Contracting with Private Providers by the Public Transportation Industry

Outline

- **Organizational Schemes** (Also see 1.201, Lecture 19)

- **Services Typically Contracted**

- **Contract Economics**

- **Contracting Issues and Practices**

- **Types of Transit Contracts**

- **Contract Management**

- **Case Studies**

- **Final Thoughts on Performance Regimes**

Primary Organizational Schemes in the U.S.

1. Standard Public Ownership & Operations

* Simplest structure

* Theoretically has maximum accountability and control

* Political and labor issues may introduce inefficiencies

* Innovation often tied to individual GM skills and future ambitions

Primary Organizational Schemes in the U.S.

2. Management Contract

* Mostly in smaller areas/not growing in number

* Provides expertise and/or experience via a manager or team who are not available locally

* 3-5 year contract duration typical—usually fixed fee

* Large incentive difficult to justify

* Employees either public employees or hired by a locally-incorporated private entity

* Implementation can be flawed; few incentives for private managers; very similar to first model

Primary Organizational Schemes in the U.S.

3. Service Contracting

* Various components of service can be contracted out

* Provision of actual bus or paratransit service most common

* Vehicles, facilities, and equipment may or may not be included in contractor-provided services

* Objectives of public agencies key to determining type of procurement and contract

U.S. Transit Industry Structure

- **Remarkably little change since the early 1970s:**

  - regional transit authorities regulating, planning and directly operating most services in larger urban areas (> 100 buses + rail)

  - municipalities operate transit in many small cities (< 100 buses)

  - principal use of private sector is in providing limited types of purchased services to transit authorities

Ancillary Services Typically Contracted

- **Ancillary or support services: cleaning, advertising, real estate, etc.**

  * **relatively straightforward and easy to define & administer**

- **Maintenance of way and vehicles**

  * **limited examples in U.S. (London PPPs)**

  * **labor issues can be tricky**

  * **more examples in the private sector**

Purchased Transit Service in US Transit Industry: Operating Expense (2007, $ millions)

Mode	Directly Operated	Purchased	Total	% Purchased
Bus	15,662	1,646	17,308	9.5%
Heavy Rail	5,835	53	5,888	0.9%
Commuter Rail	3,772	242	4,015	6.0%
Light Rail	1,098	72	1,170	6.1%
Paratransit	2,166	2,255	4,421	51.0%
Total	28,533	4,268	32,801	13.0%

Source: American Public Transit Administration Fact Book 2009 (for 2007)

Transportation Services Typically Contracted

- **Fixed route bus and rail services**

    * limited examples but increasing—Denver, Dallas, Southern California, San Juan, D.C. suburban services

    * generally has been proposed to reduce costs and/or to provide new services

    * since market is relatively small, # of bidders usually low

    * rail market just starting—quality of service seems to be the emphasis here

Services Typically Contracted

- **Paratransit (i.e., demand-responsive) services**

    * contracting much more prevalent here with a range of outcomes

    * small but growing portion of public agency budget often consumes a disproportionate amount of management attention and public scrutiny

    * transition difficulties are frequent, especially in areas with only one provider

    * technology and customer relations play an important role

Contract Economics: Basic Principles

- **Deals with situation of asymmetric information:**

    - important information available to only one of parties

    - important information cannot be independently verified

- **Basic question: how can the party (the principal) with limited information:**

    (a) create a mechanism (contract) and

    (b) behave, such that a party (the agent) with desired traits:

        i) wants to enter into the contract and

        ii) then wants to behave as desired by the principal

Difficulties in Applying Contract Economics

- Complexity of agent's task is great, simple incentives are risky

- The principal may have difficulty determining the utility function

- A great deal of information is required of both parties

- Outcomes are often not under the agent's control

- Resulting contracts may be unfeasibly complex

- The more possible actions, possible outcomes, and uncertainty between the action and the outcome, the more difficult the problem.

- There are limits to contract complexity in practice -- they are difficult and costly to design and enforce.

