

**Polk Street Lane Removal/Bike Lane  
Trial Evaluation**

Prepared for the Board of Supervisors  
City and County of San Francisco

Submitted by:  
The Department of Parking and Traffic  
May 16, 2001

## **EXECUTIVE SUMMARY**

On May 17, 1999, the Board of Supervisors approved Resolution 484-99 authorizing the striping of bicycle lanes on Polk Street between Post and Turk Streets. Between Post and Vallejo Streets, Polk Street was to be re-striped with two wider lanes as part of this project. See Appendix A for a copy of the resolution.

In April 2000, Polk Street between Vallejo and Turk Streets was re-striped with one southbound lane removed, resulting in a two-lane road. South of Post Street bike lanes were striped. The portion north of Post Street, being four feet narrower, had insufficient space for bike lanes and was striped as two wide lanes. Though bike lanes were not possible, the wide lanes provide sufficient space for cyclists and motorists to safely travel side by side. See Figures 1 and 2 in the BACKGROUND section for illustrations of the striping design and Appendix B for a map of the project area.

Note that throughout the report, the striping design on trial with one vehicle lane northbound and one vehicle lane southbound and the bike lanes/wide lanes will be referred to as the “two-lane design.” The design prior to the lane removal, with two vehicle lanes southbound and one vehicle lane northbound, will be referred to as the “three-lane design.”

This report provides data for Polk Street and parallel streets before and after the lane removal. The effect of the re-striping on bicycle, motor vehicle, and transit performance is summarized, along with results of public comments received on a telephone hotline.

A summary of the report’s findings follows:

- Bicycle volumes increased after the re-striping;
- Muni travel times during the PM did not change;
- Muni on-time performance became more unpredictable;
- Based on Muni performance data and field observations, motor vehicle traffic sometimes backs up due to the presence of double parkers, left turners, and other obstructions to smooth traffic flow, especially south of Sacramento Street;
- Some southbound motor vehicle traffic shifted from Polk Street to Gough and Hyde Streets;
- While southbound traffic volumes dropped on Polk Street, northbound volumes increased, resulting in no change of overall traffic volumes along Polk Street; and
- Public response was split (pro and con).

### **Department of Parking and Traffic Recommendation**

Based on the findings of this report, the Department of Parking and Traffic (DPT) recommends retaining the current two-lane design and the bike lanes/wide curb lanes. DPT also recommends, as a condition of retaining the two-lane design, striping treatments at California, Bush, and Post Streets to facilitate traffic flow.

Advantages of two-lane design:

- Polk Street is the most bicycle friendly north-south route in the area and the street most suited for bicycle facilities;
- Bicyclists and motorists can safely travel side by side;
- Muni travel times during the PM peak were unchanged;
- Northbound traffic flow is facilitated with the two-lane design; and
- Polk Street is not designated an arterial and is paralleled by multiple arterials.

Disadvantages of two-lane design:

- Transit reliability deteriorated;
- Congestion is more prevalent for motor vehicles in the southbound direction;
- There is one lane instead of two for queuing southbound vehicles, increasing the possibility of traffic backing up into the previous intersection; and
- With two southbound lanes (before lane removal), left turners, double-parkers, and buses at bulbs affected southbound traffic less.

**Recommended Striping Treatments**

As discussed more thoroughly in the MITIGATION MEASURES section in the body of this report, the broken yellow centerline was shifted to facilitate southbound traffic flow through the intersections of Polk and California Streets and Polk and Bush Streets. This was done as a mitigation measure for the loss of a southbound lane. Improving traffic flow has direct benefits for the 19-Polk Muni bus line.

However, northbound bicyclists do experience a narrow lane for 225 to 250 feet at the two intersections. Cyclists, by California Vehicle Code 21202, should be expected to occupy the narrow lane for these sections. Signage informing road users of this right will be installed along these narrowed sections if the DPT recommendation is approved. The sign is shown in Appendix C.

In addition to the shifted broken yellow centerline at California Street and at Bush Street, DPT recommends shifting the centerline at Post Street, where southbound motorists destined for downtown turn left.

## **BACKGROUND**

Prior to the re-striping, Polk Street between Vallejo and Turk Streets was a three-lane road with two southbound lanes and one northbound lane. It is 48'9" wide between Turk and Post Streets and 44'9" wide between Post and Vallejo Streets. The primary land use along Polk Street is commercial, with some high density residential. Parking on both sides of the street is metered for short-term use. A Muni motor coach route (19 Polk) travels along Polk Street in most of the project area.

Polk Street is designated as a part of Crosstown Bicycle Route 25, a north-south route connecting the northern waterfront to Market Street, the Civic Center, and points south. Polk Street is the only street in the area that combines favorable grades with moderate traffic volumes. The next section of this report discusses in more depth why the Board of Supervisors-approved Bicycle Plan designated Polk Street as the bicycle route in this area.

Polk Street is paralleled on its west side, in order from west to east, by Gough Street, Franklin Street, and Van Ness Avenue (State Highway 101). To its east Polk Street is paralleled by Larkin and Hyde Streets. These listed streets are designated arterials while Polk Street is not. See Appendix B for a map of the project area.

Though not designated an arterial, Polk Street serves as a direct connection to 10<sup>th</sup> Street, which provides access to the freeways, southbound Highway 101 and 280 and eastbound I-80 to the Bay Bridge. Thus, the street serves both through commute traffic and local traffic destined for the commercial district.

