



CONNECTING SAN FRANCISCO'S NORTHEAST NEIGHBORHOODS

SPUR DISCUSSION PAPER

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For more information contact:

Ratna Amin
SPUR Transportation Policy Director
ramin@spur.org

Sarah Karlinsky
SPUR Deputy Director
skarlinsky@spur.org

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SPUR
654 Mission St., San Francisco, California 94105
www.spur.org

INTRODUCTION

The northeast neighborhoods of San Francisco — which include North Beach, Telegraph Hill, Russian Hill, Fisherman’s Wharf and the edges of Chinatown — have some of the city’s highest densities of residents, workers and tourist activities. Yet there are currently no major plans to increase transit capacity serving the area.

On April 13, 2013, SPUR convened a community workshop to assess transit needs in these neighborhoods. A strong consensus emerged from the workshop for improving transit service to the northeast neighborhoods. The key findings were:

- The needs of residents, employers and tourists in the northeast neighborhoods are not well served by existing public transit service.
- There is strong interest in extending the T-Third light rail line (i.e., the Central Subway project) to a North Beach station
- There is strong interest in extending the T-Third line to the Fisherman’s Wharf area, and possibly to other neighborhoods to the west and/or along the Embarcadero.

The SPUR Northeast Neighborhoods Transit Planning Workshop was a key milestone for contemplating new transit service to the neighborhood. Developing a community vision is a critical first step on the long road to the delivery of a transit project. The first step occurred in 1989, when a citizens’ committee convened to develop a citywide vision in connection with a proposed sales tax for transportation, formulated as the “four corridors plan.” These corridors, which were recommended for new Muni Metro lines, were Third Street, Geary Boulevard, Van Ness Avenue and North Beach. San Francisco voters approved this vision in 1989 and again in 1994. (See Figure 1.) The current T-Third line and its extension to Chinatown were first identified as priority projects in the late 1990s, combining the Third Street corridor with a portion of the North Beach Corridor – the Central Subway project. SPUR’s involvement with the development of the Central Subway project is described in Appendix B. The Geary and Van Ness corridors are currently proposed for bus rapid transit, although the Geary line could be a precursor to a Muni Metro light rail line.

Figure1: Four Transit Corridors Identified by 1989 Citizens Committee

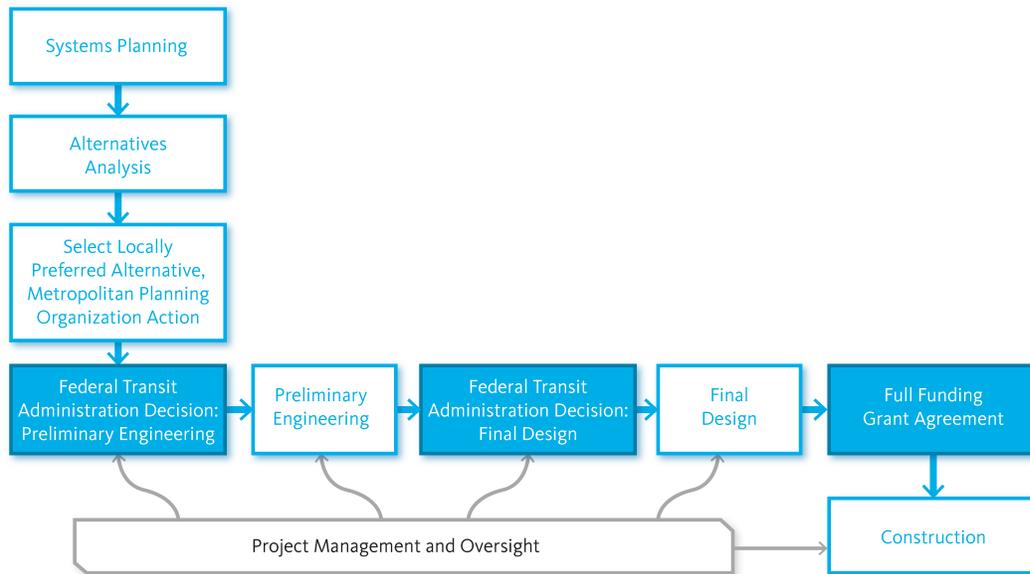


Source: San Francisco Guideway Associates, June 1995

The April 2013 workshop served as the continuation of this citywide discussion, with the objective of refining the transit vision for the remainder of the North Beach corridor. Such a vision is necessary before embarking on the lengthy process to design a project and pursue funding. The most common way a project like this is funded is through the Federal Transit Administration (FTA) New Starts project. However, other cities have used a range of approaches to fund these types of projects.

To obtain FTA funding, the process for developing new transit service includes planning the service as part of the larger transportation system and producing an Alternatives Analysis evaluating different approaches to achieving service objectives. If successful, this process may ultimately result in a Full Funding Grant Agreement and construction of the project.

Figure 2: Transit Project Process



Source: Arup, 2013, based on Federal Transit Administration Major Capital Transit Investment Fact Sheet, dated September 18, 2007

NORTHEAST NEIGHBORHOODS MERIT HIGH-CAPACITY TRANSIT SERVICE

San Francisco is expected to gain 35 percent more population and 34 percent more jobs by 2035.¹ Most of this growth will be in other parts of the city, including SoMa, Treasure Island, Mission Bay, Transbay Terminal Center, Hunters Point, Parkmerced and others. This growth will change travel patterns, including elevating the importance of north-south connections from the southeast neighborhoods to the northeast neighborhoods.

