Dogpatch-Central Waterfront Transit Demand Study

Planning Study Key Takeaways

EXECUTIVE SUMMARY

The purpose of this study is to explore transit demand connectivity between Mission Bay, Dogpatch, and Potrero Hill and to inform final recommendations for replacement service of the existing 22-Fillmore bus service to the Dogpatch. It is informed by SFMTA's review of online community survey responses, in-person public outreach events (including Sunday Streets, pop-up events at neighborhood coffee shops, commercial corridors, presentations at merchant organizations, neighborhood groups, and major transit hubs), existing ridership and network data, the San Francisco Planning Department's 2017 Second Quarter Planning Development Pipeline, and demographic data from the American Community Survey. The data was analyzed to establish existing baseline transit conditions, estimate the potential future transit demand, gather public opinion, and to produce takeaways that assist the SFMTA Transit Division in making their final recommendations.

KEY TAKEAWAYS

CURRENT TRENDS

- Most survey respondents with destinations within the study area already use transit as a part of their trip.
- Majority of Mission Bay residents/employees live/work in the same neighborhood-with high number of Dogpatch and Potrero Hill residents/employees as well.
- Top desired destinations for residents of Mission Bay, Dogpatch, and Potrero Hill do not include each other's neighborhoods – people want new connections to Downtown or nearby locations within neighborhood boundaries.
- Close to two-thirds of respondents main trip purpose was work; school and recreational trips were also significant.
- Many travelers link trips using multiple modes to reach their destination. Connection types include walk/biking to transit and using TNCs (Uber or Lyft) to access transit.
- Potrero Hill respondents were more likely to drive when compared to other study area respondents.
- Most respondents would walk between 2-4 blocks for transit (10 minutes or less). Only 20% of respondents would walk more than 5 blocks for transit.
- 16th Street BART is a key transit connection. The KT line and 10-Townsend are also popular lines respondents connect to during their trip.
- Top three incentives for taking transit included a more direct route, more frequent service, and greater transit reliability.

FUTURE DEMAND

- New development may increase transit demand on east-west running streets such as 20th, 23rd, and 22nd Streets. Development will also increase demand along north/south streets such as Third Street, Illinois Street, and Tennessee Street.
- Desired trip origins and destinations were primarily concentrated within the study area. Transit stations such as BART and Caltrain were desirable destinations, as were neighborhood amenities such as grocery stores and recreation centers. 17th, 18th, and 22nd Street between Harrison and Illinois had the highest concentration of desired destinations as well as significant amount of desired origins.
- A number of survey respondents identified 22nd Street, which also exhibits higher transit demand in the future as a result of new development, as a desired destination or origin. This street is currently a commercial corridor and home to a number of small businesses and a Caltrain station.
- Existing planned east-west transit improvements lack sufficient investment in the Dogpatch. East-west streets, such as 20th Street, may be more desirable in the future with new development planned and are currently underserved.

- Third Street is anticipated to have increased demand – T-Third improvements will be essential to meeting additional demand.

STUDY METHODOLOGY

INITIAL DATA ASSESSMENT

MISSION BAY, DOGPATCH, POTRERO HILL - NEIGHBORHOOD TRANSIT DEMAND STUDY

In February 2018 staff collaborated with Civic Edge Consulting to conduct initial outreach in Mission Bay, Dogpatch, and Potrero Hill neighborhoods. Staff developed a multi-pronged approach to survey residents of the three neighborhoods to determine whether transit demand existed between the three neighborhoods. Through its collaboration with Civic Edge, staff was able to raise awareness and encourage participation in a survey. An incentive for the survey included the opportunity to enter a drawing to receive a $50 preloaded Clipper Card.

Outreach to promote the survey included a Facebook ad geotargeted to the Zip Codes 94107 and 94158, a pre-drafted email with the survey link for SFMTA staff to send to local organizations encouraging their networks to take and share the survey, and outreach ambassador intercept at key the intersections. Figure 1 provides an overview of who was targeted through Facebook advertisements and the overall reach of the information. Reach is the number of unique people who saw our content while impressions means that content was specifically delivered to someone's news feed. Overall, 426 people provided information to us through this method.

Zip Code	Results	Reach	Impressions
94107	643 link clicks	16108	32624
94518	311 link clicks	7282	25977

Figure 1 Facebook Ad Information

Overall, 426 people who live or work in one of the three neighborhoods provided information to us through this method. A closer analysis was conducted to examine current and desired travel behaviors for residents/employees of the Dogpatch, Mission Bay, and Potrero Hill. Currently, the majority of Mission Bay residents have their most common destination within their own neighborhood (Figure 2) while Dogpatch and Potrero Hill also have large chunks of their existing population whose most common destination is within their own neighborhood.

In which neighborhood do you live or work?	In which neighborhood is your most common destination?			
	Dogpatch	**Mission Bay**	**Potrero Hill**	**Other**
Dogpatch	41%	15%	8%	36%
Mission Bay	2%	51%	9%	38%
Potrero Hill	1%	3%	32%	64%

Figure 2 Travel Outside Own Neighborhood

In an effort to more clearly determine whether or not there is strong transit demand between the three neighborhoods, respondents were specifically asked to name desired future travel destinations (to measure potential for unmet needs). None of the three neighborhoods listed either of the other two neighborhoods as

a top 3 destination (Figure 3). While there may be some demand (the neighborhoods are mentioned by some) they are not the most desired.

Top 3 Desired Destinations - Mission Bay	Top 3 Desired Destinations - Dogpatch	Top 3 Desired Destinations - Potrero Hill
1. Downtown	1. Downtown	1. Mission Bay
2. Bayview	2. General Hospital	2. Downtown
3. Presidio	3. Potrero Hill	3. 4th & King

Based on the initial outreach effort, staff found there to be low transit demand between the three neighborhoods. Following this initial outreach effort, staff shifted its focus on the greater Dogpatch area to inform Transit on its new 22-Fillmore replacement route – now referred to as the 55-Dogpatch. That analysis (summarized in **Existing and Future Conditions** section of this memo) also incorporated similar questions within a larger study area and found similar results-i.e. residents want better service from existing lines (more frequent service, better reliability, more direct route) and are generally seeking connections to destinations outside the three neighborhoods (16th Street BART, Caltrain, or Downtown).

INITIAL DATA ASSESSMENT-22 FILLMORE REPLACEMENT
An initial data-driven assessment of existing mobility conditions was conducted by SFMTA Staff in Spring of 2018 to inform staff and the public of future ridership potential in the Dogpatch. The assessment used existing ridership and network data, the San Francisco Planning Department's 2017 Second Quarter Planning Development Pipeline, and demographic data from the American Community Survey data to assess street network potential for transit ridership. The output was a GIS map that highlighted streets with high transit ridership potential and those with lower transit ridership potential (Figure 1). The data assessment focused on the Dogpatch neighborhood because its goal is to inform SFMTA on potential replacement service and because of the high future demand expected with new development

