

Memo

Date: Tuesday, December 13, 2016

Project: Lakeview Avenue Advisory Bicycle Lane Assessment

To: Catherine Woodbury, City of Cambridge Department of Public Works

From: Jerry Friedman, P.E., HDR

Subject: Lakeview Avenue Advisory Bicycle Lane Assessment Technical Memorandum

This document summarizes the evaluation and analysis associated with the installation of an advisory bicycle facility along Lakeview Avenue between Brattle Street and Huron Avenue by the City of Cambridge (City). The advisory bicycle lanes have now been in place for over a year, giving residents and other users of the street time to become adjusted to them. The City is conducting this evaluation to determine whether the markings are being used as intended, whether they are effective, whether they have an impact on motorist and bicyclist behavior, and how and where they could be implemented in other locations around the City.

Introduction

Lakeview Avenue is a segment of an identified City of Cambridge bicycle wayfinding route that extends between the Charles River path systems, Fresh Pond and the Minuteman Bikeway in Alewife. The northern portion of this segment includes marked bicycle lanes between Huron Avenue and Vassal Lane. The block directly south of that between Brattle Street and Huron Avenue was not wide enough for conventional bicycle lanes without impacting a significant amount of parking and thus the City investigated alternative treatments to enhance the multimodal nature of the street and improve roadway safety without parking impacts. See Figure 1 for a study area map.

An alternative bicycle facility treatment was developed for the Huron Avenue to

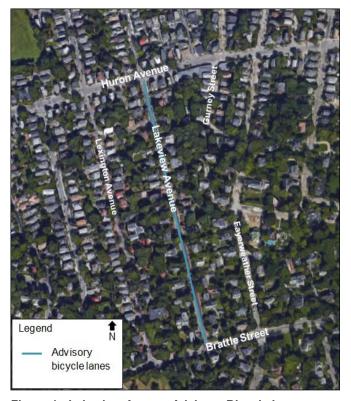


Figure 1: Lakeview Avenue Advisory Bicycle Lane





Figure 2: Lakeview Avenue Advisory Bicycle Lanes

Brattle Street segment which incorporated elements of shared lane bicycle markings as well as advisory bicycle lanes.

Similar treatments have been installed throughout Europe and more recently in limited applications within the United States. The advisory bicycle facility markings as shown in Figures 2 and 3 were installed in 2015 during street restoration following a sewer separation project. The 33-foot street width was restriped to provide 9-foot parking lanes, 2.5-foot advisory bicycle lanes, and a 10-foot, two-way travel lane in the center of the roadway. Plan sheets for the entire block can be found in Appendix B: Lakeview Avenue Plan Sheets.

See Appendix C: Notice to Residents for an informational flyer provided to residents prior to conducting this study.

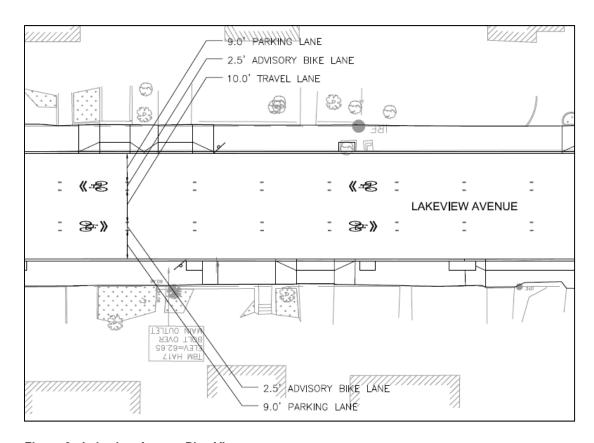


Figure 3: Lakeview Avenue Plan View

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Analysis

This report serves as an assessment of the advisory bicycle lanes' operation and effectiveness. Field evaluations, intercept surveys and video recordings were conducted during one weekday and one Saturday in October 2016 to observe bicyclist and motorist behavior in a variety of scenarios including:

- How motorists and bicyclists navigate the street when the other user group is not present
- How motorists and bicyclists react when they encounter each other moving in the same direction
- How motorists and bicyclists react when they encounter each other moving in the opposite direction
- Other important behaviors including the effect of parked vehicles on bicyclists' positioning within the roadway markings as well as driver behavior surrounding parked vehicles when a bicyclist is encountered

Intercept interviews of motorists, bicyclists, and residents were also conducted to determine how users perceive the advisory bicycle lanes and the overall function of the roadway.

Advisory Bicycle Lanes Description

Advisory bicycle lanes, also called non-compulsory bicycle lanes or suggestion lanes,¹ are most commonly installed on residential collector streets which are not suitable for traditional bicycle lanes because of width constraints or other limitations. This type of bicycle facility is often paired with removal of the centerline to reinforce the shared vehicular travel lane nature of the street.

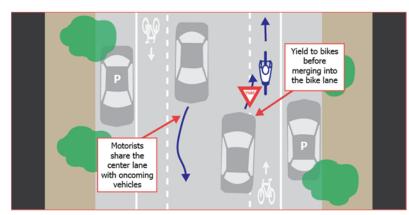


Figure 4: Advisory Bicycle Lane Illustration
Source: http://www.minneapolismn.gov/bicycles/advisory-bike-lane

Advisory bicycle lanes function much like traditional bicycle lanes. The main difference is that motorists are legally allowed to encroach on advisory bicycle lanes, indicated to motorists by a dashed line adjacent to vehicular travel lanes. This allows for more efficient use of space on low-volume and lowspeed streets, where traffic from opposing directions can share the center of the roadway. To pass, motorists may use the advisory bicycle

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¹ http://www.apbp.org/?page=2009 2 Advisory



lane in absence of bicyclists, or must yield to bicyclists before proceeding. See Figure 4 for an illustration of a standard advisory bicycle lane operation.

Video Observations

Data Collection

Field data were collected on Thursday, October 20, 2016 from 4:00 to 6:00 PM and on Saturday, October 29, 2016 from 12:00 to 2:00 PM. Weather on both days was good with temperatures in the 50s and no precipitation during the data collection periods. Video recordings were taken using a 360-degree camera, allowing for a full simultaneous view of the street as road users approached from opposite directions. Field observations and intercept interviews were also conducted during the same time periods.

In reviewing the video footage, the following notes were recorded for each instance of a motorist overtaking a bicyclist from a same-direction approach ("overtaking event"):

- Bicyclist behavior
- Motorist behavior
- Relative separation between motorist and bicyclist
- Relative separation between bicyclist and parked vehicles
- Parking utilization at the point of overtaking
- Relative motorist speed
- Notes of the interaction

Additional observations were recorded for other combinations of user interactions between any number of motorists and bicyclists traveling in the same and opposite directions. For example, observations were recorded when two vehicles passed each other in the absence of bicyclists and when bicyclists and motorists approached from opposite directions.

Data Analysis

52 overtaking events were recorded over the four hours of video recorded. Other overtaking events took place but could not be recorded due to distance from or location relative to the video camera. Though these were not recorded as an event, qualitative observations were still noted where possible. It should be noted that due to a lack of bicyclists traveling the corridor during the observation periods, the City provided intern staff to help supplement the number of interactions recorded between motorists and bicyclists.

Of the 52 recorded overtaking events, 90 percent of motorists had been driving in the center of the roadway and maintained that position as they overtook a bicyclist (see Figure 5). Another 8 percent of motorists drove in the advisory bicycle lane and only moved into the center of the roadway to pass the bicyclist (see Figure 6). A graph of motorist behavior is seen in Figure 7.





Figure 5: Motorist Maintained Center of Roadway Position Before, During, and After an Overtaking Event



Figure 6: Motorist Drove in Advisory Bicycle Lane Before and After Overtaking Event



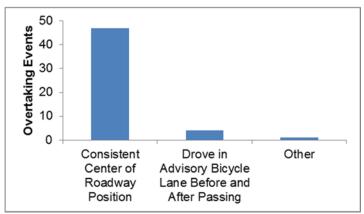


Figure 7: Motorist Behavior During an Overtaking Event

Relative separation between the bicyclist and motorist was observed and categorized as high, medium, or low. A score of "high" means that the motorist drove into the opposite bicycle lane to give the bicyclist as much room as possible during the overtaking event. A "medium" score means that the motorist maintained a direct center of roadway position during the overtaking event. A score of "low" means that the motorist was close to the bicyclist either because the motorist was driving too close to the advisory bicycle lane or because the bicyclist drifted into the vehicular travel lane. These relative measures were adjusted slightly depending on the size of the passing vehicle.

As seen in Figure 8, very few overtaking events (8 percent) were categorized as having low separation between the motorist and bicyclist. 44 percent of overtaking events received a score of "medium," and the remaining 48 percent received a score of "high." Note that Figure 8 focuses on roadway position while the motorist and bicyclist are side-by-side, and Figure 7 mostly refers to the motorist positioning directly before and after the overtaking event. Therefore, a motorist who drove in the advisory bicycle lane before and after passing was not necessarily categorized as having low separation during the overtaking event.

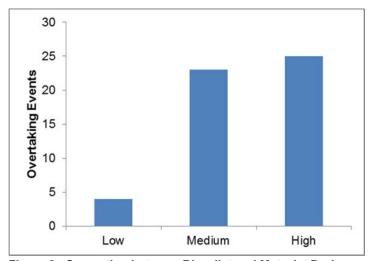


Figure 8: Separation between Bicyclist and Motorist During an Overtaking Event



Because 37 out of the 52 overtaking events involved a planted bicyclist (City intern), it is difficult to conclude much about bicyclist behavior and about the separation between a bicyclist and parked vehicles during an overtaking event. Of the 15 overtaking events that did not include a planted bicyclist, 12 bicyclists maintained their position in the advisory bicycle lane, 2 encroached on the parking lane, and 1 was weaving in and out of the parking lane before, during, and after the overtaking event. Generally, this means that bicyclists felt safe as vehicles passed them and did not need to utilize the buffer space from the parking lane. See Figure 9 for an image of a motorist overtaking a general population bicyclist (not planted).



Figure 9: Motorist Overtaking a General Population Bicyclist (Not Planted)

Observations from other roadway interactions are listed below.

- Most motorists appeared to use the center of the roadway even in the absence of bicyclists.
- At least four bicyclists chose to ride on the sidewalk instead of using the advisory bicycle lanes.
- More motorists drove in the advisory bicycle lane when parked cars were spaced farther apart and bicyclists were absent.
- Most motorists maintained their position in the center of the roadway when a bicyclist
 approached from the opposite direction. A few motorists moved into the advisory bicycle
 lane on their right to create a greater buffer between themselves and the approaching
 bicyclist.
- One bicyclist utilized the center of the roadway to pass another bicyclist riding in the advisory bicycle lane.
- Two bicyclists rode in the advisory bicycle lane in the wrong direction.
- Two bicyclists rode side-by-side with one bicyclist utilizing the advisory bicycle lane and the other riding in the parking lane.



- A motorist came to a complete stop in the parking lane to allow a school bus approaching from the opposite direction to pass.
- When a delivery truck stopped in the advisory bicycle lane and blocked most of the roadway, vehicles from the same direction utilized the advisory bicycle lane on the opposite side of the roadway to pass.
- A motorist almost struck a bicyclist as he or she was backing from a driveway and did not see the bicyclist.
- One bicyclist was riding partially in the center of the roadway and moved into the advisory bicycle lane to allow a motorist to pass from the same direction.