¹ Source: San Francisco Planning Department

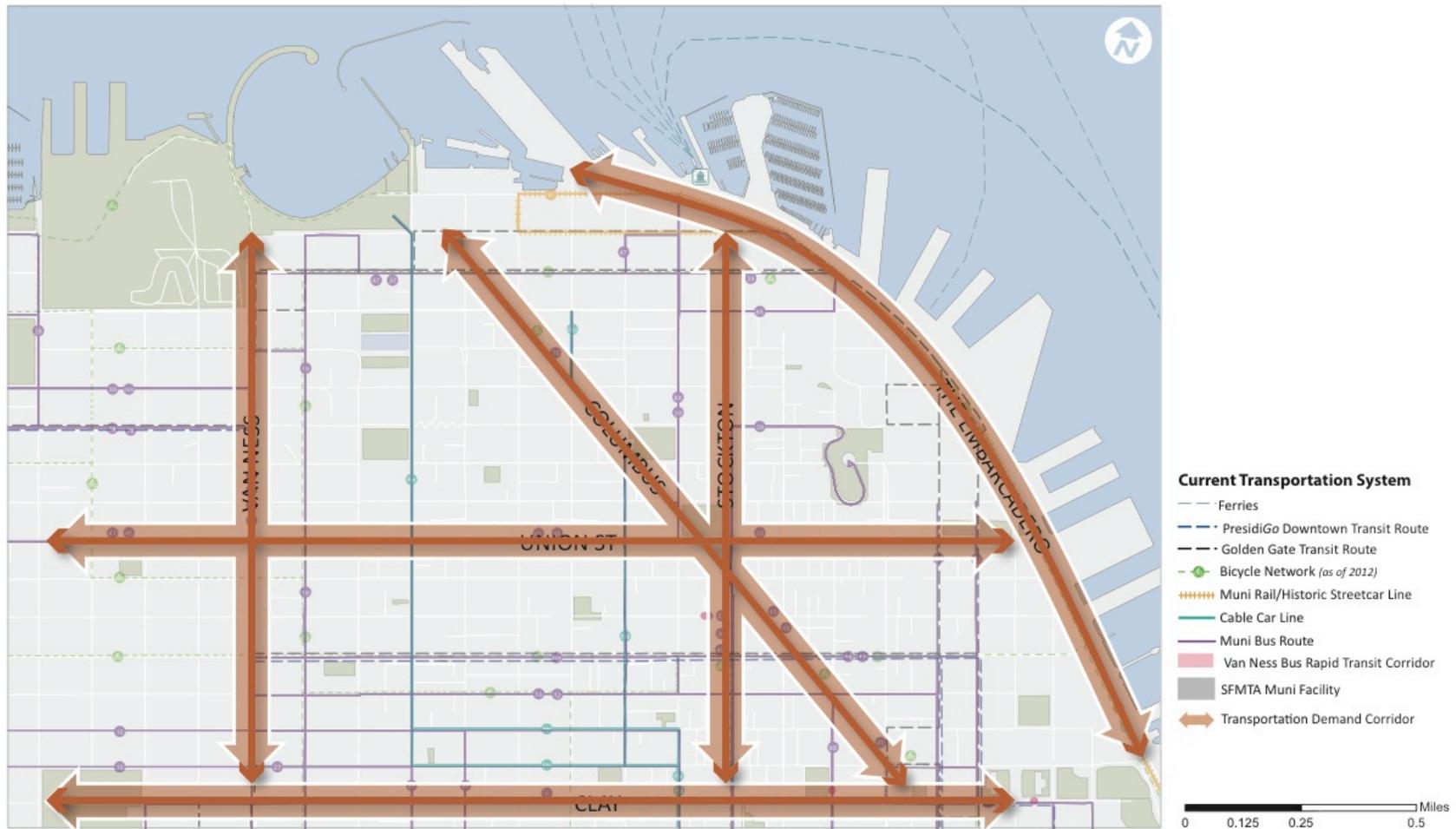
Figure 3: Major San Francisco Travel Demand Markets and Centers.



Source: SFMTA, 2013

Within the northeast neighborhoods, transportation demand is expected to grow along the Columbus, Stockton, Van Ness, Union, Clay and Embarcadero corridors, similar to current travel patterns.

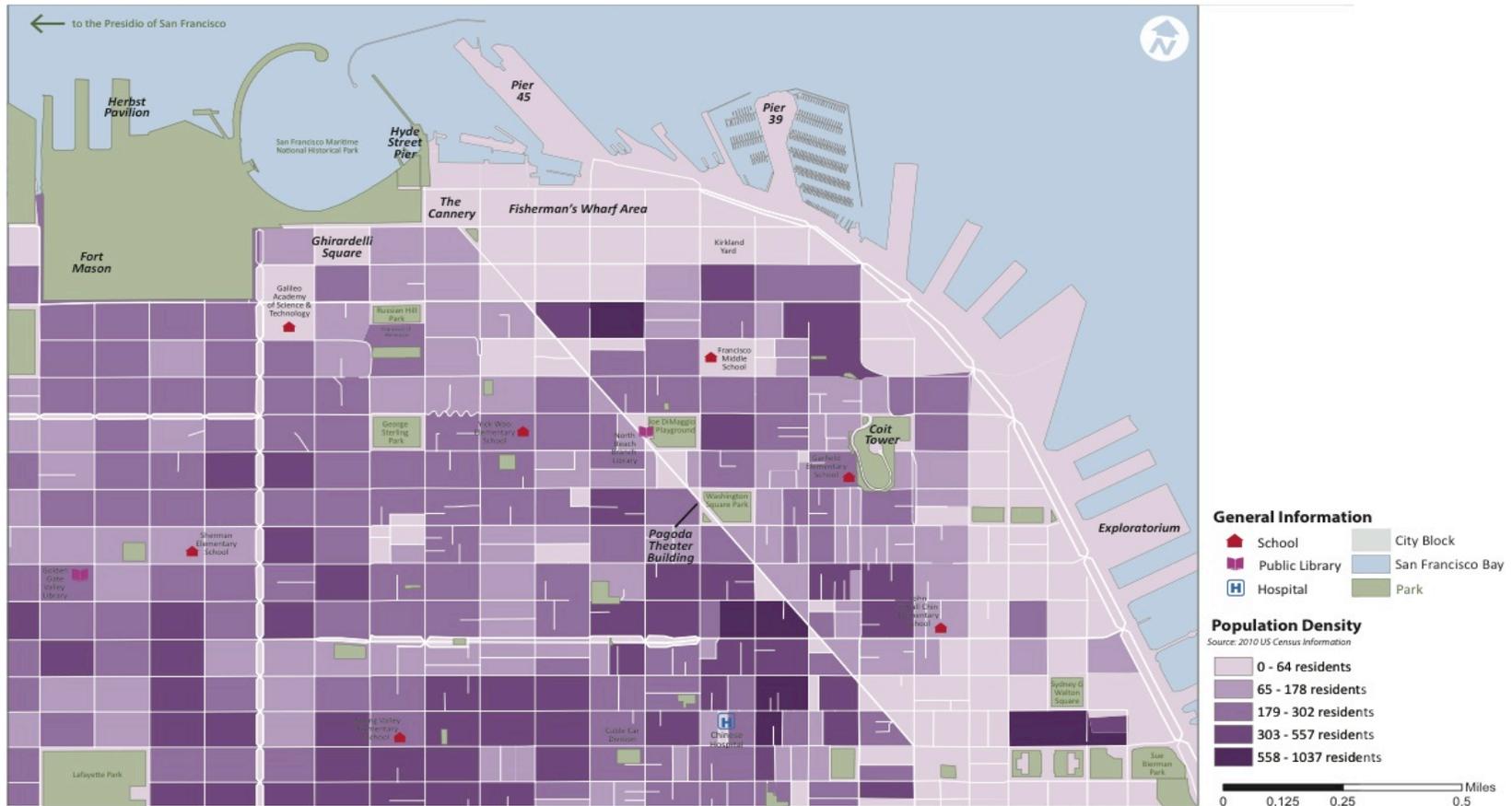
Figure 4: Northeast Transportation Demand Corridors.



