BART System Expansion Policy

1) Policy Framework for System Expansion (adopted 12.2.99)

2) Attachment A - System Expansion Criteria and Process (adopted 12.5.02)

3) Attachment B - Metrics for Staff Recommendations

Policy Framework for System Expansion

Adopted by BART Board - 12.2.99

BART POLICY FRAMEWORK FOR SYSTEM EXPANSION

Goals

- Enhance regional mobility, especially access to jobs.
- Generate new ridership on a cost-effective basis.
- Demonstrate a commitment to transit-supportive growth and development.
- Enhance multi-modal access to the BART system.
- Develop projects in partnership with communities that will be served.
- Implement and operate technology-appropriate service.
- Assure that all projects address the needs of the District's residents.

adopted 12/2/99

BART POLICY FRAMEWORK FOR SYSTEM EXPANSION

Strategies

- **Partnership**

  Seek partnerships with other transit agencies, local communities and private entities to plan and implement service expansion.

- **Transit Service Options**

  Explore new BART and other transit service options (i.e., commuter rail, light rail, quality bus) where appropriate and possibly as interim service.

- **Criteria for Project Advancement**

  For all new expansion projects (new extensions, new in-fill stations) develop criteria that will assure that projects are:

  – Cost effective, i.e., minimize the need for operation subsidies
  – Integrated with other services and facilities in an intermodal regional network
  – Maximize ridership by supporting smart, efficient and desirable growth patterns
  – Can be accommodated without adversely affecting existing system capacity, quality and financial health.
  – Have adequate bus, bicycle, and pedestrian feeder service.

Attachment A

System Expansion Criteria and Process

Adopted by BART Board - 12.5.02

System Expansion Policy

Introduction

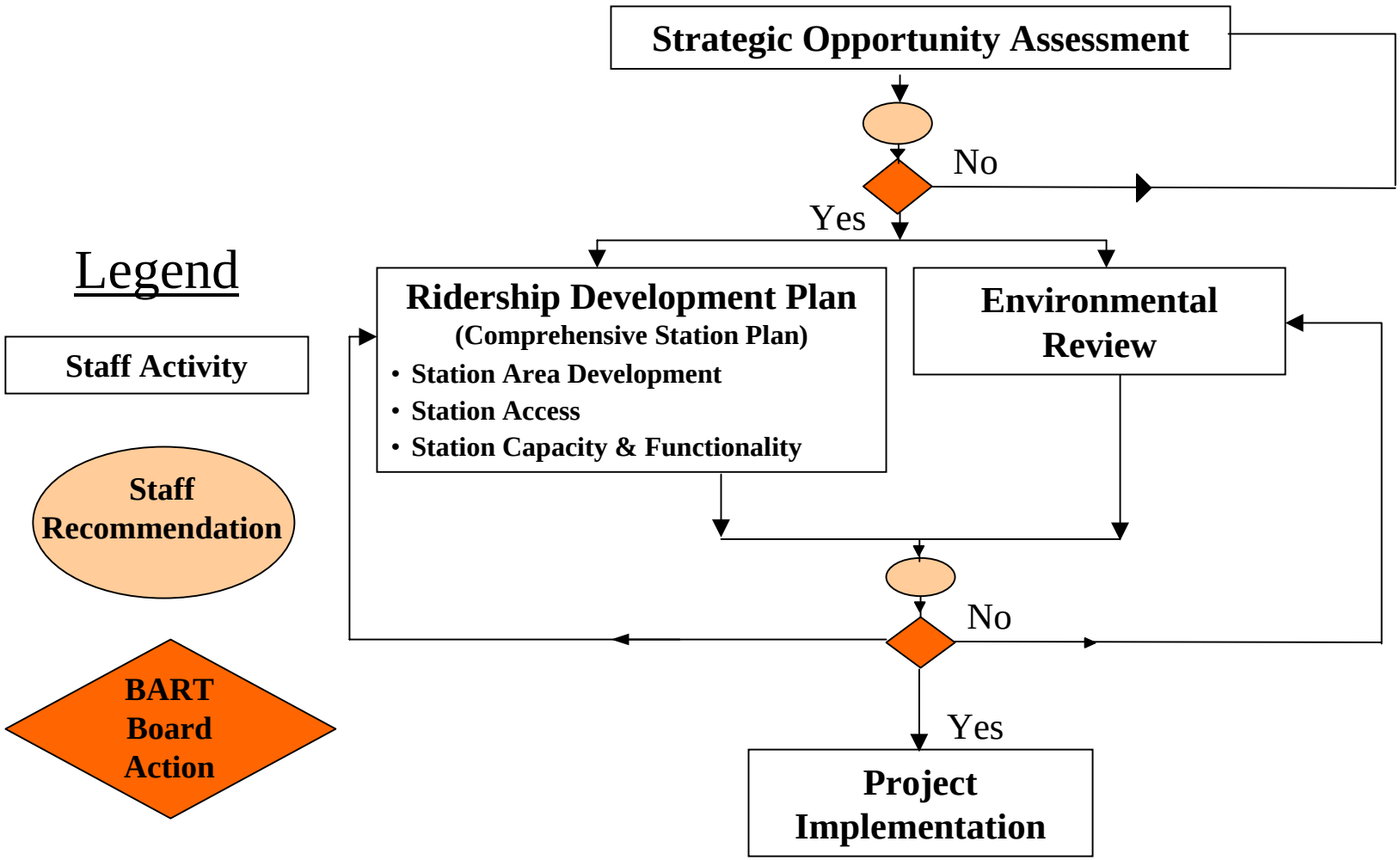
Over forty years ago, residents of the Alameda, Contra Costa and San Francisco Counties supported the creation of the BART District. Since that time, BART has become a critical component of the region's transportation system.

