#### I. Introduction

# Public Transport Planning and Industry Reform: An Introduction

### **Course Objectives**



- 1. Learn Basic Characteristics of Public Transport
- 2. Acquire Basic Service Planning and Analysis Skills
- 3. Understand Options for Providing Public Transport

## Why is Public Transport Reform Important?

Prime Public Transport Goal
 Meet Community Access and Mobility Needs

How do we best meet this goal?

Effective institutional arrangements, planning, and management!

## **Objectives of Reform**



#### Develop a public transport system that is:

- Effective
  - Meets mobility needs and is reliable, affordable, safe, and user friendly
- Efficient
  - Minimizes costs consistent with standards of effectiveness
- Financially Sustainable
  - Consistent with short and long term community resources
- Consistent with Broader Community Objectives
  - Supports community development and minimizes impacts e.g., pollution, congestion

## **Key Mechanisms**



- Organizational Framework
  - Forms of competition
  - Detailed rules for operation
- Regulation
  - Protects user needs
  - Ensures fair competition

### **General Organizational Frameworks**

- No competition
  - Government authority plans and operates services as public monopoly
- Competition in the market
  - Government authority grants operating rights to private companies
- Competition for the market
  - Government authority plans services and contracts for private operation



## No Competition Public Monopoly

Government plans and operates services as a public monopoly

#### **Advantages**

- Direct government control over services and fares
- Easy service and fare integration
- Sensitivity to social objectives

#### **Disadvantages**

- Poor management incentives
- Political interference in day-to-day operations

#### **Typical Results**

- Low efficiency and service quality
- Financial sustainability problems

#### **Examples**

United States, former Soviet Union





## Bangalore, India **Example**



- One operator (BMTC) serves the metropolitan area
  - Provides different types of services based on **BMTC** planning
  - Operates large and small buses
  - Outsources some functions
- Broad policy direction provided by state
  - BMTC retains full management authority over services, fares, and labor
- No independent regulation other than safety

## Making SOE, Public Monopoly Work Better

- Build in incentives for management
- Maximize out-sourcing
- Establish clear roles for political leadership and management
- Set clear performance objectives, measures, required actions, and consequences

### Competition in the Market

Government grants operating rights to private companies who may compete on the street for customers

#### **Advantages**

- Limited government operations management
- Management incentives for efficiency

#### **Disadvantages**

- Strong government technical oversight of services and fares needed
- More difficult service and fare integration
- Difficult to revise service network
- Difficult to provide unprofitable services

#### **Typical Results**

- Financially sustainable
- Oversupply of low-quality services
- Insensitivity to social objectives (e.g., congestion, affordability)

#### **Examples**

Latin America, Africa, Asia



## Hong Kong Example

- Strong government planning and analysis
  - Corridor/sub-area
    - Small number of companies operating large buses including double-deckers
    - Larger number of companies operating minibuses
    - Different types of services based on private market assessment within regulatory limits
- Very tight regulation/enforcement
  - Number of companies and buses
  - Quality of buses
  - Safety
  - Fares
- No subsidies (huge captive market)









## Making Competition *in* the Market Work Better

- Create strong planning and regulatory body
  - Manage the amount of service operated to insure profitability and quality
  - Set realistic fare levels based on sound economic principles and operating practices
  - Enforce safety and operating rules
  - Establish sound licensing policies (e.g., number, renewal period, ceilings on ownership)
- Provide publicly-funded infrastructure
- Provide strong traffic management and enforcement
- Provide joint services
  - Public information and marketing
  - Assistance in vehicle procurement

### Competition for the Market

Government plans services, sets fares, and contracts for private operation

#### **Advantages**

- Direct control over services and fares
- Management incentives for efficiency
- Control of service quality through contract provisions
- Sensitivity to social objectives

#### **Disadvantages**

- Strong government planning and oversight of services and fares needed
- More difficult service and fare integration
- Requires strong contract management

#### **Typical Results**

- Financially sustainable
- Relatively high efficiency and service quality

#### **Examples**

Latin America BRT, United Kingdom, France





### **UK Outside London Example**

- Strong government planning and analysis
  - Corridor/sub-area
    - Small number of companies operating large and/or small buses
    - Different types of services based on public authority plan
- Results
  - Early problems in contract specification and management that were corrected
  - Higher quality services, lower subsidies







## **Contract Types**

- Gross-cost contracts
  - Fare revenues go to public authority
  - Contractor risk limited to costs
- Net-cost contracts
  - Net-cost = Total costs Fare revenues
  - Contractor risk includes costs and revenues (riders)

## Making Competition *for* the Market Work Better

- Maximize competition
  - Multiple tenders (break up services)
  - Limits on awards to one company
  - Public provision of infrastructure and facilities
  - Assistance in procuring vehicles
  - Reduce contractor risk
    - Gross-cost contracts
    - Pass-through of volatile cost items (e.g. fuel)
- Provide joint services
  - Public information and marketing
  - Street supervision
  - Fare collection
- Provide reasonable contract incentives

## **Summary of Key Features Competition Frameworks**

	Monopoly	In Market	For Market
Operations Efficiency	_	+	+/
Service/Fare Integration	+	_	+/
Quality Control	+	_	+/
Political Interference	_	_	+
Passenger Demand Response	_	+	_
Government Skills Required	_	+	+/
Sustainability	_	_	+