Source: SFMTA, 2013

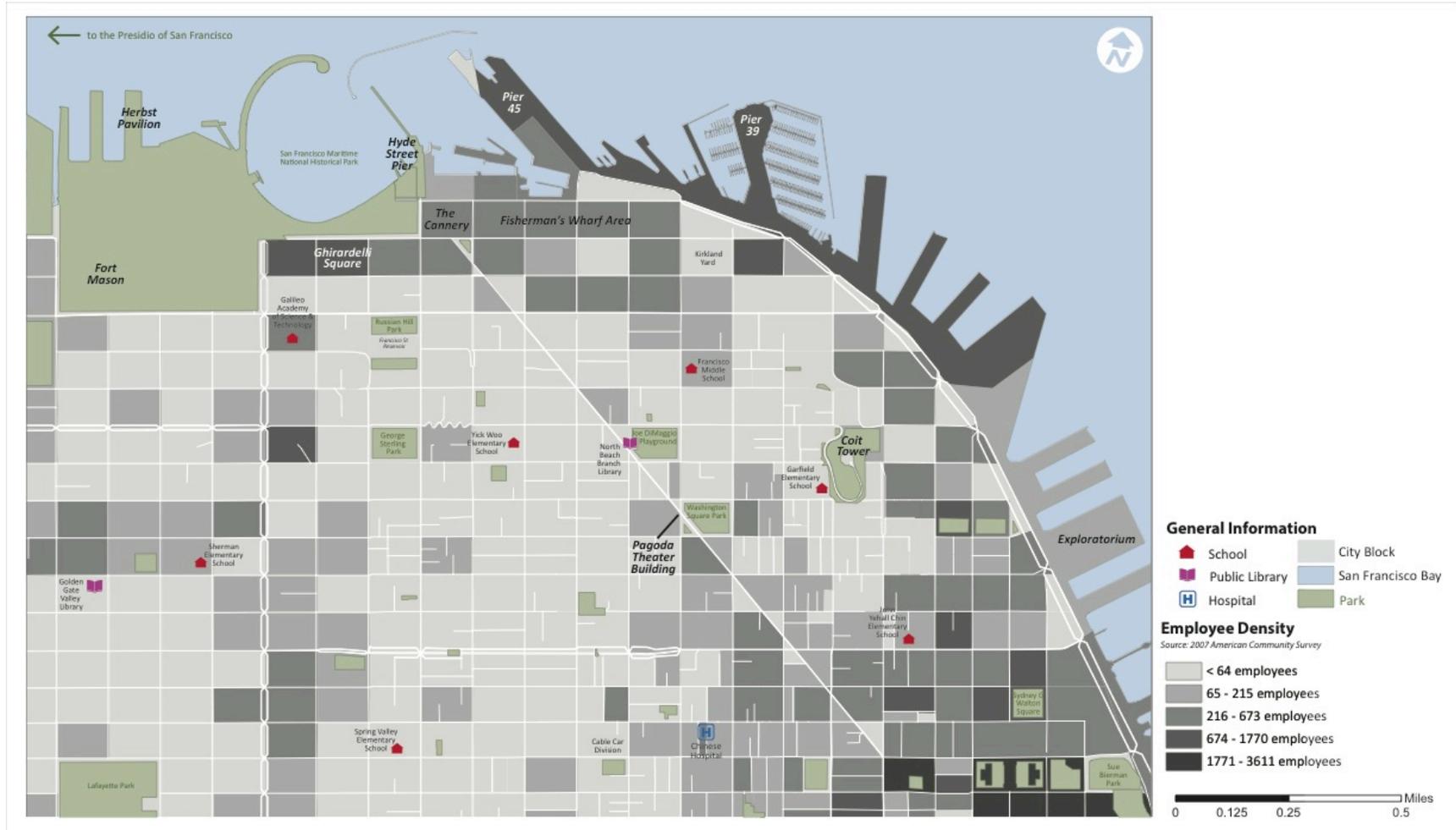
Current travel patterns are expected to continue into the future in the northeast neighborhoods because of the high existing densities of population and employment shown in Figures 5 and 6.

Figure 5: Northeast Neighborhoods Population Density



Source: SFMTA, 2013

Figure 6: Northeast Neighborhoods Employment Density



Source: SFMTA, 2013

The northeast neighborhoods and environs are some of the densest parts of the city, reaching 39,000 people per square mile in North Beach and Telegraph Hill and 27,000 people per square mile in Russian Hill (compared to an average of 17,500 citywide). This is similar population density to the Upper West Side and Upper East Side of Manhattan. Additionally, this part of the city has remarkably low auto-ownership rates: Sixty-eight percent of residents in the northeast neighborhoods do not own an automobile.