Dogpatch-Central Waterfront Transit Demand Study
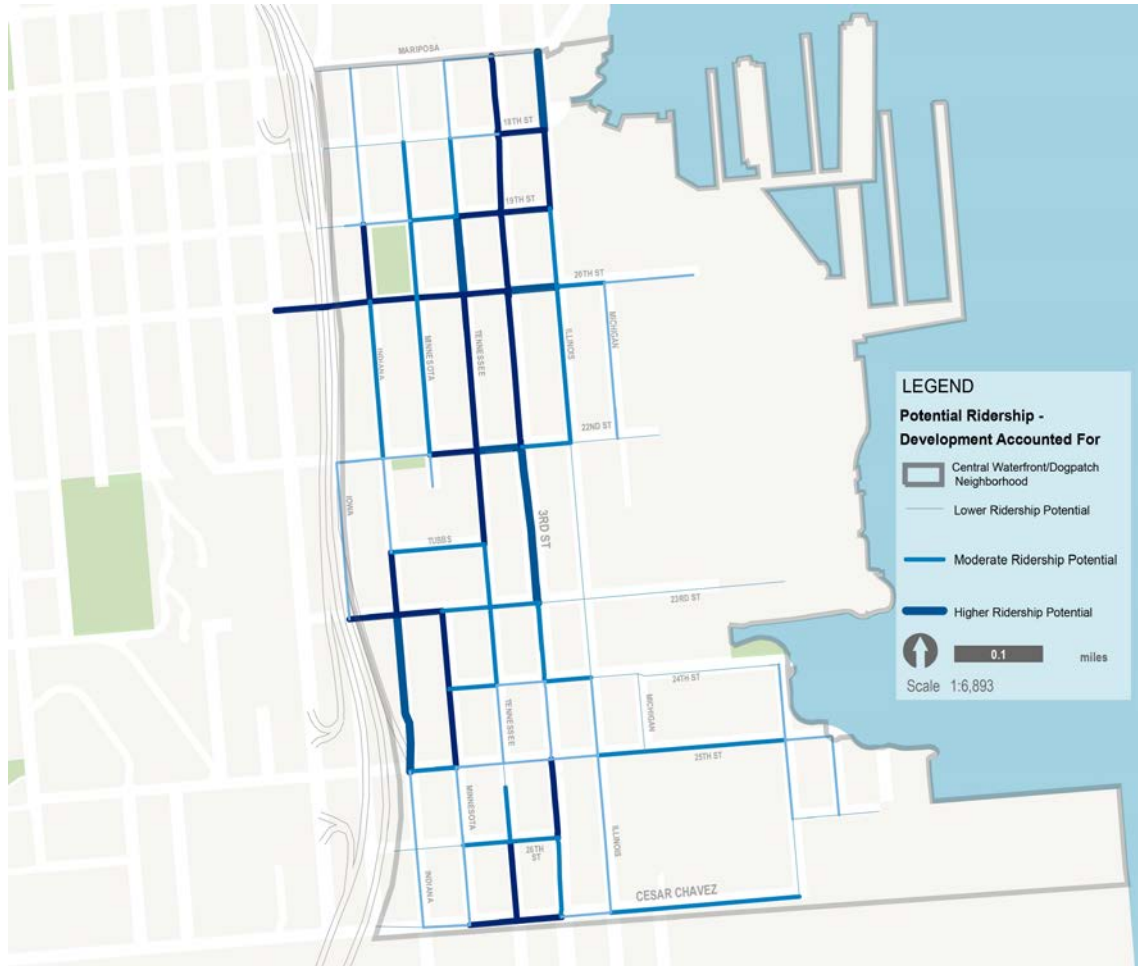
Planning Study Key Takeaways

Figure 3 Ridership potential w/pipeline development projects

After running the internal data-driven analysis of the neighborhood, staff took their initial findings, along with initial 22-Fillmore realignment alternatives, and began getting feedback on our initial assessment findings. We did so through a variety of community events.

OUTREACH SUMMARY

Outreach Activity	Date
Potrero Boosters Meeting Presentation and Survey	2/27/2018
Dogpatch-Potrero Hill Open House and Survey	3/6/2018
Dogpatch Neighborhood Association Meeting Presentation and Survey	4/11/2018
Sunday Streets Tabling and Survey	4/15/2018

Dogpatch-Central Waterfront Transit Demand Study

Planning Study Key Takeaways

Intercept Surveys at various locations and times of day in Dogpatch and Potrero Hill	4/17/2018
Online Survey	4/13/2018 - 5/3/2018
New Resident Survey (targeted to new multi-unit buildings in Dogpatch south of 16th)	5/3/2018 - 5/22/2018

SURVEY RESPONSES – COMBINED FACEBOOK, ONLINE, AND IN-PERSON
<u>Residency</u>
- A total of 790 survey responses were collected.
- A majority of Mission Bay respondents have lived there for less than 4 years.
- A majority of Dogpatch respondents have lived there for less than 4 years.
- A majority of Potrero Hill residents have lived there for longer than 4 years.

<u>Demographics</u>
- 426 of 790 respondents answered demographic information:
  - Mission Bay Demographics
    - 48% of respondents did not own a vehicle
    - 32% of respondents identified as White, 29% Asian, 21% Hispanic, 3% Black, 23% Other
    - 60% of respondents were between the age of 19-40
  - Dogpatch Demographics:
    - 54% of respondents did not own a vehicle
    - 64% of respondents identified as White, 18% Asian, 5% Black, 5% Latino, 8% Other
    - 64% of respondents were between the age of 19-40
  - Potrero Hill Demographics
    - 38% of respondents did not own a vehicle
    - 8% of respondents identified as White, 25% Asian, 16% Hispanic, 7% Black, 14% Other
    - About 44% of respondents were between the age of 19-40 and 45% were between the age of 41-64

After presenting our initial data assessment to the public through the various forums described above and collecting hundreds of survey responses, we took all the information and sorted our findings into two categories: existing and future conditions.

EXISTING AND FUTURE CONDITIONS
Existing conditions and future demands are summarized featuring a series of high-level questions meant to focus attention on existing needs and future needs/desires. The most prominent observations for each question were selected as key takeaways
- How does the existing network service streets with high demand currently?
- What are key transit connections for survey respondents?
- Where are people traveling and how they are getting there?
- What would encourage people to use transit in lieu of another mode?
- What areas will have higher demand in the future?
- How do planned transportation improvements meet future demand? What gaps still exist?

Dogpatch-Central Waterfront Transit Demand Study

Planning Study Key Takeaways

EXISTING CONDITIONS

How does the existing network service streets with high demand currently?

Staff examined current service (existing routes, stops and frequency), ridership data, and survey responses to establish a service baseline. This is contrasted with the street network evaluation which incorporates American Community Service data and existing land use to estimate current demand for transit. We observed:

- **Top used transit stops identified by survey respondents aligned with stops identified as high ridership locations**
- **20th and 3rd was the most popular transit stop for survey respondents and is also one of the highest ridership stops for the area**
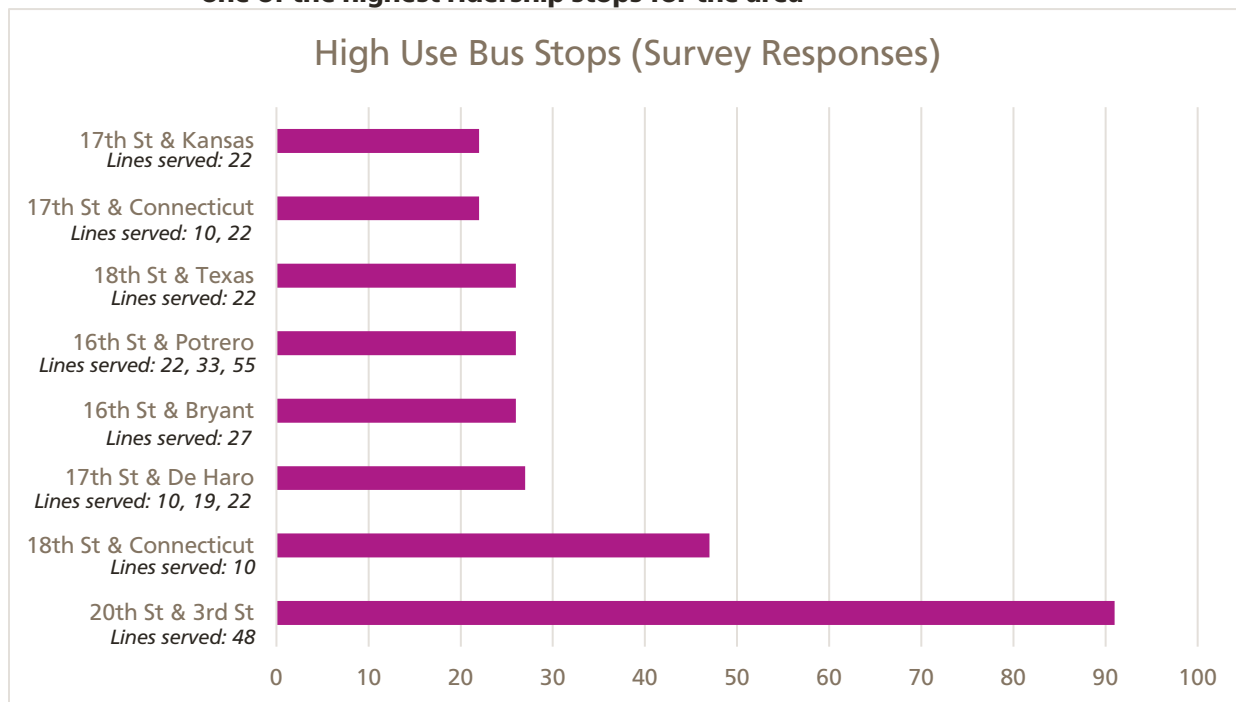
High Use Bus Stops (Survey Responses)

