
Institutional Structure and Arrangements for the Monitoring and Control of the Tren Urbano System

Research Presentation

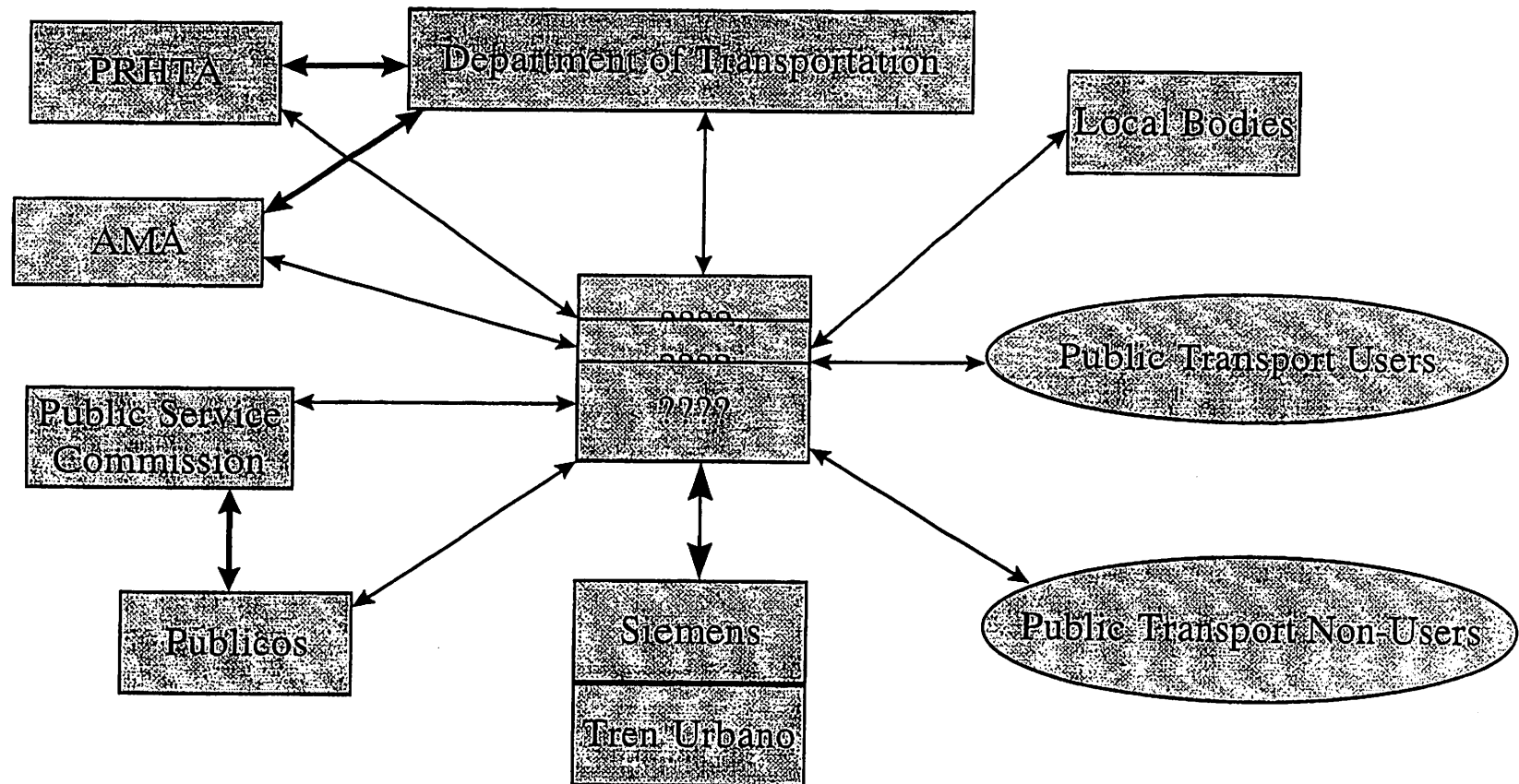
by

O.P. Agarwal, MIT

Research Objective

- Propose an institutional structure for the “Entity(s)” that will control and direct Tren Urbano during the O&M phase
- Recommend administrative and legislative provisions that would better enable it to:
 - * Sue and be sued
 - * Manage its finances
 - * Negotiate and/or mediate

An interface between Govt. & Siemens



Motivation

- Unique O&M Procurement Strategy:
 - Government provider with private producer - vastly different motivations
 - Revenue risk with provider, cost risk with producer
- Will need close monitoring and supervision to:
 - Ensure service quality & determine compensation
 - Set fares and level of service
 - Ensure proper maintenance
 - Prevent fare evasion

Motivation contd.....