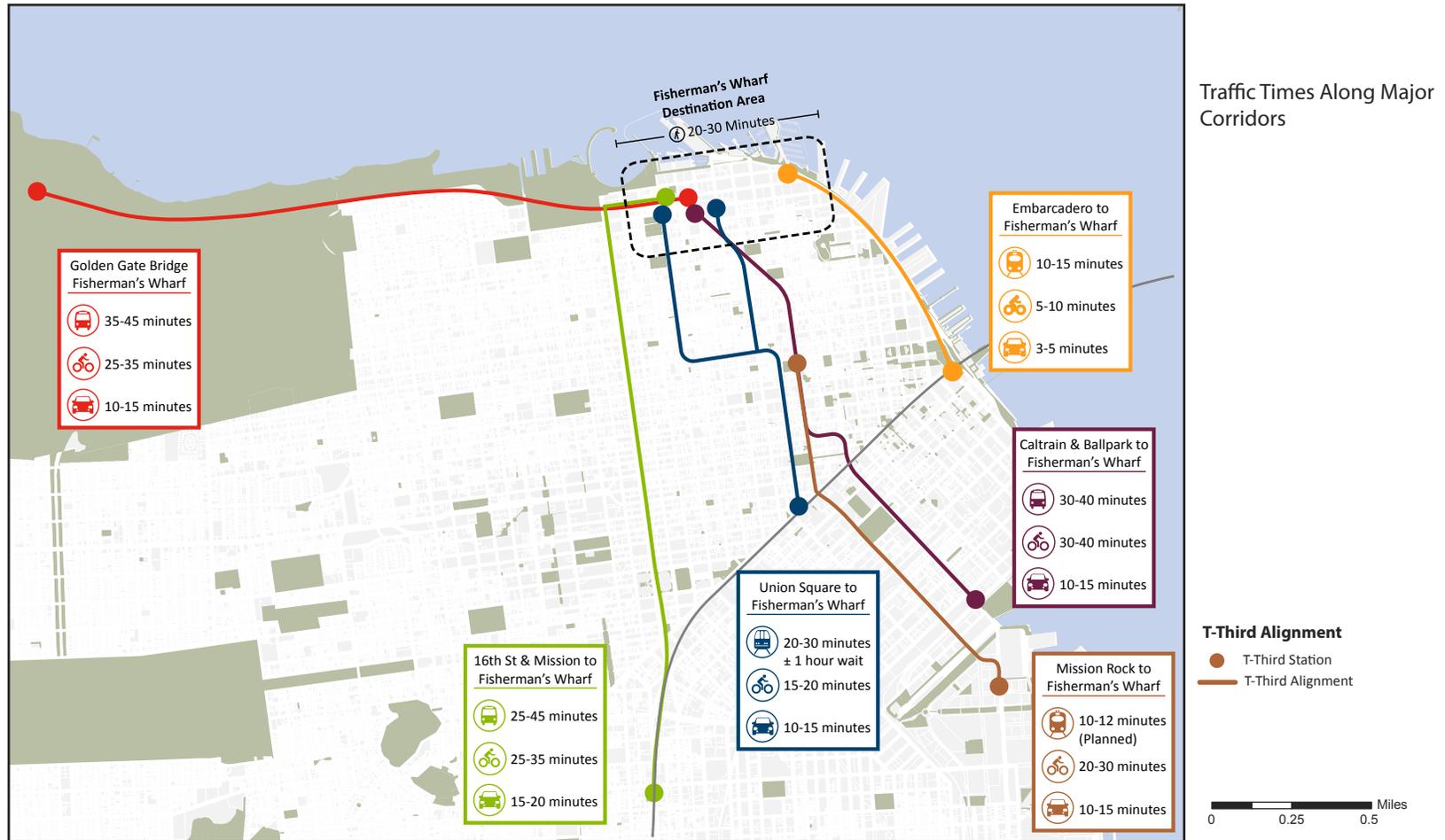
Additionally, there are large numbers of employees who travel to jobs — and large numbers of visitors who travel to tourist destinations — in the northeast neighborhoods. Fisherman’s Wharf hosts 9 to 12 million visitors per year while acting as a job center for thousands of workers, many of whom do not work conventional daytime business hours.

The population density and activity in this part of the city represent a level of demand that warrants very high-capacity and high-frequency public transit. As shown in Figure 7, on page 10, travel times from the northeast neighborhoods to other destinations in the city are long.

EXISTING TRANSIT SERVICE IS INADEQUATE

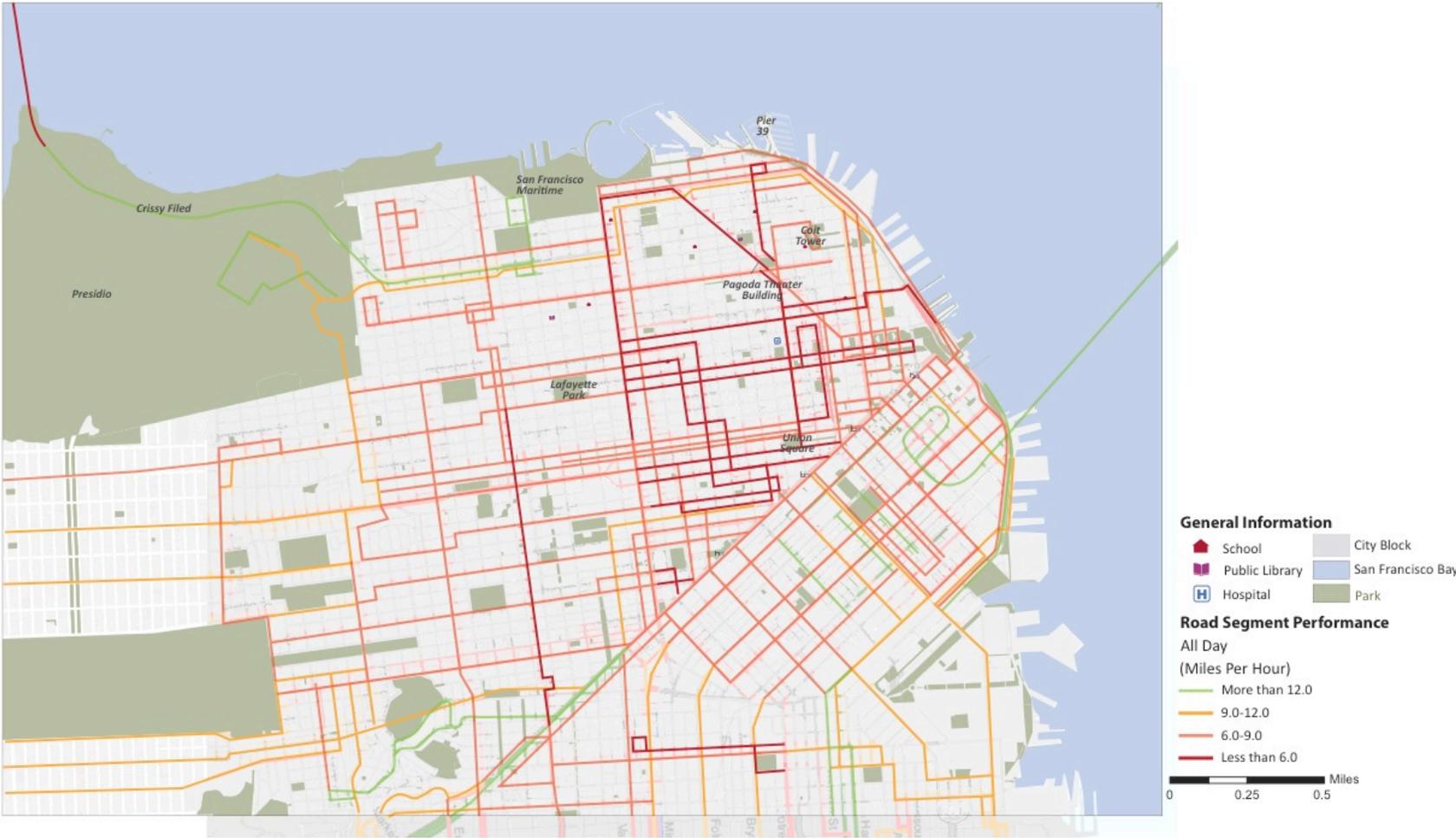
The existing transit serving these neighborhoods is congested, slow, unreliable and overcrowded. Figure 8, on page 11, shows the current speeds of transit vehicles on the Muni network through the northeast neighborhoods. Key service along the Stockton, Van Ness, Columbus, Clay and Embarcadero corridors is sometimes as slow as 3.5 miles per hour, equivalent to a 17-minute-mile walking pace — too slow to provide reliable transportation for commuters. Slow transit speeds and unreliable service cause some customers to shift to driving, which further increases congestion.

