



# Appendices

# Resident Survey Instrument

1. In the past week, have you gone to the following types of places either around MacArthur BART or outside the neighborhood? Check off all that apply. See map on first page.

	<u>Around MacArthur BART</u>	<u>Outside neighborhood</u>
Grocery shopping	<input type="checkbox"/>	<input type="checkbox"/>
Work	<input type="checkbox"/>	<input type="checkbox"/>
School	<input type="checkbox"/>	<input type="checkbox"/>
Pharmacy/Drugstore (Walgreens, CVS)	<input type="checkbox"/>	<input type="checkbox"/>
Bank	<input type="checkbox"/>	<input type="checkbox"/>
Doctor's office	<input type="checkbox"/>	<input type="checkbox"/>
Coffee shop/café	<input type="checkbox"/>	<input type="checkbox"/>
Restaurant	<input type="checkbox"/>	<input type="checkbox"/>
Bar	<input type="checkbox"/>	<input type="checkbox"/>
Women's clothing shopping	<input type="checkbox"/>	<input type="checkbox"/>
Men's clothing shopping	<input type="checkbox"/>	<input type="checkbox"/>
A friend's house	<input type="checkbox"/>	<input type="checkbox"/>

2. When shopping for **GROCERIES**, I usually go to...

Name of store: \_\_\_\_\_

Intersection: \_\_\_\_\_, City: \_\_\_\_\_

I go to this place: less than 1 1 2 3 4 5+ times per week (check one)

It takes me \_\_\_\_\_ minutes to get there from my home, and last time I went I got there by:

- |                               |   |
|-------------------------------|---|
| <input type="checkbox"/> Walk | <input type="checkbox"/> Drive alone        |
| <input type="checkbox"/> Bus  | <input type="checkbox"/> Drive with someone |
| <input type="checkbox"/> BART | <input type="checkbox"/> Other: _____       |
| <input type="checkbox"/> Bike |   |

3. When I or someone else in my household goes to **SCHOOL**, I/they go to...

*If no one in your household attends school, check this box and skip to Question 4.*

Name of school: \_\_\_\_\_

Intersection: \_\_\_\_\_, City: \_\_\_\_\_

I go to this place: less than 1 1 2 3 4 5+ times per week (check one)

It takes me \_\_\_\_\_ minutes to get there from my home, and last time I went I got there by:

- |                               |   |
|-------------------------------|---|
| <input type="checkbox"/> Walk | <input type="checkbox"/> Drive alone        |
| <input type="checkbox"/> Bus  | <input type="checkbox"/> Drive with someone |
| <input type="checkbox"/> BART | <input type="checkbox"/> Other: _____       |
| <input type="checkbox"/> Bike |   |

4. When going to **WORK**, I go to...

*If you do not work, check this box and skip to Question 5.*

Intersection: \_\_\_\_\_, City: \_\_\_\_\_

I go to this place: less than 1 1 2 3 4 5+ times per week (check one)

It takes me \_\_\_\_\_ minutes to get there from my home, and last time I went I got there by:

- |                               |   |
|-------------------------------|---|
| <input type="checkbox"/> Walk | <input type="checkbox"/> Drive alone        |
| <input type="checkbox"/> Bus  | <input type="checkbox"/> Drive with someone |
| <input type="checkbox"/> BART | <input type="checkbox"/> Other: _____       |
| <input type="checkbox"/> Bike |   |

5. What types of new businesses or other types of places to go to would you like to see within walking distance of your home? (Write your response below.)

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6. How safe do you feel when walking around your neighborhood? (Circle one.)

1                      2                      3                      4                      5  
*Very unsafe*                      *Neither safe nor unsafe*                      *Very safe*

7. How often do you walk under the freeway overpasses? (Check one.)

Never       Rarely       Occasionally       Frequently

8. How comfortable do you feel walking under the freeway overpasses? (Circle one.)

1                      2                      3                      4                      5  
*Very uncomfortable*                      *Neutral*                      *Very comfortable*

**DEMOGRAPHIC INFORMATION: For statistical purposes only. Please help us understand if our survey is a fair representation of the neighborhood.**

9. Do you **rent** or **own** your home?       Rent       Own (with or without a mortgage)

10. How many **people** live in your household (**including yourself**)? \_\_\_\_\_

11. How long have you lived in this home? (Check one.)

Less than 6 months                       1 to 2 years  
 6 months to 11 months                       3 or more years

12. Do you have access to ... a **car** for personal use?  Yes  No  
... a **bicycle**?  Yes  No

13. How often do you use **BART**? (Check one.)

5 times or more per week                       A few times per month  
 A few times per week                       Once a month or less  
 Once per week                       Never

14. How often do you use the **bus**? (Check one.)

5 times or more per week                       A few times per month  
 A few times per week                       Once a month or less  
 Once per week                       Never

15. What is your **annual household income**? (Check one.)

Less than \$25,000                       \$75,000 to \$99,999  
 \$25,000 to \$49,999                       \$100,000 or more  
 \$50,000 to \$74,999

16. Do you have any other comments you would like to add?

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Thank you for your participation in the survey! If you would like to be entered into the raffle for a chance to win \$50, please leave your mailing address or email on the tear-off sheet on the first page of the survey and send that with your survey response, **or** email your contact information to [transpostudyfall14@berkeley.edu](mailto:transpostudyfall14@berkeley.edu).

## Interview guide

## Introduction

We are UC Berkeley graduate students working on a class project to look at transportation patterns and economic activity along the Telegraph Avenue corridor and MacArthur BART station area. We are working with our clients, the City of Oakland and BART, to evaluate how future transportation investments can support local retail and economic growth. As part of the process, we are surveying the merchant community to learn about your interests and concerns.

We plan to combine the findings from the interviews, a shopper survey, and other data gathered to inform our class's overall analysis of transportation needs and opportunities in the Temescal and MacArthur areas. Your responses will be kept completely confidential. Your help is very much appreciated! The estimated time to respond is 6-10 minutes.

If you have any questions about our study you may contact Professor Elizabeth Deakin at [edeakin@berkeley.edu](mailto:edeakin@berkeley.edu) or 510 642 4749.

Type of business: \_\_\_\_\_

Business Name: \_\_\_\_\_

Address: \_\_\_\_\_

### First, we would like to ask you about the business.

1. Background information about the business
  - Number of employees at this specific location \_\_\_\_\_
  - Hours and days of operation \_\_\_\_\_
2. How long has this business been at this location? \_\_\_\_\_ (years)
3. How long have you been with this business? \_\_\_\_\_ (years)
4. How many deliveries do you receive each week? (check one of the following)  
 1 to 3                       4 to 7                       More than 7
5. Please describe your pickup and delivery schedule (days & times) in a normal week.
6. Where do your delivery trucks/vans usually stop for deliveries? (Please check one)  
 Loading zone                       Metered parking  
 Off-street parking/loading/alley                       Double park
7. Have any of your delivery drivers told you about, or have you observed, difficulty finding a convenient and legal place to load/unload?  
 YES: please explain: \_\_\_\_\_  
 NO

**Next, we would like to ask you questions about your customers.**

8. Have you ever surveyed your customers about how they get to your business?  
 YES: Would you be willing to share your results with us? Yes  No   
 No, we haven't surveyed customers about how they get to this business.

9. Please estimate the percentage of your customers that come from:

Place	Percentage using this mode:
Immediate neighborhood	%
Other Oakland neighborhoods	%
Other parts of the East Bay (Berkeley, Alameda, Piedmont, Richmond, etc.)	%
More distant parts of the Bay Area	%
I don't know	%
<b>Total</b>	<b>100%</b>

10. To the best of your knowledge, please estimate **how your customers arrive** at your business

Mode of travel:	Percentage using this mode:	I don't know	Comments
<b>Driving</b>	%		
<b>Walking</b>	%		
<b>Biking</b>	%		
<b>Bus</b>	%		
<b>BART</b>	%		
<b>Other (please state) _____</b>	%		
<b>Total</b>	<b>100%</b>		

11. To the best of your knowledge, how well do the transportation service categories listed in the table below currently **meet the needs of your customers**? (Please mark X for each category as appropriate)

	Excellent	Very good	Good	Fair	Poor	I don't know	Comments
Parking							
Bus							
BART							
Bike facilities							
Sidewalks							
Street lighting							

Next, we would like to ask you a few questions about your **employees**.

