



Seattle: Local Day - Connectivity
San Francisco Bay Area Rapid Transit District
October 23, 2013



Framing the Issue

- Recognize that BART and surrounding land will be used for transit-oriented development (TOD)
- Need to provide sustainable modes of access to grow ridership
- Transit agency does not control most access
 - Walk: Sidewalks, entitling TOD – local jurisdiction
 - Bike: Bike paths, roadways – local jurisdiction
 - Transit: Local bus operators
 - Shuttles: Local operators
- Access we do control – parking !!!

BART's Approach

- Conduct Access Study as part of TOD entitlement process
- Employ Joint Powers Authorities to align transit and local objectives on access
- Transportation Demand Management
- Developer provision of transit passes

BART Access Study Objectives

- Conduct access study as part of Environmental Impact Report (California – CEQA)
- Examine all modes of access in concert with local jurisdiction and bus operators
 - Pedestrian
 - Transit
 - Bicycle
 - Auto
- Create tiered strategies
 - Tier 0: TOD plan – connect faregates to surrounding land use
 - Tier 1: Most feasible, cost-effective
 - Tier 2: Likely feasible, some barriers, require coordinator
 - Tier 3: Long-term, further study required
- Create Access Program
 - Short-term improvements
 - Longer-term improvements
 - Approach to ensure Access Program remains current

MacArthur BART Station Access Study Example

Final

MacArthur BART Station Access Feasibility Study



332 Pine Street, 4th Floor
San Francisco, CA

SF06-0245

May 2008

Access Study for MacArthur BART Station

- Existing Conditions
- Pedestrian
- Transit, shuttles
- Bicycle
- Auto
- Tiered Strategies
- Funding
- TOD Changes

Tier 1

Tier One Strategy	Ridership Benefit (Patrons)	Capital Cost	Operating Cost (Annual)
Preferential Parking for Carpool/Vanpool in the BART Lot/Garage	60	\$5,000	\$0
10-Hour Metered Parking on 40 th Street and West MacArthur Boulevard	80	\$30,000	(\$50,000)
Electronic Bicycle Lockers in the BART Plaza	insufficient data to support estimate	\$45,000	\$5,000
AC Transit and Emery-Go-Round Access Improvements, including shelters, real-time bus information, and express service	100	\$1,000,000	\$180,000
Hospital Shuttles Access Improvements with new traffic signal at Frontage Road and West MacArthur Boulevard	150	\$250,000	\$8,000
Expanded Motorcycle and Scooter Parking in the BART Parking Lot/Garage	24	\$1,000	\$0
Attended Parking in the BART Parking Lot/Garage	150	\$75,000	\$150,000
Carpool and Vanpool Transit Discounts for BART patrons	supporting strategy	\$50,000	\$25,000
Wayfinding Signs within the Station Area to encourage non-auto access and off-peak/direction travel	supporting strategy	\$40,000	\$1,000
Safety Stop to accommodate bus and shuttle patrons with on-demand stops during nighttime service	supporting strategy	\$0	\$0
Wayfinding Signs to/from the Station in Nearby Neighborhoods to encourage non-auto access and off-peak/direction travel	supporting strategy	\$60,000	\$1,000
Station Area Maps to improve wayfinding, encourage non-auto access and off-peak/direction travel	supporting strategy	\$25,000	\$1,600
Market Rate BART Parking in the BART Parking Lot/Garage	supporting strategy	\$0	(\$450,000)

Tier 1 - continued

Tier One Strategy	Ridership Benefit (Patrons)	Capital Cost	Operating Cost (Annual)
Guaranteed Ride Home Program (ride insurance) marketing to increase usage of current Bay Area programs; Enhanced as a Supplemental Guaranteed Ride Home Program for BART patrons not eligible for current programs (with a Transit Village Development)	supporting strategy	\$10,000	\$8,200
With a Transit Village Development Only:			
Remote Parking at Three Local Churches	200	\$25,000	\$20,000
Passenger Drop-Off Improvements to reduce conflicts between shuttles, autos, bicyclists, and pedestrians	supporting strategy	\$20,000	\$2,000
Station and Village Branding, including street furniture, signage, lighting, etc.	supporting strategy	\$150,000	\$2,000
Car Sharing opportunities for Transit Village Residents and Employees	supporting strategy	\$0	\$30,000
Source: Fehr & Peers, March 2008; Cost and benefit calculations and assumptions are presented in Appendix A			