Intercept Interviews

The project team attempted to stop roadway users to ask about their perceptions of the advisory bicycle lanes and the function of the roadway as a whole. Age and gender information were estimated by the project team for each respondent.

Because many roadway users were in a hurry to continue along on their trip or because responding to the survey impeded traffic, most respondents did not complete the survey in its entirety. A total of 11 bicyclists, 17 motorists, and one pedestrian took the survey. Results of the survey are summarized below. Original surveys can be found in Appendix A: Intercept Interviews.

1. On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day?

This question received the highest response rate with 21 people, and showed that most survey respondents are very familiar with this block of Lakeview Avenue. Over 85 percent of respondents travel along the block at least twice per week, with many indicating that this block is part of their daily commute.

2. Bicyclists only: Why do you typically travel along this particular street?

Bicyclists stated that they travel along this block for a variety of reasons: because there is less traffic, it is safe, the route works well for bicyclists, the bicycle lanes are marked, it is the most direct route, the roadway is smooth, it is part of the route to Fresh Pond, a colleague travels along the same route, and a bicyclist took the same route before the Lakeview Avenue reconstruction.

3. What is the typical purpose of your trip?

Most of the respondents to this question either lived on the street or used Lakeview Avenue as part of their commute to work.

4. Do you understand what the bicycle markings on this street mean?

Four of the 13 respondents to this question did not understand what the bicycle markings mean. Three of these respondents were motorists and one was a bicyclist. The remaining



nine respondents stated that they understood the bicycle markings. Six of these were bicyclists, two were motorists, and one was a pedestrian who lived on the street.

5. Do the bicycle markings change how traveling on this street feels?

Responses to this question are summarized in Figure 6 by mode of the respondent. Some respondents offered more than one answer, which are all included in Figure 10. Motorists largely felt that the vehicular travel lane is too narrow, while bicyclists felt that the advisory bicycle lanes improved safety.

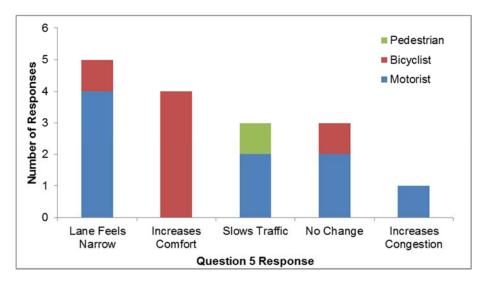


Figure 10: Responses to Survey Question 5

6. Do you have any other comments or questions about the bicycle markings?

All comments from the respondents are summarized below.

- Motorist said the roadway needs a centerline.
- Motorist said buses drive too fast down the street.
- Motorist said she likes the advisory bicycle lanes for bicyclists, but the roadway is not good from a driver's perspective.
- Motorist said she hates the roadway.
- Motorist said he prefers the new roadway configuration most of the time, but sometimes he hates it.
- Motorist said she does not like the roadway and thinks it is confusing. She said it is unclear whether the street is one-way or two-way.
- Pedestrian said roadway should prohibit vehicles during rush hour.
- Two bicyclists said they like the smoothness of the road.
- Bicyclist said she prefers the advisory bicycle lanes over no bicycle facility.
- Bicyclist said that motorists are more likely to cut off bicyclists because of the bumpouts, making the roadway more dangerous for bicyclists.



- Motorist said she does not like that there was insufficient roadway for two regular bicycle lanes.
- Motorist said she prefers to have a centerline, which makes motorists stay on the right side of the roadway.
- Bicyclist said that motorists tend to drive down the middle of the roadway.
- Bicyclist said that motorists seem confused by the pavement markings but operate safely. She believes additional signage would be helpful.

Conclusion

This study has several limitations that make it difficult to confidently conclude anything about the effectiveness of advisory bicycle lanes. Primarily the overall lack of general population bicyclists and the need to use a planted bicyclist to supplement the number of overtaking events prohibits a substantiated analysis of bicyclist behavior. It is difficult to know whether bicyclists correctly use the advisory bicycle lanes and whether the perceived level of safety would force bicyclists to encroach on the parking lanes. Overall, the sample sizes in this study of overtaking events, intercept interviews, and observations of other roadway user interactions are small, and the analyses provided herein should be used with caution.

Taking these limitations into account, general trends can still be identified. Motorists typically used the roadway correctly, driving in the center travel lane and yielding to bicyclists to allow oncoming traffic to pass. Non-planted bicyclists typically stayed in the advisory bicycle lanes. Some bicyclists and motorists used the advisory lanes incorrectly, but this is common in any bicycle facility and can be minimized with continued community outreach and user education. Examples of incorrect use included:

- Motorists driving in the advisory bicycle lane when no other vehicles were present.
- Bicyclists riding in vehicular travel lane until a motorist approached from behind, at which point bicyclist moved into the advisory bicycle lane.
- Bicyclists riding in the wrong direction within the advisory bicycle lane.

The intercept interviews suggest that bicyclists prefer the advisory bicycle lanes over no bicycle facilities, saying that the advisory bicycle lanes increase safety and comfort on the roadway. On the other hand, motorists most commonly felt that the street was too narrow, but also indicated that the advisory bicycle lanes slow traffic or that there was no change in motorist experience since pre-reconstruction conditions.

Though some interview respondents indicated that the advisory bicycle lanes slow traffic, speed studies conducted before and after the installation of the advisory bike lane markings do not support this claim. The speed limit on Lakeview Avenue during the assessment was 30 miles per hour (mph). Prior to the addition of the pavement markings, the mean speed of vehicles was 23 mph in both directions, and the 85th percentile of vehicles traveled at 28 mph. See Appendix D: Pre-Reconstruction Speed Study and Traffic Counts. After adding the advisory bike lane markings, the mean speed of vehicles was 24 mph in both directions with the 85th percentile of vehicles traveling at 29 mph. See Appendix E: Post-Reconstruction Speed Study and Traffic Counts. While the



advisory bicycle lanes have not slowed traffic, vehicles appear to be traveling at speeds appropriate for the roadway. The vehicular traffic count data collected before and after reconstruction appeared to show no significant change in traffic volumes aside from typical seasonal adjustment factors.

These findings suggest that the advisory bicycle lanes function as intended. Further analysis could be conducted in the future to try alternative advisory bicycle lane configurations that more closely resemble other installations within Europe and the Minneapolis-Saint Paul area to better understand if those designs and layouts installed locally would result in any difference in operation or user experience.

Appendix A: Intercept Interviews

Lakeview Avenue Advisory Bicycle Lane Markings Observations				
Date: 10/20/16				
Time: 41.22				

Mode: Car Motorcycle Bicycle

Gender: Femal Male

Age: Child Under 25 26 to 65 Over 65

Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking.

1. On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day?

Everyday Bossen Arvind 4:30 pm

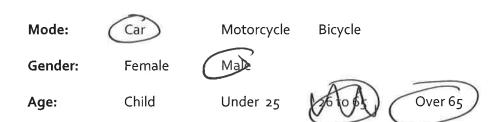
- 2. Cyclists Only: Why do you typically travel along this particular street?
- 3. What is the typical purpose of your trip?
- 4. Do you understand what the bicycle markings on this street mean?

No

- 5. Do the bicycle markings change how traveling on this street feels?
- 6. Do you have any other comments or questions about the bicycle markings?

	ate: 10/2 ime: <u> </u>	0/16 ; Z7			
M	ode:	(G)	Motorcycle	Bicycle	
Ge	ender:	Female	Male		
Ag	ge:	Child	Under 5	26 to 65	Over 65
St	in 2015, the	City implemen	ted "Advisory Bi	cycle Lane Mark	w Avenue between Huron Ave and Brattle ings" to enhance the multi-modal nature ny existing parking.
1.		ge, how many t at what times	•	vel on this segn	nent of Lakeview Avenue during the
2.	Cyclists O	only: Why do yo	ou typically trave	el along this par	ticular street?
3.	3. What is the typical purpose of your trip?				
4.	Do you ur	nderstand what		rkings on this st	reet mean?
5.	Do the bio	cycle markings o	change how trav	veling on this st	reet feels?
		Lone s	reels th	in so y	c lane a lot of times
6.	Do you ha				e bicycle markings?

Lakeview Avenue Advisory Bicycle Lane Markings Observations
Date: 10/20/16
Time: 4:34



Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking.

- 1. On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day?
- 2. Cyclists Only: Why do you typically travel along this particular street?
- 3. What is the typical purpose of your trip?

To get to Huran Auc

- 4. Do you understand what the bicycle markings on this street mean?
- 5. Do the bicycle markings change how traveling on this street feels?

Tight at the top of the Street

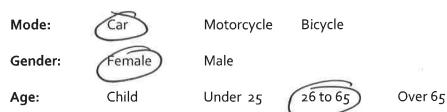
6. Do you have any other comments or questions about the bicycle markings?

Needs a certertine throughout roadday

Lake	view Avenue Advi	isory Bicycle Lane Markings Observations
	: 10/20/16	
Time	: 4:37	
Mode:	Car	Motorcycle Bicycle
Gende	r: Female	Male
Age:	Child	Under 25 26 to 65 Over 65
St in 20	o15, the City implement	struction and paving of Lakeview Avenue between Huron Ave and Brattle ted "Advisory Bicycle Lane Markings" to enhance the multi-modal nature dway safety without removing any existing parking.
	n average, how many ti eek and at what times o	imes do you travel on this segment of Lakeview Avenue during the of the day?
	Typ	ucal commuting hours
2. Cy	clists Only: Why do yo	u typically travel along this particular street?
	Little be	Because of the Signage and bike lanes
	0000	bike lanes
3. Wh	nat is the typical purpo	se of your trip?
	Woll	«
4. Do	you understand what	the bicycle markings on this street mean?

5. Do the bicycle markings change how traveling on this street feels?

Lakeview Avenue Advisory Bicycle Lane Markings Observations Date: 10/20/16 Time: <u>낙.</u>식동



Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking.

- 1. On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day?
- 2. Cyclists Only: Why do you typically travel along this particular street?
- 3. What is the typical purpose of your trip?

Lives on the street

- 4. Do you understand what the bicycle markings on this street mean?
- 5. Do the bicycle markings change how traveling on this street feels?
- 6. Do you have any other comments or questions about the bicycle markings?