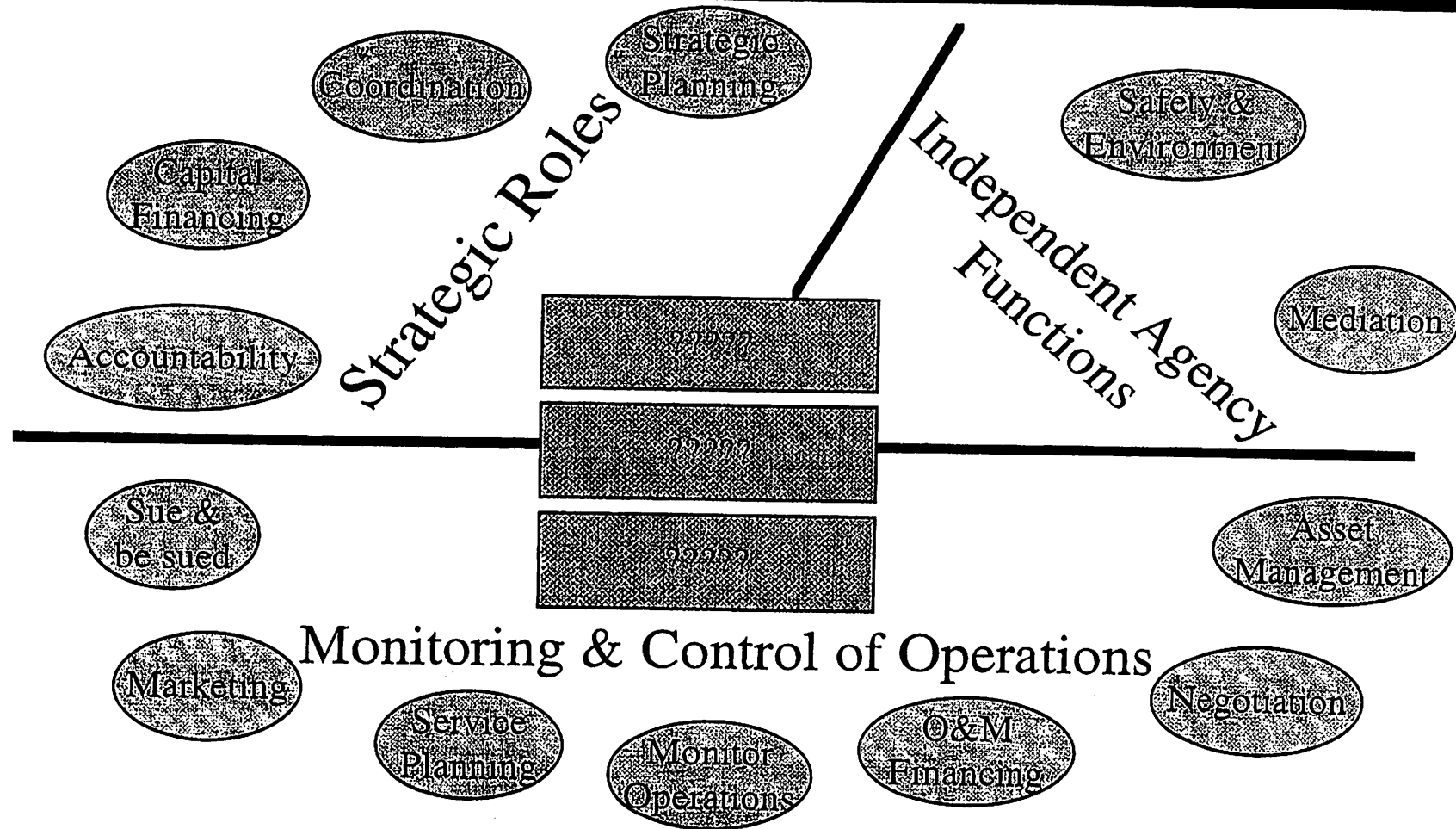
- Need for unique capabilities to sue and be sued, with or without unlimited liability
- Likelihood of complicated negotiations
- May need to raise finances