See Figure 1 for Polk Street's dimensions prior to the lane removal.

Normally, a street of this width would not be striped with three vehicle lanes. To do so results in lanes less than ten-feet wide, a standard that the city generally uses as a minimum lane width, especially on streets with regular transit service. With three lanes, the southbound right-hand lane was often occupied by double parkers, trucks loading and unloading, and Muni buses at the bus bulbs (sidewalk extensions where the bus does not need to pull into a zone). The second southbound lane was generally unobstructed for through traffic.

As a result of Board of Supervisor's Resolution 484-99, a southbound lane was removed. See Figure 2 for the resultant striping design after the lane removal.

As Polk Street is four feet narrower north of Post Street, standard width bike lanes could not be striped unless on-street parking was removed. No parking was removed with the two-lane design on trial.

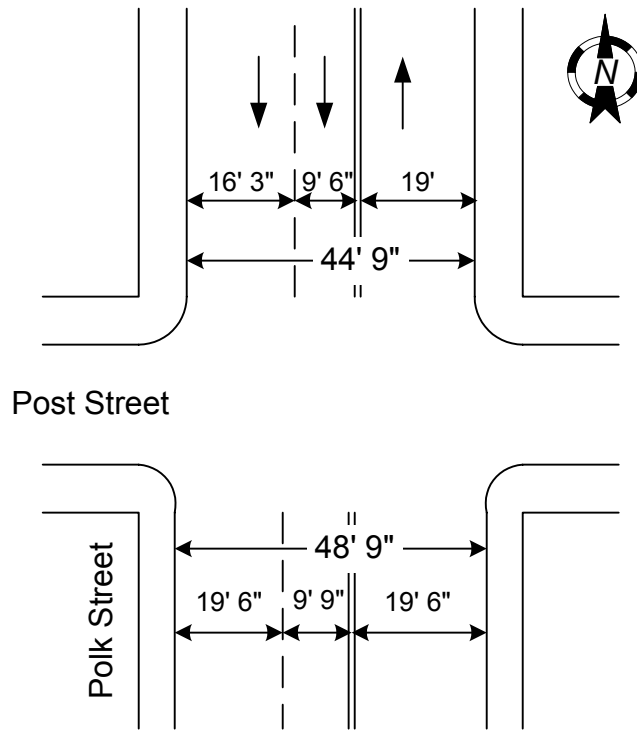


Figure 1. Polk Street before Lane Removal (3-lane design)

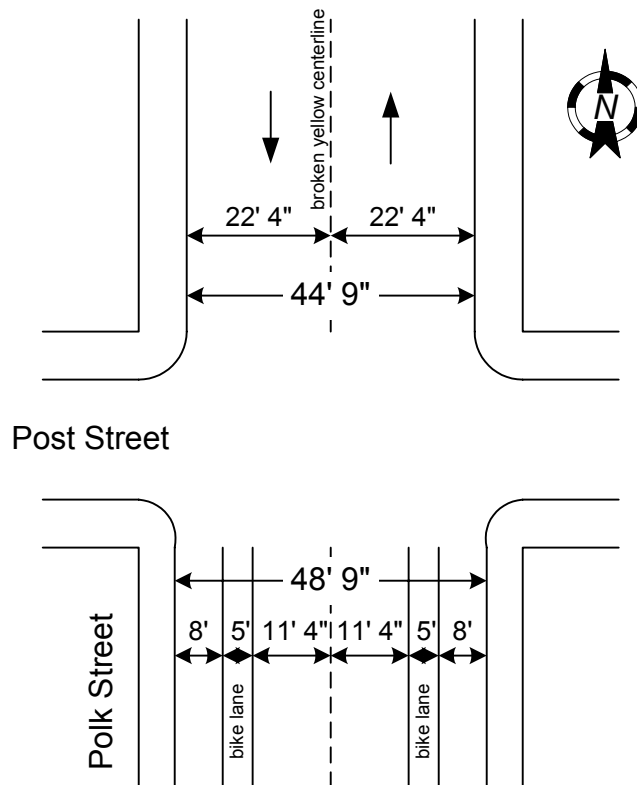


Figure 2. Polk Street after Lane Removal, with Bike Lanes/Wide Lanes (2-lane design)

## **WHY POLK STREET?**

Some people question the choice of routing cyclists along Polk Street and have inquired about the suitability of parallel streets for bike lanes.

Polk Street is the flattest north-south road through this area. Van Ness Avenue is the next flattest but carries a heavy amount of motor vehicle traffic (approximately 50,000 vehicles/day) as Highway 101 and the route for five transit lines. To the east, Gough and Franklin Streets are one-way streets with heavy traffic (approximately 23,000 and 30,000 vehicles/day, respectively) along hilly routes.

The most commonly suggested alternatives to Polk Street are Hyde and Larkin Streets because of their more residential land-use. However, there are disadvantages to those streets. Both streets are more hilly than Polk Street. (See Appendix D for a chart comparing street elevation profiles.) Hyde and Larkin Streets are also one-way south of California Street. In order to accommodate north-south bike lanes, a motor vehicle lane would have to be removed on each street, thus resulting in two removed lanes (one northbound and one southbound) as opposed to one removed lane on Polk Street. Finally, there are cable car tracks on Hyde Street north of Washington Street.

