

San Francisco  
2008

# Replacement Parking and BART TOD

October 29, 2008

# Overview

- Policy Context – BART TOD Policy
- BART Parking Replacement Methodology
- Replacement Parking in Action
  - South Hayward BART Station
  - MacArthur BART Station

# 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

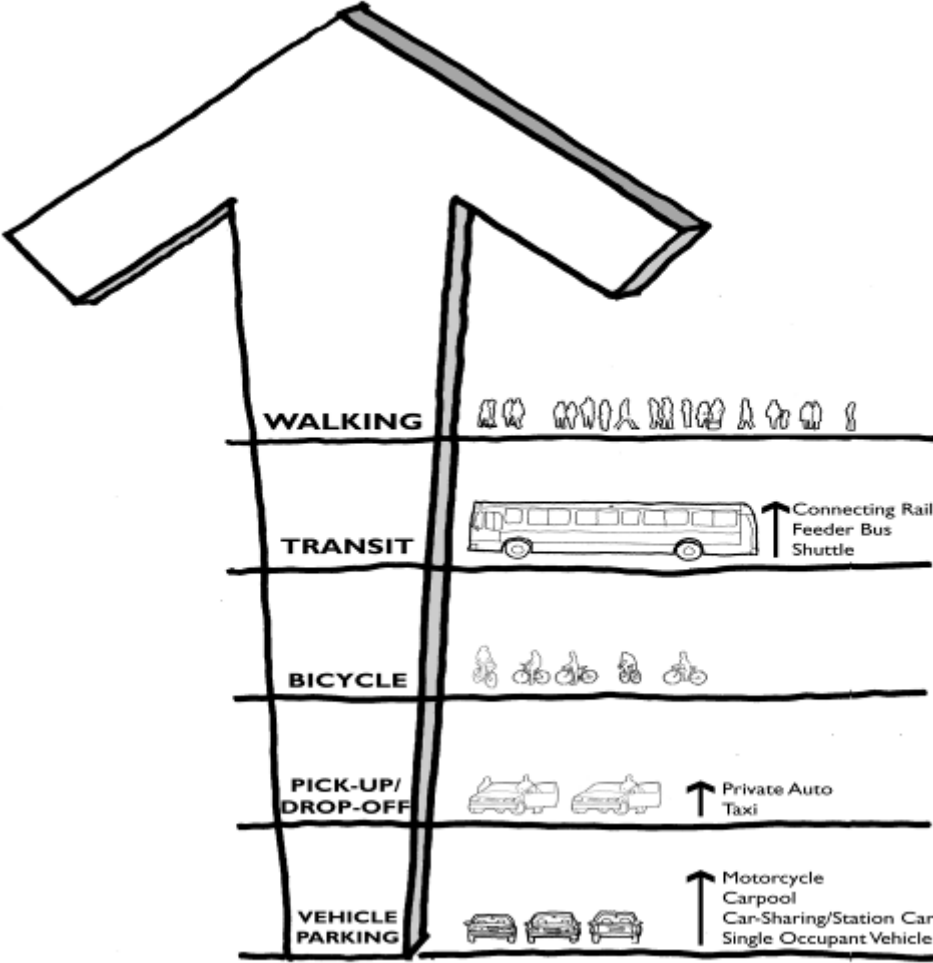
## Goals

- 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

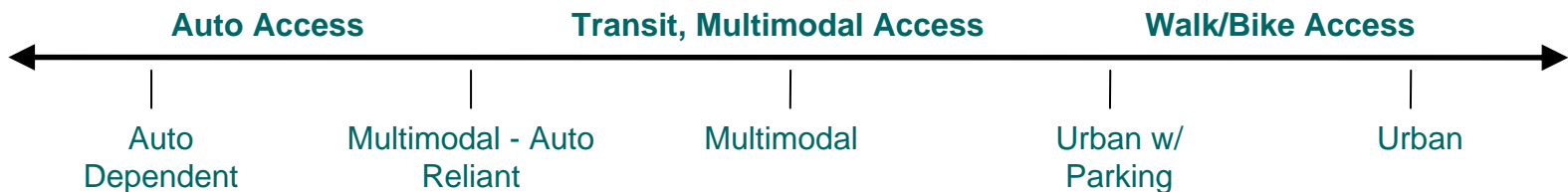
# Access Hierarchy

## ACCESS HIERARCHY



## 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 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.