Hence, there seems to be a need for unique institutional arrangements with possible lessons for others

Alternatives

- Single/Multiple Tiers
- Wing(s) of the DTOP/PRHTA
- Separate government entity(s)
 - Subordiante office of the DOT
 - Subsidiary of the PRHTA
 - New Tren Urbano Authority
 - New Tren Urbano Company
- A private company (other than Siemens)

Structure depends on expected role



Research Approach

- Establish a base case - MBTA
- Study existing urban transport planning & provisioning arrangements in San Juan
- Study O&M contract - identify features that necessitate unique supervisory arrangements
- Develop evaluation criteria for suitability of alternatives
- Evaluate alternative structures (draw lessons from privatizations elsewhere - locations & sectors)

Research Approach contd ...

- Identify likely situations requiring the “Entity(s)” to:
 - Sue and be sued
 - Engage in complicated negotiations
 - Raise finances
- Assess need for legislative and administrative measures to empower the “Entity” to deal with the above situations
(.....again, draw lessons from examples elsewhere)

Current Status

- Completed study of contract documents, structure of MBTA and preliminary study of urban transport planning systems in San Juan
- Identified unique supervision needs for Tren Urbano
- Identifying potential situations where the “Entity(s)” will need to sue and be sued, engage in complex negotiations and be able to raise finances
- Identified some evaluation criteria - being refined
- Collected some case material on recent privatizations in Buenos Aires, London and Brazil. Seeking more

Next steps

- Finalize evaluation criteria
- Evaluate the alternative institutional arrangements
- List potential scenarios requiring the ability to sue and be sued, negotiate and raise resources
- Determine legislative and administrative provisions that may offer comparative advantages in dealing with the above situations

Research Proposal for Tren Urbano

Institutional Structure and Arrangements for Monitoring and Control of the Tren Urbano System

submitted by
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Research Objective

The end goal of this research is to:

- Propose a long term institutional structure for the entity that will control and direct Tren Urbano with respect to the government's interests, focusing primarily on the finance, legal and negotiating functions, and including a recommendation as to the administrative and legal status that such an entity should have, in order to be effective.
- Identify the other major functions that would have to be performed by the entity during the initial and long term operations of the Tren Urbano
- Identify how these functions would change if alternative procurement strategies are adopted in future

Background and Motivation

Tren Urbano is being procured as a Design - Build - Operate system, unlike traditional urban rail transit facilities. Given this unique procurement strategy, and the existence of a unique relationship between government and the operator, it is likely that the traditional objectives and methods of monitoring and regulation, from the perspective of public agencies, will be different for Tren Urbano.

This new situation implies that, rather than merely replicating the institutional structure of other transit systems in the United States, the government has an opportunity to align its structure to better fit the Tren Urbano. This is particularly so, since Tren Urbano's operational structure is likely to change as the system is extended to additional phases, and as actual ridership revenue, and cost figures, emerge in the first few years of operation.

The following are some of the critical functions that may have to be provided by the new entity:

1. **Monitoring Project Implementation** - since the government would be the owner of the facility it has to make sure that the system is being built as per the contracted design and standards
2. **Monitoring operating performance** - according to the contract the responsibility for setting the service standards rests on a public entity. This would include setting fares, service frequencies, span of service, crowding standards, etc. The fee structure depends on the level of service and additional compensation or penalties may be called for if deviations take place. As a result monitoring of service levels and ridership trends is essential not just for service planning functions but also to determine the fees payable to the operator.
3. **Continual data collection and planning function** - since the public entity has to specify the service standards, it should have the capability to decide the required service standards and weigh the cost implications against broader socio-economic objectives
4. **Financial function** - under the present arrangement the financial risk is with the public entity and so it is necessary to have adequate capabilities to carry out the financial planning and management responsibilities.
5. **Negotiating function** - the nature of the contract is such that there would be several issues on which negotiations and re-negotiations would be called for. A negotiating set up would therefore be necessary with appropriate skills.
6. **Coordination function** - to integrate different transit modes, integrate fares and achieve the broader socio-economic objectives of a good urban transport system. It would have to function as a coordinating/regulating agency for all city transit modes.
7. **Long term/Strategic planning function** - the present terms of the operating contract are to last for five years. An agency must be able to examine various alternative strategies for the future and decide between them. It would also need to plan future capacity expansions and need for new lines, as well as decide procurement strategies in the light of the experience gained with the Tren Urbano procurement method.
8. **Legal function** - this entity would need to have an appropriate legal identity and be able to sue or be sued. The legal function would require the handling of legal proceedings that the entity may be involved with.
9. **Regulatory function to protect interests of consumers and the society at large** - this would include functions such as specifying safety and environmental standards.
10. **Public Accountability function** - since the entity would be a public body it would have to be accountable to the public and discharge appropriate responsibilities in this regard.
11. **Dispute Avoidance and Resolution function** - since the project involves two parties, one a public entity and the other a private company, both having vastly different motivations, the possibility of disputes and disagreements is high. Such disputes may need to be mediated by an independent agency so that a fair compromise is arrived at.

The aforesaid list of functions can be broadly classified into the following categories:

⇒ **Those required to be performed by a public entity that represents the commercial interests and financial risks of the owners:**

- Monitoring Project Implementation
- Monitoring operating performance
- Continual data collection and planning function
- Financial function
- Negotiating function
- Legal function

⇒ **Those required to be performed by a public entity that represents larger socio-economic interests:**

- Coordination function
- Long term/Strategic planning function
- Legal function
- Regulatory function to protect interests of consumers and the society at large, including the associated enforcement function
- Public Accountability function

⇒ **Those required to be performed by an independent agency that would fairly represent both the parties to the agreement.**

- Dispute avoidance and resolution.

Research Methodology

Each of the following steps will be undertaken using the eleven functions listed above as a convenient template:

I. Examine and Summarize the structure of several existing transit agencies - (by November 30, 1997)

At the outset, it is proposed to establish a base case of a typical US transit agency. For this purpose, the institutional structure, and the reasons for that structure, will be examined for several existing transit agencies, including the MBTA, WMATA and NYCTA.

II. Study contractual terms of the Tren Urbano agreement - (by December 30, 1997)

The terms of the contract between the Government and Siemens will be studied with a view to determine how the eleven functions are currently allocated in the Tren Urbano context, if at all. Towards this end the following would be identified from the contractual agreements:

- Allocation of duties, responsibilities and risks between the owners and operators and how they differ from the situation in traditional transit agencies.
- Special requirements for monitoring and control that would be necessary, to protect owner interests
- Potential areas of dispute for which the entity will have to be prepared (interviews with individuals involved with Tren Urbano would also be a source for this).

III. Review of case studies - (by February 29, 1998)

Several case studies will be examined with a view to drawing lessons from other contexts regarding:

- Potential problem areas, as encountered in other DBO procurements
- Special institutional structures, if any, set up to deal with the monitoring and control functions under such unique relationships as in the case of Tren Urbano

Some of the cases proposed to be looked at are the following :

Buenos Aires - where the urban transit system has recently been privatized and this may provide lessons on potential dispute areas as well as how they can be avoided.

London - where the railway system (except the subway) has been privatized and new institutional arrangements have been put in place for a variety of functions. It would provide lessons on possible institutional arrangements and inter-relationships between the different institutions.

Toll roads in California - Routes such as the SR 91 expressway have been procured on a BOT basis with controls on the profits of the private developer. This may provide lessons on institutional arrangements and skills required for such monitoring and control purposes.

Privately operated waste water treatment plants in the US - this may give ideas on possible institutional arrangements for monitoring and control.

IV. Recommendations (by March 31, 1998)

Recommendations for tailoring Tren Urbano institutional structures to be able to manage the eleven functions stated above, with detailed recommendations on the arrangements to manage the financial, legal and negotiation functions.

V. Final Report Writing and Submission (by April 30, 1998)