



Agenda Item 6

METROPOLITAN
TRANSPORTATION
COMMISSION

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Memorandum

TO: Policy Advisory Council

DATE: October 3, 2011

FR: Carolyn Clevenger

W.I. 1517

RE: Transit Sustainability Project Update

In March of this year, staff presented an update on the Transit Sustainability Project (TSP), primarily focused on the financial analysis that had been completed. At your October meeting, staff will present an update on the service analysis completed to date, including an overview of draft staff recommendations.

Service Analysis

The service analysis has been underway for a number of months, working through the Service Technical Advisory Committee composed of transit agency service planning staff. The service component of the TSP has three layers of analysis: 1) system-wide, 2) regional services, and 3) subregional services. The focus of the discussion at your meeting will be the system-wide and regional services components of the project. As the subregional work advances staff will provide an update to the Council.

System-wide, the analysis is focused on evaluating existing system performance through a set of consistent performance metrics. Acknowledging that there is a wide diversity in the land uses and service needs of the region, transit services are being differentiated by service type (e.g. regional all-day service, urban trunk, local network, community bus, etc.). The goal is to establish a consistent set of performance metrics for regular reporting that captures both service effectiveness (productivity) and service efficiency (cost effectiveness). Feedback from the transit agencies to-date has focused on: the difficulty of using standard metrics to evaluate service effectiveness in the diverse region in which Bay Area transit agencies operate; concern regarding how to balance service productivity with other local considerations, particularly in the more suburban and rural parts of the region; and the need to defer to local decision-making on purely local services. In response to the concerns raised, staff is focusing on service performance metrics for the regional system. In addition, staff is proposing a special focus on improving performance of the urban trunk system, which carries over 50 percent of the region's transit passengers.

The regional service analysis includes the development of service concepts for major regional corridors. The regional corridors analysis is being conducted without regard for jurisdiction or agency boundaries, focusing the analysis on current and projected travel demand, current ridership and existing infrastructure. It then seeks to identify sketch-level service concepts to effectively meet that demand. These service concepts are meant to inform transit agency and MTC planning efforts for major regional corridors, and identify areas for improved multi-jurisdictional planning.

At a more local, sub-regional level, we are or will be conducting more detailed analysis in two areas: the Inner East Bay and the Peninsula. The Inner East Bay work is underway, focusing on BART and AC Transit, and is a collaborative effort with transit agency staff actively engaged to analyze transit service in the Inner East Bay. It will result in a comprehensive service and market review of AC Transit and associated BART service, and will develop service planning concepts that examine coordination opportunities between the two systems, identify gaps and/or duplication in terms of service coverage, and identify resource requirements for service improvements. As this work progresses staff will present an update to the Council.

The final element of the service analysis that we will cover at your October meeting is the evaluation of ADA-paratransit. The paratransit work has focused on an assessment of best practices and innovative programs both locally and nationally to determine which strategies could be implemented in the Bay Area to improve the passenger experience on paratransit and/or to encourage cost-effective transit delivery. A technical advisory committee consisting of paratransit staff from eleven transit agencies in the Bay Area has reviewed the work at each step of the process. An Ad Hoc committee of lift-van, sedan and taxi service providers also reviewed the work to date. In addition, staff has reviewed the analysis and initial findings with your Equity and Access Subcommittee. We will present a summary of the initial findings of that work to you for your feedback. We will be seeking additional public input over the next month through focus groups prior to developing final paratransit recommendations for consideration.

Next Steps

The primary focus of the TSP for the next two months will be finalizing the service analysis and beginning the institutional element of the project. As these two elements of the TSP advance, we will circle back to the initial financial analysis to develop overall final recommendations, conduct public outreach, and define an implementation plan.



Today's Agenda

- Financial Analysis – Refresher on Proposed Performance Targets
- Service Analysis
 - Performance Metrics Approach
 - Regional Corridors Analysis
- Summary of ADA Paratransit Initial Findings



What is a sustainable transit system?

- **Customer:** A system that functions as an accessible, user-friendly and coordinated network for transit riders, regardless of mode, location or jurisdiction.
- **Financial:** A system that can cover its operating and capital costs with a growing share of passenger fare revenues as well as reliable streams of public funding.
- **Environmental:** A system that can attract and accommodate new riders in an era of emission-reduction goals, and is supported through companion land use and pricing policies.