Figure 7: Approximate Travel Times to the Northeast Neighborhoods



Source: Google Maps Query, April 2013

Figure 8: Muni Transit Network Congestion



Source: SFMTA, 2013

The San Francisco Municipal Transportation Authority (SFMTA) is working on several efforts to improve transit service throughout the city, including the northeast neighborhoods:

- **The Transit Effectiveness Project (TEP)** identifies ways to speed transit service including establishing transit-only lanes, modifying lanes, and improving the distribution of transit stops through stop consolidation and other methods. Lines in the northeast neighborhoods affected by the TEP include the F, 30, 49 and 8x. The TEP also proposes service changes and capital improvements for the E Embarcadero streetcar line.
- **Transportation Demand Management** focuses on a broad range of measures that improve transportation, including modes other than transit vehicles, such as ridesharing, bicycling, walking, taxis and other on-demand vehicles. It also looks at providing advanced levels of information to people traveling through the neighborhoods and managing demand through pricing.
- **New or expanded citywide transit services** are on their way. Bus rapid transit service on Van Ness is expected to begin in 2018; the new Transbay Transit Center, the modernization of Caltrain and the arrival of high-speed rail will all improve regional connections; and Muni will be piloting a service called the E Embarcadero streetcar line, extending from the Caltrain Station to Fisherman's Wharf, as part of service provision for the America's Cup sailing races.

Each of these SFMTA efforts could help improve transit services to the northeast neighborhoods. However, none of them will result in a major increase in capacity, speed or connectivity for the residents, workers and tourists in the area.

WORKSHOP PROCESS AND PARTICIPATION

The community workshop, a half-day event held on a Saturday, was organized by SPUR, with the partnership of several community leaders and with technical assistance from SFMTA and the consulting firm Arup. The workshop had two primary purposes:

1. Assess the need for, and feasibility of, improved transit in the northeast neighborhoods.
2. Determine if there is a shared vision for transit north of Chinatown.

Representatives of established community groups and business groups such as Pier 39, Ghirardelli Square, the Blue and Gold Fleet, the Fisherman's Wharf Community Benefit District and North Beach Neighbors attended the workshop. Participants also included labor unions, representatives of SFMTA, the office of Mayor Ed Lee and the Port of San Francisco. All persons who asked to participate in the workshop were included. Transportation experts and SPUR Transportation Policy Board members also attended. A list of workshop attendees is provided in Appendix A.

Workshop participants first heard background information to inform their discussions, which was followed by small group discussion. The key questions posed to attendees during the small group discussion were:

1. Do we need improved transit service north of Chinatown?
2. If so, where should such service go?
3. Should the service be on surface streets or underground?
4. What (general) route and stations make sense?
5. What kind of transit makes sense?

Attendees divided into the groups and discussed those questions before re-convening and reporting back on their key findings. Finally, the full group discussed issues and thoughts that arose based on the small group reports.



Workshop attendees listen to an introductory presentation.

It is important to note that this part of San Francisco already has extraordinary density, and further densification of land use was not discussed at all at this community workshop. SPUR in particular is not promoting any zoning changes that allow for increased density in the Chinatown and North Beach neighborhoods. Transit improvements were conceived as “retrofitting” corridors that already have high density and great transit demand.

WORKSHOP FINDINGS

Participants raised many concerns with existing travel options and offered both short- and long-term actions that would improve the possibility and ease of travel by modes other than the car to get to or from the northeast neighborhoods. Key recommendations included:

1. Add a North Beach station to the T-Third light rail line.

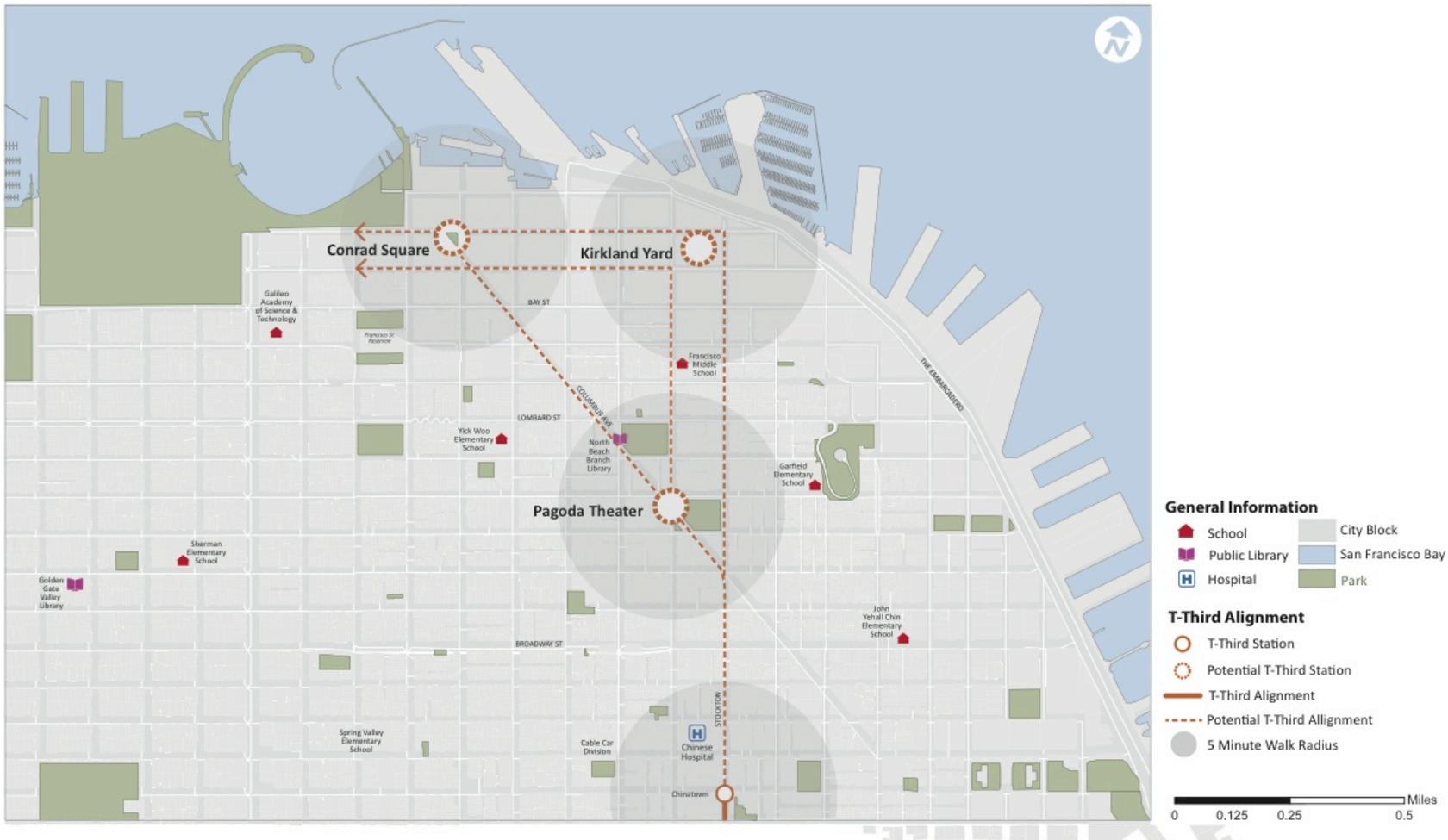
The desire for a North Beach station for the Central Subway was expressed by almost all workshop participants. The T-Third light rail service is currently planned to end at a Chinatown station, while the Central Subway *tunnel* is expected to extend past the Chinatown station at Clay and Stockton to the site of the now-empty Pagoda Theater near Washington Square, where the tunnel boring machines will be extracted. There was agreement that considerations for the

location and design of a North Beach station should provide easy connections to the many bus lines through that area, but it should not disturb Washington Square. However, there was not a consensus about the exact location of the station and how it should be accessed. It was also emphasized that the North Beach station options must be studied with urgency to allow consideration of the connections to the Central Subway tunneling activity currently underway.

2. Extend the T-Third light rail line to Fisherman's Wharf.

Community and business representatives at the workshop generally agreed that they would benefit from continuing the T-Third light rail line further than Chinatown and North Beach to provide a faster, more connected transportation choice for residents and tourists alike. The extension alignments proposed by every group at the workshop went down Columbus Avenue to Conrad Square, and down Powell Street to Kirkland Yard.

Figure 9: Potential T-Third Light Rail Alignments and Station Locations



Source: SPUR Northeast Neighborhoods Transit Planning Workshop

It was noted that Fort Mason is becoming more of a destination and that Conrad Square could end up being a central station location for the entire district. Kirkland Yard (currently a Muni facility) was noted as having potential as a new station. While some individuals had strong feelings about one or another of these alignments and station locations, the group agreed that both alignments should be studied from an engineering and design perspective.

As shown in Figure 10 on the following page, extension of the T-Third light rail would provide high capacity transit between many important origins and destinations.

Figure 10: Communities Connected by an Extended T-Third Line



Source: Gensler

There was discussion at the workshop about whether an extension of the T-Third should be a surface or subway line. Concerns with an above-ground extension were: making sure train length could be accommodated within the neighborhood block sizes; the need for a tunnel portal location (where the subway would surface from underground); and visual or noise impacts. Concerns with continuing the underground subway were the expense and time required to fund and complete a project of this size. Several people emphasized the value of putting transit lines underground in order to better use narrow streets and sidewalks for pedestrian activities and amenities.

ADDITIONAL DISCUSSION ITEMS

In addition to the two key findings above, workshop participants engaged in two other areas of significant discussion:

1. Near-term and low-cost improvements

Most participants were interested in figuring out short-term and low-cost fixes that would improve connectivity or wayfinding (design elements such as signage that help people navigate a system). It was agreed that these fixes could address many issues around tourist travel and local travel. Key improvements included:

- Better signage for transportation wayfinding, fare payment and station navigation, for both residents and visitors
- Adding more vehicles/increasing frequency on the F line route
- Reviving defunct routes like the old 10 Townsend
- Increased Muni service and speeds
- Establishing taxi stands
- Restore connectivity from North Beach to the Embarcadero by restoring all-day service on the 41 line

2. Looking at the entire transit network

Workshop attendees also focused on questions larger than those posed, including: How should long-term transit services be planned for? What is the long-term strategy for how the city shapes itself? Specific areas of focus were as follows:

A. Transit to western neighborhoods

There was a desire expressed for better transit access to the Marina, Cow Hollow and Presidio neighborhoods. However, some raised concerns about the engineering and political feasibility of extending the T-Third subway line through these neighborhoods. It was suggested that several possible east-west surface alignments for improved transit should be examined in more depth. It was also noted that bus rapid transit service is planned for the Van Ness corridor, so there will be some improved transit to the western neighborhoods soon.

Several people suggested that the T-third light rail could be extended east down the Embarcadero from Fisherman's Wharf.

B. Advancing the E line

Many participants felt it was important to implement the vision of the E line, which would provide historic streetcar service from Fisherman's Wharf to Fort Mason, in order to improve access to Fisherman's Wharf. This service will be piloted during the America's Cup events. The E line vision, put forth by the Market Street Railway, would also extend service south to the Caltrain station at 4th and King streets, and points beyond. Participants also suggested a convenient transfer opportunity from the Central Subway to the E line.

C. Creating transit hubs

Many suggested creating transit "hubs" that would provide connectivity between different travel modes and routes — for example, between bus lines, streetcars and cable cars — in one place. These hubs would be particularly helpful to tourists and could be a key design focus when planning new transit services to this area.

Several participants spoke to the urgency of getting ideas for a T-Third extension analyzed and turned into planned and environmentally cleared projects that would be eligible for funding. Funding sources to pursue include the San Francisco Transportation Plan, the Regional Transportation Plan and the Federal Transit Administration's New Starts Program. In addition, attendees discussed public-private funding partnerships, perhaps involving the growing business communities in the Presidio or along the T-Third alignment.