Polk Street, though not perfect, is the most attractive street for bicycle facilities, primarily because of its topography and lower traffic volumes. While it is possible to accommodate cyclists on parallel streets, 1) the impact on motor vehicle traffic would be greater, and 2) cyclists may still find Polk Street more attractive for the reasons above and use it instead of parallel bike facilities.

## **MITIGATION MEASURES**

With the reduced capacity of Polk Street, two types of mitigation were initially considered to offset the removal of a southbound lane. The first was the use of “No Left Turn” restrictions. The second was re-timing of traffic signals along Polk Street and at the intersection of Hyde and California Streets.

A third measure was implemented after observing back-ups along Polk Street. It consists of shifting the broken yellow centerline to facilitate maneuvers around motorists waiting to make left turns or buses stopped at sidewalk bulbs. Another mitigation measure being considered is the installation of parking zones where needed to alleviate back-ups caused by double parking.

### **“No Left Turn” Restrictions**

“No Left Turn” restrictions have the advantages of decreasing through traffic congestion and increasing safety at the intersection with the restriction. The disadvantages include increasing circulation in the area to bypass the prohibition, additional traffic on parallel streets, and the need for additional enforcement.

Merchants in the area generally did not support the installation of left turn restrictions. Also, the restrictions would increase circulation onto parallel streets with limited available capacity as motorists bypassed the restrictions. For these reasons, installing the restrictions was put on hold unless absolutely necessary.

**Traffic Signal Re-timing**

Signals along Polk Street were re-timed to give more green time to north-south traffic while still accommodating cross-street traffic. The signal at Hyde and California Street was re-timed to give green to Hyde Street, an alternate southbound route for motorists.

**Shifting Broken Yellow Centerline**

A third mitigation measure to alleviate back-ups was re-striping the yellow centerline at the intersections of Polk Street with California and Bush Streets so that there is enough width for two motor vehicles. At California Street, southbound traffic would back-up behind buses stopped at the bulb or traffic waiting to make a left turn. Generally, traffic can maneuver around one motorist waiting to turn left but two left turners waiting to proceed will block through traffic.

In September of 2000, five months after the re-striping of Polk Street, the centerline AT California Street was shifted to the east so that traffic could maneuver around a bus at the bulb or motorists waiting to make a left turn. See Figure 3.

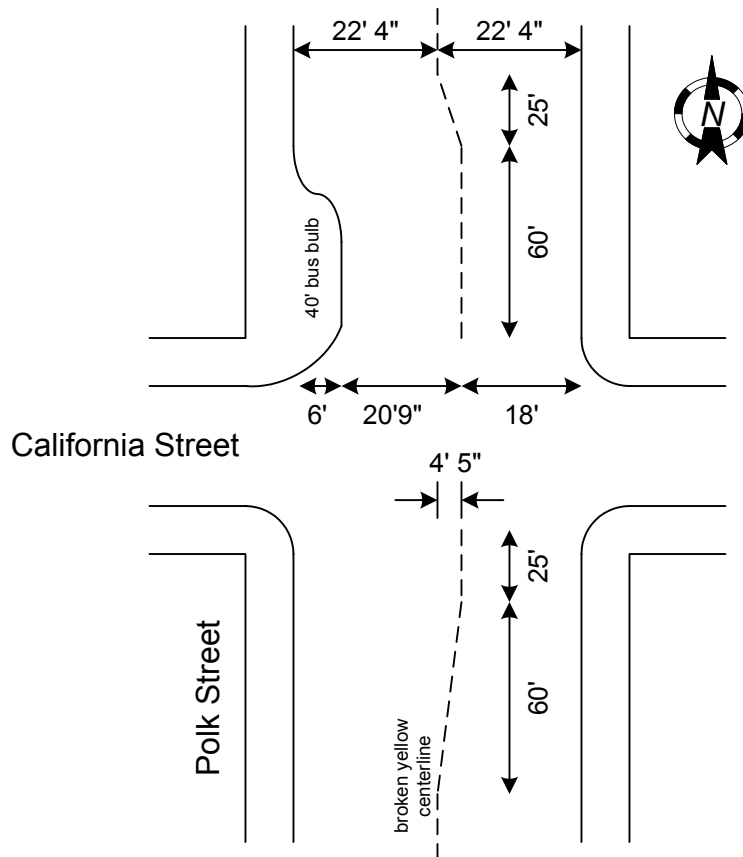


Figure 3. Intersection Design at California Street

The same was done at Bush Street, where there are often two or more southbound left turn movements per cycle. While this creates a narrow lane for northbound cyclists, it is for a fairly short distance (225 to 250 feet) where traffic is traveling relatively slowly. Cyclists can occupy the center of the narrow lane for the short distance. Signage informing road users of this right (shown in Appendix C) is being developed and will be installed along these narrowed sections if the DPT recommendation is approved.

### **Additional Parking Zones**

A common complaint from the telephone hotline was the effect of illegal double parking on traffic flow. Additional yellow truck loading zones can be painted where truck double parking is prevalent. Ten minute green zones can also be painted in front of businesses that often generate double parking, such as coffee shops. These green zones can be limited to certain times of the day (i.e. mornings for coffee shops) and be designated as regular parking spaces for other periods.