12. To the best of your knowledge, please estimate how your **employees** arrive to work

Mode of travel:	Number or percentage using this mode:	I don't know	Comments
Driving			
Walking			
Biking			
Bus			
BART			
Other (please state) _____			
<b>Total</b>	<b>100%</b>		

13. To the best of your knowledge, how well do the transportation service categories listed in the table below currently meet the needs of your **employees**? (Please mark X for each category as appropriate)

	Excellent	Very good	Good	Fair	Poor	Comments
Parking						
Bus						
BART						
Bike facilities						
Sidewalks						
Street lighting						



14. To the best of your knowledge, where do the majority of the employees that drive park their cars?

- |  |  |
|--|--|
| <input type="checkbox"/> Free on-street parking      | <input type="checkbox"/> Paid on-street parking  |
| <input type="checkbox"/> Free off-street parking     | <input type="checkbox"/> Paid off-street parking |
| <input type="checkbox"/> Other: Please specify _____ | <input type="checkbox"/> Don't know              |

**Finally, we would like to ask you about changes in the Temescal and MacArthur BART areas.**

15. What types of businesses or services do you think are missing from the Temescal and MacArthur areas?

16. Additional housing is being developed in the MacArthur BART station area. Do you think this will (check one):

- Help your business                       Hurt your business                       Don't know

Please explain: \_\_\_\_\_

17. The City of Oakland has proposed changes in street design of Telegraph Avenue. Are you aware of this?

- Yes  No

If yes, what is your view on the proposed changes to parking? Please describe.

If yes, what is your view on the proposed changes regarding bike lanes? Please describe.

18. Are there any other issues that you would like to share with us?

19. Who else should we talk to on Telegraph Avenue, about transportation issues?

# Shopper Survey Instrument

**1. What activities will you do in this area today?**

(Check all that apply.)

- Shop
- Have coffee, snack or fast food (quick meal)
- Have breakfast, lunch, or dinner (sit-down meal)
- Have drinks at a bar or a cafe
- Visit a park
- Visit a beauty salon
- Visit an ATM/bank
- Visit the post office
- Visit professional services (lawyer, doctor, etc.)
- Go to church or community event
- Just passing through
- Other: \_\_\_\_\_

**2. Which stores, restaurants, or other businesses do you visit in this area?**

**3. How many stores or places did you/will you visit today?**

- 1
- 2
- 3-4
- 5 or more

**4. How many people are with you today (including yourself)?** \_\_\_\_\_

**5. How often do you visit this area to shop or visit other businesses (personal services, banks, etc.)?**

- First time
- Once a month
- Once or twice per month
- Once a week
- 2-4 times per week
- 5 -6 times per week
- 7 or more times per week

**6. Considering all the expenditures you have made or intend to make today, approximately how much money did you/will you spend in this neighborhood?**

\$ \_\_\_\_\_

**7. Is this how much money you usually spend per day in this neighborhood?**

- Yes
- No, I usually spend about \$ \_\_\_\_\_
- I don't know.

**8. What kinds of shops and activities would you like to see more of in this area?**

\_\_\_\_\_  
\_\_\_\_\_

**9. How did you travel here today?**

- Drive alone
- Drive with friends or family /get dropped off
- BART
- Bus
- Walk
- Bicycle
- Other: \_\_\_\_\_

**10. Is this how you usually travel to this neighborhood?**

- Yes
- No, I usually travel by \_\_\_\_\_

**ANSWER QUESTION 11 ONLY IF YOU PARKED YOUR BICYCLE IN THIS NEIGHBORHOOD.**

**11. If you rode a bike to shop here today, where did you park your bicycle?**

- An outdoor bike rack at a business
- A bike rack on the street
- A tree or other immovable object on the street
- Indoor bike storage
- Other: \_\_\_\_\_

Parking location (intersection or landmark): \_\_\_\_\_

**ANSWER QUESTION 12 ONLY IF YOU PARKED YOUR CAR IN THIS NEIGHBORHOOD.**

**12. If you drove here, where did you park your car?**

- Free on-street
- Paid on-street (at a meter)
- Free off-street (a store's parking lot)
- Paid off-street (other parking lot or garage)
- Other: \_\_\_\_\_

Parking location (intersection or landmark): \_\_\_\_\_

**13. About you (for statistical purposes only)**

Age: \_\_\_\_ Sex: \_\_\_\_\_ Home Zip Code: \_\_\_\_\_

Intersection Closest to Home: \_\_\_\_\_ & \_\_\_\_\_

Number of people in your household: \_\_\_\_\_

Household Income:

- Less than \$25,000
- \$25,000 – \$50,000
- \$50,000 – \$75,000
- \$75,000 – \$100,000
- \$100,000 - \$150,000
- Over \$150,000

This survey asks you about your use of the commercial district around Telegraph Avenue, Oakland. The survey will take less than 10 minutes and your answers will be kept confidential and anonymous. Results will be used in developing and refining planning proposals for the commercial district.

You are free to decline to answer any questions, or to stop participating at any time.

The survey is being conducted by graduate students at UC Berkeley under the supervision of Prof. Elizabeth Deakin. If you have any questions, please contact Prof. Deakin at [edeakin@berkeley.edu](mailto:edeakin@berkeley.edu). If you have any questions about your rights or treatment as a research participant in this study, please contact the University of California at Berkeley's Committee for Protection of Human Subjects at 510-642-7461 or send an email to [subjects@berkeley.edu](mailto:subjects@berkeley.edu).

**THANK YOU FOR YOUR TIME!**

Location: \_\_\_\_\_

Time: \_\_\_\_\_

# Employee Survey Instrument

## WIN A \$50 AMERICAN EXPRESS GIFT CARD BY TAKING THIS SURVEY

We need employees at businesses like yours to take our survey. Just fill in your email address or phone number on the last page, and you will be entered into a drawing for a \$50 American Express gift card. The drawing will take place on Dec. 1, 2014. Your confidential contact information will be stored separately from survey data, and it will be destroyed after the drawing.

### About this survey

This survey asks you about your travel habits and feelings about public safety in and around the commercial district near Telegraph Avenue, Oakland. The survey will take less than 10 minutes and your answers will be kept confidential and anonymous. The results will be used to develop and refine planning proposals for the district. You are free to decline to answer any questions, or to stop participating at any time

The survey is being conducted by graduate students at UC Berkeley under the supervision of Prof. Elizabeth Deakin. If you have any questions, please contact Prof. Deakin at [edeakin@berkeley.edu](mailto:edeakin@berkeley.edu). If you have any questions about your rights or treatment as a research participant in this study, please contact the University of California at Berkeley’s Committee for Protection of Human Subjects at 510-642-7461 or send an email to [subjects@berkeley.edu](mailto:subjects@berkeley.edu).

THANK YOU FOR YOUR TIME!

Place of employment: \_\_\_\_\_

### COMMUTE

1. For a normal week, how do you typically get to work? (Please check all that apply.)

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Drive alone							
Carpool/get dropped-off							
BART							
Bus							
Walking							
Biking							
Other:							

Comments:

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**2. The following is a list of statements about the area where you work. (Please check the box that applies.)**

	Disagree Strongly	Disagree	Neutral	Agree	Agree Strongly	Not Applicable
I can usually find parking for my car for the duration of my workday.						
I am sometimes late to work because I struggle to find parking for my car.						
I usually need to move my car during my workday.						
I usually need to feed the meter during my workday.						
The parking meters are often broken.						
It is convenient for me to take BART to work.						
Because of my commute, I wish BART service ran later in the evening.						
It is convenient for me to take the bus to work.						
Because of my commute, I wish bus service ran later in the evening.						
I feel safe while riding my bike to work.						
I feel safe while walking to work.						
Public safety is a concern on my commute to work.						
Public safety is a concern on my commute from work.						