## Regulation



- All frameworks need regulation
  - Set rules of conduct and operation
  - Enforce rules
- Regulation can cover:
  - Fares
  - Service levels: frequency, hours, accessibility
  - Service quality: reliability, crowding
  - Vehicles: access, comfort, safety, emissions
- Effectiveness of regulations
  - Regulations are meaningless without enforcement
  - Incentives can assist compliance



## Institutional Implications



The reform of urban bus transport requires:

- A regulatory framework
  - Legal basis to impose the appropriate obligations and incentives
- Competent regulatory institutions
  - Able to plan route networks, administer regulations, guide industry development, and monitor outcomes
- A responsive operating industry
  - Amenable to control, willing to enter into competition and to invest (e.g., buses, garages)
- A government entity to provide supporting infrastructure
  - e.g., Passenger facilities, traffic management, bus priority schemes



## Reform Also Requires Consideration of Transition Issues

- What service will be provided?
  - Current, revised, or new route network
  - Frequencies and days of operation
- How will current stakeholders be treated?
  - Companies which "own" operating rights
  - Owners who provide the buses
  - Drivers and other labor
  - Combinations of the above





- Government "compensates" stakeholders for change
  - United States: Competition in Market *TO* Public Monopoly
- Government requires stakeholder involvement in new system
  - United Kingdom (Labor): Public Monopoly *TO* Competition for Market
  - Cali, Colombia (Companies/Bus Owners): Competition in Market *TO* Competition for Market
- No effort made to address stakeholder concerns
  - Indore, India: Competition in Market *TO* Competition for Market



### What is the Best Reform Option?

The answer depends on the local setting

- Desire of the government to control outcomes
- Legal authority for oversight and control
- Availability of funding to support government oversight and control
- Political willingness to exercise legal authority
- Ability to develop acceptable transition plan

The *Urban Bus Toolkit* can help



### World Bank Urban Bus Toolkit



- Targeted at improving urban bus systems in developing/transitional countries
- Sets out alternatives for providing services
- Provides tool for evaluating alternatives

## **Supporting Materials Provided**

- Case studies
  - Developing countries (11 cities)
  - Developed countries (11 cities)
- Guidance documents for transport practitioners and city officials
  - Administrative procedures
  - Administrative structures
  - Contracts
  - Reform options



### Where Can I Get the Toolkit?

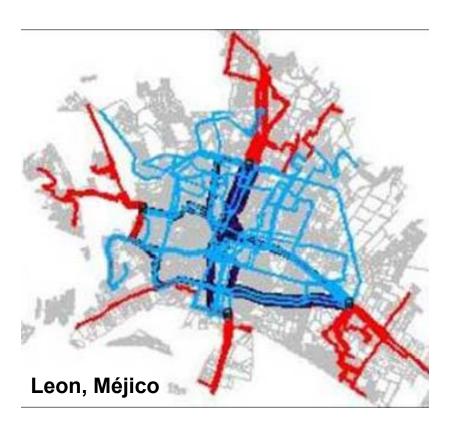
- Run from the CD
  - Copies available here
- Go the web site

http://www.ppiaf.org/UrbanBusToolkit/

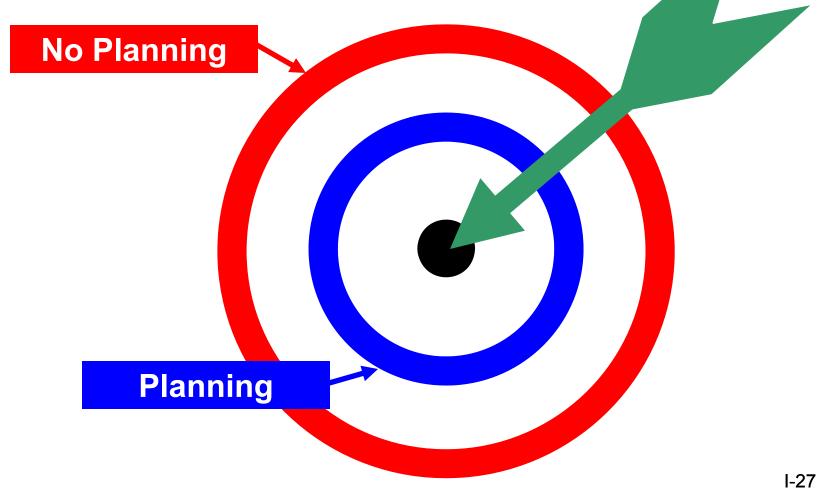


## Public Transport Planning and Analysis Is Important to Reform

- Public Needs Analysis
- Network/Route Design
- Alternatives Evaluation
  - Riders, revenues, costs
- Fare Setting
- Performance Standards
- Performance Evaluation



## Good Planning and Analysis Improves the Chances of Success!



## **Planning and Analysis Building Blocks**







**Schedule Building** 

**Cost Analysis and** Financial Planning

**Performance Analysis** 

**Measures & Standards** 

**Service Monitoring** and Data Collection

**Network and Route Design** 

Fares and Revenue: Policy, **Analysis, and Collection** 

**Market Factors** and Demand Analysis

Terminology and **Basic Relationships**