## **DATA COLLECTED**

Data collected and presented in the report are as follows:

### **Bicycle Traffic**

- Peak hour counts before and after

### **Transit - Muni**

- Arrival time performance at Polk and Post for southbound 19 buses (before and after)
- Travel time data during PM peak (before and after)
- Incident/collision data (before and after)
- Notes from meeting with operators at Kirkland

### **Motor Vehicles**

- Average Daily Traffic volumes (ADT – vehicles per day) on Polk Street (before and after)
- ADTs on parallel streets: Gough Street, Franklin Street, Van Ness Avenue, Larkin Street, and Hyde Street (before and after)

### **Public Response**

- Transcribed responses from hotline (in Attachment A)

## BICYCLE TRAFFIC

The following table compares bicycle traffic volumes before and after the lane removal.

Table 1. Before and After Bicycle Volumes\*

	BEFORE (Aug 99)	AFTER (Mar 01)	CHANGE	PERCENT CHANGE
AM Peak Hour	37	52	+15	+41%
PM Peak Hour	43	55	+12	+28%

\* Total bicycles per hour, northbound plus southbound

These four volumes are the average of a series of counts (3 to 6 counts for each number) taken before and after the lane removal. The before counts were taken in August 1999 while the after counts were taken in March 2001. Polk Street was re-striped in April 2000. Both changes (for the AM and PM peak hour) are statistically significant at the 90% confidence level.

Unlike Valencia Street prior to its bike lanes, where many of the streets in the area were similarly accommodating for bikes, Polk Street is the most accommodating street for bikes, even prior to the lane removal. With Valencia Street, the increase in bike usage could be attributed both to new riders and existing riders from parallel streets attracted to the bike lanes.

With Polk Street, it is likely that most cyclists in the area were already using the street, thus making the increase due more to new riders than to riders attracted from parallel routes. Given existing data, however, the number of new cyclists versus cyclists attracted from parallel routes cannot be determined.

## MUNI

As the 19 Polk travels along the re-striped section of Polk Street, data was collected measuring the effect of the lane removal on its performance. The 19 carries about 12,700 passengers per weekday.

### Transit Travel Times

During the afternoon peak from 4 to 6pm, the travel time of the 19 Polk was measured in both directions between Vallejo and Post Streets four months after the lane removal. A table summarizing those findings follows:

Table 2. Travel Time Data for 19 Polk (between Vallejo and Post),  
Before Lane Removal vs Four Months After Lane Removal

		BEFORE (Oct 99)	AFTER (Aug 00)	CHANGE	PERCENT CHANGE	STATISTICALLY SIGNIFICANT?*
Northbound	Average Travel Time (sec)	478	498	+20 sec	+4%	NO
	Standard Deviation (sec)	65	111			
	Minimum (sec)	391	335			
	Maximum (sec)	577	730			
	Sample Size	9	11			
Southbound	Average Travel Time (sec)	476	491	+15 sec	+3%	NO
	Standard Deviation (sec)	46	54			
	Minimum (sec)	389	395			
	Maximum (sec)	532	549			
	Sample Size	8	11			

\* Effectively "no change" when data is analyzed at 90% confidence level.

As mentioned in the MITIGATION MEASURES section of this report, the broken yellow centerline was shifted at Polk and California Streets and at Polk and Bush Streets in September of 2000. The shift was meant to facilitate southbound traffic flow around traffic waiting to make a left-turn and around buses stopped at the bus bulb at California Street. Transit travel time data was taken again after this treatment.

Table 3. Travel Time Data for 19 Polk (between Vallejo and Post),  
Before Lane Removal vs. Thirteen Months After Lane Removal\*

		BEFORE (Oct 99)	AFTER (May 01)	CHANGE	PERCENT CHANGE	STATISTICALLY SIGNIFICANT?*
Northbound	Average Travel Time (sec)	478	486	+8 sec	+2%	NO
	Standard Deviation (sec)	65	71			
	Minimum (sec)	391	348			
	Maximum (sec)	577	604			
	Sample Size	9	14			
Southbound	Average Travel Time (sec)	476	462	-14 sec	-3%	NO
	Standard Deviation (sec)	46	79			
	Minimum (sec)	389	382			
	Maximum (sec)	532	630			
	Sample Size	8	11			

\* Shifted centerline in place at California and at Bush since Sept. 2000. See "MITIGATION MEASURE" section.

\*\* Effectively "no change" when data is analyzed at 90% confidence level.

When a statistical analysis at a 90% confidence level is performed on both sets of data, the differences in travel time are insignificant. Therefore, there is "no change" in travel times.

In both directions, the standard deviation increased, demonstrating that a typical travel time will vary greater from the average. This shows that travel times are less predictable.

### Transit Arrival Time Data

The decrease in travel time predictability is supported by data provided by Muni that shows arrival time data for the southbound 19 Polk at Polk and Post Streets.

Table 4. Muni Route 19 Polk Arrival Time Data at Post (SB only)

	BEFORE (Sept 99 - Feb 00)	AFTER (Jun 00 - Oct 00)
Average On-Time Performance	0.34 minutes early	0.05 minutes late
Standard Deviation	3.15 min	6.24 min
Minimum	18 min early	29 min early
Maximum	14 min late	29 min late
Number of Time Checks	250	186

There was a slight deterioration in average on-time performance (0.34 minutes early to 0.05 minutes late – a difference of 23 seconds). Given Muni’s estimate that a southbound bus typically takes about 15 minutes (900 seconds) to arrive at Post Street, the 23 second increase in travel time is about a 2 to 3 percent increase in travel time. At a 90% confidence level, this is not a statistically significant change.

