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Transit Effectiveness Project (TEP)
Draft Proposals to Transform Muni

SFMTA | Municipal Transportation Agency

OFFICE OF THE CONTROLLER

Introduction

The Transit Effectiveness Project (TEP) is the first comprehensive review of Muni in over a generation. The project is a joint effort of the San Francisco Municipal Transportation Agency (SFMTA), which operates Muni, and the City Controller's Office.

The TEP's proposals have the potential to transform Muni so people can get where they want to go more reliably, quickly, and safely. The proposals would also help address Muni's budget deficit by making Muni more efficient, as well as reducing traffic congestion and transportation-related pollution.

Under the TEP's draft recommendations, virtually every Muni customer would experience some amount of change, with the vast majority of Muni customers benefiting from improved Muni service, in particular on the system's most heavily utilized routes.

This document summarizes what we've learned, what's next in the TEP process, and preliminary proposals for route changes.

What we have learned so far

These proposals are the result of 18 months of data collection and analysis, industry and market research, extensive community outreach, and countless conversations with Muni customers.

Highlights

- People from all parts of the City and all demographic groups said reliability was their biggest issue. San Franciscans want transit service that is on-time, consistent, predictable, and easy to use.
- Close to 75% of all daily boardings on Muni occur on the 15 busiest corridors. Many of the proposed service changes focus on these corridors.
- The City's travel patterns have changed since the Muni network was last redesigned in the late 1970s and early 1980s. Better connections between some neighborhoods could be made, and transit service could be allocated to put more service on the most crowded routes.
- 20% of San Franciscans commute outside of the City, double the number in 1970, and rely on the regional transit network, so connections to BART, Transbay Terminal, ferries, and Caltrain have become much more important.
- Customers were also concerned about overcrowding, which is most common on Muni's busiest routes.
- Slow travel times frustrate customers and increase Muni costs.

Key areas to improve Muni service

The following sections summarize the key areas for improving Muni service.

Improve Reliability

Muni is not as reliable as it should be, and improving on-time performance will require a variety of solutions. Many TEP recommendations focus on updating Muni's operating practices and infrastructure, and need not wait for service and route changes to take place. Muni has also introduced better management practices to improve reliability that have already:

- Reduced light rail break-downs by 36%,
- Reduced operator absenteeism by 14%, and
- Reduced missed runs by 58%.

Not all reliability improvements can be fixed by changing the way Muni does business. For many years Muni has not had enough funding to employ sufficient numbers of key front-line operations staff, such as street supervisors and schedulers, who keep Muni vehicles running on-time. Muni has also not had enough money to invest in the kinds of equipment and infrastructure it needs to proactively manage service.

While it will take many years to fully upgrade Muni facilities, a major step will be taken this fall with the opening of Muni Metro East, a modern rail maintenance facility along the T-Third line, which will help improve rail service reliability. A five-year process to build a state-of-the-art Control Center is underway, which will provide Muni operations staff with better ability to actively manage service reliability. Other capital improvements are planned that will modernize Muni's practices and improve its performance.

San Francisco voters recently approved Proposition A, which provides additional funding for Muni and will allow the agency to further improve reliability and begin to address the agency's structural operating budget deficit. These initial resources will be used to hire more street supervisors to monitor operator performance and manage service disruptions, additional schedulers to develop more accurate schedules, and dedicated Parking Control Officers to monitor double parking on transit corridors.

Reduce Travel Times

Next to reliability, Muni customers are most concerned about travel times. To make Muni trips quicker without compromising safety, the key is to improve travel times not by increasing top speeds, but by reducing unnecessary delays. Techniques would include:

- Transit-only lanes, or where there is not enough room, street designs that allow buses and trains to bypass long backups at intersections.
- Upgrading stop signs to "smart" traffic signals that give priority to buses and trains at intersections.

Reduced Travel Times and Cost-Effectiveness

Reducing delays will not only better serve our customers, but will benefit Muni's bottom line. How? Suppose a bus takes 60 minutes to make a round trip. If buses run every 10 minutes, six buses (and six operators) are needed to provide that trip. But if travel delays cause a bus to take 70 minutes to make the same trip, seven buses and operators would be needed to offer the same level of service—a 17% increase in cost just to maintain the same schedule.

Reducing travel times will allow Muni to provide more service on its busiest routes. The TEP has set a goal of 5% to 20% reductions in travel times based on the type of route.

