Replacement Parking for Joint Development: Access Policy Methodology

September 10, 2005
Agenda

1. Introduction
2. Overview of Policies & Guidelines
3. Access Policy Methodology
4. Next Steps
Introduction

BART Overview

- Elected Board of Directors
- Serves 4 counties
- Mature, heavy-rail system, began operations in 1972
- Serves San Francisco and Oakland CBD’s
- Recent extensions to:
  - Colma - 1995
  - Pittsburg/Bay Point – 1995/96
  - Dublin/Pleasanton – 1997
  - SFO+– 2003
- 43 stations
- 100+ miles of track
- 310,000 daily riders
Working on Two-Levels

• **Station-Level**
  – Comprehensive Station Plans
  – Parking Management Programs
  – Access Policy Methodology

• **Corridor-Level**
  – BART Corridor or Line Studies
Overview of Policies & Guidelines

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
2. Develop performance-based station access strategies on a corridor or line segment basis rather than on a station basis. Adjust the 1:1 replacement parking objective in development projects by employing the refined access methodology that examines transit access within the context of both development around transit and access strategies on a corridor or line segment basis. Encourage direct connections to stations from surrounding development in order to promote pedestrian and non-motorized access.

3. Evaluate access facilities (including commuter and development parking) as a commodity and locate them according to best planning, design and real estate practices. This may shift transit-related facilities off BART property.
Overview of Policies & Guidelines

Station Access Hierarchy

- Pedestrian access has highest priority
- Transit connections should be clear, safe and convenient
- Consider cost-effectiveness of access investments
- Wayfinding important for all modes
- Access investments should be context-sensitive
Access Policy Methodology

Problems with 1:1 Replacement

• Expense of replacement in structures
• Often requires full ground rent and tax increment (TI) contributions
• Directs resources to one access mode (those who drive and park)
• Urban design/traffic impacts
• BART had no established process for evaluating deviations from 1:1 replacement parking
Access Policy Methodology

Proposed Evaluation Process

• Methodology compares scenarios from BART’s perspective (Strategic Plan)
  – Builds on access / development priorities for each station
  – Used iteratively in collaboration with partners

• Local jurisdictions, developers, and others apply their own methods to compare scenarios

• BART collaborates with those parties in developing win-win arrangements
Access Policy Methodology

Issues in Developing Methodology

• Goal: create a tool for BART staff use in cross-department collaborations on these questions
• Questions raised are data and modeling intensive
• Focuses on larger order of magnitude impacts
• Allows for more sophisticated estimation procedures for any element
• Creative solutions are as much art as science, so a mechanistic process of selecting the “best” scenario is not recommended
Access Policy Methodology

Proposed Principles

<table>
<thead>
<tr>
<th>Process</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access policy perspective</td>
<td>Increase ridership</td>
</tr>
<tr>
<td>Creativity, collaboration</td>
<td>Positive fiscal impact</td>
</tr>
<tr>
<td>Transparency, predictability</td>
<td>Reduce drive alone share</td>
</tr>
<tr>
<td></td>
<td>Long-term system and station capacity</td>
</tr>
<tr>
<td></td>
<td>Support BART plans, local plans, and regional plans</td>
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</table>
## Access Policy Methodology

### Methodology Steps

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Policy and context issues</td>
</tr>
<tr>
<td>Step 2</td>
<td>Build scenarios</td>
</tr>
<tr>
<td>Step 3</td>
<td>Evaluate scenarios</td>
</tr>
<tr>
<td>Step 4</td>
<td>Select preferred strategy and write specifications</td>
</tr>
</tbody>
</table>
Access Policy Methodology

Step 1: Policy and Context

Station Profile:
- Station characteristics
- Station area characteristics
- Parking (including existence of Residential Parking Permits)
- Other access modes
- BART plans
- City plans
- Status of BART development solicitation
Access Policy Methodology

Step 2: Build Scenarios

- Proposed Development Program
  - Residential units
  - Commercial office space
  - Retail space
  - Other space
  - Parking for development

- Proposed Access Strategies
  - % of replacement parking
  - Shared or off-site parking
  - Other parking strategies
  - Pedestrian/bicycle improvements
  - Transit/shuttle enhancements
  - Other access strategies
Access Policy Methodology

Step 3: Evaluate Scenarios

- Ridership
  - Weekday riders from development
  - Change in weekday riders from access changes
  - Effect on “drive alone” access mode share

- Fiscal
  - Change in fare revenue
  - Parking charges (if applicable)
  - Ground rent (net any replacement parking costs)
  - Change in parking operating costs
  - Contribution to new access operating costs
  - Annualized contribution to new access capital costs

- Other Station Area Plans/Goals
## Access Policy Methodology

### Step 4: Select Preferred Strategy

<table>
<thead>
<tr>
<th></th>
<th>Scenario A</th>
<th>Scenario B</th>
<th>Scenario C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ridership:</strong> net annual ridership impact</td>
<td>#</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td><strong>Revenues/costs:</strong> net annual impact</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td><strong>Station access modes:</strong> change in drive alone %</td>
<td>Qualitative</td>
<td>Qualitative</td>
<td>Qualitative</td>
</tr>
<tr>
<td><strong>Long-term BART capacity:</strong></td>
<td>Qualitative</td>
<td>Qualitative</td>
<td>Qualitative</td>
</tr>
<tr>
<td><strong>BART plans:</strong></td>
<td>Qualitative</td>
<td>Qualitative</td>
<td>Qualitative</td>
</tr>
<tr>
<td><strong>Local goals:</strong></td>
<td>Qualitative</td>
<td>Qualitative</td>
<td>Qualitative</td>
</tr>
<tr>
<td><strong>Regional goals:</strong></td>
<td>Qualitative</td>
<td>Qualitative</td>
<td>Qualitative</td>
</tr>
<tr>
<td><strong>Other station specific criteria:</strong></td>
<td>Qualitative</td>
<td>Qualitative</td>
<td>Qualitative</td>
</tr>
</tbody>
</table>
Access Policy Methodology
Case Studies

