, heavy rail, and commuter rail operations and maintenance (O&M) and rehabilitation and replacement (R&R) costs between multiple parties. It focuses on arrangements in which one public agency is a transit service provider that is compensated by another public agency for the service provided within its jurisdictional territory. The results of this research provide value to agencies seeking to establish or re-define cost sharing arrangements.

The presentation uses case studies to summarize methodologies used to allocate costs between parties; measures applied to allocate costs; compensating revenues credited to the purchasing agency; and the workability of the arrangement. Attributes of workable arrangements include simplicity; equity; measurability; and sustainability.

The research shows that there is a tradeoff between the simplicity of a funding agreement and the equitability of the resulting funding allocations. Simple arrangements also tend to use metrics that are easy to measure. As a result there may be benefits to utilizing a more simple approach, such as improved transparency and lower implementation costs.

Conversely, the most equitable transit cost allocation arrangements tend to have complex methodologies that apply multiple metrics. These may end up being more sustainable in the long-term because they maintain a strong nexus between the benefits a jurisdiction receives from the transit system or project, and the amount of funding they are contributing. These agreements may also represent a long-standing regional consensus that is difficult to change by a single funding partner. If the arrangement fails to maintain an equitable allocation of costs, the arrangement is typically not sustainable, especially on a long-term basis.

APPROACH

The transit cost sharing arrangements were reviewed for 10 agencies from across North America, summarized in Table 1. The services include heavy rail, light rail, and commuter rail, and represent several arrangements that allocate transit costs across multiple jurisdictions.

The transit cost allocation approach for each arrangement is summarized according to the following criteria:

- **Use of funds**: whether the funds are applied as O&M costs, R&R costs, or both
- **Methodologies**: the protocol used to allocate costs between parties
- **Metrics**: measures applied to allocate costs
- **Compensating revenues**: revenues credited to the purchasing agency under the arrangement
- **Reserve fund requirements**: any reserve accounts required by the cost allocation arrangement
- **Workability of the arrangement**: the ability of the arrangement to address transit cost allocation

The workability section summarizes the extent to which each arrangement is:

- **Simple**: the arrangement is transparent, easy to comprehend, and easy to implement
- **Equitable**: the arrangement provides a fair allocation of costs for the project between parties
- **Measurable**: the metrics are easy to measure and obtain
- **Applicable**: the arrangement addresses both O&M and R&R costs
- **Sustainable**: the arrangement will remain relevant and usable on a long-term basis
CASE STUDIES
Case studies for each of the agencies summarized in Table 1 are profiled below.

FINDINGS

Simplicity
Four of the arrangements, Metrolink, Amtrak, Sound Transit, and the BART-VTA Comprehensive Agreement, are complex, using multiple metrics and methodologies. As a result, the arrangements are generally difficult to interpret and implement, requiring substantial bookkeeping and complex financial modeling. It may also be difficult for the funding agencies to describe these agreements succinctly to external stakeholders, elected officials, and the public.

The six remaining case studies are relatively simple arrangements that apply a limited number of metrics and methodologies. The simplest arrangements generally include lump sum payments toward the respective service, typically in the form of capital investments to fund upfront capital costs. Examples of such arrangements include the TTC-York Region arrangements and elements of the BART-SamTrans arrangement. Other arrangements that apply simplified metrics and methodologies include the WMATA, Valley Metro-Central Mesa, Metro-North-CDOT, and SEPTA-DTC arrangements.

Equity
Many of the arrangements are equitable with regard to current service levels. However, the arrangements may not remain equitable if there are future expansions or changes in service levels. WMATA and Sound Transit, both transit cost allocation arrangements spanning multiple jurisdictions, are generally equitable. However, there are implications for future service planning by Sound Transit given that the location of sales tax revenues generated does not necessarily correlate with locations where future transit investment are most warranted. The most equitable arrangements tend to allocate costs based on a combination of metrics such as ridership, train miles, and population.
Measurability
Metrolink, Amtrak, and the BART-VTA Comprehensive Agreement are among the least measurable. Though they apply metrics which alone are easily measured, these arrangements include an excess of measurements that collectively may be difficult to obtain and apply. The seven remaining case studies are relatively easy to measure, especially given the limited number of metrics used. The most measurable arrangements generally call for a limited quantity of metrics that can easily be obtained through typical transit data collection methods, and can be easily projected using common service planning parameters.

Applicability
The majority of arrangements address both O&M and R&R costs of the respective service. The arrangements that do not address R&R costs, such as WMATA and SEPTA-DTC, apply separate capital agreements which address the allocation of R&R costs.

Sustainability
It is important to note that though equity is a large factor, it is not the sole contributor to the sustainability of an agreement. For example, the sustainability of an agreement can be influenced by the complexity of the arrangement, the number of jurisdictions involved, the ease of the parties to alter the arrangement, or the consequences of a funding partner removing itself from the arrangement. Sound Transit’s agreement is complex and uses a broad interpretation for jurisdictional benefit. However, it shows signs of flexibility for future needs and sustainability concerns. The TTC-York arrangement and Valley Metro-Central Mesa arrangement were drafted for services that have not yet opened to service. These arrangements are currently sustainable given the recent agreement of terms between the respective entities. However, once the commencement of revenue service begins to impact the funding contributions of the member jurisdictions, the long-term sustainability of these agreements may be tested. The remaining four arrangements are likely to be more sustainable due to a significant improvement from a previous agreement (BART-SamTrans), a long-term history of successful implementation (WMATA, Metrolink), or a recent renewal of the agreement (Metro-North-CDOT). The SEPTA-DTC agreement addresses sustainability directly within its methodology, adjusting annually and allowing flexibility for future changes in the service.

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Conversely, the most equitable transit cost allocation arrangements tend to have complex methodologies that apply multiple metrics. These may end up being more sustainable in the long-term because they maintain a strong nexus between the benefits a jurisdiction receives from the transit system or project, and the amount of funding they are contributing. These agreements may also represent a long-standing regional consensus that is difficult to change by a single funding partner. If the arrangement fails to maintain an equitable allocation of costs, the arrangement is typically not sustainable, especially on a long-term basis.

Each of the case studies provides important insight on transit cost allocation methodology. The Metro-North-CDOT arrangement is most workable according to the criteria applied in this analysis. The arrangement for the New Haven commuter rail line bases O&M and R&R cost allocation on a few simple metrics. The arrangement is more equitable than the majority of case studies and is generally sustainable given that it has been in effect for several decades and was recently renewed.

For heavy rail transit cost allocation, the BART-SamTrans agreement and the WMATA arrangement are generally workable. The BART-SamTrans agreement is simple to implement and understand. The agreement is more equitable and sustainable than the agreement it replaced. The WMATA arrangement is different from the BART-VTA and BART-SamTrans arrangements given that it applies to multiple jurisdictions. However, the arrangement addresses equity across the jurisdictions using two simple formulas and three metrics that are easy to measure and obtain. In addition, the arrangement addresses a complex geography for transit cost allocation, serving two states and the District of Columbia and multiple local jurisdictions, and has remained in place since its inception.

CONCLUSIONS