Stop	Lines served
17th St & Kansas	Lines served: 22
17th St & Connecticut	Lines served: 10, 22
18th St & Texas	Lines served: 22
16th St & Potrero	Lines served: 22, 33, 55
16th St & Bryant	Lines served: 27
17th St & De Haro	Lines served: 10, 19, 22
18th St & Connecticut	Lines served: 10
20th St & 3rd St	Lines served: 48

Figure 4 Bus stops used by respondents

- **The current 22 Fillmore route serves areas with potential for moderate-higher transit demand.**
- **48 Quintara also provides service, but there is a lack of service where there might be demand to the southern end of Dogpatch (Thick blue lines = higher demand potential, Thin blue lines = lower demand potential)**

Dogpatch-Central Waterfront Transit Demand Study

Planning Study Key Takeaways

Figure 5 Potential ridership demand w/o factoring new developments

Dogpatch-Central Waterfront Transit Demand Study

Planning Study Key Takeaways

- More frequent service on T, 22, 48 lines during peak hours when the majority of respondents are making their most frequent trip would greatly improve existing service.
- Traditional commute hours (7-10:00 AM and 4-7:00 PM) are when most travelers make their trips. There are also a modest number of respondents who travel off-peak.
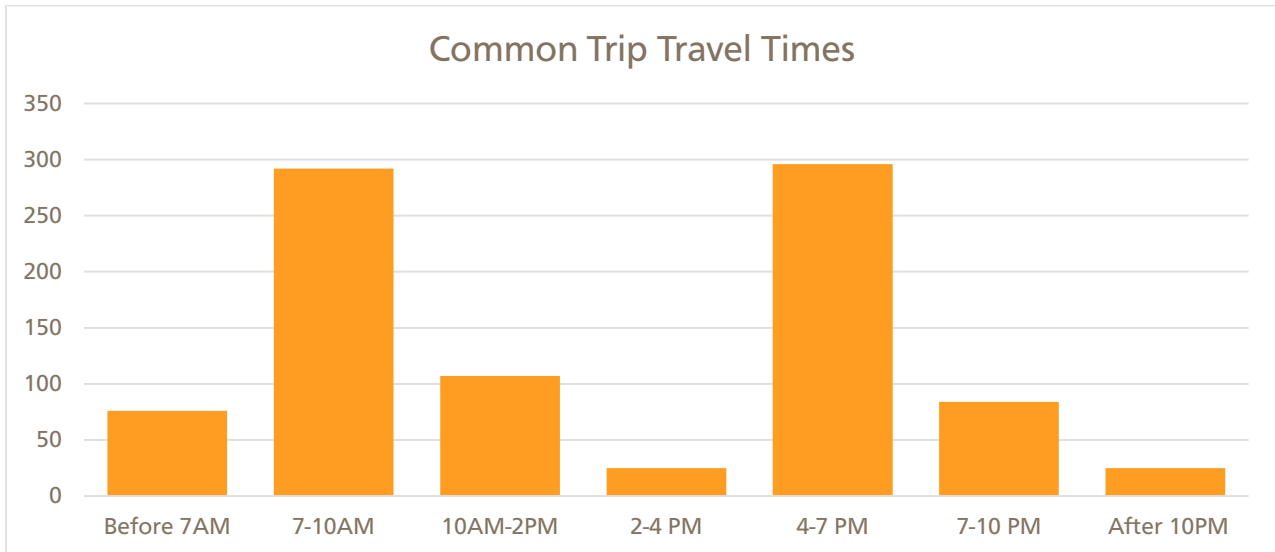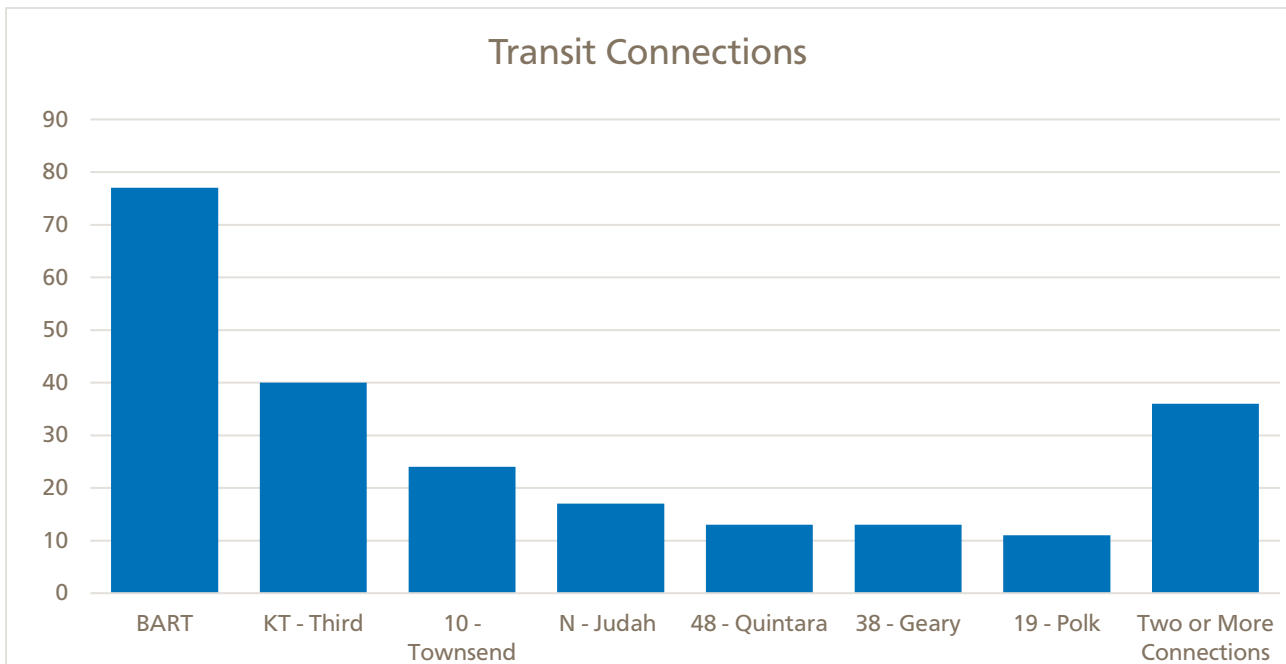

Figure 6 Most common travel times according to respondents

Dogpatch-Central Waterfront Transit Demand Study

Planning Study Key Takeaways

What are key transit connections for survey respondents?
We examined types of connections people are making to transit and various transit lines people are transferring between to determine key connections. We observed:

- **Many travelers link trips using multiple modes to reach their destination. Some types of connections include walk/biking to transit and using TNCs (Uber or Lyft) to access transit.**
- **Common transit connections for travelers taking the 10-Townsend, 22-Fillmore, and 48-Quintara included BART, especially the 16th and Mission Station, and Muni LRT lines, such as the T-Third.**

Transit Connections

Figure 7 Most common transit connections according to respondents

Dogpatch-Central Waterfront Transit Demand Study

Planning Study Key Takeaways

Where are people traveling and how they are getting there?