Buses drive too Fast down the street

Lakeview Avenue Advisory Bicycle Lane Markings Observations					
Date: 10/20/16					
Time: _	4:46				
Mode:	Car	Motorcycle	Bicycle		
Gender:	Female	Male			
Age:	Child	Under 25	26 to 65	Øver 65	
St in 2015, t	the City implement	ed "Advisory Bi	cycle Lane Marki	v Avenue between Huron Ave and Brattle ngs" to enhance the multi-modal nature ny existing parking.	
	rage, how many ti nd at what times o		vel on this segm	ent of Lakeview Avenue during the	
2. Cyclists	s Only: Why do yo	υ typically trave	el along this part	cicular street?	
3. What is the typical purpose of your trip?					
4. Do you understand what the bicycle markings on this street mean?					
5. Do the bicycle markings change how traveling on this street feels?					
Makes the new feel conjusted and is uncomfortable when there is a core ming the other direction 6. Do you have any other comments or questions about the bicycle markings? Likes it for cyclists and thinks its a good idea but not from a drivers perspective					

Lakeview Avenue Advisory Bicycle Lane Markings Observations Date: 10/20/16 Time: 4: 34 Motorcycle Mode: Bicycle Gender: Male Under 25 Over 65 Child Age: Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking. 1. On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day? 2. Cyclists Only: Why do you typically travel along this particular street? 3. What is the typical purpose of your trip? 4. Do you understand what the bicycle markings on this street mean? Do the bicycle markings change how traveling on this street feels?

They hate it (2 Women

Da	Lakeview Avenue Advisory Bicycle Lane Markings Observations Date: 10/20/16				
Ti	me:u	: 39			
Mo	de:	Car	Motorcycle	Bicycle	
Ge	nder:	Female	Male		
Ag	e:	Child	Under 25	26 to 65	Over 65
Sti	in 2015, th	e City implement	ed "Advisory Bio	ycle Lane Ma	lew Avenue between Huron Ave and Brattle rkings" to enhance the multi-modal nature any existing parking.
1.	1. On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day?				
2.	2. Cyclists Only: Why do you typically travel along this particular street?				
3.	What is	the typical purpo	se of your trip?		
4.	•	understand what	the bicycle mar	kings on this	street mean?

Feels narrow but is also glad there is a bike lane

6. Do you have any other comments or questions about the bicycle markings?

5. Do the bicycle markings change how traveling on this street feels?

La	KEVIEW	Lakeview Avenue Advisory Dicycle Lune Markings Observations				
Da	ite: 10/2	20/16				
Tir	me:					
Мо	de:	Car	Motorcycle Bicycle			
Ger	nder:	Female	Male			
Age	e:	Child	Under 25 26 to 65 Over 65			
Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking. 1. On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day? 3-3 days a week Cyclists Only: Why do you typically travel along this particular street?						
		2				
3.	What is t	the typical purpo	ose of your trip?			
		Comm	ruding			
4.	Do you u	understand what	the bicycle markings on this street mean?			
5.	Do the b	icycle markings o	change how traveling on this street feels?			

Lakeview Avenue Advisory Bicycle Lane Markings Observations Date: 10/20/16 Time: 5:05						
Mode:	(ar	Motorcycle Bicycle				
Gender:	Female	Male				
Age:	Child	Under 25 26 to 68 Over 65				
St in 2015, tl	he City impleme	construction and paving of Lakeview Avenue between Huron Ave and Brattle ented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature oadway safety without removing any existing parking.				
	age, how man	y times do you travel on this segment of Lakeview Avenue during the es of the day?				
	Molti	ple times a day				
2. Cyclists	2. Cyclists Only: Why do you typically travel along this particular street?					
3. What is	the typical pur	rpose of your trip?				
Delivers Flowers						
4. Do you understand what the bicycle markings on this street mean?						
5. Do the bicycle markings change how traveling on this street feels? Likes it a lot better, can See the cyclists much						
cas	iles of	nd knows where they are on the road				
		r comments or questions about the bicycle markings?				
	Hotes it sometimes but more after than not					

Mode:

Car

Motorcycle

Bicycle

Gender:

Female

Male

Age:

Child

Under 25



Over 65

Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking.

1. On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day?

Twice a day

- 2. Cyclists Only: Why do you typically travel along this particular street?
- 3. What is the typical purpose of your trip?

Drop kids off at school and pick them up

- 4. Do you understand what the bicycle markings on this street mean?
- 5. Do the bicycle markings change how traveling on this street feels?
- 6. Do you have any other comments or questions about the bicycle markings?

Doesn't like it, says its confusing it its two ways or not

Lakeview Avenue Advisory Bicycle Lane Markings Observations
Date: 10/20/16
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Time: _	3.12			
Mode:	Car	Motorcycle	Bicycle	
Gender:	Female	Male		
Age:	Child	Under 25	26 to 65	Over 65

Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking.

1. On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day?

2. Cyclists Only: Why do you typically travel along this particular street?

3. What is the typical purpose of your trip?

4. Do you understand what the bicycle markings on this street mean?

5. Do the bicycle markings change how traveling on this street feels?

Lakeview Avenue Advisory Bicycle Lane Markings Observations Date: 10/20/16 Time:					
Mode:	Car	Motorcycle Bicycle			
Gender:	Female	Male			
Age:	Child	Under 25 26 to 65 Over 65			
St in 2015, the of the street	ne City impleme and improve ro	nstruction and paving of Lakeview Avenue between Huron Ave and Brattle ted "Advisory Bicycle Lane Markings" to enhance the multi-modal nature dway safety without removing any existing parking.			
	age, how many nd at what time	times do you travel on this segment of Lakeview Avenue during the of the day?			
	to	uke a week			
2. Cyclists Only: Why do you typically travel along this particular street? Sofest and fastest cut through					
3. What is	the typical purp	ose of your trip?			
Commute					
4. Do you understand what the bicycle markings on this street mean?					
5. Do the bicycle markings change how traveling on this street feels? No for an experienced rider it makes when perderent to be 6. Do you have any other comments or questions about the bicycle markings?					

sofer even through its not

Date: 10	120/16					
Time: _5.24						
Mode:	Car	Motorcycle	Bicycle	Resident		
Gender:	Female	Male				
Age:	Child	Under 25	26 to 65	Over 65		
St in 2015,	the City implemen	ted "Advisory Bi	cycle Lane	keview Avenue between Huron Ave and Brattle Markings" to enhance the multi-modal nature ring any existing parking.		
	erage, how many t and at what times		vel on this	segment of Lakeview Avenue during the		
	ζ.	Resident				
2. Cyclist	ts Only: Why do yo	ou typically trave	el along th	is particular street?		
3. What	is the typical purp					
-	บ understand wha			· ·		
says people don't understand that it is a shored						
P	ike lane					
5. Do the	e bicycle markings					
People drive a bit shower but not erough						
A B	Buses and cars drive too figs theithetersection is					
6. Do you have any other comments or questions about the bicycle markings?						
N	No line down middle of road.					
No line down middle of road Suggested making it a street that conf be turned down						

Lakeview Avenue Advisory Bicycle Lane Markings Observations Date: 10/20/16 Time: 5.29
Mode: Car Motorcycle Bicycle
Gender: Female Male
Age: Child Under 25 26 to 65 Over 65
Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking.
On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day?
2-3 times a week
2. Cyclists Only: Why do you typically travel along this particular street?
2. Cyclists Only: Why do you typically travel along this particular street? Smooth, bike lakes maked out, good cut through
through
3. What is the typical purpose of your trip?
Traveling back from work
4. Do you understand what the bicycle markings on this street mean?
Yes but doesn't think drivers do
5. Do the bicycle markings change how traveling on this street feels?
Mare confirtable since long of marked out

Likes the smathness of road

6. Do you have any other comments or questions about the bicycle markings?

makes down more aware

Date: 10/2 Time:	20/16 5:37			
Mode:	Car	Motorcycle	Bicycle	
Gender:	emale	Male		
Age:	Child	Under 25	26 to 65	Over 65

Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking.

1. On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day?

M-F commute hours

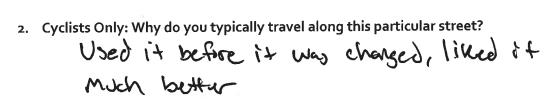
- 2. Cyclists Only: Why do you typically travel along this particular street?
- 3. What is the typical purpose of your trip?

Wolk

- 4. Do you understand what the bicycle markings on this street mean?
- 5. Do the bicycle markings change how traveling on this street feels?

Prefers it over no lines

Lakeview	Lakeview Avenue Advisory Bicycle Lane Markings Observations						
Date: 10/2 Time:	· .						
riirie	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-					
Mode:	Car	Motorcycle	Bicycle				
Gender:	Female	Male					
Age:	Child	Under 25	26 to 65	Over 65			
Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking.							
On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day?							
Rondon							



3. What is the typical purpose of your trip?

Randon

4. Do you understand what the bicycle markings on this street mean?

Says no one understands what is going on

- 5. Do the bicycle markings change how traveling on this street feels?
- 6. Do you have any other comments or questions about the bicycle markings?

 Thinks the bump outs make it more dangerous because cars are more likely to cut them off

Lakeview Avenue Advisory Bicycle Lane Markings Observations	;
Date: 10/20/16	

Time: _	5, 71			
Mode:	Car	Motorcycle	Bicycle	
Gender:	Female	Male		
Age:	Child	Under 25	26 to 65	Over 65

Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking.

1. On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day?

Eury day

2. Cyclists Only: Why do you typically travel along this particular street?

3. What is the typical purpose of your trip?

Drive hime from work

4. Do you understand what the bicycle markings on this street mean?

No, not enough room for two curs

5. Do the bicycle markings change how traveling on this street feels?

Time:	552		
Mode:	Car	Motorcycle Bicycle	
Gender:	Female	Male	
Age:	Child	Under 25 26 to 65 Over 65	
St in 2015, the	e City impleme	nstruction and paving of Lakeview Avenue between Huron Ave and Brated "Advisory Bicycle Lane Markings" to enhance the multi-modal naredway safety without removing any existing parking.	
	ge, how many I at what times	times do you travel on this segment of Lakeview Avenue during the of the day?	e
	T	sice a day Rush how	
		ou typically travel along this particular street? Sues Hus way	
3. What is t	he typical purp	ose of your trip?	
	Mork	a a	
4. Do you u	nderstand wha	t the bicycle markings on this street mean?	
	Ye		
5. Do the bi	cycle markings	change how traveling on this street feels?	
F	teel Sa	fer and that the drivers we	
	More	nware of him	

6. Do you have any other comments or questions about the bicycle markings?

Lakeview Avenue Advisory Bicycle Lane Markings Observations

Date: 10/20/16

Time:	5: <u>5</u> 4	_		
Mode:	Car	Motorcycle	Bicycle	
Gender:	Female	Male		
Age:	Child	Under 25	26 to 65	Over 65

Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking.

1. On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day?

Turce a day Rush hor

2. Cyclists Only: Why do you typically travel along this particular street?

Less troffic

3. What is the typical purpose of your trip?

Work

4. Do you understand what the bicycle markings on this street mean?

Yes

5. Do the bicycle markings change how traveling on this street feels?

Likes it better than before redusign

Date: 10/20/16 Time: 4:07 Mode: Motorcycle Bicycle Gender: Male Child Under 25 26 to 65 Age: Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking. 1. On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day? 2. Cyclists Only: Why do you typically travel along this particular street? 3. What is the typical purpose of your trip? 4. Do you understand what the bicycle markings on this street mean? 5. Do the bicycle markings change how traveling on this street feels?

6. Do you have any other comments or questions about the bicycle markings?

Didn't like that there was not enough from for the

Lakeview Avenue Advisory Bicycle Lane Markings Observations
Date: 10/20/16
Time: 4:04 PM

Mode: Car Motorcycle Bicycle

Gender: Female Male

Age: Child Under 25 6 to 65 Over 65

Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking.