- Building "bus bulbs" that extend transit stops beyond the sidewalk to allow buses to pick up and drop off passengers without having to merge back into traffic.
- Implementing "proof-of-payment" prepaid fare policies to allow passengers to board at all doors.

Muni will soon select segments of busy routes to pilot test a new delay-reduction program. After July 2008, dedicated service teams will systematically evaluate every major Muni corridor to make recommendations on how to reduce delays. These teams will also coordinate with larger investments being considered, including Bus Rapid Transit on Geary Boulevard and Van Ness Avenue.[1]

Update Muni Routes

The proposed service and route changes would be implemented once reliability has been stabilized. The proposed route changes are intended to help Muni support improved mobility and economic vitality in San Francisco, as well as reduced traffic congestion and pollution. The TEP route proposals are based on several key concepts:

- Muni's limited resources should be allocated where ridership is greatest, even if that means reducing or eliminating service on the least productive routes.
- Transit is needed in all San Francisco neighborhoods; key parts of the existing transit network are not serving today's travel patterns as well as they could be.
- Routes should be easy to comprehend; customers should be able to intuitively understand the streets on which routes operate, and trips should be as direct as possible.
- It is important, and possible, to both improve service for existing customers and attract new customers.

What the TEP Means for Muni Customers

More reliable Muni service

- SFMTA is committed to developing more accurate schedules, 100% operator and vehicle availability, full supervisory coverage and better management of congestion.

More and better service

- 80% of Muni's morning peak period boardings would have improved frequencies and shorter wait times.
- In the midday, 50% of customers would see improved frequencies.
- There would be 14% more service on the Rapid Network (15 busiest corridors); no change on the Local Network.
- There would be 23% less service on the Community Connectors, but revised services would be quicker, more direct, and more reliable.

Shorter trips for most customers

- Going from the Marina to SF State would save 8 minutes – a 24% faster trip.
- Going from SF General Hospital to Divisadero & Geary would save 5 minutes – a 12% faster trip.

[1] The San Francisco County Transportation Authority (SFCTA), in partnership with the SFMTA, the Planning Department, the Department of Public Works and Golden Gate Transit, is studying the benefits and impacts of potential Bus Rapid Transit (BRT) designs on Geary and Van Ness. BRT is a quick and relatively inexpensive way to speed up buses and make service more reliable and comfortable.

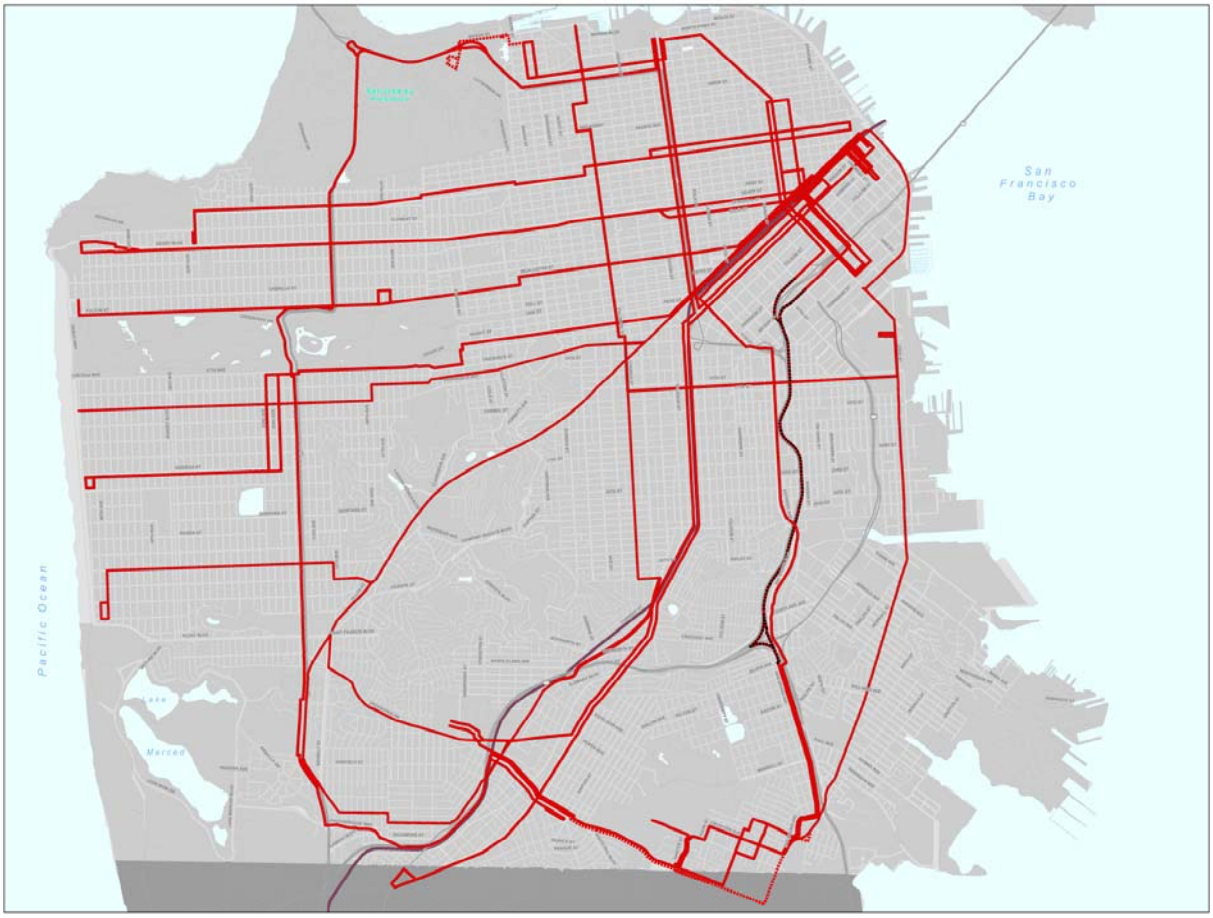
- BRT typically gives buses their own traffic lane so they can run faster with fewer impediments, gives buses priority at traffic signals so they spend less time stopped at red lights, provides real time information to customers so they know when the next bus is coming, builds high-quality and well-lit bus stations to improve safety and comfort, and provides streetscape improvements and amenities to make the street safer and more comfortable for pedestrians and bicyclists accessing the transit stations.