We utilized survey participant's responses to questions regarding their most common trip to determine primary trips modes, purposes, origins, and destinations. We observed:

- o **About 2/3 of respondents were commuting to work; school and recreational trips were the two other largest trip purposes.**
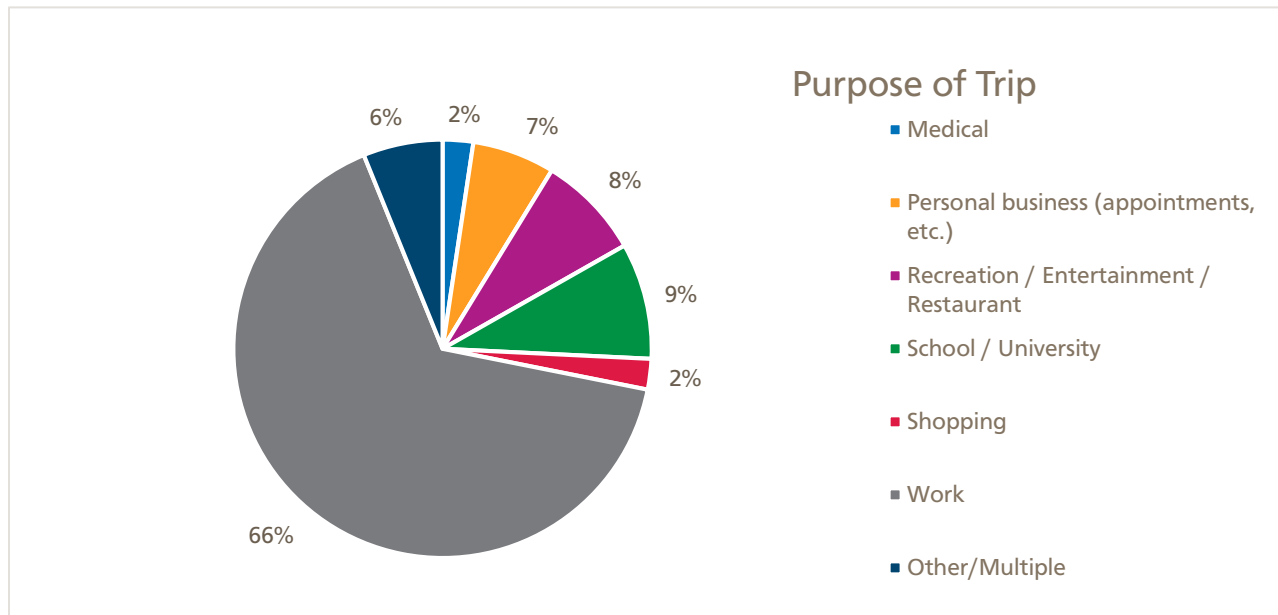

Figure 8 Common trip purpose according to respondents

- o **Almost 50% of respondents use public transit as a primary mode of travel. As previously mentioned many respondents are connecting to transit in a variety of different ways (i.e. drive to transit, bike to transit, Uber/Lyft to transit, etc.)**
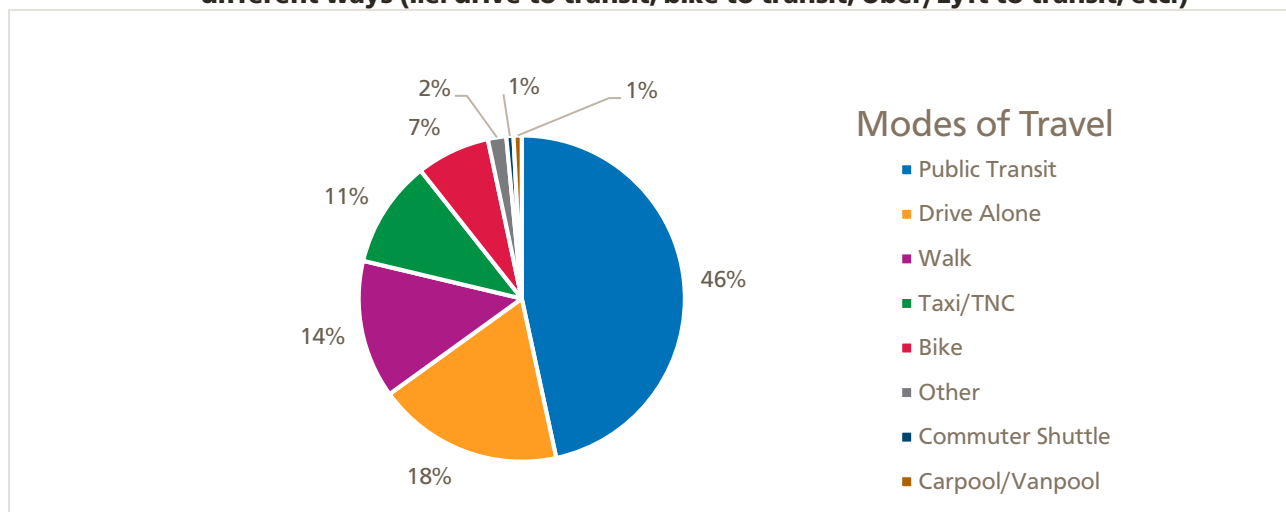

Figure 9 Primary mode of travel according to respondents

Dogpatch-Central Waterfront Transit Demand Study

Planning Study Key Takeaways

- o **The top common trip destination (based on all surveys combined) was the Dogpatch, followed by Mission Bay and Potrero Hill. Other primary destinations include South of Market, Downtown, Financial District, and Mission.**
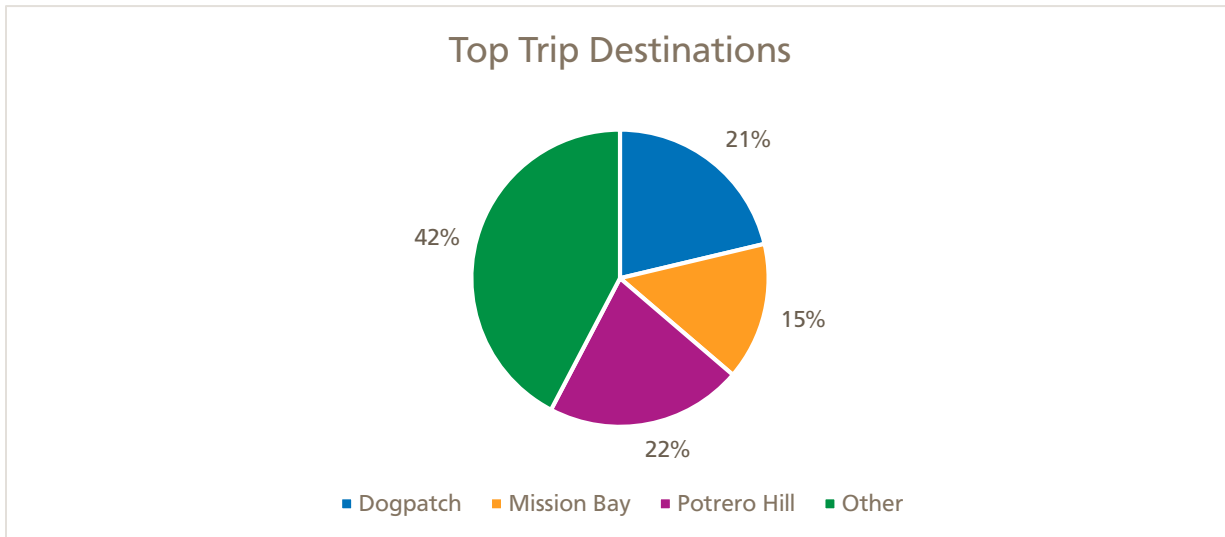
Top Trip Destinations