1. On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day?

From Canada

2. Cyclists Only: Why do you typically travel along this particular street?

3. What is the typical purpose of your trip?

4. Do you understand what the bicycle markings on this street mean?

Yes

5. Do the bicycle markings change how traveling on this street feels?

04

Date: 10 Time:	/20/16 1:07			
Mode:	Car	Motorcycle	Bicycle	
Gender:	Female	Male		
Age:	Child	Under 25	26 to 65	Over 65
St in 2015, t	he City implemen	ted "Advisory E	Bicycle Lane Mai	ew Avenue between Huron Ave and Brattle kings" to enhance the multi-modal nature any existing parking.
	rage, how many t nd at what times		ravel on this seg	ment of Lakeview Avenue during the
2. Cyclists	s Only: Why do yo	u typically tra	vel along this pa	articular street?
_	the typical purpo	•		
4. Do you	understand what	the bicycle m	arkings on this	street mean?
_	bicycle markings い以 るいい	_	_	street feels?
liv	a vellow	line in	in she m	the bicycle markings? Addle of the word slde

Lakeview Avenue Advisory Bicycle Lane Markings Observations Date: 10/20/16 Time: 4:17 Mode: Motorcycle Bicycle Female Gender: Child Under 25 26 to 65 Over 65 Age: Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking. 1. On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day? M-F around this time 2. Cyclists Only: Why do you typically travel along this particular street? 3. What is the typical purpose of your trip?

4. Do you understand what the bicycle markings on this street mean?

5. Do the bicycle markings change how traveling on this street feels?

Lakeview Avenue Advisory Bicycle Lane Markings Observations

Date: 10/20/16
Time: _ 4'.\ }

Mode:

Car

Motorcycle

Bicycle

Gender:

Female

Male

Age:

Child

Under 25



Over 65

Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking.

1. On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day?

Eucyday 7:30-8ish

- 2. Cyclists Only: Why do you typically travel along this particular street?
- 3. What is the typical purpose of your trip?

Work

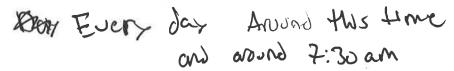
- 4. Do you understand what the bicycle markings on this street mean?
- 5. Do the bicycle markings change how traveling on this street feels?

Slowed traffic

6. Do you have any other comments or questions about the bicycle markings?

Date: 10/ Time:	20/16	-		ngs Observations
Mode:	Car	Motorcycle	Bicycle	
Gender:	Female	Male		
Age:	Child	Under 25	26 to 65	Over 65
St in 2015, th	ne City implem	ented "Advisory	Bicycle Lane Mark	w Avenue between Huron Ave and Brattle kings" to enhance the multi-modal nature ny existing parking.

On average, how many times do you travel on this segment of Lakeview Avenue during the week and at what times of the day?



2. Cyclists Only: Why do you typically travel along this particular street?

3. What is the typical purpose of your trip?

WOCK

4. Do you understand what the bicycle markings on this street mean?

5. Do the bicycle markings change how traveling on this street feels?

Loves it na feets much more comfortable

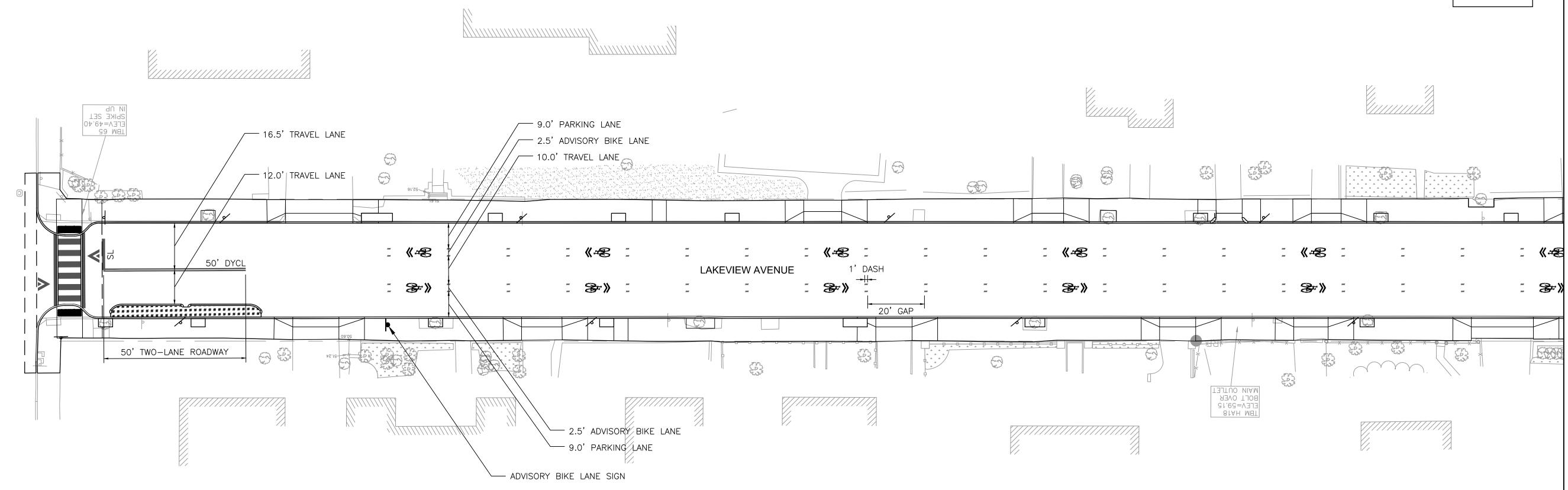
6. Do you have any other comments or questions about the bicycle markings?

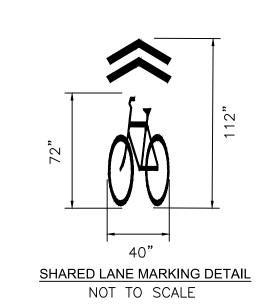
people traveling up lakeview tend to down