Tier 2

Tier Two Strategy	Ridership Benefit (Patrons)	Capital Cost	Operating Cost (Annual)
Parking Benefit District to enable BART patrons to purchase surplus Residential Parking Permits (RPPs) with revenues dedicated to the District	500	\$25,000	(\$192,000)
Pedestrian Infrastructure Improvements on surrounding pedestrian access routes	insufficient data to support estimate	\$5,000,000	\$50,000
Bicycle Infrastructure Improvements on surrounding bicycle access routes	insufficient data to support estimate	\$500,000	\$25,000
High Capacity Bicycle Parking on the BART Plaza	insufficient data to support estimate	\$100,000	\$5,000
Volunteer Neighborhood Guides to guide visitors to the Station Area and Village	supporting strategy	\$100,000	\$100,000
Blue Light Phones/ Personal Security Improvements to encourage non-auto travel within the Station Area	supporting strategy	\$70,000	\$7,000
Neighborhood Ridematching/ Ridesharing (existing 511 with potential expansion)	supporting strategy	\$5,000	\$5,000
Station/TDM Website to enhance wayfinding, non-auto access alternatives	supporting strategy	\$10,000	\$5,000
Smart Parking (Variable Message Signs) to alert patrons to available parking capacity in the BART Parking Lot/Garage	supporting strategy	\$35,000	\$3,500
With Transit Village Development Only:			
Village Resident EcoPass (BART EZ-Rider card and AC Transit Monthly Pass) to encourage car shedding	12	\$5,000	(\$5,920)
Unbundled, shared parking for new residential development to make additional parking capacity available for BART patrons	180	\$10,000	\$10,000
Information Booth to be located in the Transit Village	supporting strategy	\$50,000	\$25,000

Source: Fehr & Peers, March 2008; Cost and benefit calculations and assumptions are presented in Appendix A

Tier 3

Tier Three Strategy	Ridership Benefit (Patrons)	Capital Cost	Operating Cost (Annual)
Free Wi-Fi to enable Internet access for wayfinding information	supporting strategy	\$25,000	\$10,000
Internet Kiosks to provide wayfinding information	supporting strategy	\$10,000	\$10,000
With Transit Village Development Only:			
Bicycle Station co-located with a retail use in the Transit Village	insufficient data to support estimate	\$650,000	\$150,000
Village Resident 20% Discount BART Ticket to encourage car shedding	30	\$5,000	\$127,200
Source: Fehr & Peers, March 2008; Cost and benefit calculations and assumptions are presented in Appendix A			

Access Improvements - MacArthur

Element	Capital Activity	Operating Activity
Replacement Garage	Grant funded	BART annual O&M cost
Discounted Transit Passes	Not applicable	Grant and Private cost
Traffic Signals (MacArthur & 40 th)	Grant funded	City annual O&M cost
BART Drop-Off/Pick-Up Improvements	Grant funded	City and BART annual O&M cost
Bicycle parking in private development	Grant funded	Private O&M cost
Pedestrian Plaza with bike station	Grant funded	BART annual O&M cost
Roads, sidewalks, lighting & furniture	Grant funded	Private O&M cost
Unbundling parking & carsharing	Not applicable	Private O&M cost
Signage within Transit Village	Grant funded	Private O&M cost
Signage to/from Transit Village	BART to fund	BART or City annual O&M cost
Security	Included in design effort	To be determined by City and BART
Bike Facility Operation		Funds needed
Shuttle or Transit Operation		Funds needed
Transportation Demand Management Program		Private cost during build-out
		Funds needed after build-out