21%

15%

22%

42%

- ■ Dogpatch ■ Mission Bay ■ Potrero Hill ■ Other

Figure 10 Top destinations

- o **Most survey respondents with destinations within the study area were likely to get there using transit as a part of their trip. People were more likely to drive, use TNC's, or walk to reach Potrero Hill compared to other study area neighborhoods.**
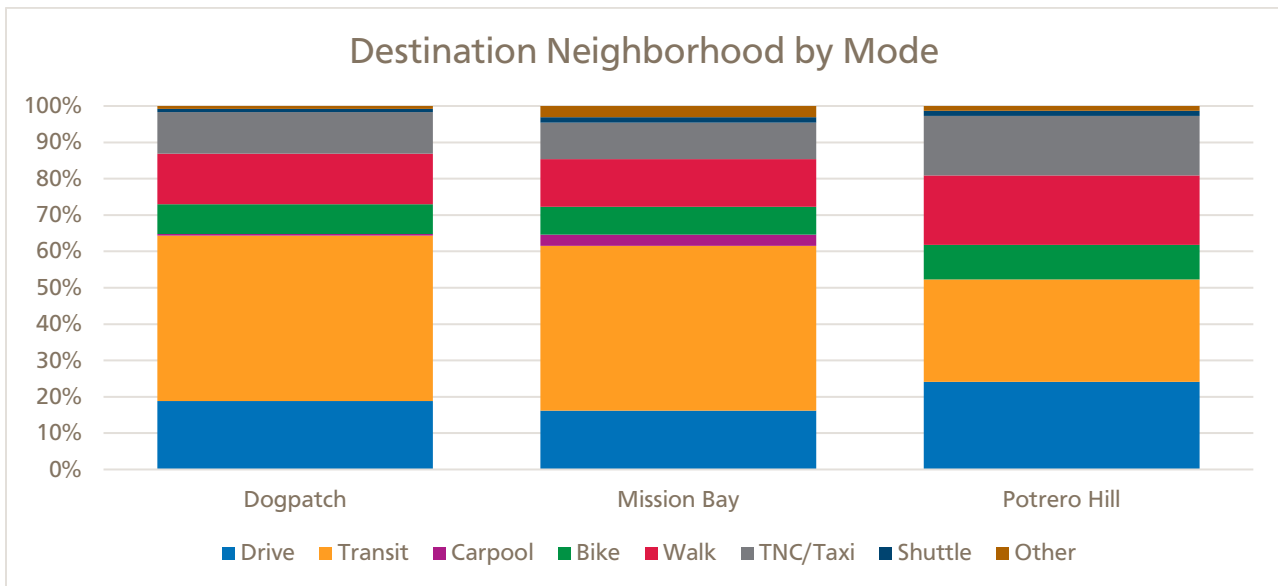
Destination Neighborhood by Mode

Dogpatch   Mission Bay   Potrero Hill

- ■ Drive ■ Transit ■ Carpool ■ Bike ■ Walk ■ TNC/Taxi ■ Shuttle ■ Other

Figure 11 Travel mode of choice for inner-neighborhood travel

Dogpatch-Central Waterfront Transit Demand Study

Planning Study Key Takeaways

What would encourage people to use transit in lieu of another mode?

We utilized survey responses to examine what factors would encourage participants to use transit in lieu of another mood and how far would someone be willing to walk to transit. We also examined the origins and destinations of trips respondents currently feel they are unable to make via transit. We observed:

o **Most respondents would walk between 2-4 blocks for transit (10 minutes or less). Only about 20% of respondents would walk more than 5 blocks**
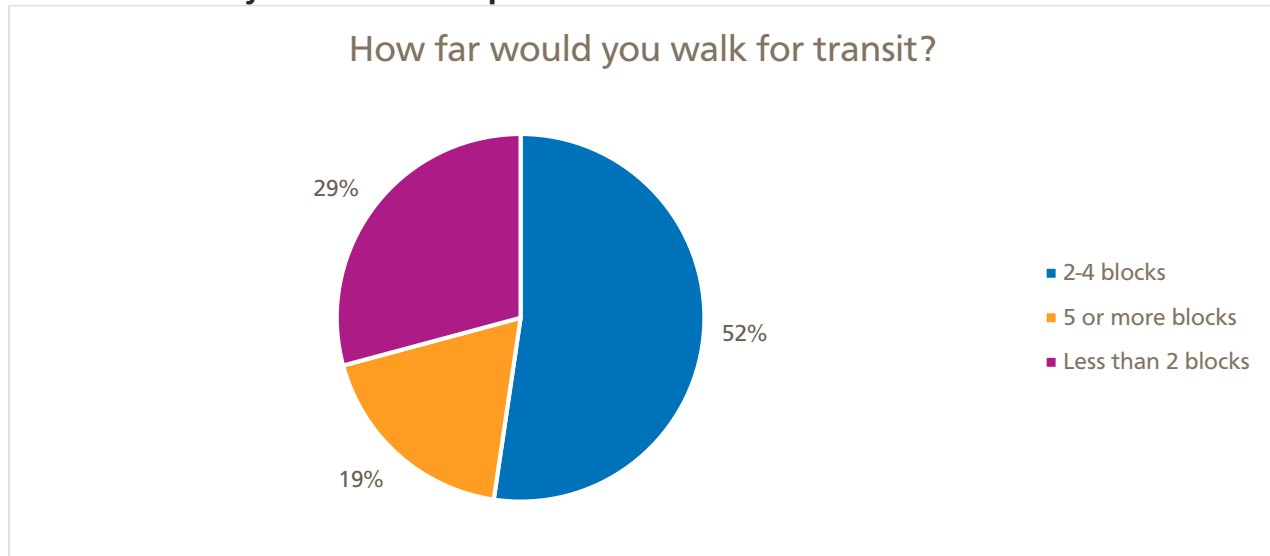
How far would you walk for transit?

29%

52%

19%

- 2-4 blocks
- 5 or more blocks
- Less than 2 blocks

Figure 12 Max travel distance to nearest bus stop

o **Top three incentives for taking transit included a more direct route, more frequent service, and greater transit reliability**
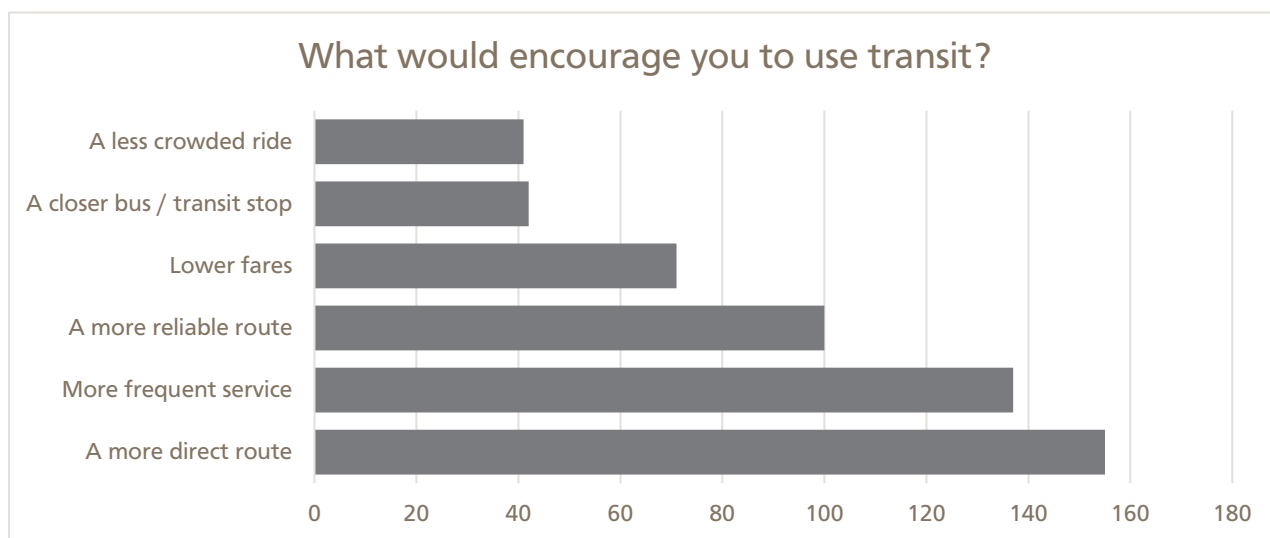
What would encourage you to use transit?