RECOMMENDATIONS

The discussion at the Northeast Neighborhoods Transit Planning Workshop demonstrated a strong desire among community and business representatives to improve transit services so that: residents have more non-auto travel options; residents without cars can get to school, work and social activities; and tourists can better enjoy North Beach and Fisherman's Wharf without the use of a car.

In order to address the needs in this important part of the city, we recommend that the SFMTA proceed with the following:

1. Study the establishment of a T-Third light rail station in North Beach, but not in Washington Square Park. The planned extraction of the tunnel boring machines at the Pagoda Theater site (described in Appendix B) offers a unique opportunity to build a station there with little neighborhood impact, utilizing excavation and tunneling work already planned. The SFMTA should act quickly to extend the rights it has already acquired for that purpose.
2. Study alternative alignments for extending the T-Third light rail through North Beach to Fisherman's Wharf, and add this extension to SFMTA capital plans. Using the tunnel boring machines now underground, instead of planning for new tunneling in the future, could save

hundreds of millions of dollars. The SFMTA should explore whether the tunneling component of this extension should be expedited.

3. Identify and implement short-term improvements to transit service — as well as complementary transportation modes such as walking, biking and taxis — in the North Beach and Fisherman’s Wharf neighborhoods.
4. Study additional ways that the northeast neighborhoods can be connected via transit to growing destinations such as the Eastern Neighborhoods and SoMa, as well as the Marina and Presidio neighborhoods.
5. Engage with stakeholders in the potential areas for transit extension that are studied as a result of these recommendations. Incorporate their needs and concerns into any future service design.

We expect the findings from the workshop to facilitate action by SFMTA as well as community and business leaders who wish to create a long-term vision for a connected and livable San Francisco.



The full group contemplates the top recommendations from each small group.

APPENDIX A: LIST OF WORKSHOP ATTENDEES

Bruce Agid	Market Street Railway
Peter Albert	San Francisco Municipal Transportation Agency
Ratna Amin	SPUR
Jon Ballesteros	San Francisco Travel Association
Tim Bates	Arup
Troy Campbell	Fisherman's Wharf Community Benefit District
Dahlia Chazan	Arup
Claudine Cheng	Renew SF
Jennifer Cheung	HNTB
Phil Chin	Chinatown TRIP
Tan Chow	Chinatown Community Development Center
Julienne Christensen	SPUR Task Force
Carolyn Deniz	Ghirardelli Square
Kathleen Dooley	North Beach Business Association
Diane Filippi	SPUR
Rodney Fong	Fong Real Estate Co., LLC
John Funghi	San Francisco Municipal Transportation Agency
Megan Gee	Arup
Karin Giefe	Arup
Stephanie Greenburg	SoTel Neighbors
Rich Hillis	Fort Mason Center
Dan Hodapp	Port of San Francisco
Aidan Hughes	Arup
Sarah Karlinsky	SPUR
Lewis Knight	Gensler

John Kriken	SOM
Ken Maley	Friends of Washington Square
Robert Mittelstadt	RenewSF
Patrick Murphy	Blue & Gold Fleet
Timothy N. Papandreou	San Francisco Municipal Transportation Agency
Robert Pierce	Young Professionals in Transportation
Scott Preston	AECOM
Alice Rogers	Mission Bay Neighborhood Association
Ted Rosenbaum	Young Professionals in Transportation
Taylor Safford	Blue & Gold Fleet
Mike Sonn	Telegraph Hill Dwellers
Steve Taber	SPUR Central Subway Task Force, Russian Hill Neighbors
Judson True	Office of Supervisor David Chiu
Patrick Valentino	SPUR Central Subway Task Force
David Vasquez	Public Vision Research, LLC
Wells Whitney	RenewSF
Steve Woo	Chinatown Community Development Center
Cindy Wu	Chinatown Community Development Center

APPENDIX B: SPUR WORKSHOP BACKGROUND

In 2006, SPUR convened a committee of SPUR members as the Central Subway Task Force. The task force analyzed the proposed T-Third Central Subway project (Phase II) and submitted recommendations. Based on these recommendations, in 2007 SPUR supported the SFMTA Central Subway project with the understanding that SFMTA would study an extension of the T-Third light rail line to the northeast neighborhoods — specifically, the development of stations at North Beach and a continuation of the service to Fisherman’s Wharf².

SPUR found that the existing Central Subway project would provide a direct transit link from the Visitacion Valley, Bayview, Bayshore and Mission Bay areas to SoMa, downtown and Chinatown. Benefits of the project identified by SPUR in 2007 included:

- Adding capacity, speed and reliability to a corridor that sorely needs it.
- Supporting job growth in the 4th Street corridor south of market.
- Making the Muni Metro system more of a network by creating a north-south connection to the rest of the system.
- Providing connectivity to transit networks that serve the rest of the region: Caltrain, BART, the rest of the Muni Metro system and, in the future, high-speed rail.
- Gaining ability to leverage a high level of federal funding through the New Starts program.

At the time of this project, SPUR also argued that an extension of the light rail line could improve the Central Subway project for several reasons:

- An extension would maximize operational efficiency of the T-Third line. Muni operations could be made more efficient by taking advantage of transfer opportunities between other transit lines and the Central Subway.
- An extension would provide connectivity for residents, workers and tourists to growing activity and job centers such as SoMa.
- A Washington Square T-Third station would not only serve a very dense residential area, it would also be a convenient location for interface between bus service and the subway. In addition, it would make it possible to reduce surface bus service on Stockton Street, thereby saving operating expense every year.

SFMTA responded to certain of SPUR’s recommendations, most significantly by moving the Union Square Station closer to the Powell Street Station and facilitating convenient connection between the two stations. However, SFMTA did not add an extension of the subway line beyond Chinatown station to Phase II of the T-Third project, except for the extension of the tunnel to Washington Square, which served to facilitate removal of the tunnel boring machines. Subsequently, SPUR has consistently advocated studying the extension and, in 2012, initiated discussions with the MTA and a variety of community stakeholders and, in due course, initiated the concept of convening a community workshop. Figure 11 shows the northern extent of the existing T-Third project.

² http://www.spur.org/publications/library/report/newconnections_062007

Figure 11: Planned T-Third Alignment



Source: SFMTA

APPENDIX C: SUMMARY OF SMALL GROUP DISCUSSIONS

Following the background presentation, workshop participants divided into small groups, each organized to ensure a representative cross-section of participants, to discuss the issues outlined in the “Workshop Process and Participation” section of this report. Each group had the maps included in this report for reference, as well as maps of passenger on-boarding and off-boarding locations for local transit lines. Finally, the groups were asked to appoint a spokesperson and summarize their discussion, describing where they agreed or disagreed and showing the route or routes they had sketched.