These values assume the buses began their runs at the correct time. But as demonstrated by the “minimum” values (both of which are greater than the expected 15 minute travel time for a bus to reach Post Street), the data may be skewed by buses that did not begin their runs at scheduled times. Nonetheless, if one assumes that buses began their runs at correct times with equal frequency for both the before and after periods, this skewing effect would be essentially cancelled out.

This arrival data, based on a much larger sample size, does confirm the data presented earlier in Tables 2 and 3. A telling statistic is the increase in standard deviation, indication that there is a greater spread in actual arrival times. As shown in the travel time data, the predictability of transit performance deteriorated with the lane removal.

The increases in standard deviation support observations from the field. If there are few double parkers, left-turners, or buses at bus bulbs, motor vehicle traffic generally clears each light and experiences no extraordinary delays. However, if one or more of the above occurs in a particular area, traffic can quickly back up into the preceding intersection and take multiple traffic signal cycles to dissipate the queue. These periodic back-ups result in unpredictable transit performance on Polk Street.

### Muni Collision/Incident Data

Incident data provided by Muni showed a drop in collisions involving Muni vehicles after the re-striping. Though the data period is too short to be able to draw conclusions, there were five collisions in the five months prior to the lane removal and two collisions in the five months following the lane removal.

### Meeting with Operators

A meeting was held with operators at the Kirkland Yard in July 2000 to discuss the lane removal and their experiences with it. A set of notes from the meeting was provided by

Muni and is included in this report in Appendix E. A primary concern of the operators was with the behavior of cyclists around buses. With regard to the lane removal, they noted such issues as maneuvering around double parkers. They generally felt that Polk Street was easier to drive with the three-lane design, prior to the lane removal.

## AVERAGE DAILY TRAFFIC

Average Daily Traffic (ADT) counts were taken to determine the 24-hour traffic volumes along Polk Street and neighboring streets and summarized in the table below.

Table 5. ADT Volumes on Polk Street and Parallel Streets\*

	BEFORE (Sept 99)	AFTER (Jan-Mar 01)	DIFFERENCE	PERCENT CHANGE
Gough St	23,000	24,800	1,800	8
Franklin St	36,000	33,500	-2,500	-7
Van Ness Ave	51,000	49,000	-2,000	-4
Polk St	16,600	16,300	-300	-2
Larkin St	16,000	15,400	-600	-4
Hyde St	16,000	18,400	2,400	15
Total	158,600	157,400	-1,200	-1

\* All counts taken south of Post Street. Streets listed from west to east.

Motor vehicle traffic dropped on Polk Street and increased on Gough and Hyde Streets, two streets that are one-way southbound at Post Street where the counts were taken. These ADT volumes are shown as a bar graph in Appendix F.

On Polk Street, ADT counts were taken at the two ends of the project area, at Turk Street to the south and at Broadway to the north. A count was also taken near the middle at Post Street.

Table 6. ADT Volumes along Polk Street

	BEFORE (Sept 99)	AFTER (Jan-Mar 01)	DIFFERENCE	PERCENT CHANGE
SB at Broadway	6,600	6,700	100	2
NB at Broadway	4,500	4,800	300	7
SB at Post	12,000	9,900	-2,100	-18
NB at Post	4,600	6,400	1,800	39
SB at Turk	12,300	12,000	-300	-2
NB at Turk	1,800	2,100	300	17

While there was a drop in southbound traffic, northbound traffic increased so that the overall number of motor vehicles along Polk Street remained unchanged. Some reasons for the increase in northbound traffic volumes:

- The increased green time for Polk Street traffic signals, while mitigating the loss of a southbound lane, made northbound travel more attractive.

- The wider northbound lane made Polk Street more attractive to motorists.
- The wider northbound lane facilitated passing left-turners, cyclists, and those making parking maneuvers.

## **PUBLIC RESPONSE**

To allow people to provide feedback on the new conditions on Polk Street, DPT created a telephone hotline and advertised the hotline phone number on traffic signs along the street.

One hundred seventy three hotline responses were paraphrased and transcribed. They are included in Attachment A, along with a copy of the outgoing message. There was a virtually even split in responses for and against the bicycle lanes/lane removal.

Those in favor of the lane removal/bike lanes generally stated the improvements in bicycle accommodation as their reason for supporting the project. Most against the lane removal were frustrated at the increase in congestion and cited such problems as double parkers, left turners, and buses at bus bulbs causing back-ups and sometimes forcing drivers to wait multiple traffic signal cycles to pass an intersection.

## **COLLISION ANALYSIS**

Due to the short period of data available for analysis, it would be very difficult - if impossible - to make statistically significant determinations. Thus, an analysis of collisions is not provided.

For information, there was a statistically insignificant drop in collisions involving transit vehicles, as reported by Muni and stated in the section of the report discussing Muni.

## **PEDESTRIAN DATA**

Pedestrian traffic volumes were collected at the intersection of Polk and Post Streets at the request of an advocacy group in favor of the lane removal/bike lanes, but not included in the report. Pedestrian traffic volumes along a commercial strip will vary due to time of the year, economic conditions, and physical changes to the walking space, among other factors. To conclude that the lane removal/bike lane project affected the number of pedestrians along Polk Street would be difficult to justify without extensive surveying.