Comments:

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**WORKDAY**

**3. The following is a list of statements about the area where you work. Please check the box that applies.**

	Disagree Strongly	Disagree	Neutral	Agree	Agree Strongly	Not Applicable
I shop in the neighborhood before/after work (e.g. books, clothes, hair cuts, etc.).						
I go to restaurants or bars in this neighborhood before/after work.						
I buy groceries or other essentials in this neighborhood before/after work.						
I wish shops and services were open later in this area.						
I feel safe in the neighborhood around my workplace.						

Comments:

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**ANSWER QUESTION 4 ONLY IF YOU TYPICALLY PARK YOUR BICYCLE IN THIS NEIGHBORHOOD.**

**4. If you ride a bike, where do you typically park your bicycle? (Please choose one.)**

- A bike rack on the street
- A tree or other immovable object on the street
- A bike storage facility
- Protected bike storage at my work place.
- Other: \_\_\_\_\_

Parking location (intersection or landmark):

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**ANSWER QUESTION 5 ONLY IF YOU TYPICALLY PARK YOUR CAR IN THIS NEIGHBORHOOD.**

**5. If you drive, where do you typically park your car? (Please choose one.)**

- Free on-street
- Paid on-street (meter)
- Free off-street (employer’s parking lot)



- Paid off-street (third-party parking lot or garage)
- I don't know.
- Other: \_\_\_\_\_

Parking location (intersection or landmark):

\_\_\_\_\_

**BASIC INFORMATION**

**6. What time of day do you usually start work at this location?**

- Morning (6-9 am)
- Late morning (9-11 am)
- Midday (11 am-1 pm)
- Afternoon (1-4 pm)
- Late afternoon (4-6 pm)
- Evening (6-9 pm)
- Night (9-12 pm)
- Late night/Early morning (12-6 am)
- It varies considerably:  
\_\_\_\_\_

**7. How many hours a week do you usually work at this location?**

- Less than 20 hours a week
- 20-40 hours a week
- More than 40 hours a week
- It varies considerably:  
\_\_\_\_\_

**8. How long is your usual workday?**

- Less than 4 hours a day
- 4-8 hours a day
- Over 8 hours a day
- It varies considerably:  
\_\_\_\_\_

**9. For how long have you worked for this business?**

- Less than 1 year
- 1-2 years
- 3-4 years
- Over 5 years

**10. About you (for statistical purposes only)**

Age: \_\_\_\_\_  
 Sex: \_\_\_\_\_  
 Home Zip Code: \_\_\_\_\_  
 Intersection Closest to Home:  
 \_\_\_\_\_ & \_\_\_\_\_

**THANK YOU FOR YOUR TIME!**

.....  
COMPLETE THIS SECTION TO PARTICIPATE IN THE \$50 AMERICAN EXPRESS GIFT CARD DRAWING:

Email: \_\_\_\_\_

Phone: \_\_\_\_\_

We will try to reach the gift card winner for up to one week after the drawing date. If we cannot reach the initial winner within that time, then we will randomly select another winner using the same

procedure until we can award the gift card. After the gift card has been awarded, we will destroy all the confidential email addresses and phone numbers.

# Network Analysis

**Figure A. 8. 1 AM traffic counts**

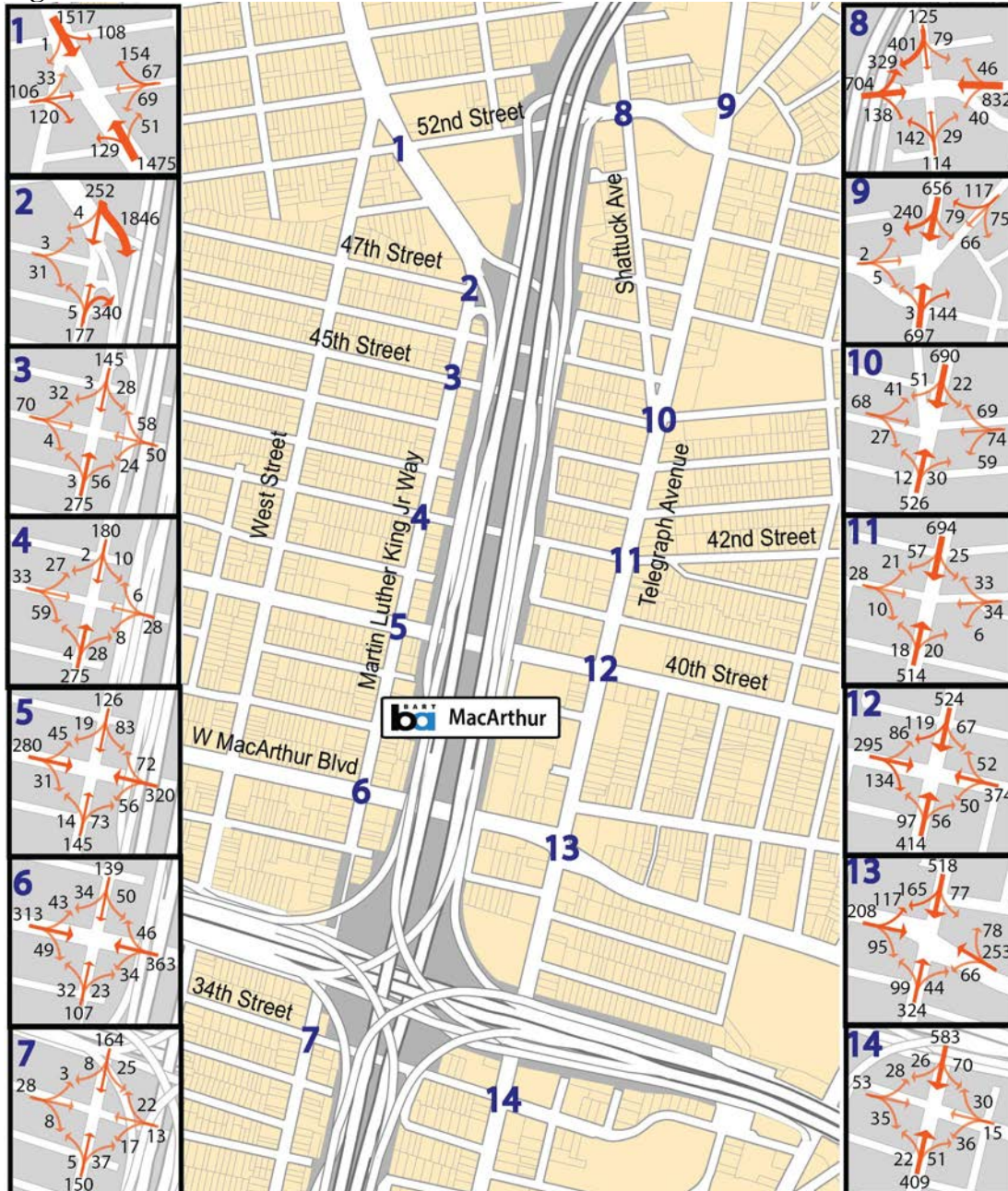
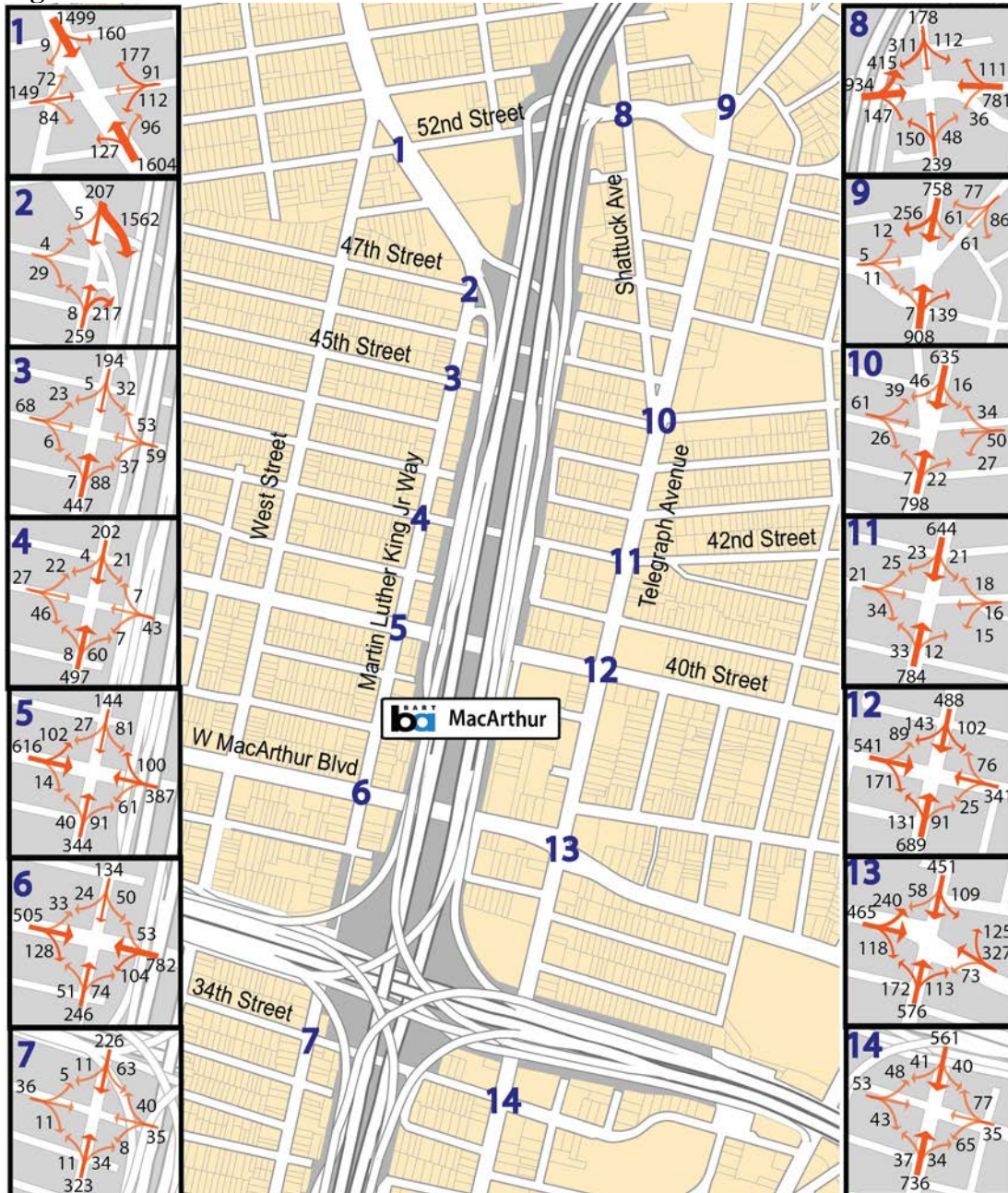