It is not possible to invest equally in all routes. A framework has been developed that adds more transit service to the most heavily used routes, which are the same routes that tend to suffer the most overcrowding, on-time performance problems, and service delays.

The TEP would organize service into four proposed categories:

- **Rapid Network: service every 5 to 10 minutes (or better)** – Popular lines such as the N-Judah, 14L-Mission Limited and 30-Stockton make up the backbone of the system. Under the proposals, busy corridors would be enhanced so that customers would enjoy shorter waiting and travel times, less crowding, and major stops that look and feel more like light rail stations.
- **Local Network: service every 10 to 15 minutes** – Somewhat less utilized but still essential routes such as the 21-Hayes and 29-Sunset that complement and connect to the Rapid Network.
- **Community Connectors: service every 15 to 30 minutes** – Lightly used bus routes such as the 37-Corbett and 67-Bernal Heights that circulate through some of San Francisco's hillier neighborhoods, filling gaps in coverage and helping to put a bus stop within one-quarter mile of virtually every San Franciscan.
- **Specialized Services** – Routes such as express lines, feeders to BART and Caltrain stations, and ballgame shuttles, that provide services tailored to particular markets and limited times of day.

Map of Proposed Muni Rapid Network



Other Improvements

In addition, the TEP is also proposing the following enhancements to the overall experience of using Muni such as improving pedestrian access to transit stops and adding amenities at stops including more *NextMuni* arrival time signs, ticket machines, and bicycle lockers. The TEP is also coordinating with the City's Better Streets Program to prioritize pedestrian improvements on the Rapid Network.

Next steps and getting involved

The preliminary TEP proposals are draft recommendations for public discussion. Over the next two months, the TEP team will be collecting feedback through:

- Community workshops scheduled for late March and early April (visit http://www.sftep.com for details and to sign up to receive updates on the meeting schedule)
- The 311 Customer Service line
- Comment forms on the project website at http://www.sftep.com

In late spring 2008, the TEP proposals will be submitted to the SFMTA Board of Directors, reflecting any revisions that are developed as a result of internal and external stakeholder input. After the Board's review, the service change proposals will undergo environmental assessment, and, based on that analysis, the City's decision makers may make further changes to the actual projects that come out of the TEP.

The environmental assessment is expected to require approximately 12 months, so the first Muni service and route changes may happen as early as July 2009. In the meantime, the SFMTA will continue to work to improve Muni reliability.