Project Work Program

Project Goal: to identify the major challenges facing transit, confront them directly, and identify a path toward an efficient, affordable, well-funded transit system that more people will use

Technical Analysis

Financial

Service

Institutional



Financial Performance Metrics

Financial Principles and Targets Framework Proposed for the Large 7 Operators

Principles

1. Improve Operating Efficiency
2. Control Cost Growth
3. Stabilize Operating Revenues

Targets

1. Reduce operating costs by 10% per hour of service (Big 7 operators)
2. Keep any real increases in operating cost per hour/mile equal to or less than increases in amount of service provided
3. Secure additional funding for transit and/or require agency reserves

Example Strategies

Service Analysis

Service Analysis

- **System-wide:**
 - Evaluate existing performance
- **Regional Services:**
 - Assessment of transit competitiveness
 - TransBay, Express, and Feeder Services – 11 corridors considered
 - Analysis of ADA-paratransit
- **Sub-regional Service Analysis:**
 - East Bay and Peninsula

Service Performance Metrics

TSP Service Metrics

- Service metrics focus on ridership generation, service efficiency, and service quality
- Service Productivity
 - Attracting more passengers to the system, investing in strong markets and more cost efficient use of resources
- Service Quality
 - Providing a high quality service to the public that will attract more riders
- Current focus is on existing service
 - Capital expansion and replacement considerations still to be evaluated as part of Plan Bay Area

Why Service Performance Metrics?

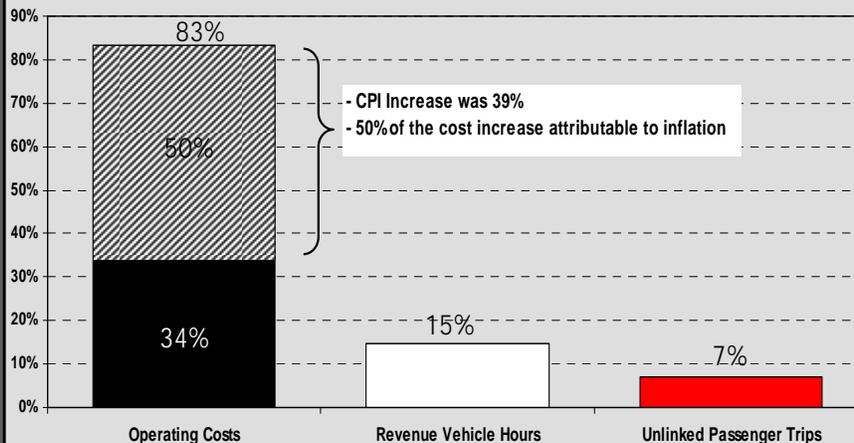
- Overarching goal is to improve system productivity in the region and get more passengers on transit
- Past approach has been to include assessment of individual agency standards, goals and objectives in SRTPs
- Performance Audits and Productivity Improvement Program process identifies projects aimed at meeting standards, goals and objectives
- This approach has been ineffective in moving the needle in system productivity



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The Results: Bay Area Large Operators(1997 – 2008)

- Costs have increased faster than increases in service
- Ridership has not kept pace with service increases



Source: National Transit Database, "Big 7" only.
Excludes ferry, cable car and paratransit.



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Performance Metrics Process

- Reviewed existing agency standards and commonly used metrics
- Discussed potential options with the Service Technical Advisory Committee
- Focused on metrics related to service effectiveness
- Attempted to differentiate by types of service provided throughout the region in order to account for diversity of land use and passenger demand



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Service Categories: Regional



Regional All-Day High Capacity

- All-day backbone service
- BART, Caltrain



Regional All-day

- Fills in/supplements all-day regional service



Regional Commute

- Peak-only, peak direction regional service



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Service Categories: Subregional



Urban Trunk

- All-day backbone service on higher-density arterials



Subregional Commute

- Peak-only express-type services within county



Local Network

- Moderate-density arterials mainly served by local bus



Community Bus

- Local circulation often within lower-density areas



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Service Category Comparisons

	Total Ridership	Total Cost	Total Revenue	Average Revenue Speed (mph)
REGIONAL	28%	35%	59%	32
Regional High Capacity	26%	30%	55%	35
Regional All Day	1%	3%	3%	18
Regional Commute	1%	2%	1%	18
SUBREGIONAL	72%	65%	41%	10
Urban Trunk	53%	37%	27%	9
Subregional Commute	2%	1%	1%	17
Local Network	13%	19%	9%	11
Community Bus	3%	7%	3%	12
School Services	1%	1%	1%	10



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What is the appropriate focus and role of MTC?