Applications to Transit Service Contracting

Traditional approaches to contract design:

- identify desirable performance by contractor

- define measures for performance

- devise incentives/penalties based on measures

Obstacles to applying contract economics:

- agency has multiple objectives for contracting

- contractors have a great range of actions to choose from

- contractors also have multiple objectives

Fundamental Contracting Issues

- **Maximize competition**

- **Understand the potential contractors**

- **Consider risk premiums**

- **Consider implications of fixed and variable costs**

- **Provision of equipment and facilities**

- **Performance standards, incentives, and penalties**

- **Compensation provisions (startup costs and cash flow)**

- **Contract length (normally 3-5 years)**

US Transit Agency Contracting Practices

- Contracting is relatively stable, and still a small share of all service (13% overall, 51% of paratransit)

- Increasing use of competitive selection processes

- Structuring bids to minimize contractor's risk can increase competition

- Incentives and penalties are often included in contracts, but enforced much less frequently

- Contract extension/renewal a common implicit incentive

- Impact on reputation is a major factor

Types of Service Contracts

1. "Cost Plus" (~ 20%)

* provider is reimbursed for all costs (usually up to a "ceiling") plus a negotiated profit

* contractor generally cannot suffer a loss

* thought to provide little inducement to keep costs low

* often associated with quality of service objective

Types of Service Contracts

2. "Fixed Price" (~ 80%)

* ~ 60% based on service provided (vehicle hours or miles)
  * revenue versus non-revenue
  * can result in less emphasis on quality

* ~ 20% based on service consumed (passenger trips or miles)
  * short trips versus long trips
  * measurement becomes a critical item

* shifts much more risk to contractor and various mechanisms have been used to reduce this risk
  * "floors" on service or passenger units
  * combination of fixed and variable payments
  * full cost template specification and "shadow" bids at TfL

Contract Management/ Contractual Relationships

- **Key to success is competent management on both sides**

- **Mutual respect and fair dealings most important aspects of relationship**

- **Regular reporting by contractor, thorough review by agency necessary**

- **Hands-on, frequent interaction reduces "games"**

Contract Management/ Contractual Relationships

- **Achievable, significant incentives more important than penalties except in extreme cases**

- **Reputation/recommendation more important than minor financial incentives**

- **"Cost-plus" form of contract with revenue/cost savings sharing may be cheapest in the long run**

Case Study 1: New Suburban Fixed-Route Bus Services

- 5-year fixed-price for new services (compensation based on revenue-hours)

- Low-bid selected (a penny an hour difference!)

- Vehicles purchased by public agency and maintenance-facility provided midway through contract

- Contract economics change drastically as service expands and vehicles age

Case Study 1: New Suburban Fixed-Route Bus Services

- Drivers hired by public agency

- No interest within agency in renegotiating terms

- Penalties and incentives were insignificant

- Major loss could cripple small company

- Resulted in: new operator with substantially increased costs

Case Study 2: State-Sponsored Paratransit/Medicaid Transportation

- Competition for each county or groups of counties every 3-5 years

- Public, private-not-for-profit and private-for-profit companies compete

- Compensation on basis of price per passenger-mile with COL adjustments

- Quality of service initially an explicit factor; later reduced to a "qualification"

- Private providers pushed out due to public cross-subsidies

Case Study 3: Paratransit Brokerage

- **One of longest-running private contracts in U.S. for one of the largest ADA/elderly paratransit programs**

- **Private broker has a "cost-plus" contract with public agency and in-turn contracts on a vehicle-hour basis with 6-12 private providers (by region)**

- **Significant incentive for productivity; small penalties for poor service**

- **Year-to-year semi-formal cost-based renegotiations of rates and adjustments of service areas**

- **Proven result-lower costs per passenger and per-hour and excellent service quality**

Case Study 4: TfL Overground Service

- **Transfer of 4 commuter rail services from UK National Rail to TfL, to be combined with a newly-built service (ELL)**

- **Complete cost specification including explicit overheads and profits through TfL-supplied templates**

- **Evaluators and consultants complete a "shadow bid"**

- **Performance regime is difficult because of enormous uncertainty**

- **BAFO included "Dynamic Benchmarking Revenue Share Incentive," but TfL never "bought in"**

Final Thoughts on Performance Regimes

- Carefully consider aspects of performance you want to reward or discourage

- Can you justify significant monetary incentives?

- Rule of Thumb from Contractor's Perspective:
    - Put no more than 2/3 of profit at risk
    - Will work harder if profit can be doubled

- The more uncertainty in future performance, the more dynamic benchmarks make sense

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