Today the pressures of growth in the Bay Area continue. Accommodating this growth continues to drive further dispersal of jobs and housing. At the same time, BART and other transit systems demand a continued level of reinvestment to maintain service. Finally, financial support for BART and other transportation systems must compete with their infrastructure and social needs. It is imperative that BART, as a steward of public funding for transportation investments, continue to:

- Ensure cost-effective transportation investment decisions;
- Protect the taxpayers' investment in the District's physical infrastructure;
- Ensure the financial health and sustainability of the District; and
- Enhance the Bay Area's environment and quality of life.

It is with these considerations that the BART Board adopts the following Project Advancement Criteria and Process for all System Expansion projects.

Project Advancement Process



Project Advancement Process

Stage 1

- **Strategic Opportunity Assessment**
  - Initial planning assessment of transit expansion opportunities
  - Level of effort commensurate with funding availability for study
  - May include several planning efforts before project recommendation brought forward to the Board

- **Project Advancement**
  - Staff uses study reports to evaluate a project against the criteria and decides whether to recommend a project for advancement to the next stage
  - Board considers staff recommendations and decides whether to advance project recommendation to the next stage for further study

Stage 2

- **Ridership Development Plan**
  - Work in partnership with local jurisdictions to develop a Memorandum of Understanding (MOU) laying out coordinated timelines for transit project Environmental Review and the Ridership Development Plan process
  - Work in partnership with local jurisdictions to achieve transit ridership thresholds by balancing transit-oriented development (TOD) and access goals with community desire; seek commitments from local jurisdictions regarding land use and access plans

- **Environmental Review**
  - CEQA and/or NEPA environmental review process (as applicable).

- **Project Advancement**
  - Ridership Development Plan prepared concurrently with Environmental Review and brought forward to the Board
  - Staff uses both documents to evaluate project with the criteria and decides whether to recommend a project for advancement
  - Board considers staff recommendations and decides whether to advance project to the next stage

Project Advancement Criteria

Transit Supportive Land Use and Access

- **Existing Land Use: Residential and/or Employment**
- **Existing Intermodal Connections**
- **Land Use Plans and Policies**

Ridership Development Plan

- **Ridership Threshold**
- **Station Context**

Cost-Effectiveness

- **Cost per New Rider: Base Case**
- **Cost per New Rider: with TOD**
- **Cost per Transportation System User Benefit**

Regional Network Connectivity

- **Regional Transportation Gap Closure**

System and Financial Capacity

- **Core System Improvements**
- **Capital Finance Plan**
- **Operating Finance Plan**