# 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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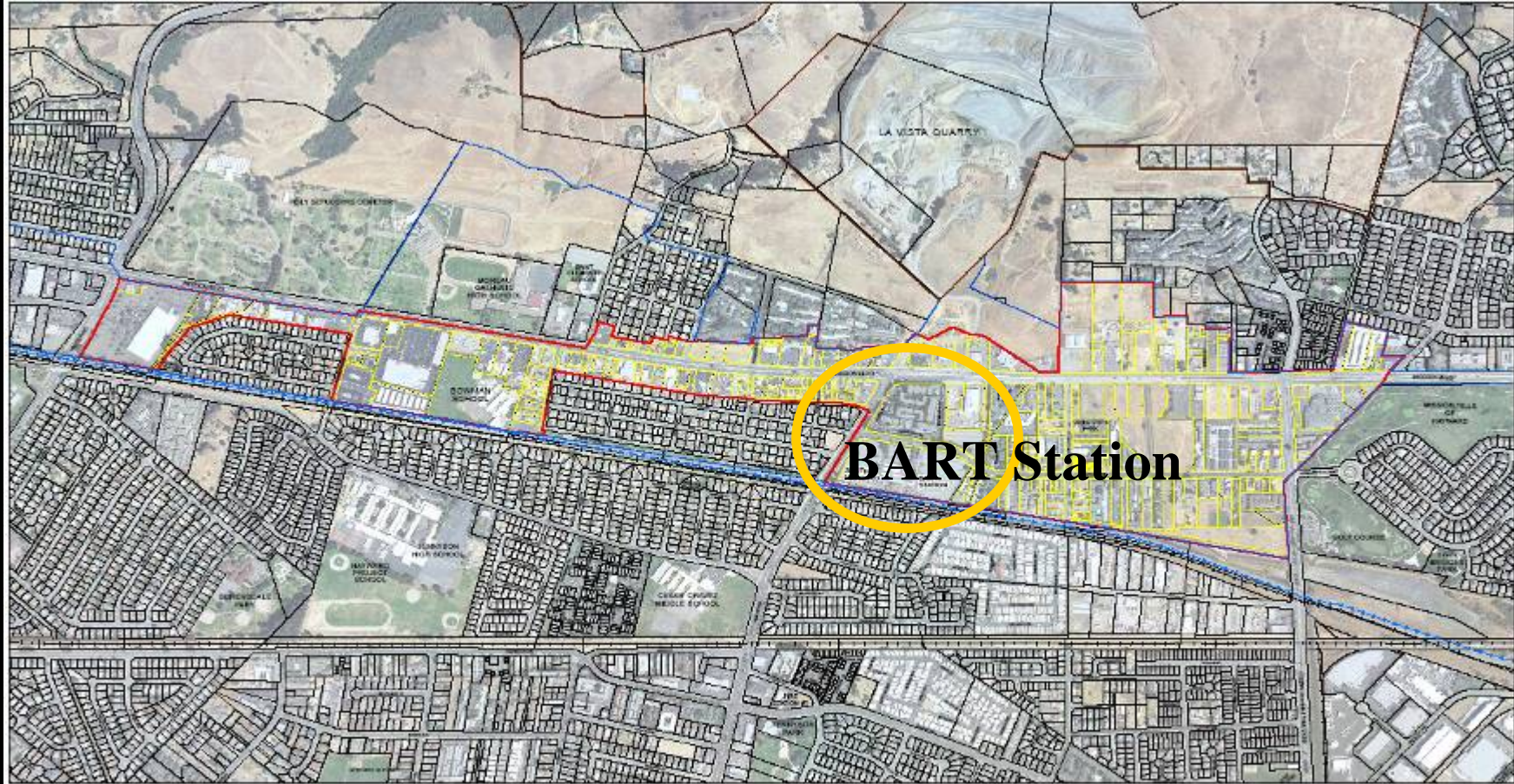
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### Case Study – South Hayward BART

- 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

AERIAL IMAGE

LEGEND

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



# 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

	60% BART Replacement Parking	75% BART Replacement Parking
Gross Residential Density (units/acre)	80 units/acre	76 units/acre
Net Change in Ridership	1,698	1,841
Net Annual Impact (Revenues-Costs)	+\$1,372,213	+\$775,964



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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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