• Stations selected for range of conditions, pressing issues, city/developer interest:
  – Concord – has some available parking
  – El Cerrito Del Norte – relocation of BART parking
  – MacArthur – urban setting, wide range of alternatives
  – San Leandro – modest proposal, limited readiness

• Scenarios not intended as a recommendations but as tests of the proposed methodology

• Sample Using MacArthur
Access Policy Methodology

MacArthur Scenarios: Setting
## Access Policy Methodology

### MacArthur Scenarios: Input

<table>
<thead>
<tr>
<th></th>
<th>Scenario A: Conservative, full replacement</th>
<th>Scenario B: Conservative, 50% on-site replacement, shared parking</th>
<th>Scenario C: Aggressive, 50% on-site replacement, shared parking, access imp.</th>
</tr>
</thead>
<tbody>
<tr>
<td># units residential (rental)</td>
<td>575</td>
<td>575</td>
<td>650</td>
</tr>
<tr>
<td>Retail (sf)</td>
<td>41,000</td>
<td>41,000</td>
<td>103,000</td>
</tr>
<tr>
<td>Medical office (sf)</td>
<td>14,000</td>
<td>14,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Community (sf)</td>
<td>4,500</td>
<td>4,500</td>
<td>6,000</td>
</tr>
<tr>
<td># of BART parking spaces on-site</td>
<td>603</td>
<td>302</td>
<td>302</td>
</tr>
<tr>
<td>Total non-shared spaces (BART + joint dev)</td>
<td>1,456</td>
<td>1,155</td>
<td>1,625</td>
</tr>
<tr>
<td>Parking charges on the BART parking at station</td>
<td>$0; $63/month on 119 reserved</td>
<td>$1 per day on 151 spaces; $63/month on 119 reserved</td>
<td>$3/day; no reserved program</td>
</tr>
<tr>
<td>New transit/shuttle programs</td>
<td>None</td>
<td>None</td>
<td>$1 M to relocate bus intermodal; $0.2 M annual to enhance feeder bus.</td>
</tr>
</tbody>
</table>

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## Access Policy Methodology

### MacArthur Scenarios: Results

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Scenario A</th>
<th>Scenario B</th>
<th>Scenario C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ridership</strong>: net annual ridership impact</td>
<td>962</td>
<td>638</td>
<td>1,411</td>
</tr>
<tr>
<td><strong>Revenues and costs</strong>: net annual impact, $/year</td>
<td>$384,609</td>
<td>$813,552</td>
<td>$1,087,313</td>
</tr>
<tr>
<td><strong>Station access mode</strong>: reduction in drive alone share</td>
<td>Least</td>
<td>Middle</td>
<td>Most</td>
</tr>
<tr>
<td><strong>Long-term BART capacity</strong></td>
<td>No land left at station for future BART use.</td>
<td>No land left at station for future BART use.</td>
<td>No land left at station for future BART use.</td>
</tr>
<tr>
<td><strong>BART Plans</strong>: support Comprehensive Station Plans and access targets.</td>
<td>Mixed-use nature of project provides broad ridership base.</td>
<td>Mixed-use nature of project provides broad ridership base.</td>
<td>Supports the evolution toward a mixed-use center and transition to non-auto access.</td>
</tr>
<tr>
<td><strong>Local goals</strong>: Context-appropriate; local support, partnerships (qualitative)</td>
<td>Supports city objectives.</td>
<td>Supports city objectives.</td>
<td>Supports city objectives.</td>
</tr>
<tr>
<td><strong>Regional goals</strong>: housing provision and affordability, congestion, air quality, etc. (qualitative).</td>
<td>Least support for non-auto modes, but still creates mixed-used TOD.</td>
<td>Balanced between scenarios A and C.</td>
<td>Most support for TOD transition.</td>
</tr>
</tbody>
</table>
Access Policy Methodology

Findings

• Transit-oriented development projects produce a reliable, unrestricted cash flow

• Small-scale development with full replacement parking often results in an unfeasible project

• Scenarios with less than full replacement parking, parking charges, and alternative access improvements produce the most positive outcomes

• Most promising opportunities involve coordinating multiple station area property owners

• More market feasibility and pro forma analysis is needed
Next Steps

Apply Methodology

• TOD Policy adopted by Board in July 2005

• Apply Access Policy Methodology in the TOD planning and development process:
  – South Hayward BART
  – Lake Merritt BART
  – Daly City BART
  – MacArthur BART

• Continue Corridor- or Line-level analyses

• Support TOD research that enhances understanding and modeling capabilities
BART Station Activity

In Planning
- 16th / Mission
- 24th / Mission
- Glen Park
- Balboa Park
- Daly City
- Millbrae
- Lake Merritt
- Ashby (west)
- North Concord/Martinez
- San Leandro
- Bay Fair
- Castro Valley
- South Hayward
- Warm Springs
- Dublin/Pleasanton (south)

Ready for Development Solicitation
- Concord
- San Leandro
- Hayward
- Union City
- El Cerrito del Norte
- Balboa Park (part)

In Development Negotiations
- MacArthur
- Fruitvale (II)
- Coliseum
- West Oakland

Approved Development
- Hercules
- Richmond
- Pleasant Hill
- Ashby (east)
- Walnut Creek
- West Dublin/ Pleasanton
- Dublin/ Pleasanton (north)

Completed
- Richmond (part)
- Fruitvale (part)
- Castro Valley (part)
- Hayward (part)

http://www.bart.gov

August 22, 2005