Muni route proposals at a glance

Where service would increase:

Hundreds of changes are proposed, from the relatively minor (e.g., buses running slightly more frequently in the middle of the day) to major route redesigns. Highlights include:

- Trains and buses would run every 5 to 10 minutes all day on the *Rapid Network,* consisting of rail lines J, K, L, M, N and T, and the busiest bus lines, the 1, 5/5L, 9, 9X, 14/14L, 22, 28/28L, 30, 38/38L, 47, 49/49L, and 71/71L.
- Muni's busiest rail line, the N-Judah, would have more service, running every 6 minutes during peak hours.
- A new line would circulate around Downtown, replacing the 19-Polk on Polk Street and the 12-Folsom in SoMa, and also connecting North Beach with the Montgomery BART/Muni Station along a route similar to the old 15-line.
- Most limited-stop routes such as the 38L and 71Lwould operate more often, all day and into the evening. The 14L-Mission Limited, which now runs every 15 minutes and only during the middle of the day, would run every 7.5 minutes during peak hours and every 10 minutes throughout the day. The 49-Van Ness/Mission would also become a new limited "49L" route.
- Capacity would be increased on Stockton Street in Chinatown. Service on the 9X-Bayshore Express would be nearly doubled in the middle of the day and larger, articulated buses would be used for all service on the 30-Stockton.
- Express lines from western neighborhoods would make stops at Van Ness, facilitating access to the Civic Center and other destinations.
- For the first time, direct service would be offered between Potrero Hill and Downtown as part of the 12-Pacific. Extending the 45-Union Stockton trolley coach through Mission Bay to Potrero Hill and S.F. General Hospital would provide a second downtown connection.
- Service could double on 24th Street by rerouting the 24-Divisadero, also connecting the Bayview to the heart of the Mission. The 33-line would replace the 24 south of 24th Street.
- Extensions of some of Muni's other zero-emission electric trolley coach lines are proposed, such as bringing the 6-Parnassus to West Portal, the 30-Stockton to the Presidio, and the 24-Divisadero to the Marina.
- A new 5L-Fulton Limited would offer Richmond residents a much faster ride downtown, while 5-Fulton local buses would continue to make all stops east of Stanyan.
- A restructured 28L with fewer stops would provide faster connections from the Marina to the Richmond, Sunset and Balboa Park – and perhaps also to Third Street.
- Other crosstown service will also expand. Lines 18 and 23 would be combined to create a single route running from the Richmond to the Bayview. The 29-Sunset will run more frequently and the 48-line will run from Ocean Beach to Third Street at all times.
- The 6-Parnassus would be rerouted onto Cole Street, better serving the Haight-Ashbury and providing an alternative to the N-Judah at Carl and Cole.
- Stronger links would be established between Community Connector routes and major transfer points, such as a revamped 36-line connecting Mt. Davidson to Glen Park BART.

Muni route proposals at a glance

Where one service would replace another:

In some parts of the system, a new route would replace a current route, offering connections that do not currently exist. Examples include:

- The J-Church would replace the outer portion of the M-Ocean View line, connecting the Mission and Noe Valley to S.F. State.
- The 18 would replace the Ocean Beach branch of the 38-Geary, bringing crosstown connections to outer Balboa and Cabrillo.

Where service would be reduced:

In the TEP's "resource constrained" scenario, there would be no net increases to Muni service hours; improvements on Muni's busiest lines would have to be balanced by reductions elsewhere. Some examples include:

- Service on lines 3, 4, 26, 53, 56 and 66 would be discontinued along with some portions of lines such as the 2, 17, 35, 36, 37 and 39. Where routes would be discontinued or relocated, alternatives are almost always available – if not on the same street, then within a few blocks.
- Some lines would be "straightened out," continuing to serve the neighborhoods they do now, but sometimes on different streets, removing service from some blocks. Examples are lines 6, 52 and 54.
- In some areas one new line would replace two current lines. For example, the 27-line would serve the Mission District along Harrison Street, replacing buses on Folsom and Bryant streets with a new service more frequent than either current one.
- Evening service would be less frequent on some lines—and more frequent on others--but would still operate on the Rapid and Local Network lines at least every 20 minutes until the end of the service day. Most community service lines, as now, would stop operating at 10pm or midnight. In addition to the "constrained" scenario, the TEP also includes an "enhanced" scenario, which would retain a somewhat higher level of evening service than in the "constrained" version.