## CONCLUSION

This evaluation yields the following results:

- Bicycle volumes increased after the re-striping;
- Muni travel times during the P.M. did not change;
- Muni on-time performance became more unpredictable;
- Based on Muni performance data and field observations, motor vehicle traffic sometimes backs up due to the presence of double parkers, left turners, and other obstructions to smooth traffic flow, especially south of Sacramento Street;
- Some southbound motor vehicle traffic shifted from Polk Street to Gough and Hyde Streets;
- While southbound traffic volumes dropped on Polk Street, northbound volumes increased, resulting in no change of overall traffic volumes along Polk Street; and
- Public response recorded from the telephone hotline was split (pro and con).

**Appendix A**  
**Resolution 484-99**

1 [Traffic Regulations]

2 ENACTING TRAFFIC REGULATIONS ON VARIOUS STREETS

3 RESOLVED, That, in accordance with the provisions of the  
4 California Vehicle Code and the San Francisco Traffic Code, the  
5 following regulations governing the movement of vehicles are hereby  
6 enacted as designated below:

7 BICYCLE LANES - ESTABLISH

8 Polk Street, southbound, between Post and Turk Streets (6-month  
9 trial period, requires removal of one traffic lane).

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**\*\*NAME OF SUPERVISOR/COMMITTEE/DEPARTMENT\*\***  
**BOARD OF SUPERVISORS**



**City and County of San Francisco**

City Hall  
1 Dr. Carlton B. Goodlett Place  
San Francisco, CA 94102-4689

**Tails**

**Resolution**

**File Number:** 990983

**Date Passed:**

Enacting traffic regulations on various streets.

**BICYCLE LANES - ESTABLISH**

Polk Street, southbound, between Post and Turk Streets (6-month trial period, requires removal of one traffic lane)

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May 17, 1999 Board of Supervisors — ADOPTED

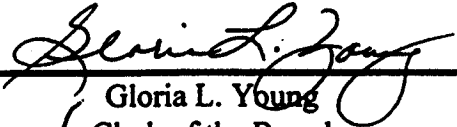
Ayes: 6 - Ammiano, Becerril, Bierman, Katz, Leno, Yaki

Noes: 2 - Newsom, Teng

Absent: 3 - Brown, Kaufman, Yee

File No. 990983

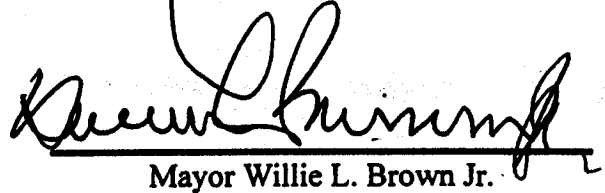
I hereby certify that the foregoing Resolution was ADOPTED on May 17, 1999 by the Board of Supervisors of the City and County of San Francisco.