Appendix B: Lakeview Avenue Plan Sheets



CONT. ON SHEET 2

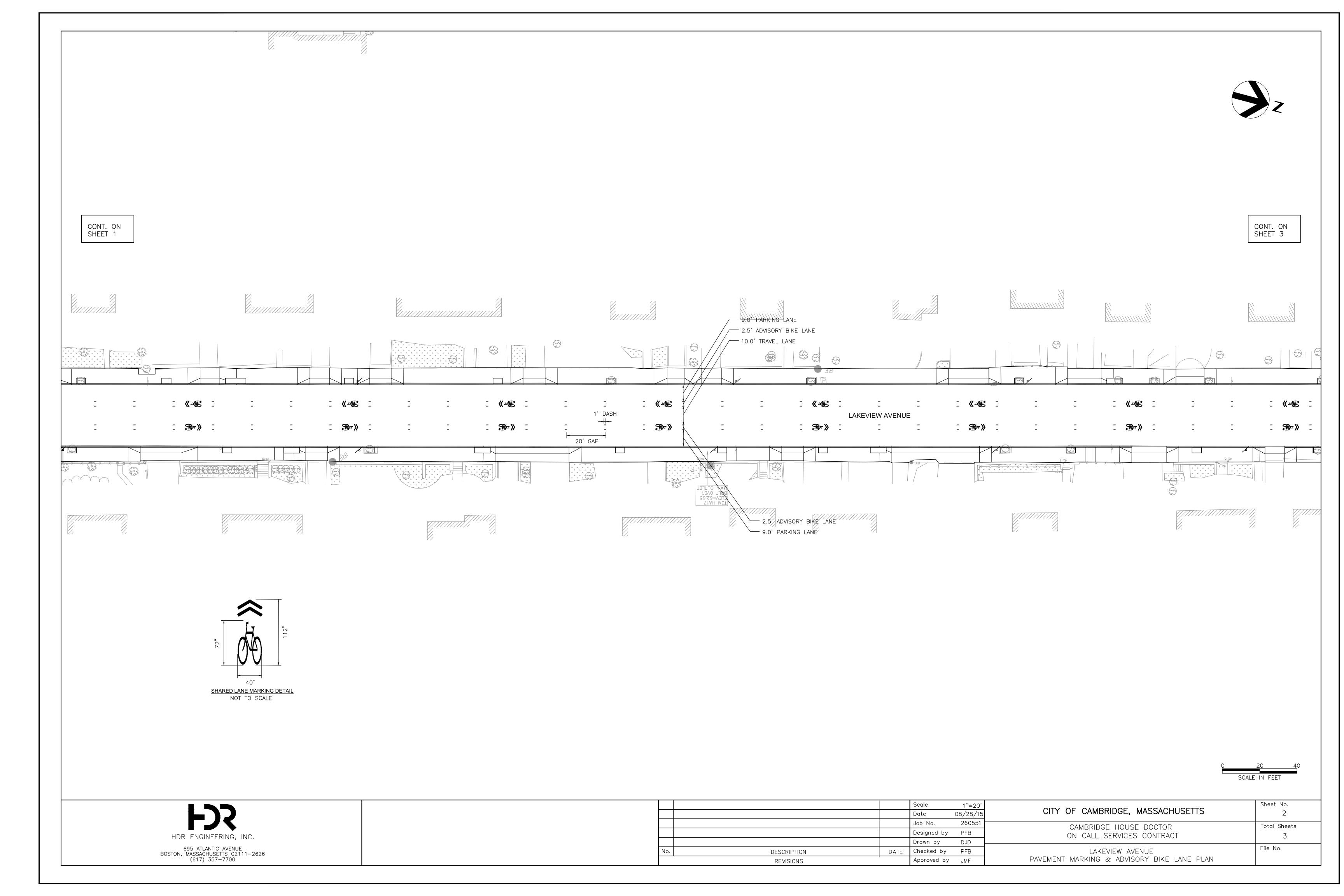


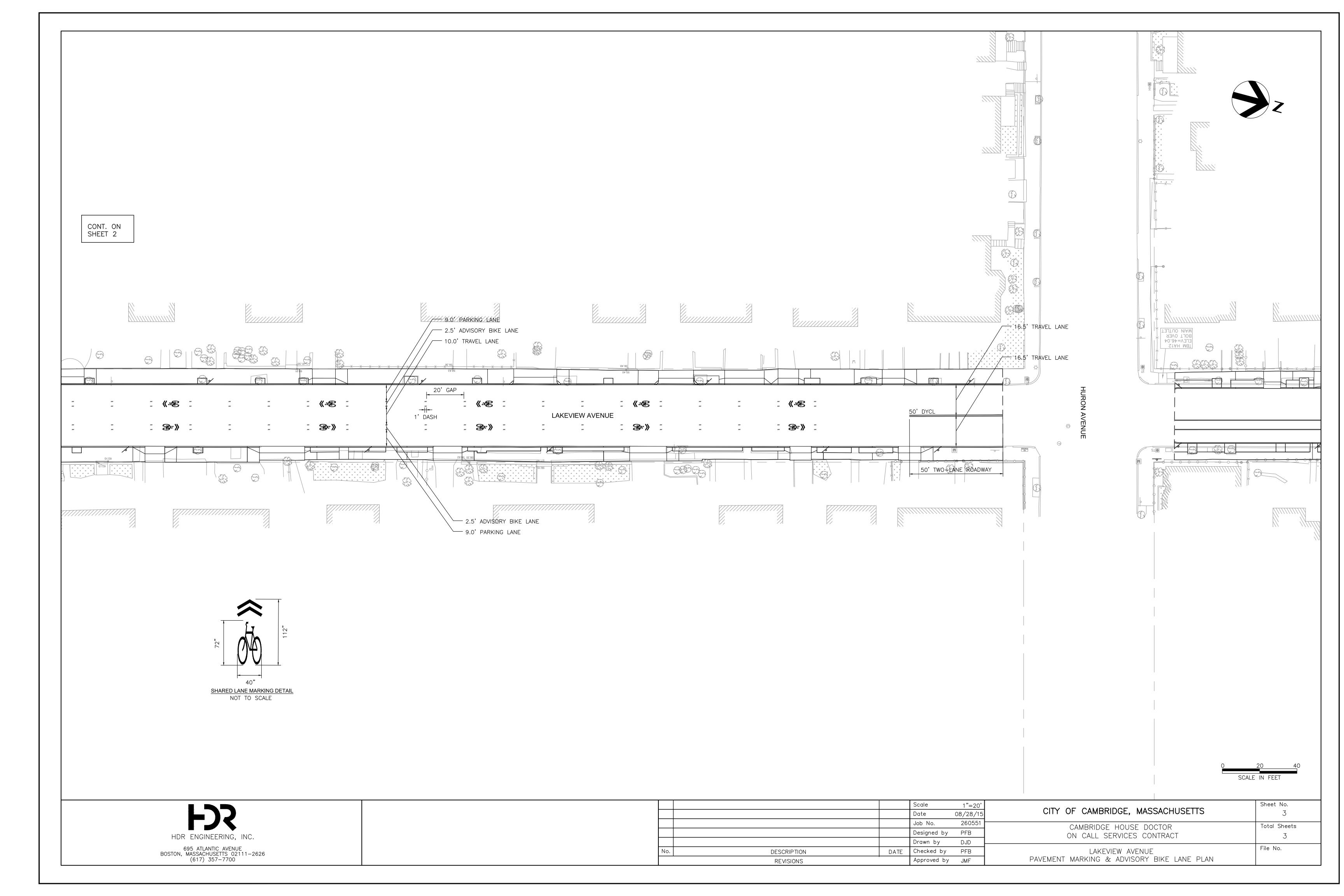


0 20 40

FJS
HDR ENGINEERING, INC.
695 ATLANTIC AVENUE BOSTON, MASSACHUSETTS 02111-2626 (617) 357-7700

			Scale Date	1"=20' 08/28/15	CITY OF CAMBRIDGE, MASSACHUSETTS	Sheet No.
			Job No. Designed by	260551 PFB	CAMBRIDGE HOUSE DOCTOR	Total Sheets
			Drawn by	DJD	ON CALL SERVICES CONTRACT	3
No.	DESCRIPTION	DATE	Checked by	PFB	LAKEVIEW AVENUE	File No.
	REVISIONS .	·	Approved by	JMF	PAVEMENT MARKING & ADVISORY BIKE LANE PLAN	





Appendix C: Notice to Residents



City of Cambridge Department of Public Works

Owen O'Riordan, Commissioner

147 Hampshire Street
Cambridge, MA 02139
theworks@cambridgema.gov

Voice: 617 349 4800 TDD: 617 499 9924

Notice - Lakeview Avenue Advisory Bicycle Lane Markings Observations 10/19/16

Upon completion of the reconstruction and paving of Lakeview Avenue between Huron Ave and Brattle St in 2015, the City implemented "Advisory Bicycle Lane Markings" to enhance the multi-modal nature of the street and improve roadway safety without removing any existing parking.

What are Advisory Bicycle Lanes?

Illustrated in the visual below, Advisory Bicycle Lane markings are used on streets that are too narrow for dedicated bicycle lanes. They bring greater awareness to the roadway as a shared space and can improve the multi-modal nature of the street. The dashed line indicates to drivers that they may drive in the bike space when a bicyclist is not present. The street functions similarly to how it functioned before construction, with two-way traffic and two sides of parking. See also

http://www.cambridgema.gov/CDD/Transportation/bikesincambridge/biketoolbox for additional information







Why Lakeview Avenue?

Lakeview Ave is part of the signed bike route between the Minuteman Bikeway, Fresh Pond and the Charles River path system. Lakeview Ave between Huron Ave and Vassal Lane has a bike lane. Unfortunately, Lakeview Ave between Brattle St and Huron Ave is not wide enough for conventional bicycle lanes without impacting a significant amount of parking. Lakeview Avenue was therefore identified by the City as a very good candidate to test Advisory Bicycle Lane markings, which could potentially be implemented in other locations as well.

Assessment Process

As of October 2016, the Advisory Bicycle Lane markings have been in place on Lakeview Avenue for over a year, giving residents and other users of the street time to become adjusted to them. The City is now conducting an evaluation in order to determine whether the markings are being used as intended, and their effectiveness.

During one weekday and one Saturday period beginning on or about October 20, staff from the City and their engineering consultant will be present on the street video



Lakeview Avenue Conditions as of August 2011

recording vehicular and bicycle traffic and interactions. The field and video observations will allow us to see how and where vehicles and cyclists operate when they are alone on the street; when they encounter each other moving in the same direction; when they encounter each other moving in the opposite direction; and other important behaviors. Video recording will only be in place during the hours of study.

We also plan to try and (quickly) speak with motorists and bicyclists when they are stopped at the ends of the street, to determine whether they understood the Advisory Bicycle Lane markings and whether the markings decreased the stress of using the street, particularly for cyclists.

Following the completion of our assessment, the results will be made available to residents and others via the project website at www.cambridgema.gov/theworks/HuronA.

If you have any questions or concerns, please contact me at cwoodbury@cambridgema.gov / 617-349-4818.

Sincerely,

C. Daly Woodbury

Catherine Daly Woodbury Project Manager



Appendix D: Pre-Reconstruction Traffic Counts and Speeds

Location: Lakeview Avenue Loc #2 Location : South of Huron Avenue City/State: Cambridge, MA

260551VOLA2

Time	Start	11-Aug-15	5	SB	Hour	Totals		NB	Hour	Totals	Combin	ed Totals
12:00	Time					Afternoon	Morning	Afternoon	Morning	Afternoon		
12:15	12:00											
12:30	12:15		3	8			0	11				
12:45	12:30		0					14				
01:00	12:45		0		4	25	1	9	3	41	7	66
01:15	01:00		0	4			0					
01:45	01:15			3			0					
01:45			0				0	12				
02:15 0 6 1 9 02:30 2 13 0 11 0 12 03:00 0 12 0 14 0 23 0 13 0 23 0 14 0 23 0 0 23 0 0 23 0 0 23 0 0 23 0 0 23 0			0	10	0	21	•	9	1	40	1	61
02:30	02:00		2				0	11				
02:45	02:15		0	6			•					
03:00	02:30		2	13			0	11				
03:30	02:45		0	5	4	30			3	37	7	67
03:30	03:00		0	12				14				
03:45	03:15											
04:00								22				
04:15	03:45			5	1	26			1	73	2	99
04:35	04:00		0	3				22				
04:45	04:15						•	22				
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05:30 1 6 0 23 93 6 116 06:45 1 2 4 23 1 21 2 93 6 116 06:00 2 8 5 26 2 8 6 116 06:15 1 5 0 32 0 0 20 120 06:45 4 3 10 20 4 17 10 100 20 120 07:00 9 5 6 16 6 70 100 20 120			0									
05:45	05:15			9				26				
06:00	05:30			6				23				4.40
06:30	05:45		1	2	4	23		21	2	93	6	116
06:30	06:00		2	8			5	26				
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08:00	07.30		17		15	10	0		22	15	67	64
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09:30 13 0 13 5 09:45 12 1 47 5 10 4 43 18 90 23 10:00 7 3 7 3 7 3 7 3 7 3 10:15 9 0 12 3 12 3 14 7 10:45 7 3 29 7 10 1 43 14 72 21 11:00 14 1 12 2 2 13 1 <td></td> <td></td> <td></td> <td>2</td> <td>7.5</td> <td></td> <td></td> <td></td> <td>77</td> <td>20</td> <td>117</td> <td>31</td>				2	7.5				77	20	117	31
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Percent 53.8% 46.2% 27.0% 73.0% 26.0% 62.4%	Total		252	216			218	588			470	804
Feloeiii 55.070 40.270 21.070 15.070 50.9% 05.170	Percent		53.8%	46.2%			27.0%	73.0%			36.9%	63.1%

Location: Lakeview Avenue Loc #2 Location: South of Huron Avenue City/State: Cambridge, MA

ADT

ADT 1,408

AADT 1,408

260551VOLA2

Start	12-Aug-15	, s	SB	Hour	Totals	N	NB	Hour	Totals	Combine	ed Totals
Time	Wed	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		1	10		7 111011110011	1	21		7 111011110011		7.110.11.00.11
12:15		0	9			0	16				
12:30		0	8			1	21				
12:45		0	6	1	33	1	15	3	73	4	106
01:00		2	6			0	17				
01:15		1	10			0	9				
01:30		0	8			0	13				
01:45		1	5	4	29	0	16	0	55	4	84
02:00		0	10			0	15				
02:15		0	7			0	12				
02:30		0	13			0	19				
02:45		0	12	0	42	0	18	0	64	0	106
03:00		0	8			0	23				
03:15		0	13			0	19				
03:30		1	14			0	25				
03:45		0	12	1	47	0	18	0	85	1	132
04:00		1	11			0	34				
04:15		0	20			0	27				
04:30		0	14			1	43		101		
04:45		0	9	1	54	2	27	3	131	4	185
05:00		0	8			0	35				
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07:00		11	2			1	17				
07:13		17	3			6	6				
07:30		13	1	49	13	4	9	15	50	64	63
08:00		14	4	49	13	5	7	13	30	04	03
08:15		22	2			15	5				
08:30		11	3			10	9				
08:45		15	3	62	12	12	6	42	27	104	39
09:00		21	3	02		8	6		_,	101	00
09:15		9	2			8	6				
09:30		12	0			11	7				
09:45		9	4	51	9	7	4	34	23	85	32
10:00		9	2			8	6				
10:15		5	0			28	8				
10:30		8	0			16	4				
10:45		1	0	23	2	18	1	70	19	93	21
11:00		1	0			13	1				
11:15		5	2			18	4				
11:30		8	1			19	1				
11:45		4	0	18	3	12	2	62	8	80	11
Total		225	302			238	776			463	1078
Percent		42.7%	57.3%			23.5%	76.5%			30.0%	70.0%
Grand		477	518			456	1364			933	1882
Total											
Percent		47.9%	52.1%			25.1%	74.9%			33.1%	66.9%

