Designing Transit with Development in Mind

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What will we cover today

- Creating value
- Auto oriented transit
- Designing for development
- Thinking about stations
- Real world examples

MetroCities TOD
Dubai UAE
Creating Value with transit
Great Stations
Defining Value

- Great design & great transit
- Civic architecture & place making
- Catalyst for community objectives

Portland, London, Strasbourg
Auto-oriented transit
Auto or Development Oriented?

- Both designs:
  - Same land uses
  - Same transit
    - Rail station
    - 800 Park & Ride
    - 12 Bus Transfer
  - Same cost
- One encourages TOD at the station
- One separates the station from the community
Retrofitting Conventional Design

- Transit designed around the car
- 3,072 surface parking spaces
- Station opened in 2001
- Design precludes TOD
- Designated a Metropolitan Center
- Retrofit plan for station
  - All transit functions
  - Plus TOD
Designing Transit for Development
Making transit behave

• Design great transit & great places
  – Keep vision in mind, not the automobile
  – Break the mold
  – Look outside the ROW

• Balance “place” and speed
  – Create a great destination
  – Going nowhere fast has little value
Development-Oriented Transit
“DOT”

- Transit designed with development in mind
- Corridor selection
- Station function
- Pedestrian access
- Parking location
- Community partnerships
- Incorporate TOD

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The DOT Process

- 3 to 5-day design charrette:
  - Address transit design, community fit and TOD
- The participants:
  - Transit agency, design team, local land use & public works
- Ground rules:
  - Transit design can change
  - Budget & schedule can’t change

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Addressing process & culture

- Schedule & financial pressures
  - Part of every project
- Engineers want to decide
  - They run the project
- Planners want to contemplate
  - Late to the game
- Accelerate design & improve decisions
DOT Process Results:

- Identify TOD implications of
  - alignment
  - corridor
  - station locations
- Recommend changes to design
  - Document logic
- Identify next steps for TOD
- Develop DOT framework to guide future design

Arterial station access options Honolulu
DOT Checklist:

- Typical issues to address
  - Is the station located in an area with development potential?
  - Does the design allow for pedestrian connections?
  - Is transit well connected into the community?
  - Is TOD incorporated into the design?
Thinking about stations
What is a Station?

Minimum building blocks of a station:

- 12’+ Platform
- Shelter
- Bench
- Lighting
- Information
- Trash can

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Two ways to view station design

- **Engineering Scope**
  - Transit facility focus
  - View from the station out to edge of ROW
- **DOT Scope**
  - Community focus
  - View from the community in

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Station Location Considerations

- Proximity to uses that generate ridership
- Direct accessibility
- Safety and security
- Visibility to users
- System connections
Place Making at Stations

Places to come back to, not just to leave from

• Four different strategies:
  – Station as a place
  – Station invisible to complement place
  – TOD defines place
  – TOD serves as place
Designed for Development
Fruitvale Transit Village

- Joint Development of BART parking
- Transit center on one side, development other
- Revitalized low-income community
- Calmed major arterial

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Fruitvale BART

- Park & Ride Structure
- Multi-Modal Transit Center
- Development Zone
- Transit Zone
- Pedestrian Spine
- Development Phase II
- Calmed Major Arterial

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Fruitvale Transit Village

- Full service transit
  - Rail Station
  - Bus transfer
  - Park & ride
  - Kiss & ride
Fruitvale Transit Village

Community developed TOD

- Community Center
- Affordable housing
- Senior Housing
- Medical Clinic
- Retail

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Making the station to community connection

SubiCentro, Perth, Western Australia
Making the connection: Downtown, Station, City Hall all... Henderson Civic Centre, Waitakere, NZ
Baltimore DOT Principles

1. Shape the Future
   - Design Red Line facilities to shape and enliven the community and most importantly, serve people.

2. Locate Your Identity
   - Locate train stations in an identifiable civic and friendly place; stations should define the most important places in each neighborhood.

3. Transit Stations as Landmarks
   - Design memorable transit stations that serve as local landmarks and provide unique civic identity.

4. Connect Communities with Transit
   - Adjacent streets and sidewalks along the line should be linked by pedestrian and bicycle connections for efficient transit access.

5. Be a Good Neighbor
   - Site and design stations to be good neighbors as well as providing safe and efficient transit service.

6. Compliment Community Objectives
   - Help knit the urban and economic landscape; each station is a stimulus for development providing a mix of uses close in transit.

7. Connect Places with Walking
   - Provide streets, paths and connections for pedestrians and vehicles between Red Line stations and the downtown and transit centers, with buildings connecting these connections.

8. Pass the Test of Time
   - Make the appearance of transit facilities evident from their approach.

9. Attract New Riders
   - Brushes should be visible and create design that will attract new riders and inspire those who already use mass transit.

10. Create Partnerships
    - Secure partnerships that will maximize the potential of the Red Line and the connection of stations to enhance the public environment and transit improvements.

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