Gloria L. Young  
Clerk of the Board

**MAY 28 1999**

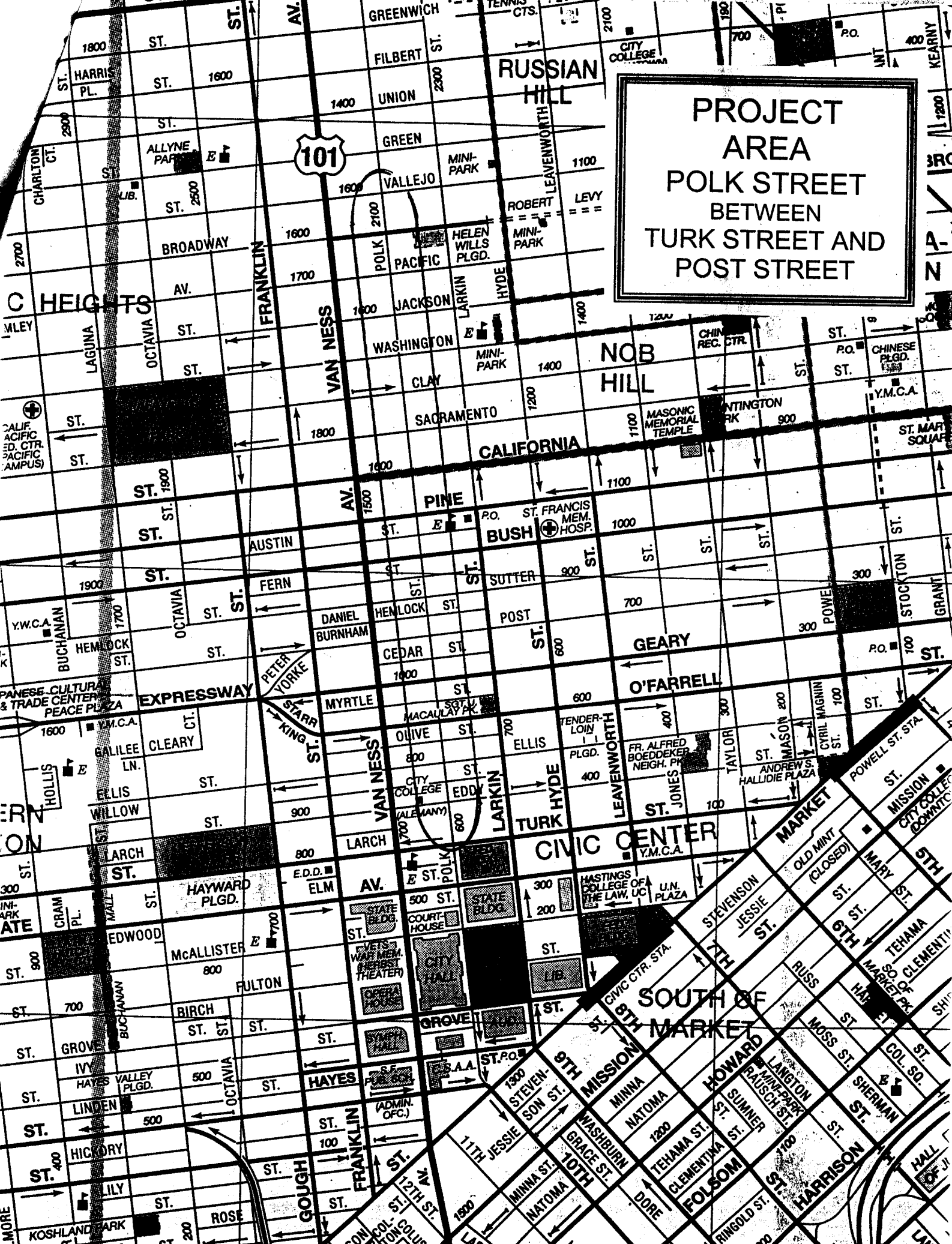
**Date Approved**



Mayor Willie L. Brown Jr.

**Appendix B**  
**Map of Project Area**

**PROJECT AREA**  
**POLK STREET**  
**BETWEEN**  
**TURK STREET AND**  
**POST STREET**



**101**

**NOB HILL**  
CHIN. REC. CTR.  
MASONIC MEMORIAL TEMPLE  
ANTINGTON PARK  
ST. MAR. SQUARE

**BUSH**  
ST. FRANCIS MEM. HOSP.  
STOCKTON ST.  
GRANT ST.

**O'FARRELL**  
POWELL ST. STA.  
MISSION ST.

**CIVIC CENTER**  
Y.M.C.A.  
HASTINGS COLLEGE OF THE LAW, UC  
U.N. PLAZA

**SOUTH OF MARKET**  
5TH ST.  
6TH ST.  
7TH ST.

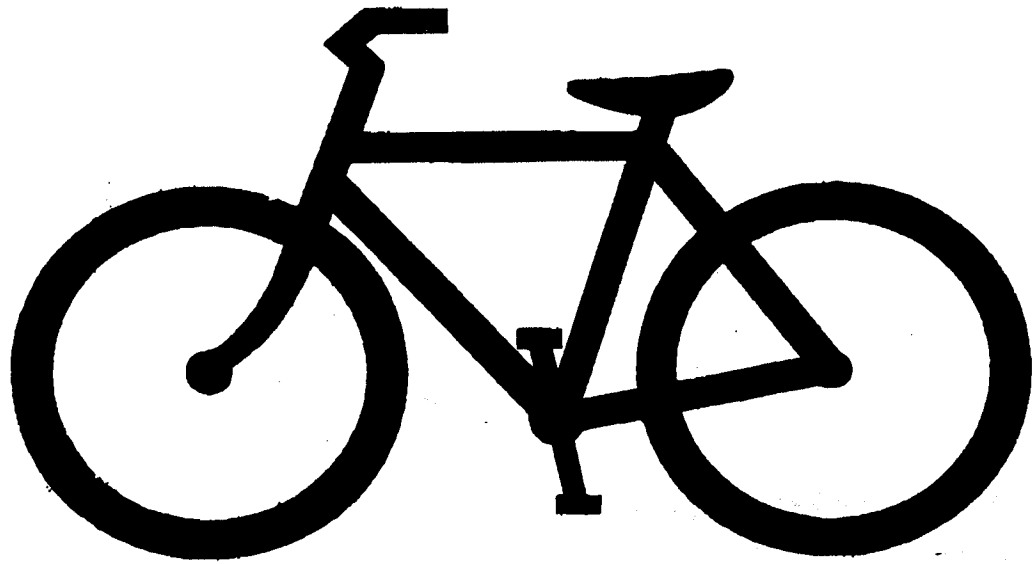
**8TH MISSION**  
MINNA ST.  
NATOMA ST.