Figure A. 8. 2 PM Traffic Counts





**Figure A. 8. 3 AM Bicycle Counts**

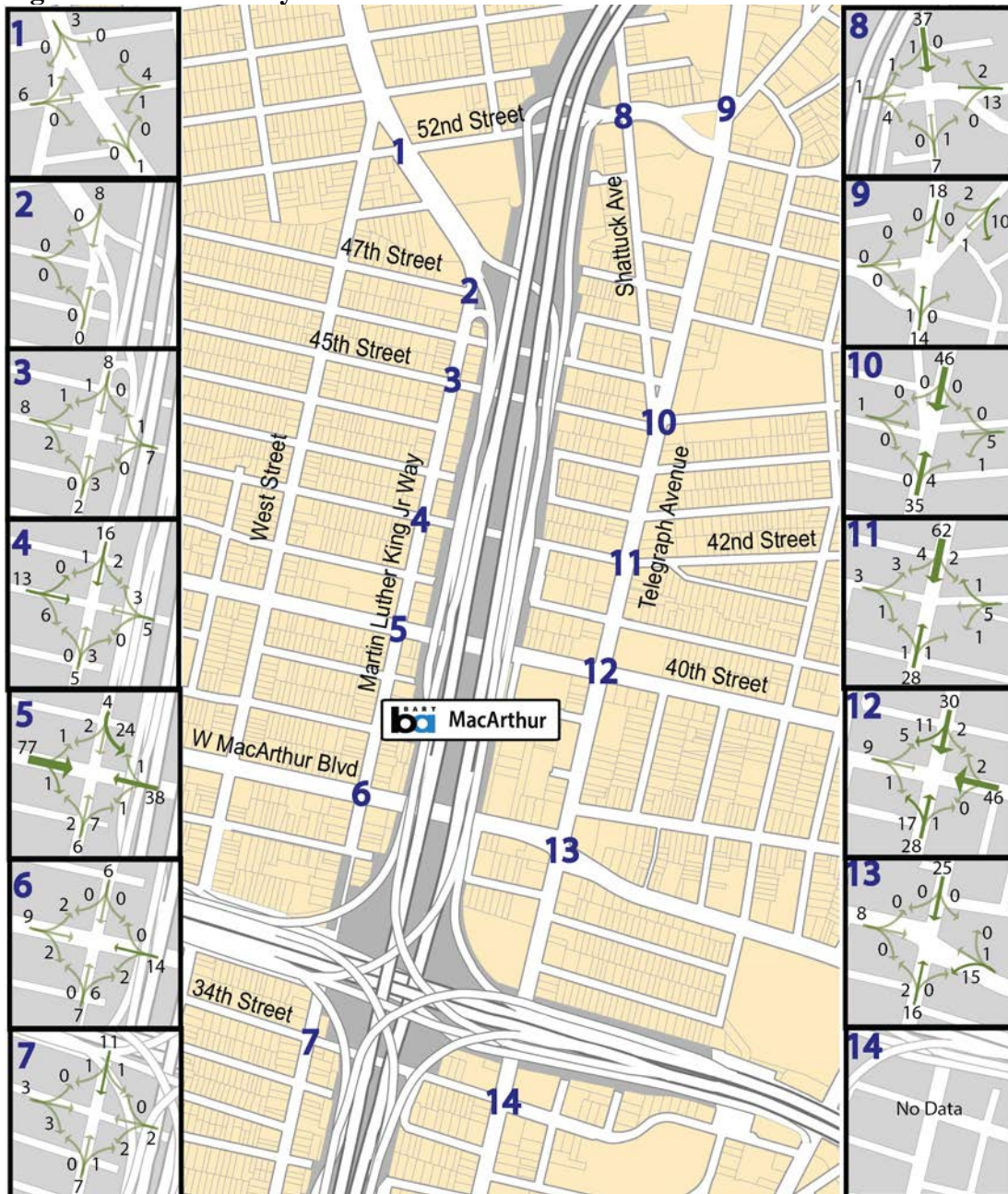
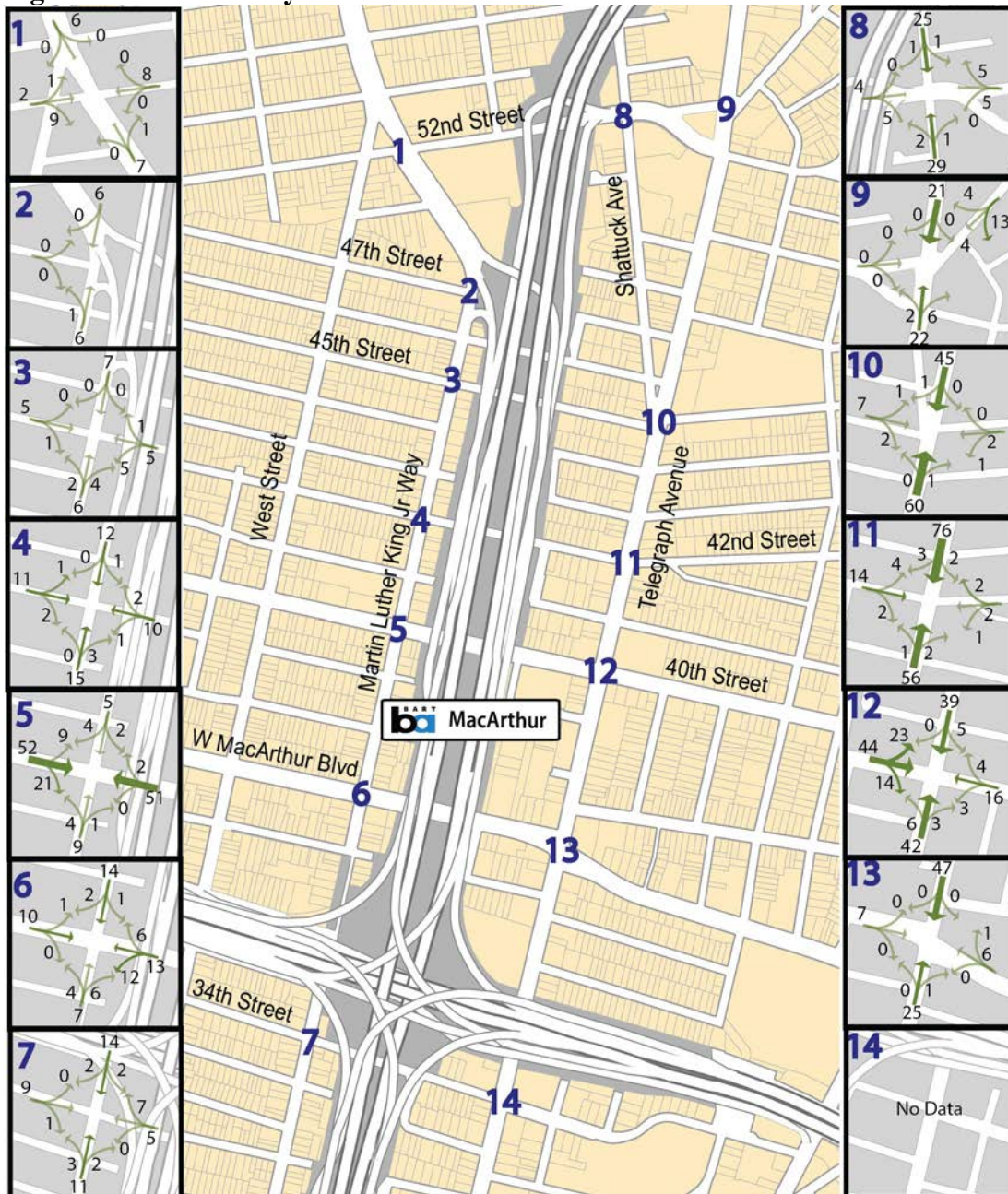