South Hayward BART Station Joint Powers Authority Example

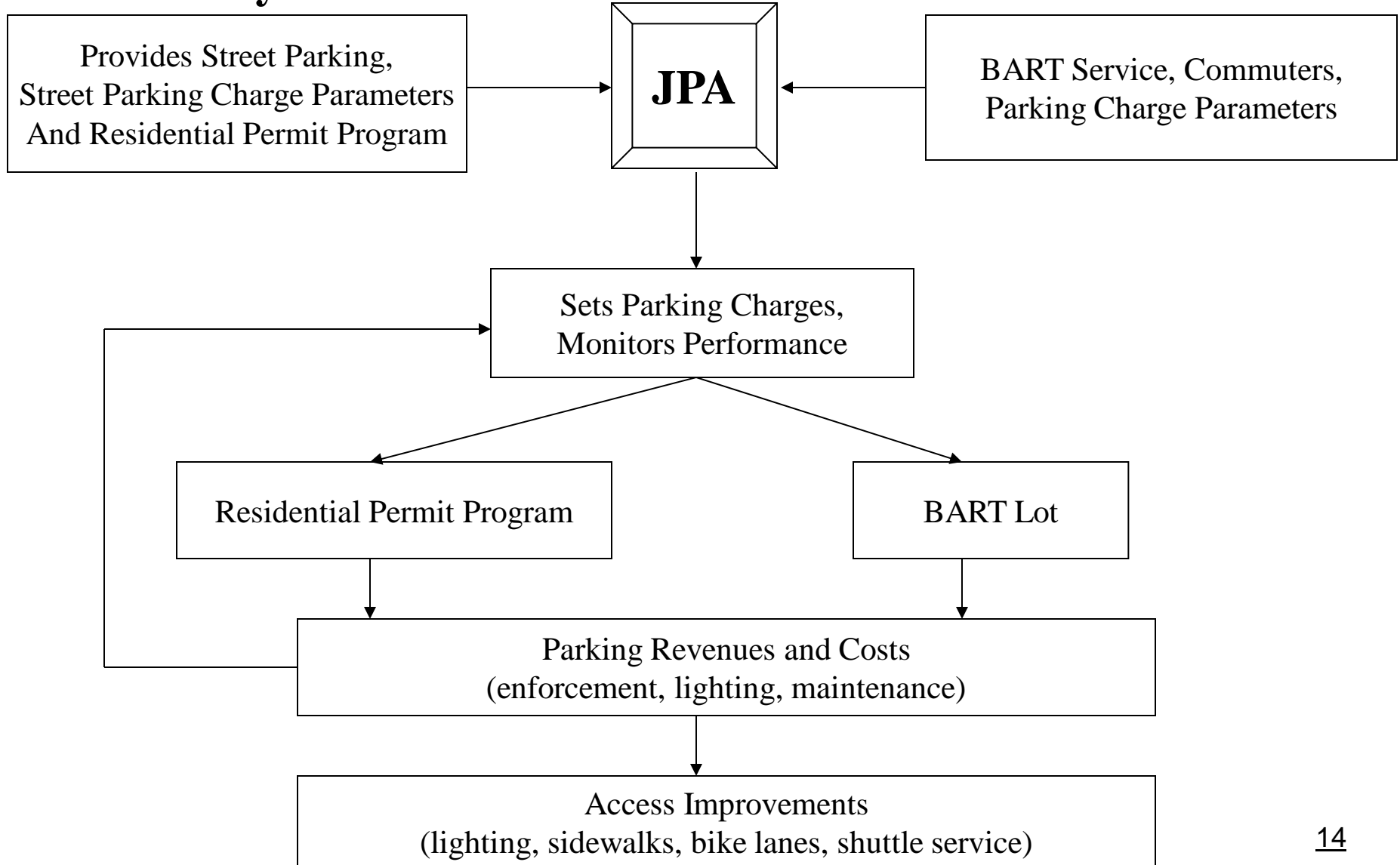
Key Issue

- Need resolution to parking and access before current development plan can begin construction
- Approach: Form joint powers authority with City to address parking and access
 - Rather than build 174-space replacement garage, examine alternative approaches to address loss in commuter parking

Access Structure

City

BART



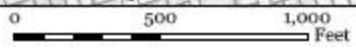


SHB-TOD: Proposed Parking Regulations in JPA Area



Proposed Parking Designations

- █ BART Reserved, All Hours
- █ BART Reserved, M-F, 4am-3pm
- █ No Parking: M-F, Midnight to 9am
- █ Residential Parking Permit Only, M-F, 7am-4pm
- █ School Drop-Off Zone, M-F, 7-9am and 2-4pm
- █ No Change
- Proposed JPA Area
- BART East Parking Lot
- South Hayward BART Station and Parking Lot