Category	Value (approx)
A less crowded ride	41
A closer bus / transit stop	42
Lower fares	71
A more reliable route	100
More frequent service	137
A more direct route	155

Figure 13 Most likely to encourage more transit use

12

Dogpatch-Central Waterfront Transit Demand Study

Planning Study Key Takeaways

- Desired trip origins and destinations were primarily concentrated within the study area. Transit stations such as BART and Caltrain were desirable spots, as were neighborhood amenities such as grocery stores and recreation centers.
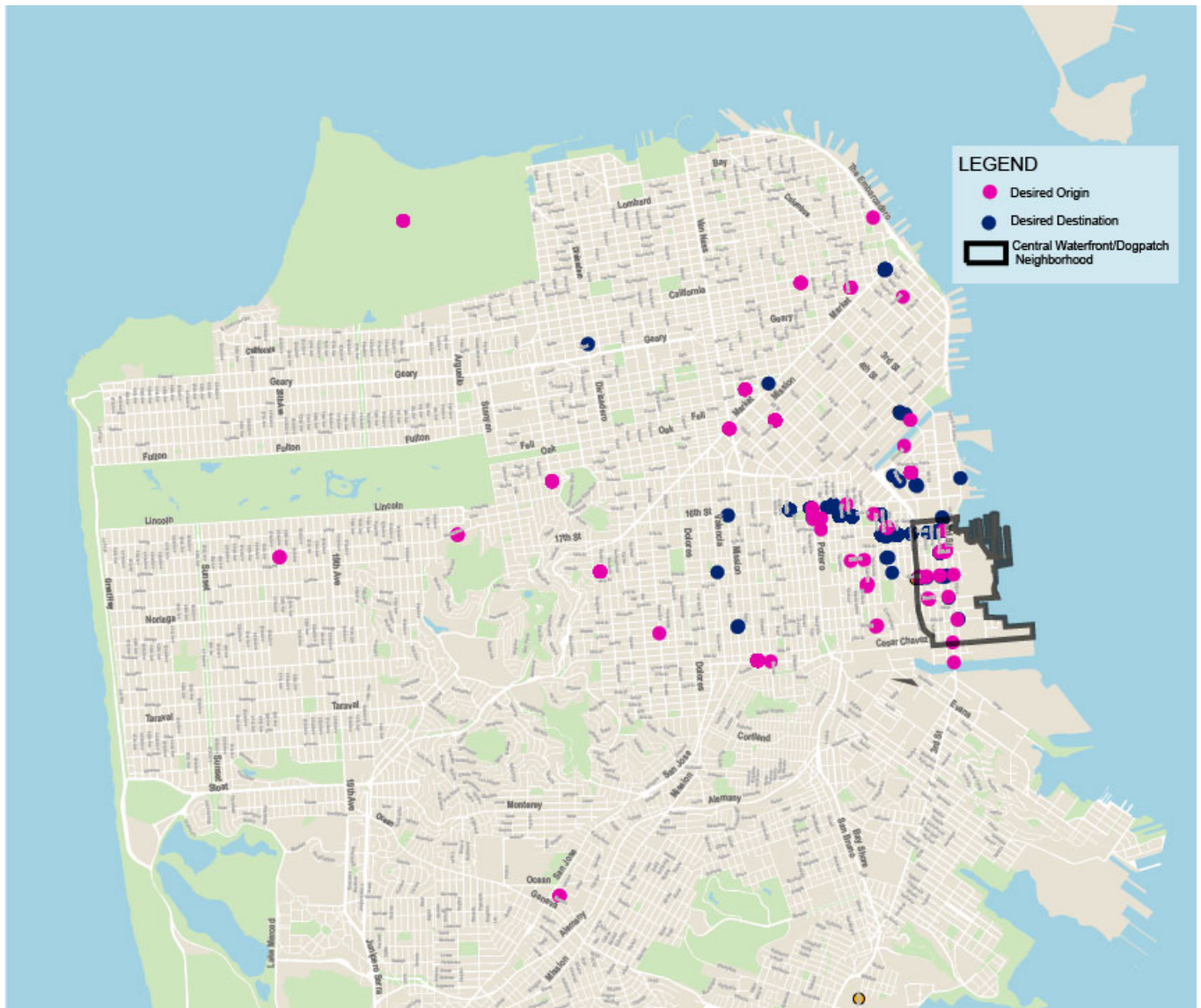

Figure 14 Desired trip origins and destinations – citywide

Dogpatch-Central Waterfront Transit Demand Study

Planning Study Key Takeaways

- 17th and 18th Street between Harrison and Illinois had the highest concentration of desired destinations as well as significant amount of desired origins.
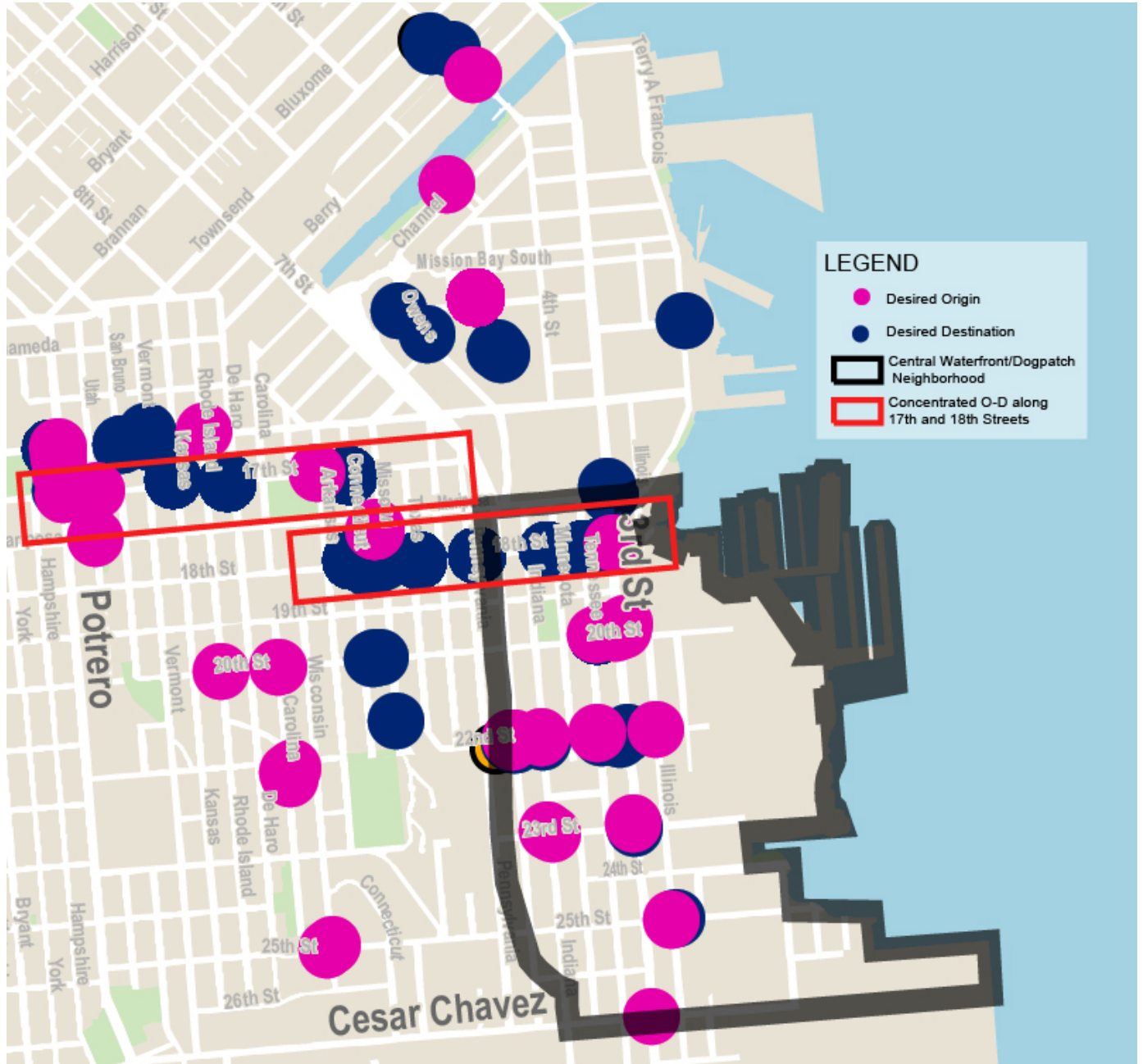

Figure 15 Desired origins and destinations – surrounding study area

Dogpatch-Central Waterfront Transit Demand Study

Planning Study Key Takeaways

FUTURE DEMAND

What areas will have higher demand in the future?