Figure A. 8. 4 PM Bicycle Counts





**Figure A. 8. 5 AM Pedestrian Counts**

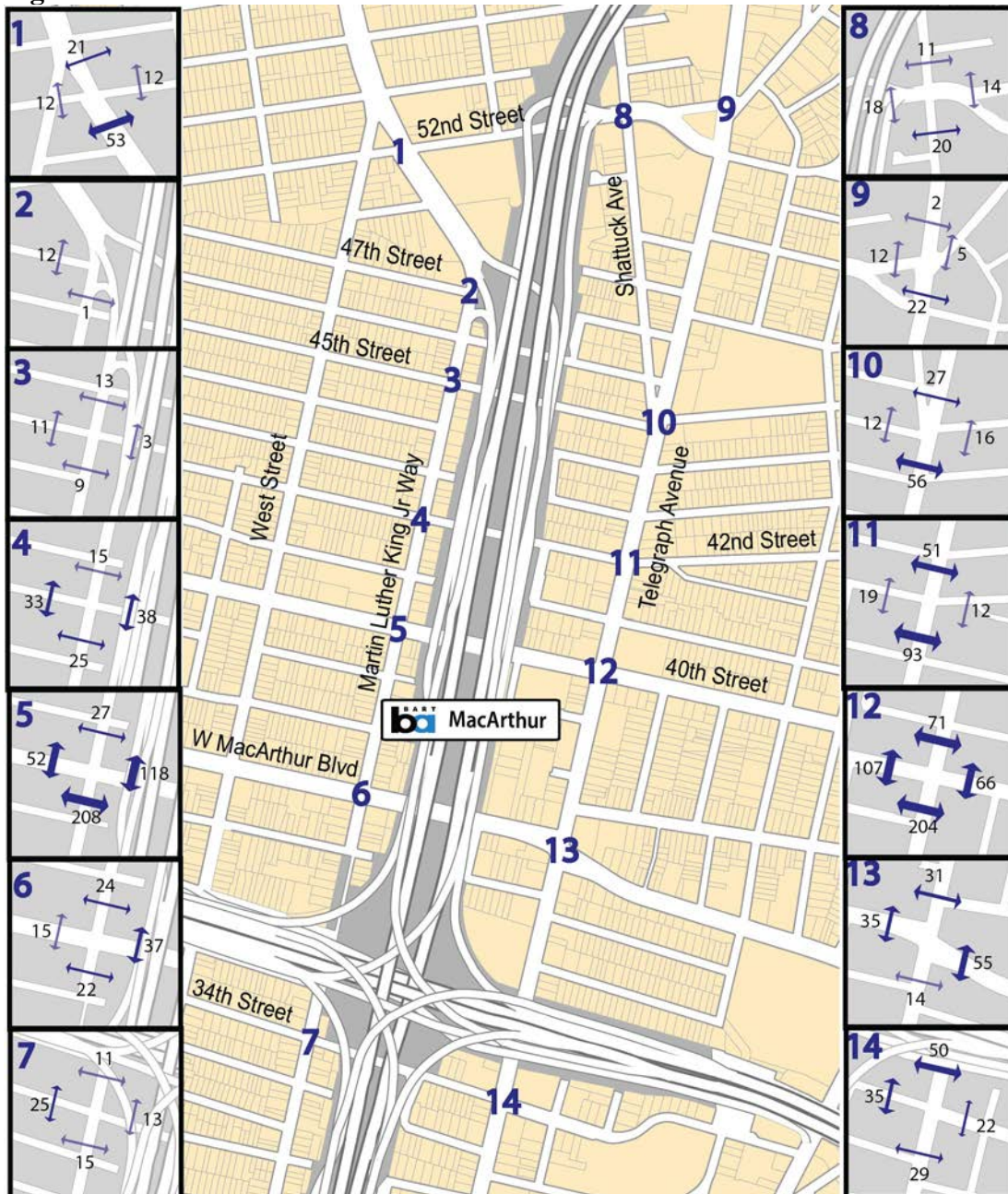