Page 2

Location: Lakeview Avenue Loc #2 Location: South of Huron Avenue

City/State: Cambridge, MA

260551VOLA2

Start	10-Aug	g-15	Τι	ıe	We	ed	Thu	ı	Fr	i	Sat		Sur)	Week Ave	rage
Time	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	ЙB
12:00 AM	*	*	4	3	1	3	*	*	*	*	*	*	*	*	2	3
01:00	*	*	0	1	4	0	*	*	*	*	*	*	*	*	2	0
02:00	*	*	4	3	0	0	*	*	*	*	*	*	*	*	2	2
03:00	*	*	1	1	1	0	*	*	*	*	*	*	*	*	1	0
04:00	*	*	0	3	1	3	*	*	*	*	*	*	*	*	0	3
05:00	*	*	4	2	7	1	*	*	*	*	*	*	*	*	6	2
06:00	*	*	10	10	8	8	*	*	*	*	*	*	*	*	9	9
07:00	*	*	45	22	49	15	*	*	*	*	*	*	*	*	47	18
08:00	*	*	73	44	62	42	*	*	*	*	*	*	*	*	68	43
09:00	*	*	47	43	51	34	*	*	*	*	*	*	*	*	49	38
10:00	*	*	29	43	23	70	*	*	*	*	*	*	*	*	26	56
11:00	*	*	35	43	18	62	*	*	*	*	*	*	*	*	26	52
12:00 PM	*	*	25	41	33	73	*	*	*	*	*	*	*	*	29	57
01:00	*	*	21	40	29	55	*	*	*	*	*	*	*	*	25	48
02:00	*	*	30	37	42	64	*	*	*	*	*	*	*	*	36	50
03:00	*	*	26	73	47	85	*	*	*	*	*	*	*	*	36	79
04:00	*	*	26	95	54	131	*	*	*	*	*	*	*	*	40	113
05:00	*	*	23	93	28	145	*	*	*	*	*	*	*	*	26	119
06:00	*	*	20	100	30	96	*	*	*	*	*	*	*	*	25	98
07:00	*	*	19	45	13	50	*	*	*	*	*	*	*	*	16	48
08:00	*	*	11	26	12	27	*	*	*	*	*	*	*	*	12	26
09:00	*	*	5	18	9	23	*	*	*	*	*	*	*	*	7	20
10:00	*	*	7	14	2	19	*	*	*	*	*	*	*	*	4	16
11:00	*	*	3	6	3	8	*	*	*	*	*	*	*	*	3	7
Lane	0	0	468	806	527	1014	0	0	0	0	0	0	0	0	497	907
Day	0		127		154		0		0		0		0		1404	
AM Peak	-	-	08:00	08:00	08:00	10:00	-	-	-	-	-	-	-	-	08:00	10:00
Vol.	-	-	73	44	62	70	-	-	-	-	-	-	-	-	68	56
PM Peak	-	-	14:00	18:00	16:00	17:00	-	-	-	-	-	-	-	-	16:00	17:00
Vol.	-	-	30	100	54	145	-	-	-	-	-	-	-	-	40	119
Comb. Total	0	1		1274	1	541	C	0		0	C)	()	140)4
ADT	ΑĽ	OT 1,408	AAI	DT 1,408												

Location: Lakeview Avenue Loc #2 Location: South of Huron Avenue

City/State: Cambridge, MA SB

SB														
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 AxI	5 Axle	>6 Axl	<6 AxI	6 Axle	>6 Axl	
Time	MtrCyc	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
08/11/15	1	2	1	0	0	0	0	0	0	0	0	0	0	4
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	2	1	0	0	1	0	0	0	0	0	0	0	4
06:00	1	9	0	0	0	0	0	0	0	0	0	0	0	10
07:00	4	38	2	0	1	0	0	0	0	0	0	0	0	45
08:00	3	59	10	0	1	0	0	0	0	0	0	0	0	73
09:00	1	40	4	0	1	0	0	1	0	0	0	0	0	47
10:00	1	21	5	1	1	0	0	0	0	0	0	0	0	29
11:00	2	28	3	0	2	0	0	0	0	0	0	0	0	35
12 PM	0	21	3	0	1	0	0	0	0	0	0	0	0	25
13:00	0	15	2	0	4	0	0	0	0	0	0	0	0	21
14:00	3	21	6	0	0	0	0	0	0	0	0	0	0	30
15:00	0	21	5	0	0	0	0	0	0	0	0	0	0	26
16:00	0	22	4	0	0	0	0	0	0	0	0	0	0	26
17:00	2	19	2	0	0	0	0	0	0	0	0	0	0	23
18:00	1	19	0	0	0	0	0	0	0	0	0	0	0	20
19:00	3	14	2	0	0	0	0	0	0	0	0	0	0	19
20:00	0	10	1	0	0	0	0	0	0	0	0	0	0	11
21:00	1	3	1	0	0	0	0	0	0	0	0	0	0	5
22:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
23:00	0	2	1_	0	0	0	0	0	0	0	0	0	0	3
Day Total	23	377	54	1	11	1	0	1	0	0	0	0	0	468
Percent	4.9%	80.6%	11.5%	0.2%	2.4%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	08:00	08:00	10:00	11:00	05:00		09:00						08:00
Vol.	4	59	10	1	2	1_		1						73
PM Peak	14:00	16:00	14:00		13:00									14:00
Vol.	3	22	6		4									30

Location: Lakeview Avenue Loc #2 Location: South of Huron Avenue

City/State: Cambridge, MA

SB														
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 AxI	5 Axle	>6 AxI	<6 AxI	6 Axle	>6 Axl	
Time	MtrCyc	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
08/12/15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
05:00	1	6	0	0	0	0	0	0	0	0	0	0	0	7
06:00	1	7	0	0	0	0	0	0	0	0	0	0	0	8
07:00	5	36	4	0	2	2	0	0	0	0	0	0	0	49
08:00	7	46	9	0	0	0	0	0	0	0	0	0	0	62
09:00	9	37	5	0	0	0	0	0	0	0	0	0	0	51
10:00	0	18	5	0	0	0	0	0	0	0	0	0	0	23
11:00	1	14	1	0	2	0	0	0	0	0	0	0	0	18
12 PM	2	25	5	0	1	0	0	0	0	0	0	0	0	33
13:00	1	18	7	0	3	0	0	0	0	0	0	0	0	29
14:00	1	35	4	0	2	0	0	0	0	0	0	0	0	42
15:00	0	39	7	1	0	0	0	0	0	0	0	0	0	47
16:00	4	42	8	0	0	0	0	0	0	0	0	0	0	54
17:00	5	18	5	0	0	0	0	0	0	0	0	0	0	28
18:00	6	24	0	0	0	0	0	0	0	0	0	0	0	30
19:00	1	10	1	0	1	0	0	0	0	0	0	0	0	13
20:00	1	10	1	0	0	0	0	0	0	0	0	0	0	12
21:00	1	7	1	0	0	0	0	0	0	0	0	0	0	9
22:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
23:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
Day	46	402	63	1	13	2	0	0	0	0	0	0	0	527
Total				•										021
Percent	8.7%	76.3%	12.0%	0.2%	2.5%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	08:00	08:00		07:00	07:00								08:00
Vol.	9	46	9		2	2								62
PM Peak	18:00	16:00	16:00	15:00	13:00									16:00
Vol.	6	42	8	1	3									54
Grand	69	779	117	2	24	3	0	1	0	0	0	0	0	995
Total								0.40′	0.004					
Percent	6.9%	78.3%	11.8%	0.2%	2.4%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	

Location: Lakeview Avenue Loc #2 Location: South of Huron Avenue

City/State: Cambridge, MA

NB														
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axl	5 Axle	>6 AxI	<6 AxI	6 Axle	>6 Axl	
Time	MtrCyc	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
08/11/15	0	2	1	0	0	0	0	0	0	0	0	0	0	3
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	1	1	0	1	0	0	0	0	0	0	0	0	3
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
05:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
06:00	2	6	2	0	0	0	0	0	0	0	0	0	0	10
07:00	3	13	4	0	2	0	0	0	0	0	0	0	0	22
08:00	3	35	5	0	1	0	0	0	0	0	0	0	0	44
09:00	0	34	6	1	2	0	0	0	0	0	0	0	0	43
10:00	5	33	5	0	0	0	0	0	0	0	0	0	0	43
11:00	1	34	6	0	1	1	0	0	0	0	0	0	0	43
12 PM	1	33	5	0	2	0	0	0	0	0	0	0	0	41
13:00	0	32	5	1	2	0	0	0	0	0	0	0	0	40
14:00	0	30	4	0	1	0	0	2	0	0	0	0	0	37
15:00	1	60	10	0	2	0	0	0	0	0	0	0	0	73
16:00	10	75	9	0	1	0	0	0	0	0	0	0	0	95
17:00	11	78	4	0	0	0	0	0	0	0	0	0	0	93
18:00	9	88	3	0	0	0	0	0	0	0	0	0	0	100
19:00	6	36	3	0	0	0	0	0	0	0	0	0	0	45
20:00	2	23	1	0	0	0	0	0	0	0	0	0	0	26
21:00	0	17	1	0	0	0	0	0	0	0	0	0	0	18
22:00	1	12	1	0	0	0	0	0	0	0	0	0	0	14
23:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
Day Total	55	653	78	2	15	1	0	2	0	0	0	0	0	806
Percent	6.8%	81.0%	9.7%	0.2%	1.9%	0.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	08:00	09:00	09:00	07:00	11:00	0.070	0.270	0.070	0.070	0.070	0.070	0.070	08:00
Vol.	5	35	6	1	2	1								44
PM Peak	17:00	18:00	15:00	13:00	12:00	•		14:00						18:00
Vol.	11	88	10	1	2			2						100

Location: Lakeview Avenue Loc #2 Location: South of Huron Avenue City/State: Cambridge, MA

NB														
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 AxI	5 Axle	>6 AxI	<6 AxI	6 Axle	>6 Axl	
Time	MtrCyc	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
08/12/15	1	2	0	0	0	0	0	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:00	1	7	0	0	0	0	0	0	0	0	0	0	0	8
07:00	5	5	4	0	1	0	0	0	0	0	0	0	0	15
08:00	7	30	3	0	1	1	0	0	0	0	0	0	0	42
09:00	6	26	2	0	0	0	0	0	0	0	0	0	0	34
10:00	7	53	7	0	3	0	0	0	0	0	0	0	0	70
11:00	5	45	9	0	3	0	0	0	0	0	0	0	0	62
12 PM	7	59	5	1	1	0	0	0	0	0	0	0	0	73
13:00	3	38	13	0	1	0	0	0	0	0	0	0	0	55
14:00	6	52	5	0	1	0	0	0	0	0	0	0	0	64
15:00	4	70	10	0	1	0	0	0	0	0	0	0	0	85
16:00	17	105	6	0	2	1	0	0	0	0	0	0	0	131
17:00	25	108	12	0	0	0	0	0	0	0	0	0	0	145
18:00	21	70	4	0	1	0	0	0	0	0	0	0	0	96
19:00	18	30	2	0	0	0	0	0	0	0	0	0	0	50
20:00	7	18	2	0	0	0	0	0	0	0	0	0	0	27
21:00	5	17	0	0	1	0	0	0	0	0	0	0	0	23
22:00	3	13	3	0	0	0	0	0	0	0	0	0	0	19
23:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
Day	148	759	88	1	16	2	0	0	0	0	0	0	0	1014
Total				•										1014
Percent	14.6%	74.9%	8.7%	0.1%	1.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	10:00	11:00		10:00	08:00								10:00
Vol.	7	53	9		3	11								70
PM Peak	17:00	17:00	13:00	12:00	16:00	16:00								17:00
Vol.	25	108	13	1	2	1								145
Grand	203	1412	166	3	31	3	0	2	0	0	0	0	0	1820
Total									•					1020
Percent	11.2%	77.6%	9.1%	0.2%	1.7%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	