We examined new resident travel patterns to identify transit use/demand trends. We also evaluated new resident travel trends against popular desired origins and destinations. We observed:

- o New resident travel patterns are consistent with previous trends
    - ▪ Most Common Destination: Dogpatch
    - ▪ Top commute modes: 1. Transit, 2. TNC/Walk/Drive, 3. Bike
    - ▪ Top transit incentives: A more direct route, More reliable service, More frequent service
    - ▪ 22 was the most popular route for transit trips, followed by the T-Third

- **Potential travel demand of current residents (w/o factoring new development) is most heavily concentrated in the southern end of the Dogpatch neighborhood (figure 14).**
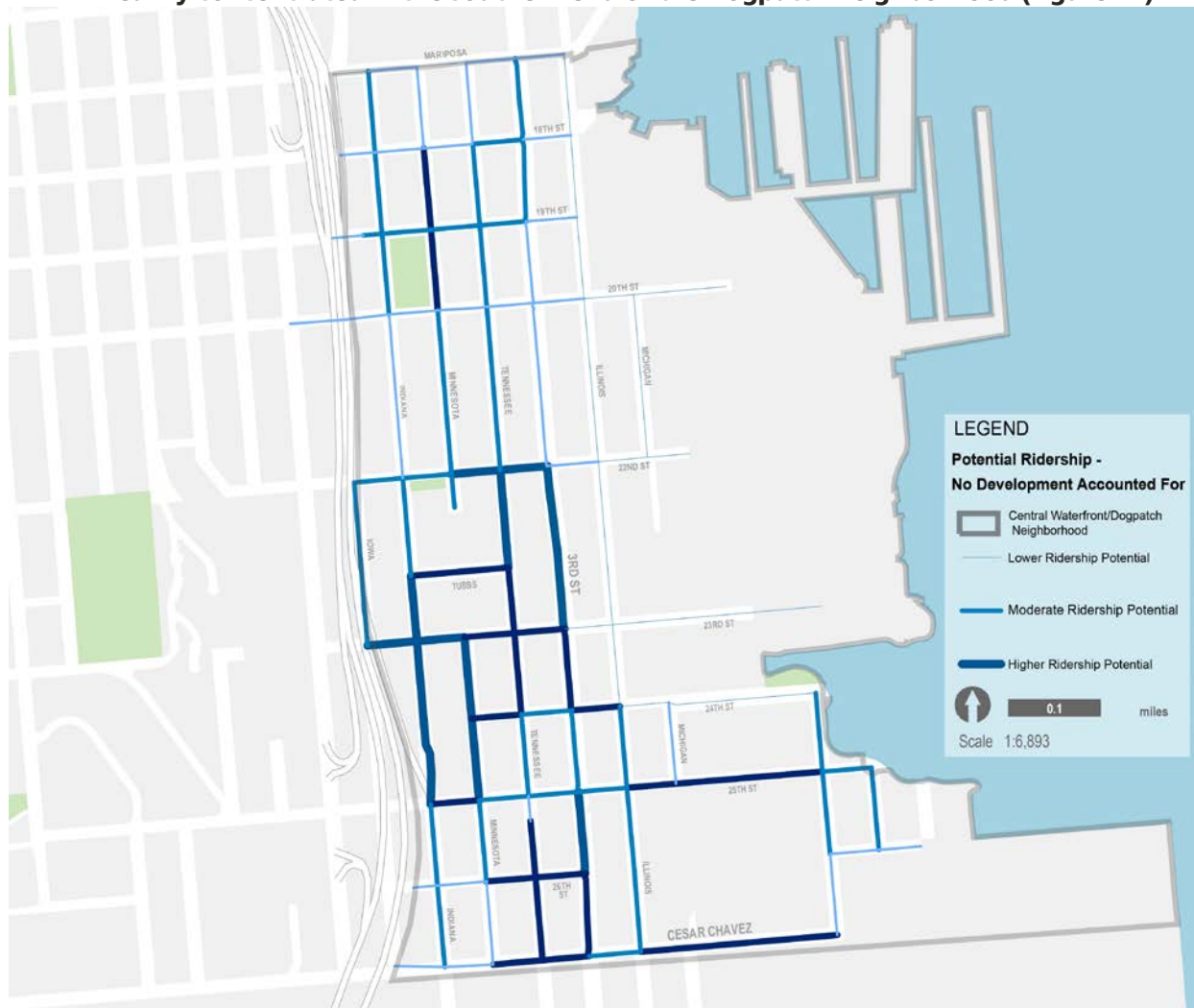

Figure 16 Potential ridership demand w/o factoring new developments

Dogpatch-Central Waterfront Transit Demand Study

Planning Study Key Takeaways

- When factoring in new development (figure 15), future potential transit demand increases throughout the neighborhood, most notably in the northern end of the Dogpatch, particularly along Tennessee and Illinois Streets, and along east-west stretches along 20th, 22nd, and 23rd Streets.
- A number of survey respondents identified a desired destination or origin along 22nd Street, which also exhibits higher transit demand as the result of new development. This street is currently a commercial corridor and home to a number of small businesses and a Caltrain station.
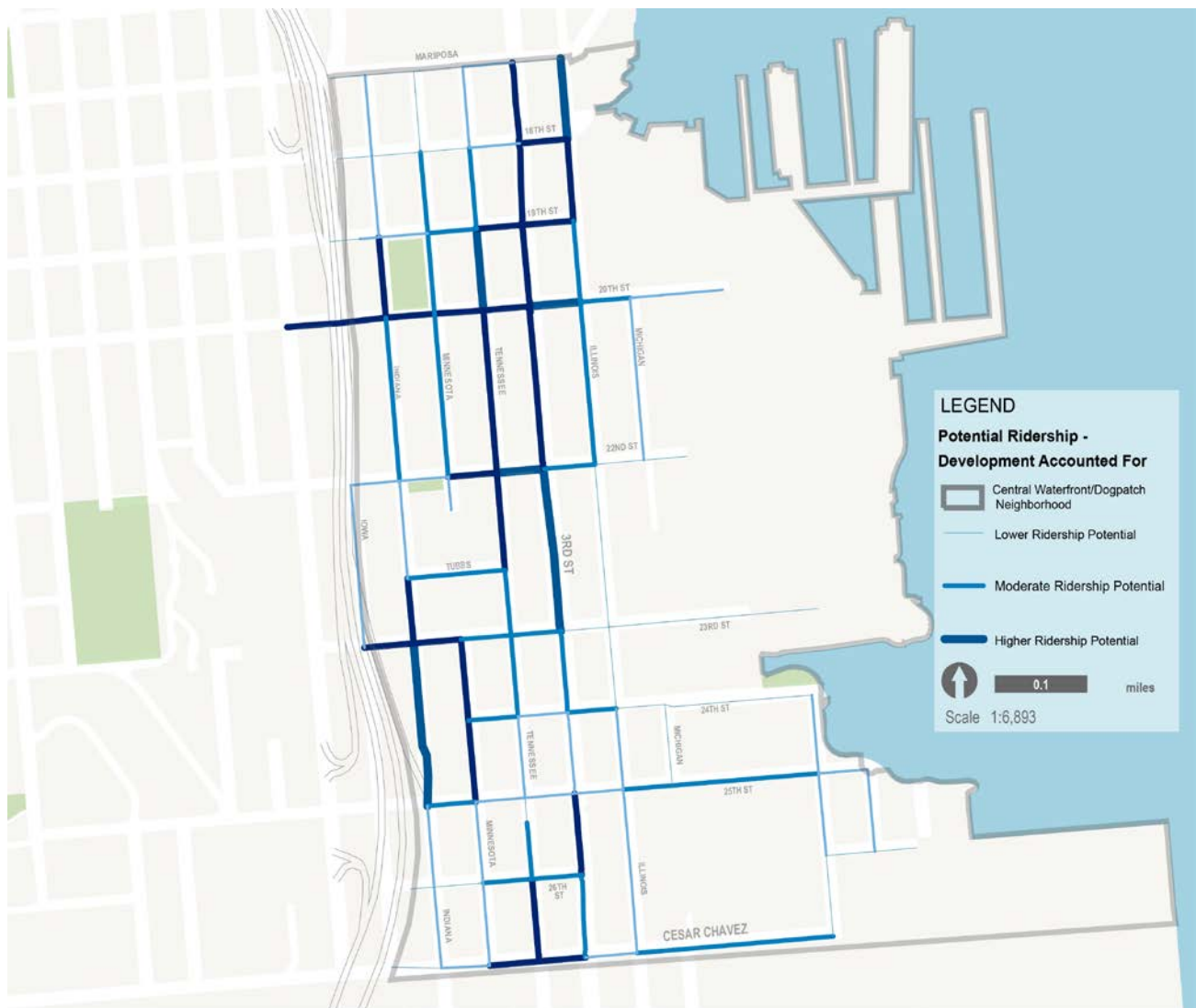