**9TH MISSION**  
JESSIE SON ST.  
STEVENSON ST.

**10TH MISSION**  
WASHBURN ST.  
TEHAMA ST.

**11TH MISSION**  
JESSIE SON ST.  
MINNA ST.  
NATOMA ST.

**Appendix C**  
**Signage for Narrowed Lanes**



**ALLOWED**

**USE OF**

**FULL LANE**

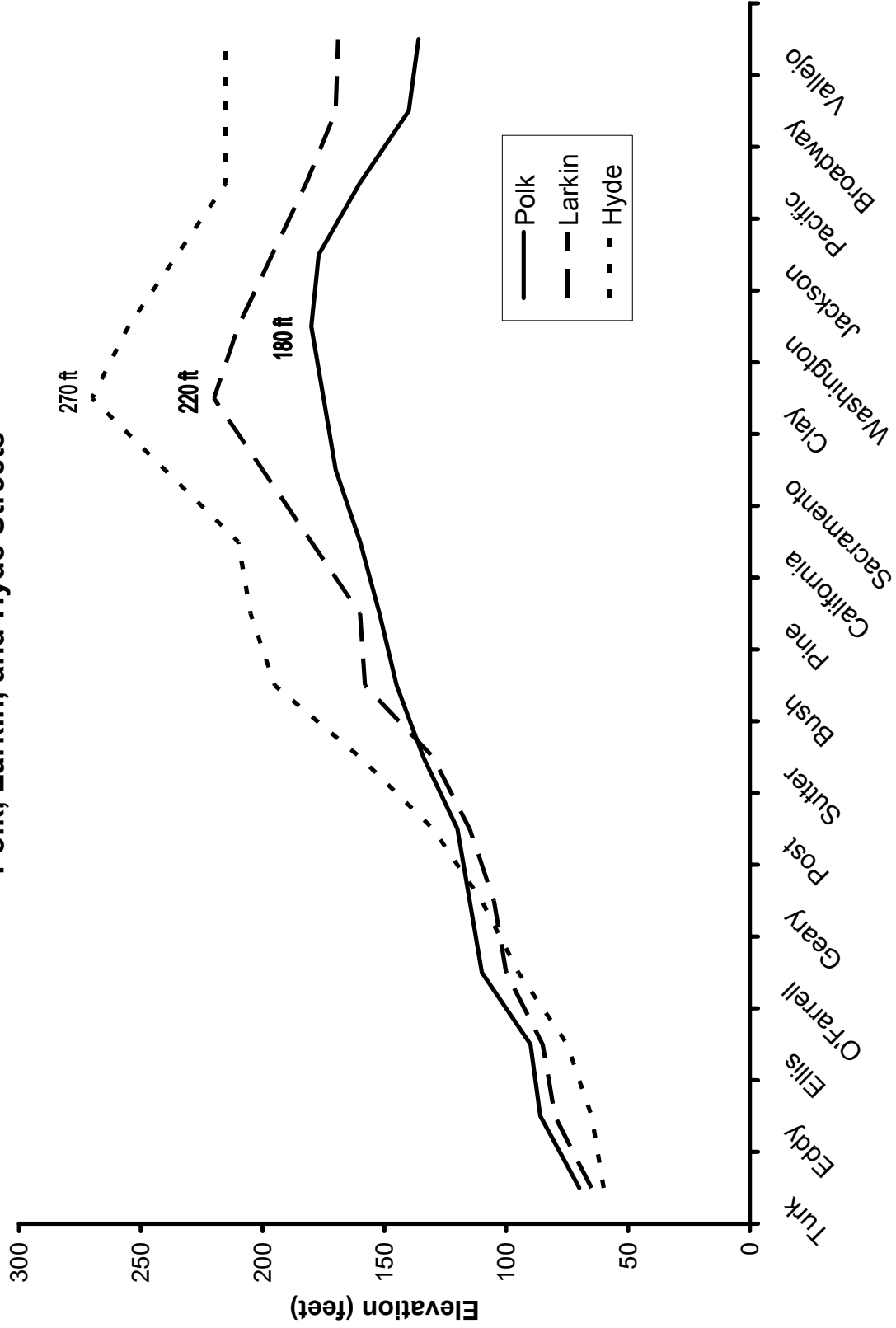
**CVC 21202**

## **Appendix D**

### **Street Elevation Profiles for Polk, Hyde, and Larkin Streets**

# Street Elevation Profiles

## Polk, Larkin, and Hyde Streets



**Appendix E**

**Minutes of Meeting with Muni's Kirkland Yard Operators**

July 26, 2000

Kirkland Division

Meeting of Operators of 19-Polk, DPT, and Muni Service Planning

Topic: Bike Lanes on Polk Street

In attendance: Mike Sallaberry (DPT Engineering), Steve Patrinick (Muni Service Planning), John Rudolph (Muni Service Planning Intern), Kirkland Division Operators, including Irwin Lum

Op Bikes are not public transit. They are an obstacle to transit.

Op Bikes have to appreciate a bus driver's limited visibility and full load of people.

Op Polk is narrow -- trucks are double parked. Why Polk? Anywhere but Polk or Van Ness.

Op Problem intersections are at Pine, Bush, and Broadway.

Op Clay Street near the Big Apple. There's a big rig that takes the whole block.

Op Polk is a busy busy street. We're dancing with these bikes all day.

Op It's not a good safe idea.

Op South of Broadway is difficult. Northpoint to Broadway is okay.

Op More loading zones might help. Less parking would help.

Op Truck drivers don't care about being cited. They say, "The company will pay for it."

Mike Where there used to be three lanes, with bikes, was it better?

Several Ops Yes, the old one was better.

Op Double parking is okay; you can just go around. But having the bikes there makes it very hard to just go around.

Op Commute hours are the most difficult.

Op The bikes go in and out of traffic, passing on the right and left. If they stayed in the lane, it would be okay.

Op "When I pass him to pull into my zone, it's like I'm trying to jam him. But I'm just doing my job."

Op Bikes are hard to see.

Op They cut you off.

Mike There's not much we can about behavior.

Op Bicycle delivery bikers are twice as dangerous. They should obey signals.

Op Pine Street is okay until Polk. Then a mass of cars, blocking the intersection.

Op Pine with two lanes was okay, but in the evening it backs up from Polk.

Mike DPT can help with an array of options, some things we can do. Paint the streets with three lanes. Install "Keep Clear" signage. Enforcement.

Lengthen left turn only lanes.

Op Good! This is still in a trial phase, right?

Mike Yes, right.

## **Appendix F**

### **ADT Volumes for Polk Street and Parallel Streets**

# ADTs for Polk Street and Parallel Streets