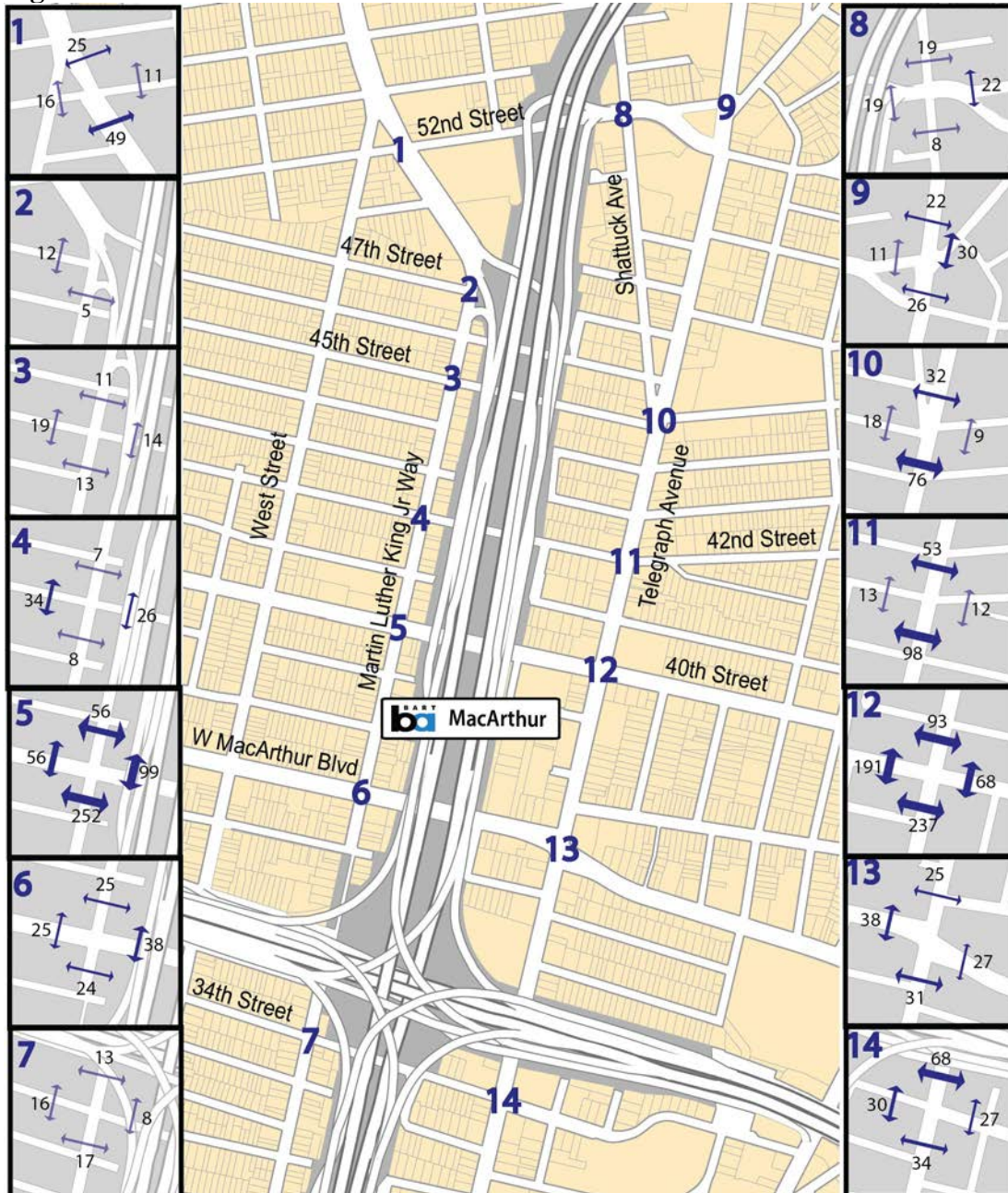
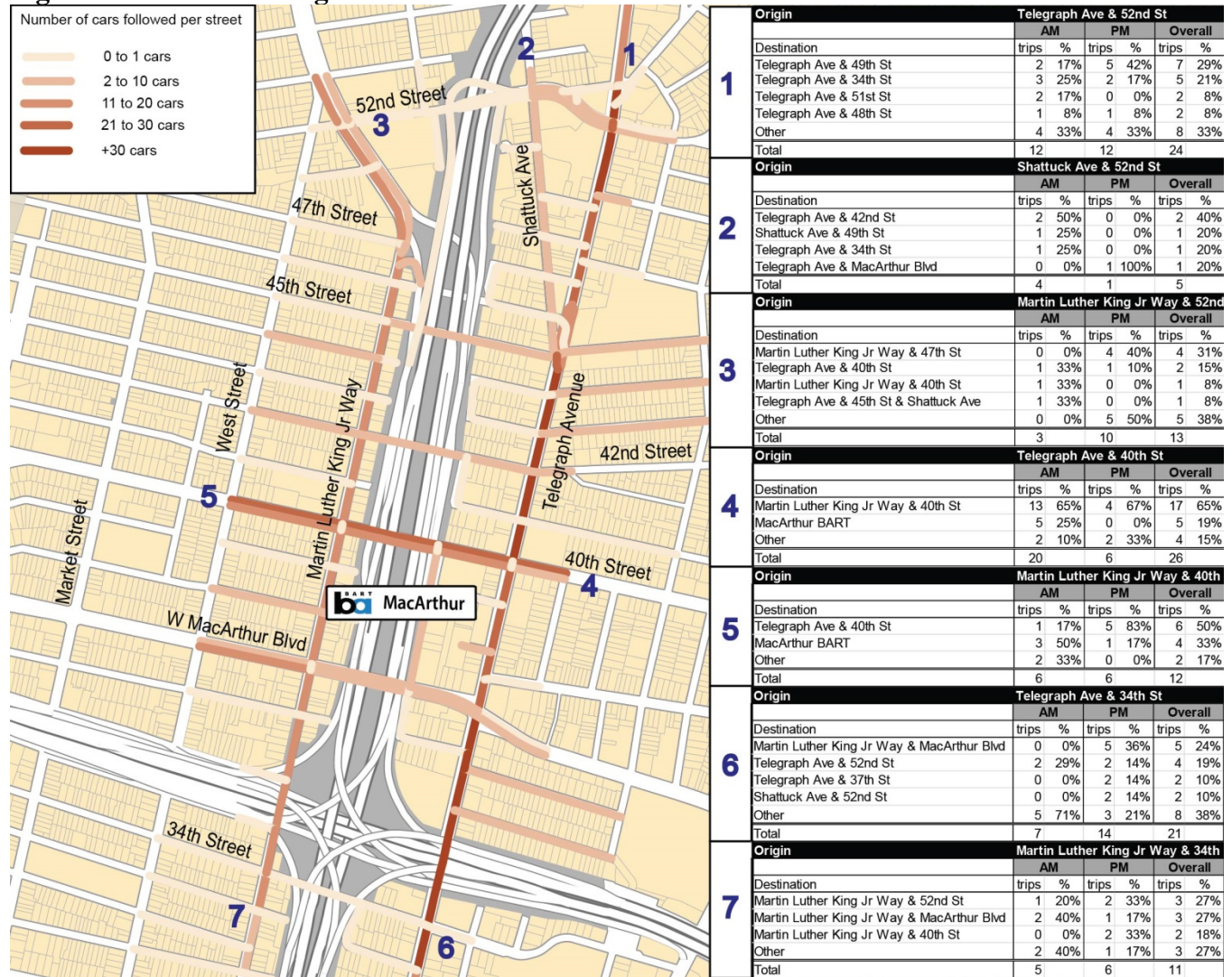


