Replacement Parking and BART TOD

October 29, 2008
Overview

• Policy Context – BARTTOD Policy
• BART Parking Replacement Methodology
• Replacement Parking in Action
  - South Hayward BART Station
  - MacArthur BART Station
Building Livable Communities with Transit

**BART System**

- Opened in 1972
- 4 counties, 26 cities
- 104 track miles, 43 stations
- 360,000 Systemwide Average Weekday Riders
- 46,303 Parking Spaces
- 65% of operating costs from fares, parking, advertising
BART TOD Policy

Major Policy Recommendations:
- Pursue Transit-Oriented Development, not Joint Development
- Shift Access Approach
BART TOD Policy

Goals

A. Increase transit ridership and enhance quality of life at and around BART stations by encouraging and supporting high quality transit-oriented development within walking distance of BART stations.

B. Increase transit-oriented development projects on and off BART property through creative planning and development partnerships with local communities.

C. Enhance the stability of BART's financial base through the value capture strategies of transit-oriented development.

D. Reduce the access mode share of the automobile by enhancing multi-modal access to and from BART stations in partnership with communities and access providers.

Adopted by BART Board – July 14, 2005
Access Hierarchy

ACCESS HIERARCHY

WALKING

TRANSIT

BICYCLE

PICK-UP/DROP-OFF

VEHICLE PARKING

Connecting Rail Feeder Bus Shuttle

Private Auto Taxi

Motorcycle Carpool Car-Sharing/Station Car Single Occupant Vehicle
Access Types

- Urban
- Urban with Parking
- Multimodal
- Multimodal - Auto Reliant
- Auto Dependent
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Replacement Parking Policy - Why?

Problems with 1:1 Replacement Parking

- Expense of replacement in structures
- Often requires full ground rent and TI contribution
- Directs resources to one access mode (those who drive and park)
- Urban design/traffic impact
- Had no established process for evaluating deviations from 1:1
Replacement Parking Methodology

- Developed for BART by Professor Rick Willson, Cal Poly Pomona
- Adjusted 1:1 replacement parking with a refined access methodology includes transit access for development around transit.
- Encourages direct connections to surrounding development to promote pedestrian and non-motorized access.
Building Livable Communities with Transit

BART Parking Replacement Framework

• 1) Identify policy and context issues that affect the TOD scenarios,
• 2) Build scenarios of TOD, parking, and access strategies,
• 3) Evaluate scenarios (ridership and fiscal impacts)
• 4) Select preferred strategies

Adapted From Willson and Menotti, TRB, 2006
Replacement Parking Factors

• Ridership Factors
  - Change in ridership from development
  - Change in BART commuter parking supply
  - Other access programs

• Fiscal Impact Factors
  - Net change in passenger fares
  - Parking charges
  - Ground rent (if any)
  - Changes in capital and operating costs
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Case Study – South Hayward BART

- **Auto-Reliant/Suburban Station**
- **3200 Average Weekday Riders**
- **2005 Access Data:**
  - 39% Drive Alone
  - 19% Drop-Off
  - 22% Walk
South Hayward BART Station Area Concept Plan

LEGEND
- Redevelopment Project Area
- Concept Area
- Concept Area Parcels
- City Limits
- BART
- Railroads

AERIAL IMAGE

BART Station
South Hayward BART

- 2006 Design and Access Study (Nelson/Nygaard Study for BART)
  - 1,207 existing parking spaces
  - 2005: 39% of Patrons Drove Alone to Station
  - Two Scenarios: Both include reduced parking replacement + increase in transit service

<table>
<thead>
<tr>
<th></th>
<th>60% BART Replacement Parking</th>
<th>75% BART Replacement Parking</th>
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<tbody>
<tr>
<td>Gross Residential Density (units/acre)</td>
<td>80 units/acre</td>
<td>76 units/acre</td>
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<tr>
<td>Net Change in Ridership</td>
<td>1,698</td>
<td>1,841</td>
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<tr>
<td>Net Annual Impact (Revenues-Costs)</td>
<td>+$1,372,213</td>
<td>+$775,964</td>
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Case Study - MacArthur BART

- Urban with Transit Station
- 8,000 Average Weekday Riders
- 2006 Access Data:
  - All-Day
  - 10% Drive Alone
  - 15% Drop-Off
  - 39% Transit
  - 29% Walk
  - 7% Bicycle
Case Study - MacArthur BART Transit Village
MacArthur BART Transit Village

- 2008 MacArthur BART Access Study (prepared for BART and City of Oakland by Fehr and Peers)
- Station Characteristics
  - 600 existing parking spaces
  - Development proposal for 624 Units of Housing, 40,000 Sq. ft. of commercial space
- Replacement Parking – 50% minimum
- Remaining demand accommodated through off-site parking (Remote lots; unbundling; Access Improvements to other modes)
- City of Oakland approval of EIR and entitlements in June 2008; BART Board Review in Fall 2008
For More Information

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