	Total Ridership	Total Cost	Total Revenue	Average Revenue Speed (mph)
REGIONAL				
Regional High Capacity	26%	30%	55%	35
Regional All Day	1%	3%	3%	18
Regional Commute	1%	2%	1%	18
Urban Trunk	53%	37%	27%	9
TOTAL	81%	72%	86%	

- Focus on multi-jurisdictional regional services
 - MTC directly involved in funding bus/ferry operating and rail capital investments
 - MTC is often involved in negotiations between systems
 - Bridge services – MTC/BATA involved in setting toll policy and bridge operations
- Focus on urban trunk
 - Carries 53% of total ridership in the region
 - Coincides with where the region is forecasting significant growth and tied to objectives of Plan Bay Area



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Service Performance Metrics Approach

- Focus on the Regional Services and Urban Trunk
- Transit agencies remain responsible for establishing subregional and local performance metrics
- Recommend both productivity and composite metrics



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Regional Services

- Regional system as defined by:
 - crossing the Bay, or
 - having a route length of twenty miles or more and crossing a county line
- Includes:
 - BART, Caltrain
 - TransBay bus services
 - Some express bus services
 - Ferry services



Draft Performance Measurement Approach

Productivity Metric – Capacity Utilization

- Performance evaluated by continuous improvement against current performance
- 10% improvement within 3 years
- Measured by route level for bus and ferry and system level for rail

Farebox Metric

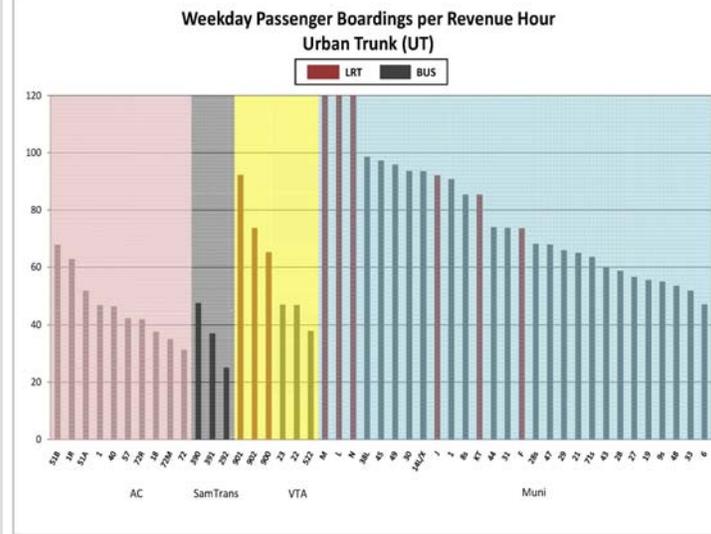
- Performance evaluated compared to a standard
- Standard set by RM2 model averages
- Tracked by route level for bus and ferry and system level for rail

Performance-Based Funding

- Consider allocating funds based on performance and reallocating funds to a more productive route if targets are not met; after consultation and corrective action process (RM2 model)



Urban Trunk Routes



*List of routes tentative based on initial agency input.



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Urban Trunk

- All day backbone service on higher-density arterials
- Carries 53% of trips in the region
- Average operating speed of 9 mph

Agency	Average Speed: Urban Trunk Routes
AC Transit	10.0 mph
Muni	7.8 mph
SamTrans	12.3 mph
VTA	13.8 mph



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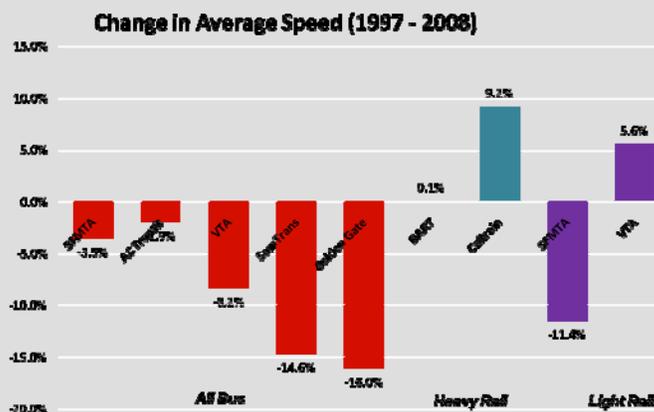
Service Quality: Urban Trunk

- Improve the customer's experience
 - Frequency: spontaneous use – less than 12 minute headways – in appropriate market conditions
 - Service Predictability: Predictable service is necessary for customers to depend on transit as a reliable travel choice and is particularly important for areas without spontaneous use frequency
 - Speed: benefits affecting both customer convenience and agency cost-effectiveness
 - Particularly an issue for congested Urban Trunk corridors with high ridership and resource investment
 - Requires greater investment in transit priority treatments and better coordination with cities/public works departments