Figure A. 8. 6 PM Pedestrian Counts

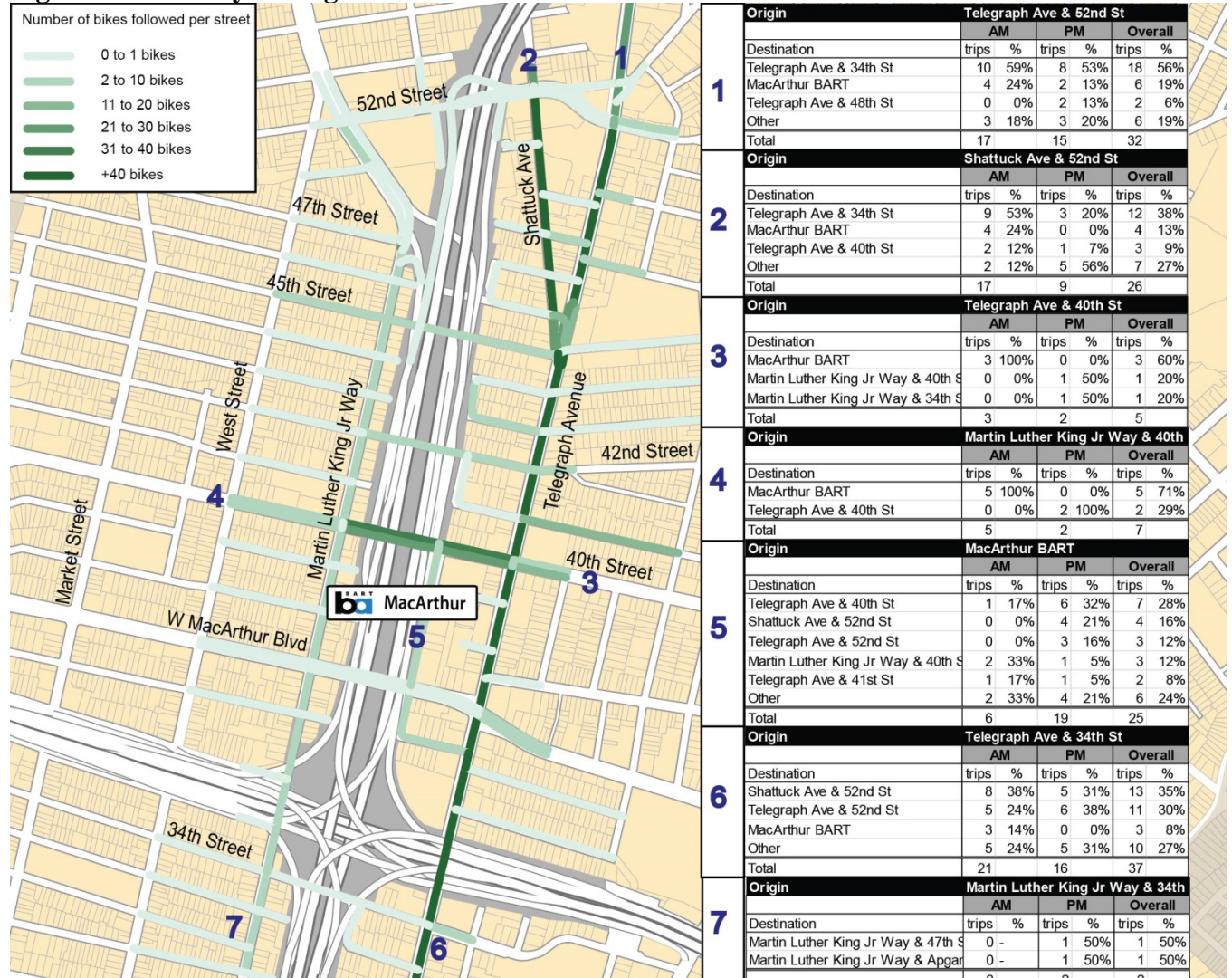




**Figure A. 8. 7 Traffic origins and destinations**



**Figure A. 8. 8 Bicycle origins and destinations**



**Table A. 8. 1 Network results for all models**

	Average Delay				Vehicles Attempting to Enter Network				Vehicles That Did Not Enter Network
	Total	Cars	Buses	Bikes	Total	Cars	Buses	Bikes	
2017 No Action	175	174	448	157	11,970	11,327	37	372	1,939
2032 No Action	278	276	596	283	12,269	11,558	37	436	5,180
2032 Low TOD Modal Shift on Current Infrastructure	236	235	578	233	12,538	11,417	36	845	4,419
2032 High TOD Modal Shift on Current Infrastructure	241	239	563	250	12,474	10,515	38	1,696	5,475
2032 High TOD Modal Shift on Complete Streets and 40th St. Pedestrianization	263	275	556	191	11,475	9,575	39	1,655	5,813
2032 High TOD Modal Shift on Complete Streets	424	427	852	405	8,772	7,403	28	1,186	8,335



**Table A. 8. 2 2014 Current Conditions intersection results**

	Car LOS	Average queue length (ft)	Person Delay (s)	Bus delay (s)	Bus stops	Bike delay (s)
Martin Luther King Jr. Way & 52nd St.	D	278	51.46	73.8	2	36.3
Martin Luther King Jr. Way & 47th St.	B	0	11.53	9.6	0	2.1
Martin Luther King Jr. Way & 45th St.	A	5	8.19	17.0	1	5.3
Martin Luther King Jr. Way & 42nd St.	A	3	2.97	16.9	0	2.7
Martin Luther King Jr. Way & 40th St.	B	19	17.43	19.6	1	16.8
Martin Luther King Jr. Way & MacArthur Blvd.	B	14	11.16	40.6	1	18.8
Martin Luther King Jr. Way & 34th St.	B	8	11.30	36.6	1	11.0
Shattuck Ave. & 52nd St.	F	450	88.19	0.0	0	73.9
Telegraph Ave. & 52nd St.	E	97	58.19	85.4	2	41.7
Telegraph Ave. & 51st St.	E	448	78.59	111.8	3	71.8
Telegraph Ave. & 45th St. & Shattuck Ave.	B	11	12.01	11.7	0	3.6
Telegraph Ave. & 42nd St.	A	8	7.35	7.7	0	8.9
Telegraph Ave. & 40th St.	C	69	31.25	40.9	2	31.3
Telegraph Ave. & MacArthur Blvd.	C	42	24.22	32.0	1	17.5
Telegraph Ave. & 34th St.	B	19	13.93	15.6	1	9.5

**Table A. 8. 3 2017 No Action intersection results**

	Car LOS	Average queue length (ft)	Person Delay (s)	Bus delay (s)	Bus stops	Bike delay (s)
Martin Luther King Jr. Way & 52nd St.	D	274	53.87	79.5	2	43.6
Martin Luther King Jr. Way & 47th St.	B	0	11.49	22.3	1	2.9
Martin Luther King Jr. Way & 45th St.	A	5	9.14	17.5	1	6.8
Martin Luther King Jr. Way & 42nd St.	A	2	3.58	17.3	0	2.6
Martin Luther King Jr. Way & 40th St.	B	25	20.42	19.8	1	17.3
Martin Luther King Jr. Way & MacArthur Blvd.	B	19	12.25	49.5	1	18.1
Martin Luther King Jr. Way & 34th St.	B	8	11.93	35.6	1	9.2
Shattuck Ave. & 52nd St.	F	285	82.27	0.0	0	75.0
Telegraph Ave. & 52nd St.	E	119	64.70	67.2	2	37.0
Telegraph Ave. & 51st St.	F	600	81.11	111.4	3	75.6
Telegraph Ave. & 45th St. & Shattuck Ave.	E	121	68.83	99.2	6	39.9
Telegraph Ave. & 42nd St.	D	84	37.84	32.2	1	33.8
Telegraph Ave. & 40th St.	E	198	59.25	75.0	2	57.3
Telegraph Ave. & MacArthur Blvd.	C	83	35.18	40.8	2	23.3
Telegraph Ave. & 34th St.	B	21	13.34	11.9	0	9.9