Location: Lakeview Avenue Loc #2 Location: South of Huron Avenue

City/State: Cambridge, MA

SB, NB														
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 AxI	5 Axle	>6 Axl	<6 AxI	6 Axle	>6 Axl	
Time	MtrCyc	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
08/11/15	1	4	2	0	0	0	0	0	0	0	0	0	0	7
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	5	1	0	1	0	0	0	0	0	0	0	0	7
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
05:00	0	3	2	0	0	1	0	0	0	0	0	0	0	6
06:00	3	15	2	0	0	0	0	0	0	0	0	0	0	20
07:00	7	51	6	0	3	0	0	0	0	0	0	0	0	67
08:00	6	94	15	0	2	0	0	0	0	0	0	0	0	117
09:00	1	74	10	1	3	0	0	1	0	0	0	0	0	90
10:00	6	54	10	1	1	0	0	0	0	0	0	0	0	72
11:00	3	62	9	0	3	1	0	0	0	0	0	0	0	78
12 PM	1	54	8	0	3	0	0	0	0	0	0	0	0	66
13:00	0	47	7	1	6	0	0	0	0	0	0	0	0	61
14:00	3	51	10	0	1	0	0	2	0	0	0	0	0	67
15:00	1	81	15	0	2	0	0	0	0	0	0	0	0	99
16:00	10	97	13	0	1	0	0	0	0	0	0	0	0	121
17:00	13	97	6	0	0	0	0	0	0	0	0	0	0	116
18:00	10	107	3	0	0	0	0	0	0	0	0	0	0	120
19:00	9	50	5	0	0	0	0	0	0	0	0	0	0	64
20:00	2	33	2	0	0	0	0	0	0	0	0	0	0	37
21:00	1	20	2	0	0	0	0	0	0	0	0	0	0	23
22:00	1	18	2	0	0	0	0	0	0	0	0	0	0	21
23:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9
Day Total	78	1030	132	3	26	2	0	3	0	0	0	0	0	1274
Percent	6.1%	80.8%	10.4%	0.2%	2.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	08:00	08:00	09:00	07:00	05:00		09:00						08:00
Vol.	7	94	15	1_	3	1_		1						117
PM Peak	17:00	18:00	15:00	13:00	13:00			14:00						16:00
Vol.	13	107	15	1	6			2						121

Location: Lakeview Avenue Loc #2 Location: South of Huron Avenue

City/State: Cambridge, MA

SB, NB														
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 AxI	5 Axle	>6 Axl	<6 AxI	6 Axle	>6 Axl	_
Time	MtrCyc	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
08/12/15	1	3	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
04:00	0	3	0	0	1	0	0	0	0	0	0	0	0	4
05:00	1	6	1	0	0	0	0	0	0	0	0	0	0	8
06:00	2	14	0	0	0	0	0	0	0	0	0	0	0	16
07:00	10	41	8	0	3	2	0	0	0	0	0	0	0	64
08:00	14	76	12	0	1	1	0	0	0	0	0	0	0	104
09:00	15	63	7	0	0	0	0	0	0	0	0	0	0	85
10:00	7	71	12	0	3	0	0	0	0	0	0	0	0	93
11:00	6	59	10	0	5	0	0	0	0	0	0	0	0	80
12 PM	9	84	10	1	2	0	0	0	0	0	0	0	0	106
13:00	4	56	20	0	4	0	0	0	0	0	0	0	0	84
14:00	7	87	9	0	3	0	0	0	0	0	0	0	0	106
15:00	4	109	17	1	1	0	0	0	0	0	0	0	0	132
16:00	21	147	14	0	2	1	0	0	0	0	0	0	0	185
17:00	30	126	17	0	0	0	0	0	0	0	0	0	0	173
18:00	27	94	4	0	1	0	0	0	0	0	0	0	0	126
19:00	19	40	3	0	1	0	0	0	0	0	0	0	0	63
20:00	8	28	3	0	0	0	0	0	0	0	0	0	0	39
21:00	6	24	1	0	1	0	0	0	0	0	0	0	0	32
22:00	3	15	3	0	0	0	0	0	0	0	0	0	0	21
23:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
Day Total	194	1161	151	2	29	4	0	0	0	0	0	0	0	1541
Percent	12.6%	75.3%	9.8%	0.1%	1.9%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	08:00	08:00		11:00	07:00								08:00
Vol.	15	76	12		5	2								104
PM Peak	17:00	16:00	13:00	12:00	13:00	16:00								16:00
Vol.	30	147	20	1	4	1								185
Grand	272	2191	283	5	55	6	0	3	0	0	0	0	0	2815
Total Percent	9.7%	77.8%	10.1%	0.2%	2.0%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	_3.0

Location: Lakeview Avenue Loc #2 Location: South of Huron Avenue

City/State: Cambridge, MA

SB	·																
Start	1	4	7	10	13	16	19	22	25	28	31	34	37	40		85th	95th
Time	3	6	9	12	15	18	21	24	27	30	33	36	39	999	Total	Percent	Percent
08/11/15	0	0	1	0	0	1	1	1	0	0	0	0	0	0	4	22	23
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	1	0	0	1	2	0	0	0	0	0	4	26	26
03:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	26	26
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	1	0	0	1	0	1	1	0	0	0	0	0	4	25	26
06:00	0	0	1	0	0	0	0	4	3	2	0	0	0	0	10	27	29
07:00	0	0	1	1	2	0	9	13	12	4	3	0	0	0	45	27	30
08:00	0	0	2	4	1	5	12	15	20	9	5	0	0	0	73	28	30
09:00	0	1	0	0	2	3	9	13	11	7	1	0	0	0	47	27	29
10:00	0	1	1	2	1	3	7	8	3	2	1	0	0	0	29	25	29
11:00	0	0	2	1	0	2	10	5	8	5	1	1	0	0	35	28	30
12 PM	0	0	0	1	0	2	11	4	6	1	0	0	0	0	25	25	26
13:00	0	0	0	0	0	3	6	6	4	1	1	0	0	0	21	26	29
14:00	0	0	2	2	1	1	4	10	3	4	3	0	0	0	30	28	31
15:00	0	0	0	0	1	4	1	7	5	6	2	0	0	0	26	29	31
16:00	0	0	0	0	2	2	5	5	7	3	2	0	0	0	26	28	31
17:00	0	0	1	1	0	0	5	4	6	4	1	1	0	0	23	28	32
18:00	0	1	0	0	2	0	1	7	6	1	2	0	0	0	20	27	31
19:00	0	0	1	2	0	0	2	6	6	2	0	0	0	0	19	26	28
20:00	0	0	0	0	2	2	1	2	2	1	1	0	0	0	11	28	31
21:00	0	0	1	0	0	1	0	1	2	0	0	0	0	0	5	25	26
22:00	0	0	0	1	0	0	0	2	2	2	0	0	0	0	7	28	29
23:00	0	0	0	0	0	0	0	1_	1	1	0	0	0	0	3	28	29
Total	0	3	14	15	15	30	84	116	111	55	23	2	0	0	468		
Percent	0.0%	0.6%	3.0%	3.2%	3.2%	6.4%	17.9%	24.8%	23.7%	11.8%	4.9%	0.4%	0.0%	0.0%			
AM Peak		09:00	08:00	08:00	07:00	08:00	08:00	08:00	08:00	08:00	08:00	11:00			08:00		
Vol.		1_	2	4	2	5	12	15	20	9	5	11			73		
PM Peak		18:00	14:00	14:00	16:00	15:00	12:00	14:00	16:00	15:00	14:00	17:00			14:00		
Vol.		1	2	2	2	4	11	10	7	6	3	1			30		

260551SPDA2

Location: Lakeview Avenue Loc #2 Location: South of Huron Avenue 260551SPDA2

City/State: Cambridge, MA

SB																	
Start	1	4	7	10	13	16	19	22	25	28	31	34	37	40		85th	95th
Time	3	6	9	12	15	18	21	24	27	30	33	36	39	999	Total	Percent	Percent
08/12/15	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	20	20
01:00	0	1	0	0	0	0	0	2	0	1	0	0	0	0	4	28	29
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	23	23
04:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	26	26
05:00	0	0	2	0	0	0	1	1	2	0	1	0	0	0	7	26	31
06:00	0	0	1	0	0	2	0	2	2	1	0	0	0	0	8	26	28
07:00	0	0	4	2	3	1	6	9	15	9	0	0	0	0	49	27	29
08:00	0	0	2	4	3	2	9	14	15	8	4	1	0	0	62	28	31
09:00	0	1	2	6	0	4	3	4	17	10	3	1	0	0	51	28	31
10:00	0	0	0	0	0	1	2	6	9	1	3	1	0	0	23	30	32
11:00	0	0	1	1	0	2	4	5	3	1	1	0	0	0	18	26	30
12 PM	0	0	0	3	0	3	5	10	6	3	2	0	1	0	33	28	32
13:00	0	0	0	1	1	1	10	6	4	3	2	1	0	0	29	28	32
14:00	0	0	0	2	0	2	6	17	8	6	1	0	0	0	42	27	29
15:00	0	0	2	1	0	2	6	18	9	8	1	0	0	0	47	27	29
16:00	0	1	2	3	1	0	4	14	11	9	7	2	0	0	54	30	32
17:00	0	1	1	1	3	0	7	7	5	3	0	0	0	0	28	26	28
18:00	1	1	2	1	0	2	7	5	8	1	2	0	0	0	30	26	30
19:00	0	0	1	0	1	1	1	3	4	2	0	0	0	0	13	27	29
20:00	0	0	0	1	2	1	2	3	0	3	0	0	0	0	12	28	29
21:00	0	0	1	0	0	0	1	4	3	0	0	0	0	0	9	25	26
22:00	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2	23	23
23:00	0	0	0	1	0	0	0	0	2	0	0	0	0	0	3	26	26
Total	11	5	21	27	14	24	76	132	124	69	27	6	1	0	527		
Percent	0.2%	0.9%	4.0%	5.1%	2.7%	4.6%	14.4%	25.0%	23.5%	13.1%	5.1%	1.1%	0.2%	0.0%			
AM Peak		01:00	07:00	09:00	07:00	09:00	08:00	08:00	09:00	09:00	08:00	08:00			08:00		
Vol.		1	4	6	3	4	9	14	17	10	4	1			62		
PM Peak	18:00	16:00	15:00	12:00	17:00	12:00	13:00	15:00	16:00	16:00	16:00	16:00	12:00		16:00		
Vol.	1_	1_	2	3	3	3	10	18	11	9	7	2	1		54_		
Grand Total	1	8	35	42	29	54	160	248	235	124	50	8	1	0	995		
Percent	0.1%	0.8%	3.5%	4.2%	2.9%	5.4%	16.1%	24.9%	23.6%	12.5%	5.0%	0.8%	0.1%	0.0%			
					40												