Figure 17 Potential ridership demand factoring in new developments

Dogpatch-Central Waterfront Transit Demand Study

Planning Study Key Takeaways

How do planned transportation improvements meet future demand? What gaps still exist?
We examined future planned network-upgrades (pictured below) and contrasted with the street network evaluation which incorporates American Community Service data, existing land use, and developments in the pipeline to estimate future demand for transit. We observed:

- o **Transit improvements lack east-west connections in the Dogpatch which may be more desirable with new development and currently seem to be underserved.**
- o **Third Street is anticipated to have high demand – T-Third improvements will be essential to meeting additional demand**
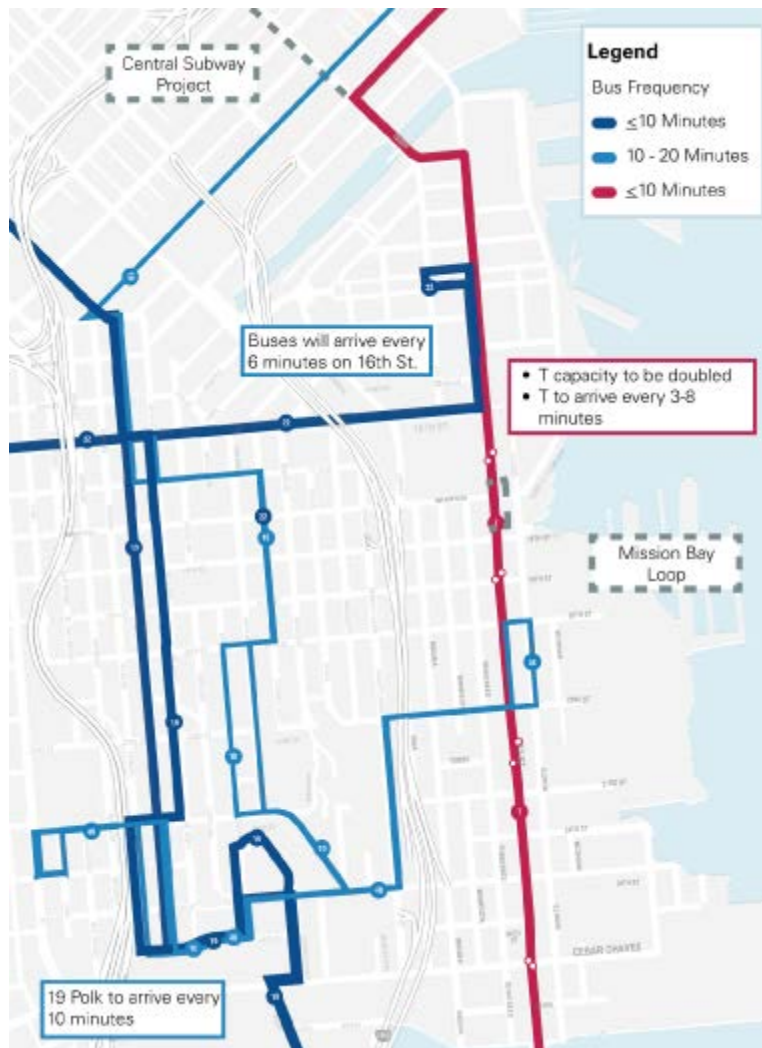

Figure 18 Planned transit improvements

Dogpatch-Central Waterfront Transit Demand Study

Planning Study Key Takeaways

KEY TAKEAWAYS

CURRENT TRENDS

- Most survey respondents with destinations within the study area already use transit as a part of their trip.
- Majority of Mission Bay residents/employees live/work in the same neighborhood-with high number of Dogpatch and Potrero Hill residents/employees as well.
- Top desired destinations for residents of Mission Bay, Dogpatch, and Potrero Hill do not include each other's neighborhoods – people want new connections to Downtown or nearby locations within neighborhood boundaries.
- Close to two-thirds of respondents main trip purpose was work; school and recreational trips were also significant.
- Many travelers link trips using multiple modes to reach their destination. Connection types include walk/biking to transit and using TNCs (Uber or Lyft) to access transit.
- Potrero Hill respondents were more likely to drive when compared to other study area respondents.
- Most respondents would walk between 2-4 blocks for transit (10 minutes or less). Only 20% of respondents would walk more than 5 blocks for transit.
- 16th Street BART is a key transit connection. The KT line and 10-Townsend are also popular lines respondents connect to during their trip.
- Top three incentives for taking transit included a more direct route, more frequent service, and greater transit reliability.

FUTURE DEMAND

- New development may increase transit demand on east-west running streets such as 20th, 23rd, and 22nd Streets. Development will also increase demand along north/south streets such as Third Street, Illinois Street, and Tennessee Street.
- Desired trip origins and destinations were primarily concentrated within the study area. Transit stations such as BART and Caltrain were desirable destinations, as were neighborhood amenities such as grocery stores and recreation centers. 18th and 22nd Streets between Harrison and Illinois had the highest concentration of desired destinations as well as significant amount of desired origins.
- A number of survey respondents identified 22nd Street, which also exhibits higher transit demand in the future as a result of new development, as a desired destination or origin. This street is currently a commercial corridor and home to a number of small businesses and a Caltrain station.
- Existing planned east-west transit improvements lack sufficient investment in the Dogpatch. East-west streets, such as 20th Street, may be more desirable in the future with new development planned and are currently underserved.
- Third Street is anticipated to have increased demand – T-Third improvements will be essential to meeting additional demand.

NEXT STEPS

The Transit Division will now take the findings of this report and use them in developing their proposed 22-Fillmore route alternatives. Outreach for the chosen alternatives is slated to begin in early September with a round of pop-up events throughout the study area, visits to a number of the local neighborhood associations, merchant groups, as well as a SFMTA sponsored community meeting in early October. To keep up to date with the alternatives selection process, continue to follow the work by visiting the Dogpatch-Potrero Hill 16th Street Connection [webpage](#).