**Table A. 8. 4 2032 No Action intersection results**

	Car LOS	Average queue length (ft)	Person Delay (s)	Bus delay (s)	Bus stops	Bike delay (s)
Martin Luther King Jr. Way & 52nd St.	D	281	53.22	85.6	2	40.8
Martin Luther King Jr. Way & 47th St.	B	1	10.72	22.4	0	1.9
Martin Luther King Jr. Way & 45th St.	A	6	10.09	22.8	1	6.2
Martin Luther King Jr. Way & 42nd St.	A	3	4.49	17.0	0	2.2
Martin Luther King Jr. Way & 40th St.	F	165	86.42	80.0	3	96.1
Martin Luther King Jr. Way & MacArthur Blvd.	C	35	26.45	48.5	1	23.0
Martin Luther King Jr. Way & 34th St.	B	11	14.43	40.4	1	13.1
Shattuck Ave. & 52nd St.	F	711	121.89	0.0	0	124.9
Telegraph Ave. & 52nd St.	E	124	81.12	107.4	4	73.9
Telegraph Ave. & 51st St.	F	645	97.69	79.7	3	74.9
Telegraph Ave. & 45th St. & Shattuck Ave.	F	166	75.69	69.6	3	49.3
Telegraph Ave. & 42nd St.	E	163	71.89	54.1	3	51.3
Telegraph Ave. & 40th St.	F	681	133.64	132.4	4	121.7
Telegraph Ave. & MacArthur Blvd.	F	537	127.50	63.3	2	81.1
Telegraph Ave. & 34th St.	F	230	131.89	152.4	5	82.8

**Table A. 8. 5 2032 Low TOD Modal Shift on Current Infrastructure intersection results**

	Car LOS	Average queue length (ft)	Person Delay (s)	Bus delay (s)	Bus stops	Bike delay (s)
Martin Luther King Jr. Way & 52nd St.	E	294	62.47	91.3	2	76.6
Martin Luther King Jr. Way & 47th St.	A	0	10.02	26.4	1	0.4
Martin Luther King Jr. Way & 45th St.	A	7	9.62	14.5	0	7.4
Martin Luther King Jr. Way & 42nd St.	A	3	7.21	17.9	0	1.3
Martin Luther King Jr. Way & 40th St.	D	89	45.35	32.9	1	45.2
Martin Luther King Jr. Way & MacArthur Blvd.	B	29	15.03	48.1	1	21.3
Martin Luther King Jr. Way & 34th St.	B	10	14.07	34.1	2	9.5
Shattuck Ave. & 52nd St.	F	562	90.33	0.0	0	124.2
Telegraph Ave. & 52nd St.	E	123	71.01	102.6	4	57.1
Telegraph Ave. & 51st St.	F	609	89.62	74.9	2	76.9
Telegraph Ave. & 45th St. & Shattuck Ave.	E	161	65.04	69.7	4	35.0
Telegraph Ave. & 42nd St.	E	120	53.29	34.9	2	30.3
Telegraph Ave. & 40th St.	F	526	86.07	94.5	3	69.4

Telegraph Ave. & MacArthur Blvd.	E	345	58.35	66.7	2	36.7
Telegraph Ave. & 34th St.	E	164	71.30	91.0	5	36.8

**Table A. 8. 6 2032 High TOD Modal Shift on Current Infrastructure intersection Results**

	Car LOS	Average queue length (ft)	Person Delay (s)	Bus delay (s)	Bus stops	Bike delay (s)
Martin Luther King Jr. Way & 52nd St.	E	318	69.43	111.5	3	93.2
Martin Luther King Jr. Way & 47th St.	A	1	9.95	19.2	0	0.5
Martin Luther King Jr. Way & 45th St.	B	10	12.63	20.7	0	7.8
Martin Luther King Jr. Way & 42nd St.	B	16	21.68	40.7	1	18.1
Martin Luther King Jr. Way & 40th St.	E	261	77.50	84.2	3	73.8
Martin Luther King Jr. Way & MacArthur Blvd.	D	101	44.60	125.6	4	48.1
Martin Luther King Jr. Way & 34th St.	C	22	22.99	44.1	2	15.6
Shattuck Ave. & 52nd St.	F	530	93.42	0.0	0	113.0
Telegraph Ave. & 52nd St.	E	125	75.04	238.5	7	54.3
Telegraph Ave. & 51st St.	F	619	81.13	21.9	0	53.2
Telegraph Ave. & 45th St. & Shattuck Ave.	C	25	28.00	31.1	1	8.8
Telegraph Ave. & 42nd St.	C	27	23.90	18.2	0	12.9
Telegraph Ave. & 40th St.	F	611	94.70	111.3	3	73.7
Telegraph Ave. & MacArthur Blvd.	E	419	80.74	91.6	3	47.7
Telegraph Ave. & 34th St.	F	224	96.12	163.4	10	52.8

**Table A. 8. 7 2032 High TOD Modal Shift on Complete Streets Intersection Results**

	Car LOS	Average queue length (ft)	Person Delay (s)	Bus delay (s)	Bus stops	Bike delay (s)
Martin Luther King Jr. Way & 52nd St.	E	308	63.00	87.0	2	72.2
Martin Luther King Jr. Way & 47th St.	B	1	10.98	28.4	1	0.4
Martin Luther King Jr. Way & 45th St.	B	7	12.37	23.4	1	7.3
Martin Luther King Jr. Way & 42nd St.	A	4	7.58	21.4	1	1.6
Martin Luther King Jr. Way & 40th St.	C	27	23.32	29.7	1	17.6
Martin Luther King Jr. Way & MacArthur Blvd.	F	410	95.46	106.3	4	57.6
Martin Luther King Jr. Way & 34th St.	F	107	108.14	158.5	5	50.6
Shattuck Ave. & 52nd St.	E	519	75.01	0.0	0	97.4
Telegraph Ave. & 52nd St.	E	104	79.42	114.1	5	82.5
Telegraph Ave. & 51st St.	F	626	88.07	82.5	2	64.8
Telegraph Ave. & 45th St. & Shattuck Ave.	C	78	26.03	21.4	1	7.0



Telegraph Ave. & 42nd St.	C	63	19.84	13.7	0	8.7
Telegraph Ave. & 40th St.	D	268	51.86	55.5	2	26.6
Telegraph Ave. & MacArthur Blvd.	F	393	88.33	64.5	2	43.6
Telegraph Ave. & 34th St.	E	251	83.47	84.8	5	27.4

**Table A. 8. 8 2032 High TOD Modal Shift on Complete Streets and 40th St.  
Pedestrianization intersection results**

	Car LOS	Average queue length (ft)	Person Delay (s)	Bus delay (s)	Bus stops	Bike delay (s)
Martin Luther King Jr. Way & 52nd St.	E	328	70.00	168.0	6	97.9
Martin Luther King Jr. Way & 47th St.	B	2	11.53	15.2	0	1.8
Martin Luther King Jr. Way & 45th St.	B	9	12.38	24.4	1	6.7
Martin Luther King Jr. Way & 42nd St.	A	11	10.44	24.0	1	3.1
Martin Luther King Jr. Way & 40th St.	C	27	21.28	29.3	2	16.8
Martin Luther King Jr. Way & MacArthur Blvd.	F	492	140.60	92.3	3	120.4
Martin Luther King Jr. Way & 34th St.	F	138	127.37	241.8	8	93.0
Shattuck Ave. & 52nd St.	E	511	77.65	0.0	0	102.2
Telegraph Ave. & 52nd St.	E	106	77.92	135.4	4	37.2
Telegraph Ave. & 51st St.	F	762	84.01	71.5	2	61.2
Telegraph Ave. & 45th St. & Shattuck Ave.	E	224	56.69	38.1	1	19.1
Telegraph Ave. & 42nd St.	E	386	60.61	34.0	1	40.7
Telegraph Ave. & 40th St.	F	260	80.16	93.0	3	31.6
Telegraph Ave. & MacArthur Blvd.	F	742	125.29	100.8	3	54.8
Telegraph Ave. & 34th St.	F	324	117.74	131.9	5	44.5