Partnerships

- **Community and Stakeholder Support**

Attachment B

Metrics for Staff Recommendations

PROPOSED CRITERIA	PROJECT STATUS	
	Strategic Opportunity Assessment	Environmental Clearance/ Ridership Development Plan
Transit Supportive Land Use and Access		
Existing Land Use: Residential and/or Employment	L/LM/M/MH/H	L/LM/M/MH/H
Existing Intermodal Connections	L/LM/M/MH/H	L/LM/M/MH/H
Land Use Plans and Policies	L/LM/M/MH/H	L/LM/M/MH/H
Ridership Development Plan (Comprehensive Station Plan)		
Ridership Threshold		L/LM/M/MH/H
Station Context		L/M/H
Cost Effectiveness		
Cost per New Rider: Base Case	L/LM/M/MH/H	L/LM/M/MH/H
Cost per New Rider: with TOD	L/LM/M/MH/H	L/LM/M/MH/H
Cost per Transportation System User Benefit		L/LM/M/MH/H
Regional Network Connectivity		
Regional Transportation Gap Closure	L/M/H	L/M/H
System and Financial Capacity		
Core System Improvements	L/LM/M/MH/H	L/LM/M/MH/H
Capital Finance Plan	L/M/H	L/M/H
Operating Finance Plan	L/M/H	L/M/H
Partnerships		
Community and Stakeholder Support	L/LM/M/MH/H	L/LM/M/MH/H

Rating Legend

L: Low LM: Low-Medium M: Medium MH: Medium-High H: High

Transit Supportive Land Use and Access

Existing Land Use: Residential	**Low**	**Low-Medium**	**Medium**	**Medium-High**	**High**
Residential Density (units per *gross* acre)	< 5	5-9	10-14	15-24	> 25
Residential Density (units per *net* acre)	< 15	16-25	26-45	46-75	> 75
Total Units w/i 1/2 mile radius	< 2,500	2,501-5,000	5,001-7,500	7,501-12,500	> 12,500
Estimated Trips at **30%** mode share**	< 1,800	1,801-3,600	3,601-5,400	5,401-9,000	> 9,000

* Residential units within ½ mile radius of stations

** Estimated trips (two-way) based on 1.2 workers per household.

Examples of Residential Density

within 1/2 mile radius of BART Stations

	Low	Low-Medium	Medium	Medium-High	High
Net	North Berkeley BART (10+ du/a)	MetroWalk Richmond BART (20+ du/a)	Strobridge Court Castro Valley BART (41 du/a)	Coggins Square Pleasant Hill BART (58 du/a)	Gaia Building Berkeley BART (250 du/a)

Gross*	Orinda (2 du/a)	Rockridge (9 du/a)	Ashby (11 du/a)	16th Street (22 du/a)	Civic Center (42 du/a)

* Dwelling Units per Gross Acre within 1/2 mile of station (Cervero, 1990)

Transit Supportive Land Use and Access

Existing Land Use: Employment	**Low**	**Low-Medium**	**Medium**	**Medium-High**	**High**
Employment Density (employees per *gross* acre)*	< 10	10-20	21-50	51-100	> 100
Million Sq. Ft. of Commercial Space w/i ½ mile radius	< 1.7	1.7–3.3	3.4-8.3	8.4-16.6	> 16.6
Total Employees w/i 1/2 mile radius	< 5,100	5,100-9,900	9,901-24,900	24,901-49,800	> 49,800
Estimated Trips at **10%** mode share**	< 1,000	1,000-2,000	2,001-5,000	5,001-10,000	> 10,000

* Employment within 1/2 mile radius of stations

** Estimated trips (two-way) based on 3 employees per 1,000 square feet.

Examples of Employment Density

within 1/2 mile radius of BART Stations

	Low	Low-Medium	Medium	Medium-High	High
Gross*	Union City (2)	Walnut Creek (19)	Berkeley (24)	19th Street (65)	Montgomery (234)

* Employees per Gross Acre within 1/2 mile of station (Cervero, 1990)

Transit Supportive Land Use and Access

Existing Intermodal Connections	Low	Low-Medium	Medium	Medium-High	High
Pedestrian		***Qualitative Assessment***			
Bicycle		***Qualitative Assessment***			
Transit		***Qualitative Assessment***			

Pedestrian
- Comprehensiveness of Pedestrian Network
- Safe Access to Station Sites
- Topography

Bicycle
- Bicycle Network Connectivity
- Existing Bicycle Usage
- Comprehensiveness of Bicycle Network

Transit
- Peak-Hour Transit Routes
- Peak-Hour Routes w/ Headways 15 Minutes or Less
- Evening & Weekend Routes

Transit Supportive Land Use and Access

	Low	Low-Medium	Medium	Medium-High	High
Land Use Plans and Policies		***Qualitative Assessment***			