Joint Powers Authority Program

Topic	3/14/13 Proposed Board Action for South Hayward
Daily Parking Fee	\$1.00
Increase Fee if occupancy is greater than	98% full - increase \$0.50/day every 6 months
No change in fee	Between 90% and 98%
Reduce fee if occupancy is less than	90% [NOTE: Minimum fee not less than \$1/day]
Maximum Daily Fee	\$5.00
Single Day Reserve Fee	Daily Fee + \$2.00
Monthly Reserve Fee	(Daily Fee + \$1.00) x 21

Comparison of BART Board Actions

Topic	2/28/13 Board Action	3/14/13 Proposed Board Action for South Hayward
Daily Parking Fee	\$1.00	\$1.00
Increase Fee if occupancy is greater than	\$0.50/day every 6 months if lot greater than 95% full	\$0.50/day every 6 months if lot greater than 98% full
No change in fee		Between 90% and 98%
Reduce fee if occupancy is less than	95%	90% [NOTE: Minimum fee not less than \$1/day]
Maximum Daily Fee	\$3.00	\$5.00
Single Day Reserve Fee	Daily Fee + \$3.00	Daily Fee + \$2.00
Monthly Reserve Fee	(Daily Fee + \$2.00) x 21	(Daily Fee + \$1.00) x 21

Proposed Operating Costs

- Operating investment:
 - Maintenance: Current practice year 1; consider JPA years 2+
 - Parking Enforcement: Current practice year 1; consider JPA years 2+
 - Maintain Clipper Card Reader and Parking Validation machines per current practice

Item	Annual Cost	Source of Funds	
		Year 1	Years 2+ ⁽¹⁾
Parking Enforcement	\$ 85,000	BART – BART lot City – City streets	JPA – BART lot & City streets
Maintenance	\$ 377,800	BART – BART lot City – City streets	JPA – BART lot & City streets
Validation Machines	\$ 0	BART	BART
Monthly Parking Ticket Administration	\$ 0	Parking Vendor - percent of ticket sales	

⁽¹⁾ Contingent upon future discussions.

Proposed Capital Improvements

By BART and City

- Each to be reimbursed by JPA over 20 years at 3% interest

Capital Item	Cost	By
Re-stripe/number spaces on BART lot	\$200,000	BART
Strip new spaces & number them on city streets	\$ 50,000	City
Signage – enforcement & wayfinding on BART lot	\$100,000	BART
Signage – enforcement & wayfinding on City streets	\$ 50,000	City
Install Clipper Card Reader and Parking Validation machines in BART paid area	\$ 1,600	BART
Pedestrian safety fencing on Tennyson	\$ 97,000	City
Purchase & issuing of Permits	\$ 3,000	City
Total	By BART By City	
	\$301,600	
	<u>\$200,000</u>	
Grand Total	\$501,600	

Transportation Demand Management

TDM

- Needs to be addressed by transit
- Work in progress for BART
 - MacArthur: \$350,000 capital grant funds from developer - \$70,000 to TDM study
 - Walnut Creek: \$125,000 developer funding to start process
- Pleasant Hill/Contra Costa Centre Station

San Francisco Bay Area Rapid Transit District
Real Estate & Property Development Department