Group D at work during the small group discussion.

Group A

The group discussed the importance of overall improvements to travel times, including both north-south and east-west travel. Some improvements to existing service — such as additional (not necessarily historic) street cars on the F line route, clearer signage for tourists, reviving a defunct route like the old 10 Townsend and adding taxi stands — would all help in advance of any major service improvement planned from this process. The group also discussed the importance of transit for employees, tourists, residents and students, who all have somewhat different needs. They would expect tourists to disembark and visit more neighborhoods if they could see them from an above-ground train, but below-ground service would be faster and better service for other users. This is a particular concern for North Beach, which is between Fisherman’s Wharf and Union Square and wants to attract people to stop along the way. If an underground route is preferred, it should have welcoming stations that show visitors what neighborhood they are in.



Map produced by Group A.

The group agreed on:

1. Short-term need for transit/taxi/signage/way-finding improvements.
2. The T Line should go all the way to Fisherman's Wharf.
3. North/south sections need to have strong east-west connections, including to the Presidio and neighborhoods off of the main line.

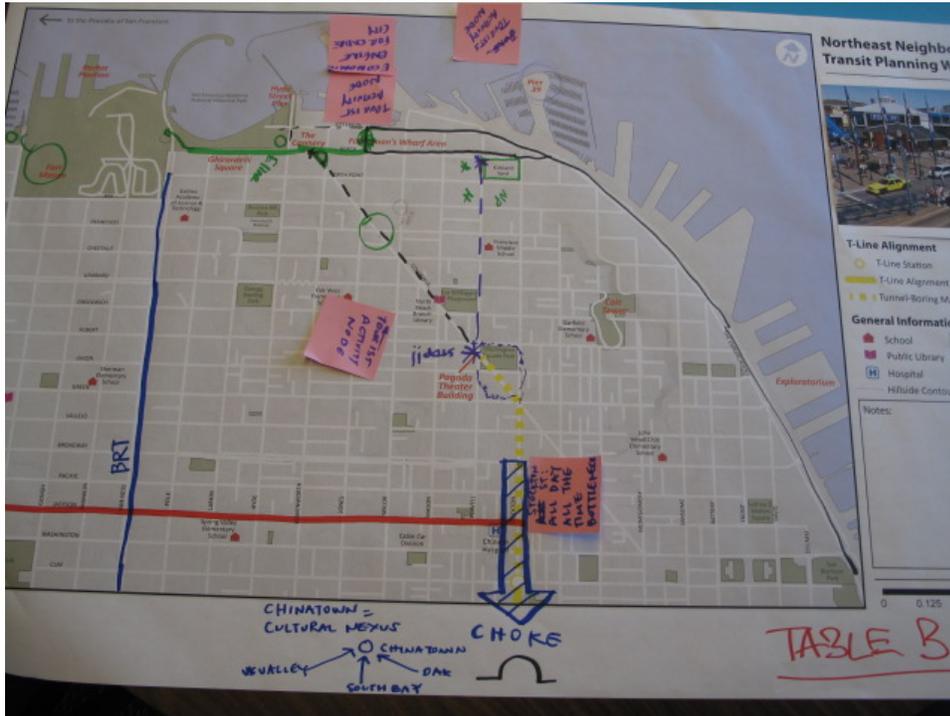
The group had differences on:

1. The location of a Fisherman's Wharf stop: Conrad square and/or the Kirkland yard
2. Above-ground versus below-ground service, but leaned toward below ground
3. North-south routing: Columbus versus Powell

Group B

The group discussed the need for clear wayfinding to transit, with signage indicating destinations and routes, particularly for tourists accessing key destinations like Fisherman's Wharf. The Stockton corridor needs additional service to plan ahead for an aging population that will be transit-dependent, to create a more redundant system, and to increase speed. In evaluating the potential for an above-ground versus below-ground line, the group was concerned about the amount of space that would be required for a portal to bring a train from below-ground to the surface. This led to a preference for an all-subway system.

There was a fairly detailed discussion of stop locations, including consideration of North Beach, Pier 39, Fisherman’s Wharf, and Columbus/Jefferson, as well as extensions to the west in the Marina.



Map produced by Group B.

The group agreed on:

1. A T-Third North Beach stop in the Washington Square Park vicinity.
2. Preference for underground light rail service.
3. Consideration of one or more light rail spurs to Kirkland Yard and Columbus/Jefferson.

The group had concerns about:

1. Construction impacts associated with a T-Third extension, particularly at Columbus, which lent more preference to Kirkland Yard because construction impacts may be more minimal.
2. Establishing appropriate phases for a T-line extension.

Group C

Group participants focused on connectivity among neighborhoods, and improving the speed of transit service. There was also discussion of the need for additional capacity to support existing demand from residents, employees, and tourists. The group discussed the need for a vision that looks to ultimate buildout to ensure that a phased approach does not result in only partial completion of the project. There was also discussion of making sure there are not too many stops because they can make the project problematic from both political and economic standpoints.



Map produced by Group C.

The group agreed on:

1. A T-Third North Beach Station in the Washington Square Park vicinity.
2. Continued underground T-Third line.
3. Phased extension to the waterfront and to the west.
4. The purpose of an extension of the T line should be to enhance connectivity.

The group had concerns about:

1. T-Third station locations and routing, particularly choosing between Powell and Columbus routes.
2. Selection of the ultimate end-point of the line.

Group D

The group started out with a consensus that everyone wanted a T-Third station in the North Beach and Fisherman's Wharf areas. From that point, the discussion focused on the appropriate routing, which included discussion of the many competing demands for the Columbus Street right-of-way. Pedestrians could use more space, there is demand for parking (in part because of lack of knowledge of parking garages) and there is a need for room for transit vehicles. A dedicated right-of-way for transit would improve service reliability and would benefit tourists who like to travel above ground, where they can see what they are passing. The group also discussed their preference for routing that reduces the number of transfers and serves projected employment (including in the Presidio).



The group agreed on:

1. T-Third extension should go to Fisherman's Wharf at a minimum, with aspirations to extend to Presidio with a Fisherman's Wharf loop or turnback.
2. Surface with dedicated Right-of-Way and sub-surface should both be considered, leaving both options open.
3. Light rail is ideal mode, but we should retain flexibility.
- 4.

The group had differences on:

1. The specific T-Third alignment to Fisherman's Wharf.
2. Whether there should be dedicated Right-of-Way.
3. A single track versus a double track for surface alignments, considering the reduced neighborhood impact of a single track.