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Recent Changes in Speed



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Speed Improvement Approach

- Focus on actively improving Urban Trunk corridors
 - Top priority corridors operate at 15 minute headways or better, and have speeds of 10 mph or less
 - Requires development of improvement program based on cost/benefit analysis and ongoing monitoring
- Consider regional funding for projects for speed improvement
- Consider incorporating local support for transit speed improvements into One Bay Area grant criteria



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Transit Performance Initiative

- *Transportation 2035* included a strong commitment to the Freeway Performance Initiative (FPI), which identified low-cost investments that improve operating efficiency of the freeway network
- Similar initiative for transit could focus on low-cost capital investments that could improve operations and customer experience
 - Transit signal prioritization
 - Passenger circulation improvements at major hubs
 - Boarding improvements – e.g. level boarding, fare collection, new curbside infrastructure, etc.
 - Stop improvements – e.g. real-time information, shelters, lighting, etc.



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Feedback From Project Steering Committee Meeting

- Transit agencies generally supportive of focus on regional services
- Strong support for focusing on speed/transit performance improvements
- Disappointment, particularly from business groups and audience members, regarding lack of standard performance metrics or improvement targets for local services



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Next Steps

- Discuss refined proposal with Project Steering Committee
- Develop monitoring approach
- Develop Transit Performance Initiative and identify potential funding
- Establish a joint financial and service advisory committee to work with staff on final recommendations



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Regional Corridors Analysis

Introduction

Objective:

- Develop planning process for major regional corridors involving multiple agencies and/or modes
- Conduct sketch level planning to inform future analysis

Proposed approach:

- Evaluate demand without regard for jurisdictional boundaries
- Align transportation network with current and future land use
- Identify transit opportunities for agency and regional consideration
- Develop performance metrics to evaluate performance and financial sustainability

Regional Corridors



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System Goals

- Grow transit ridership faster than population
- Support projected population and employment growth
- Deliver the service in a cost-effective manner
- Create a high frequency, well used, seamless system for the customer

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Regional Corridors – Observations

- Work has been conceptual in nature but points to the need for joint planning in regional corridors
- Lack of comprehensive planning leads to conflicting priorities for capital investments

Recommended Next Steps:

- Formalize planning process for corridors with multiple operators
- Initiate multi-operator working groups to further detail the concepts identified in the regional corridor sketch analysis
- Establish timelines for corridor action plans

ADA Paratransit

Paratransit Studied Separately from Fixed Route Service

- Unique mode dependent on fixed route structure
- Vulnerable population served: frail elderly and disabled
- Costs are driven by different factors than fixed route
- Affected by cutbacks in social services transportation

Process

- Technical Advisory Committee of 8 transit operators
- Ad Hoc Committee of contract providers
- Briefings of MTC Policy Advisory Council, Equity and Access Subcommittee
- Outreach to ADA paratransit riders – in process for late September and October

Cost Pressures

- Aging population
- Mainstreaming of activities by people with disabilities
- Growth in trips from human service agencies
- Increased demand for dialysis treatment transportation
- Improvements in paratransit service quality
- Increased contract rates driven by fuel, health care, insurance
- Longer trips due to regionalization of medical services
- Larger mobility aids (e.g., wheel chairs, walkers, etc.)



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Customer Service Issues

Based on outreach to date, further customer outreach scheduled for September and October of 2011

- Late vehicles
- No-show vehicles
- Lack of communication about late vehicles
- Long rides, due to trip grouping
- Transfers between agencies
 - connecting with second operator sometimes difficult
 - safety at transfer points
 - scheduling



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Strategies to Manage Costs and Improve Mobility

Strategies were analyzed in five areas:

- Demand Management Strategies
- Productivity Measures
- Cost Containment Strategies
- Restructuring Service
- Alternatives to ADA Paratransit



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Priority Regional Strategies

Proposed Top-Tier Strategies:

1. Shift more trips from paratransit
 - Improvements to fixed-route transit
 - Travel training and promotion of transit
 - Walkable communities, complete streets, and land use planning
2. Manage demand more effectively
 - Improve ADA paratransit certification process
 - Implementing conditional (trip by trip) eligibility
 - Premium charges for service beyond ADA requirements
3. Create mobility managers in one or more subregional areas to better coordinate resources and serve customers



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Next Steps

- September/October 2011 - Conduct 3 customer focus groups on top strategies - invitees from all 9 counties
- Late 2011 - TSP Project Steering Committee – consider priority recommendations
- Final draft to Commission: early 2012
- Develop implementation plan for selected strategies