<http://www.bart.gov/development/>

- o BART's TOD Policy
- o BART's TOD Projects

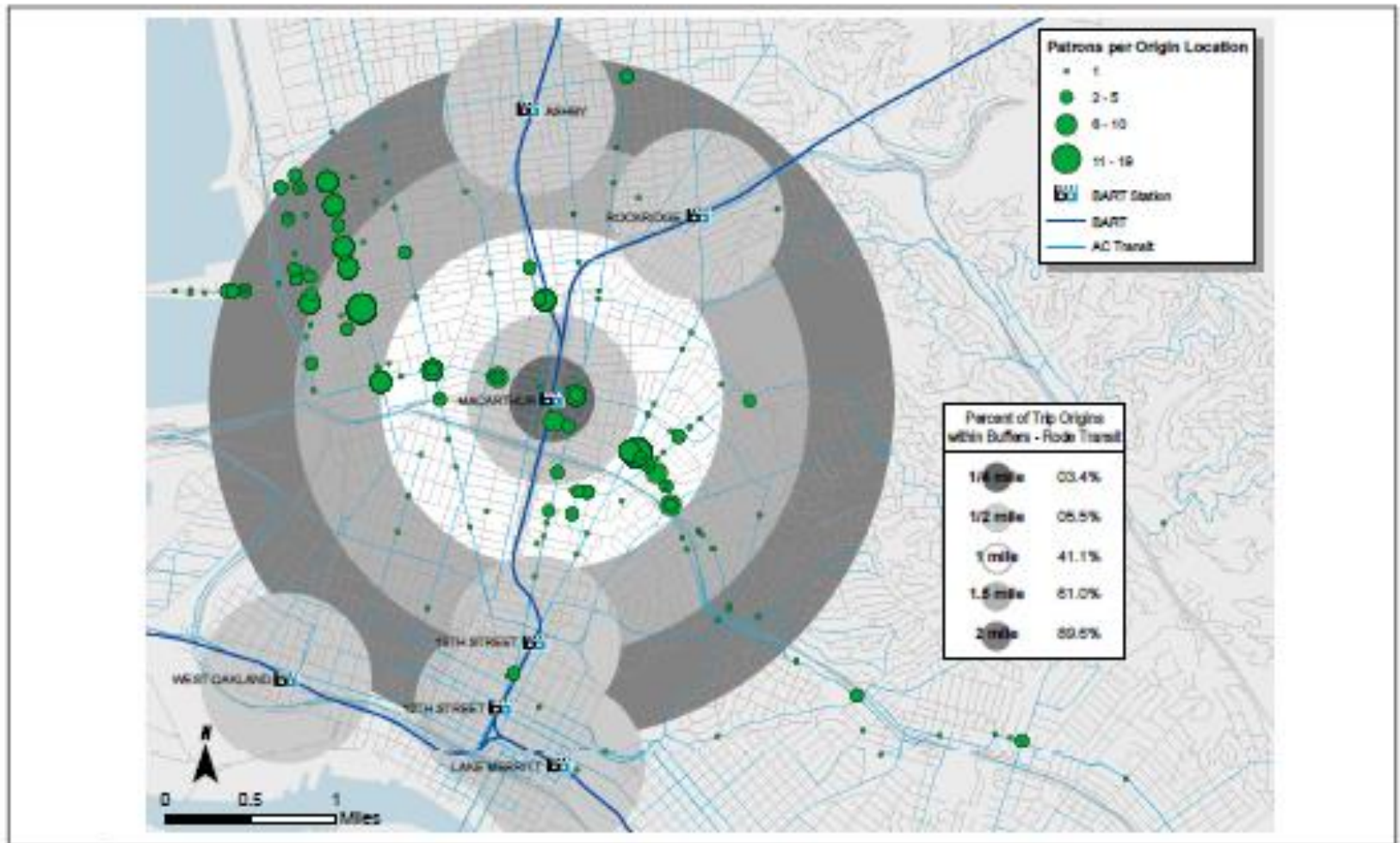
Replacement Parking Credits

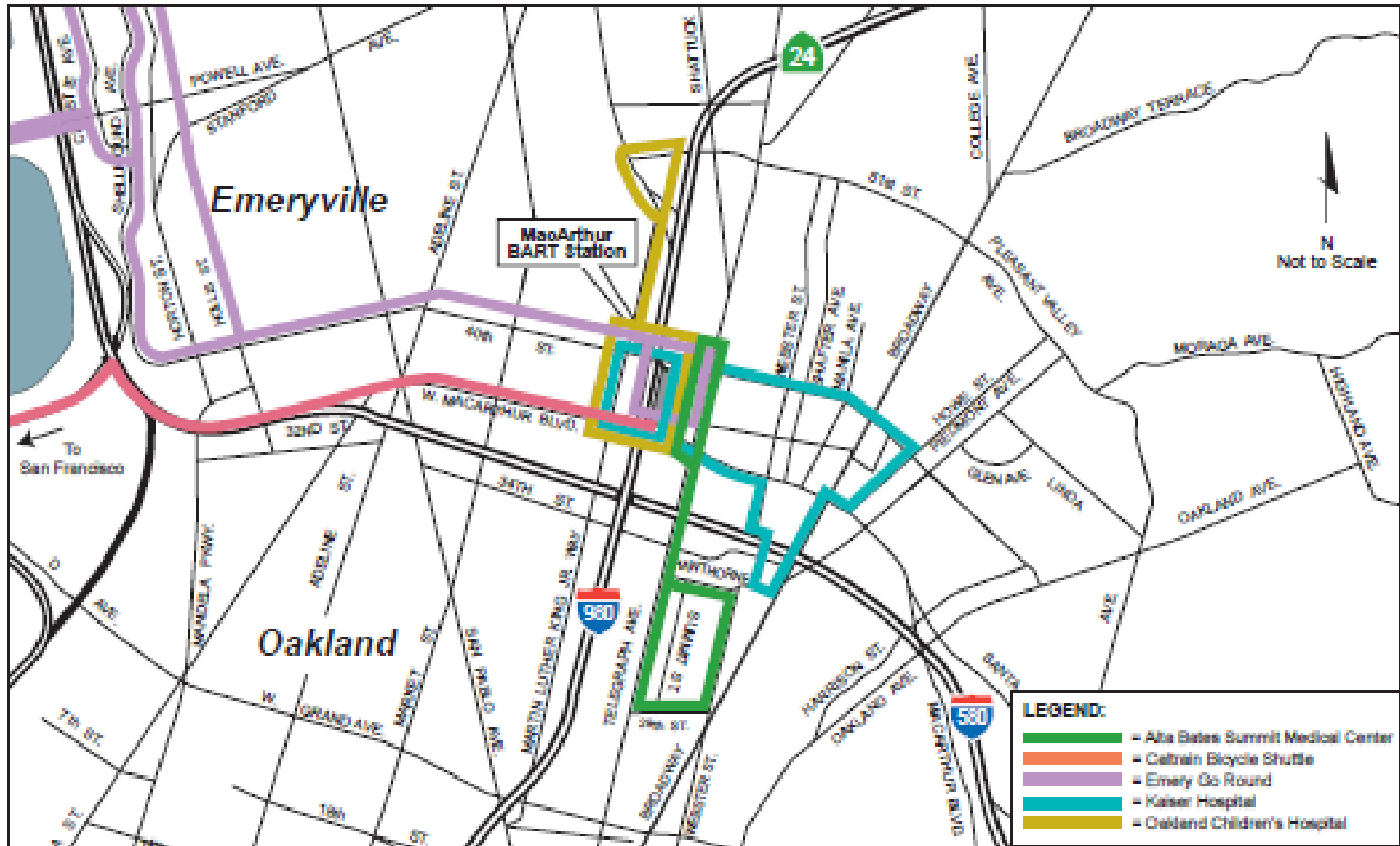
Topic	Station				
	Fruitvale	Pleasant Hill	San Leandro	Walnut Creek	MacArthur
Parking Replacement Percentage	100%	100%	100%	100%	83% in garage 100% with streets
Cost of Replacement	\$15.6 M	\$49.2 M	\$11.5 M	\$21.2 M	\$18.4 M
Credit for replacing parking	Yes – To developer for ground lease payments and Phase 2 site acquisition	Yes – To County for ground lease payments (75% of lease revenue)	Partial – To affordable housing developer for ground lease payments	Yes – To developer for all payments	Yes – To developer for all payments except continuing Transit Benefit Covenant
Net Present Value of Credit	\$7.3 M	\$11.2 M+	\$2.34 M	\$17.5M (Phase 1) \$10.1M (Phase 2)	\$16 M
Years to Exhaust Credit	25	99 – County receives 75% of revenues	99 – Prepayment of affordable housing ground lease	8 – Phase 1 20+ - Phase 2	10 – Until for-sale units begin resales

