Transit Operating Decisions

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- Service Frequency
  - based on customers at max load point, average duration standing
- Service Span (time of day)
  - customer boardings by trip
- Bus Stop and Shelter Placement
  - customer boardings by stop
More Transit Operating Decisions

- Scheduling
  - running time - travel time between timepoints
- Route Alignment
  - customer boardings by segment, transfers by route

Decision Based Planning

- The purpose of good transit planning and management is to make decisions.
- The following questions should be asked (1):
  - What is the decision in a narrow sense?, i.e. commit money, approve, go to the next step?
  - Who makes the decision?
  - Who else is involved?
  - When must it be made?
  - What has to be decided now vs. later?
Decision Based Planning

- The following questions should be asked (2):
  - What information will be needed to make the decision?
  - What criteria will be used to make the decision?
  - What are your cost criteria?
  - What are your performance criteria?
  - What impacts are you concerned with?
  - What techniques will be needed to provide the information for the decision?

Information Based Strategy: Steps

- Preparation
- Implementation
- Utilization
Preparation

- Define the Problem
- State Objectives
- Identify Needed Information
- Review Secondary Sources

Table 1.2 Examples of Secondary Information Sources

1. U.S. Census: Socioeconomic, demographic and housing data are available in census tracts or block groups, always aggregated, sometimes incomplete.
   Critical Information
   1. Location of place of work
   2. Income distribution
   3. Automobile availability
   4. Mode to work
   5. Age distribution

   Available on tape or hard copy, usually from planning agency.
2. Planning Agencies
   Current Land Use Plan
   Current Zoning
   Raw Data
   1. Employment Locations
   2. Centers of Commercial Activity Sales Tax Data
   Locations of Special Trip Generators
   1. Elderly Housing
   2. Medical Facilities
   3. Schools
   4. Employment
   5. Shopping

3. City Traffic Department
   Traffic Volumes/Capacity
   Intersection Geometry/Control
   Parking and Other Regulations
   Construction Plans

4. In House Data Collection
   Running Time Information
   Time Between Check Points
   Schedule Adherence
   Running Time on Alternative Routes
   Passenger Comments/Complaints
4. In House Data Collection (con’t)
   - Driver Comments/Complaints
   - Ridership Counts
   - Rate Revenue
   - Off On Counts
   - # of Transfers Issued/Accepted

5. Community Sources
   - Political Leaders
   - Other Community Leaders/Knowledgeable Persons
   - Informal Contacts
   - Task Forces
   - Public Hearings

6. Private Sources
   - Utility Records and Surveys
   - Newspaper Surveys and Market Information
Implementation (Collect the Data)

- When?
- Where?
- How Often?
- Who?, How trained?
- How Summarized?
- How Presented?

Utilization

- Coding, Tabulating and Weighing Information
- Data Analysis and Interpretation
- Report Writing
- Decision Making
- Follow Up
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