Growth Management	• Concentration of development around established activity centers and regional transit
Transit Supportive Corridor Policies	• Plans and policies to increase corridor and station area development • Plans and policies to enhance transit-friendly character of station area development • Commitment to inter-jurisdictional consensus on land use
Supportive Zoning Regulations Near Transit Stations	• Zoning that increases development density in transit station areas • Zoning that encourages mixed-use development • Zoning that enhances transit-oriented character of area, and pedestrian access • Zoning that reduces parking and traffic mitigation
Tools to Implement Land Use Policies	• Community outreach in support of land use planning • Regulatory and financial incentives to promote transit support development

Ridership Development Plan

(Comprehensive Station Plan)

Ridership Threshold*	Low	Low-Medium	Medium	Medium-High	High
BART	<5,000	5,000-9,999	10,000-13,999	14,000-20,000	>20,000
Other Rail Technology		***% of BART per mile capital costs***			
Express Bus/Bus Rapid Transit		***% of BART per mile capital costs***			

Includes:

- Station Area Development
- Station Access
- Station Capacity & Functionality

***** Thresholds based on corridor-wide station average for daily trips to and from (*entries and exits*) new stations in horizon year with planned transit-oriented development and access improvements

Ridership Development Plan

(Comprehensive Station Plan)

	Low	Medium	High
Station Context	***Qualitative Assessment***		

Low: Station location that would not support transit-oriented development and that would negatively affect the quality of the station experience for patrons (i.e. freeway median)

Medium: Station location with good potential for transit-oriented development and an acceptable station experience for patrons

High: Station location that already has or would greatly facilitate transit-oriented development and would provide a good experience for patrons (i.e. downtown locations)

Cost Effectiveness

	Low	Low-Medium	Medium	Medium-High	High
Cost per *New* Rider - Base Case	>$40.00	$25.01-40.00	$15.01 – 25.00	$10.00 – 15.00	<$10.00

	Low	Low-Medium	Medium	Medium-High	High
Cost per *New* Rider - with TOD	>$40.00	$25.01-40.00	$15.01 – 25.00	$10.00 – 15.00	<$10.00

(Costs in 2002 dollars)

Cost Effectiveness

	Low	Low-Medium	Medium	Medium-High	High
Cost/Transportation System User Benefit	TBD	TBD	TBD	TBD	TBD

The cost effectiveness – transportation system user benefits measure is defined as a multimodal measure of perceived travel time for all transportation system users in the forecast year, divided by the recommended cost of the project. The new measure ***de-emphasizes*** *new riders and instead measures the benefits for users changing modes as well as existing transit riders and highway users. The cost effectiveness – transportation system user benefits measure will be phased in over time, becoming effective on September 1, 2001.*

Federal Transit Administration – Frequently Asked Questions on New Starts Final Rule

Regional Network Connectivity

	Low	Medium	High
Regional Transportation Gap Closure	***Qualitative Assessment***		

Assess the interconnected relationship of the transit expansion project and the existing transportation network, identifying opportunities for major gap closures (i.e., airport, inter-city rail, commuter rail, light rail).

System and Financial Capacity

	Low	Medium	High
Core System Improvements	***Qualitative Assessment***		

Enhances (at best) or minimizes demands on core system:

- **Yard/Support Facilities**
- **Redundancy/Recovery Capabilities**
- **Station and Line Haul Capacity**

System and Financial Capacity

	Low	Medium	High
Capital Finance Plan*	***Qualitative Assessment***		

* Capital Finance Plan rating based on:

1) A fully-funded project;
2) The stability, reliability and availability of proposed funding sources; and
3) Funding sources not competing with those that can be used for BART System Renovation and Core System Capacity needs (i.e. RTP/CMAQ or RIP).
4) For projects outside the District - funding sources not competing with those that can be used for District extensions.
5) For projects outside the District - core system improvements are funded in the Capital Financial Plan for the project.
6) For project inside the District - core system improvements are funded in a parallel financial plan.

System and Financial Capacity

	Low	Medium	High
Operating Finance Plan*	***Qualitative Assessment***		

* Operating Finance Plan rating based on:

1) Estimated farebox recovery (Low: <30%; Medium: 30-50%; and High: >50%);
2) The stability, reliability and availability of proposed operating subsidy.
3) For projects outside the District - funding sources that do not draw on, or risk the use of, District operating revenues.

Partnerships

	Low	Low-Medium	Medium	Medium-High	High
Community and Stakeholder Support		***Qualitative Assessment***			

Community Support • Degree of Support

Stakeholder Support • Degree of Support