Mode of Access

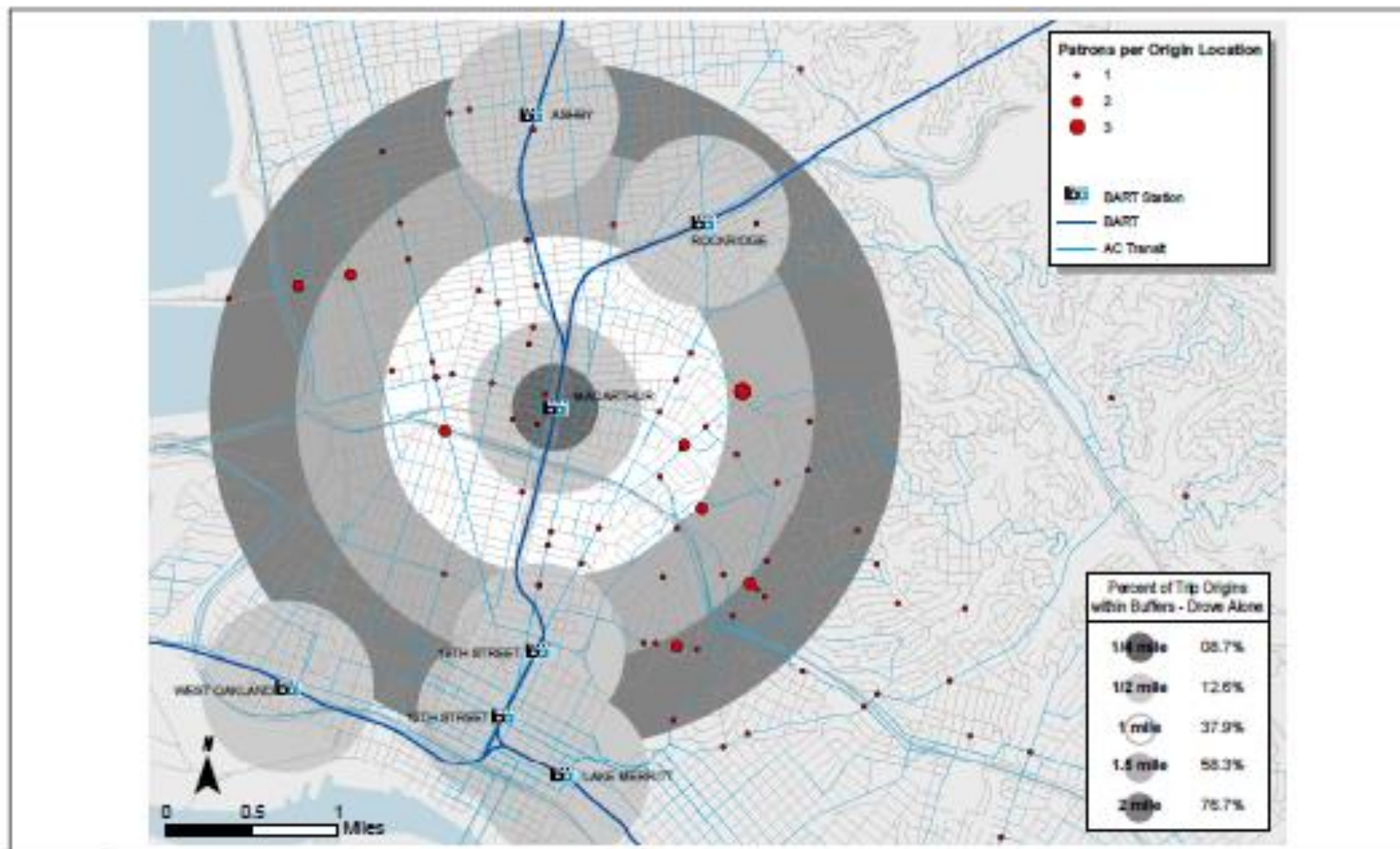
Access Mode	2008 All Trips
Walk (only)	27%
Bicycle	7%
Bus/Transit	33%
Dropped Off	11%
Carpool	3%
Drive Alone	18%
Total (1)	100%

(1) Total may not add precisely to 100% due to rounding
2008: BART Station Profile Survey





MacArthur BART Station Access Feasibility Study



Preliminary Study Recommendations, Issues and Resolutions

- Commuter Parking – Throughout area with monthly permit
 - Issue: Community loss of traditional parking
 - Resolution: Introduce commuter parking predominantly along streets that have no parking and introduce parking permit program for residents
- Daily parking on BART land, monthly on City streets
 - Issue: Disincentive to purchase monthly permit
 - Resolution: Monthly and daily reserved on BART land, daily on balance of BART land and on City streets