15th Percentile: 16 MPH 23 MPH 50th Percentile: 85th Percentile: 27 MPH 95th Percentile: 30 MPH

10 MPH Pace Speed: Statistics 19-28 MPH Number in Pace : 684

> Percent in Pace: 68.7% Number of Vehicles > 25 MPH: 340 Percent of Vehicles > 25 MPH: 34.1% Mean Speed(Average): 23 MPH

Location: Lakeview Avenue Loc #2 Location: South of Huron Avenue

City/State: Cambridge, MA

NB	zambnago,	1717															
Start	1	4	7	10	13	16	19	22	25	28	31	34	37	40		85th	95th
Time	3	6	9	12	15	18	21	24	27	30	33	36	39	999	Total	Percent	Percent
08/11/15	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	29	29
01:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	23	23
02:00	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	25	26
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	14	14
04:00	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	34	35
05:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	23	23
06:00	0	0	0	1	1	0	1	1	2	2	1	1	0	0	10	31	34
07:00	0	0	0	1	1	4	2	1	10	3	0	0	0	0	22	26	28
08:00	0	0	0	1	4	0	4	9	9	10	3	0	3	1	44	29	36
09:00	0	0	0	1	1	4	8	10	9	9	1	0	0	0	43	28	29
10:00	1	0	3	1	6	1	6	7	8	6	3	1	0	0	43	28	31
11:00	0	1	0	2	1	2	5	7	13	8	4	0	0	0	43	29	31
12 PM	0	2	4	4	2	0	6	5	13	4	1	0	0	0	41	26	29
13:00	0	0	1	0	0	1	7	10	12	5	3	1	0	0	40	28	31
14:00	0	0	0	0	1	1	1	10	15	7	2	0	0	0	37	28	30
15:00	0	0	0	2	1	4	7	13	19	22	5	0	0	0	73	29	30
16:00	0	0	0	1	5	9	6	17	30	17	7	3	0	0	95	29	32
17:00	0	0	0	5	6	1	4	18	27	20	9	3	0	0	93	29	32
18:00	0	0	0	4	4	9	8	17	21	28	7	1	1	0	100	29	31
19:00	0	0	0	3	3	0	5	10	13	6	4	1	0	0	45	29	32
20:00	0	0	0	1	2	2	3	6	8	2	2	0	0	0	26	27	31
21:00	0	0	0	0	0	1	4	6	3	3	0	0	1	0	18	28	36
22:00	0	0	0	1	1	1	2	6	2	0	0	0	1	0	14	25	36
23:00	0	0	0	0	0	0	0	0	3	3	0	0	0	0	6	29	29
Total	1 2 40/	3	8	28	40	40	79	158	218	158	54	12	6	1 0.40/	806		
Percent	0.1%	0.4%	1.0%	3.5%	5.0%	5.0%	9.8%	19.6%	27.0%	19.6%	6.7%	1.5%	0.7%	0.1%	00.00		
AM Peak Vol.	10:00	11:00 1	10:00 3	11:00 2	10:00 6	07:00 4	09:00 8	09:00 10	11:00 13	08:00 10	11:00 4	04:00	08:00 3	08:00	08:00 44		
	I													1			
PM Peak		12:00 2	12:00	17:00	17:00	16:00	18:00	17:00 18	16:00	18:00	17:00	16:00	18:00		18:00 100		
Vol.		2	4	5	6	9	8	18	30	28	9	3	1		100		

260551SPDA2

Location: Lakeview Avenue Loc #2

Location: South of Huron Avenue

9/8-664-2565

260551SPDA2

City/State: Cambridge, MA

NB

NB																	
Start	1	4	7	10	13	16	19	22	25	28	31	34	37	40		85th	95th
Time	3	6	9	12	15	18	21	24	27	30	33	36	39	999	Total	Percent	Percent
08/12/15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	3	25	26
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	1	0	1	1	0	0	3	34	35
05:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	26	26
06:00	0	0	0	0	1	0	2	0	2	3	0	0	0	0	8	28	29
07:00	0	1	1	0	4	2	0	2	2	2	0	1	0	0	15	28	33
08:00	0	0	0	4	3	1	5	9	9	11	0	0	0	0	42	28	29
09:00	0	0	1	2	1	4	1	3	11	7	3	1	0	0	34	29	32
10:00	0	2	0	5	5	2	18	22	9	5	1	1	0	0	70	25	29
11:00	0	0	1	1	2	3	9	13	13	15	4	1	0	0	62	29	31
12 PM	0	0	0	5	4	4	6	14	24	10	5	1	0	0	73	28	31
13:00	0	0	0	1	2	2	4	18	11	12	5	0	0	0	55	29	31
14:00	0	0	2	3	2	3	6	16	20	10	1	0	1	0	64	27	29
15:00	0	0	1	0	2	1	7	11	36	19	6	2	0	0	85	29	31
16:00	0	0	0	4	10	9	8	24	41	28	7	0	0	0	131	28	30
17:00	0	1	1	6	14	10	11	28	34	27	11	1	1	0	145	29	31
18:00	0	1	4	6	10	5	8	24	18	15	5	0	0	0	96	28	30
19:00	0	0	4	5	8	6	7	8	7	2	3	0	0	0	50	25	30
20:00	0	0	0	4	5	1	4	6	6	0	1	0	0	0	27	25	26
21:00	0	0	1	2	1	2	3	4	4	3	3	0	0	0	23	29	31
22:00	0	0	0	3	0	3	0	7	3	2	0	1	0	0	19	27	33
23:00	0	0	0	1_	0	0	2	2	1	1_	1_	0	0	0	8	29	31
Total	0	5	17	52	74	58	101	212	254	172	57	10	2	0	1014		
Percent	0.0%	0.5%	1.7%	5.1%	7.3%	5.7%	10.0%	20.9%	25.0%	17.0%	5.6%	1.0%	0.2%	0.0%			
AM Peak		10:00	00:00	10:00	10:00	09:00	10:00	10:00	11:00	11:00	11:00	04:00			10:00		
Vol.		2	1	5	5	4	18	22	13	15	4	1			70		
PM Peak		17:00	18:00	17:00	17:00	17:00	17:00	17:00	16:00	16:00	17:00	15:00	14:00		17:00		
Vol.		1_	4	6	14	10	11	28	41	28	11	2	1		145		
Grand	1	8	25	80	114	98	180	370	472	330	111	22	8	1	1820		
Total															.020		
Percent	0.1%	0.4%	1.4%	4.4%	6.3%	5.4%	9.9%	20.3%	25.9%	18.1%	6.1%	1.2%	0.4%	0.1%			

15th Percentile: 16 MPH 50th Percentile: 24 MPH 85th Percentile: 28 MPH 95th Percentile: 31 MPH

Statistics 10 MPH Pace Speed: 21-30 MPH Number in Pace: 1232

Number in Pace : 1232
Percent in Pace : 67.7%

Number of Vehicles > 25 MPH : 787

Percent of Vehicles > 25 MPH : 43.2%

Mean Speed(Average) : 24 MPH

Location: Lakeview Avenue Loc #2 Location: South of Huron Avenue

City/State: Cambridge, MA

SB, NB	ambridge,	IVIA															
Start	1	4	7	10	13	16	19	22	25	28	31	34	37	40		85th	95th
Time	3	6	9	12	15	18	21	24	27	30	33	36	39	999	Total	Percent	Percent
08/11/15	0	0	1	0	0	1	1	1	0	3	0	0	0	0	7	28	29
01:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	23	23
02:00	0	0	0	0	1	0	0	3	3	0	0	0	0	0	7	25	26
03:00	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2	26	26
04:00	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	34	35
05:00	0	0	1	0	0	1	0	3	1	0	0	0	0	0	6	24	26
06:00	0	0	1	1	1	0	1	5	5	4	1	1	0	0	20	29	33
07:00	0	0	1	2	3	4	11	14	22	7	3	0	0	0	67	26	29
08:00	0	0	2	5	5	5	16	24	29	19	8	0	3	1	117	28	31
09:00	0	1	0	1	3	7	17	23	20	16	2	0	0	0	90	27	29
10:00	1	1	4	3	7	4	13	15	11	8	4	1	0	0	72	27	31
11:00	0	1	2	3	1	4	15	12	21	13	5	1	0	0	78	28	31
12 PM	0	2	4	5	2	2	17	9	19	5	1	0	0	0	66	26	28
13:00	0	0	1	0	0	4	13	16	16	6	4	1	0	0	61	27	31
14:00	0	0	2	2	2	2	5	20	18	11	5	0	0	0	67	28	30
15:00	0	0	0	2	2	8	8	20	24	28	7	0	0	0	99	29	30
16:00	0	0	0	1	7	11	11	22	37	20	9	3	0	0	121	29	31
17:00	0	0	1	6	6	1	9	22	33	24	10	4	0	0	116	29	32
18:00	0	1	0	4	6	9	9	24	27	29	9	1	1	0	120	29	31
19:00	0	0	1	5	3	0	7	16	19	8	4	1	0	0	64	28	31
20:00	0	0	0	1	4	4	4	8	10	3	3	0	0	0	37	27	31
21:00	0	0	1	0	0	2	4	1	5	3	0	0	1	0	23	27	29
22:00	0	0	0	2	0	1	2	8	4	2 4	0	0	0	0	21	26 28	29
23:00 Total	1	6	0 22	43	<u>0</u> 55	0 70	163	274	329	213	<u>0</u> 77	14	06	01	9 1274		29
Percent	0.1%	0.5%	1.7%	3.4%	4.3%	5.5%	12.8%	21.5%	25.8%	16.7%	6.0%	1.1%	0.5%	0.1%	1274		
AM Peak	10:00	0.5%	10:00	08:00	10:00	09:00	09:00	08:00	08:00	08:00	08:00	04:00	08:00	0.1%	08:00		
Vol.	10.00	1	4	5	7	7	17	24	29	19	8	04.00	3	00.00	117		
PM Peak		12:00	12:00	17:00	16:00	16:00	12:00	18:00	16:00	18:00	17:00	17:00	18:00	<u> </u>	16:00		
Vol.		2	4	6	7	10.00	12.00	24	37	29	17.00	17.00	10.00		121		
VOI.		_	7	U	,		17	24	31	23	10	-	'		121		

260551SPDA2

Location: Lakeview Avenue Loc #2
Location: South of Huron Avenue

City/State: Cambridge, MA

SB	. N	1B

SB, NB																	
Start	1	4	7	10	13	16	19	22	25	28	31	34	37	40		85th	95th
Time	3	6	9	12	15	18	21	24	27	30	33	36	39	999	Total	Percent	Percent
08/12/15	0	0	1	0	0	0	1	1	1	0	0	0	0	0	4	25	26
01:00	0	1	0	0	0	0	0	2	0	1	0	0	0	0	4	28	29
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	23	23
04:00	0	0	0	0	0	0	0	0	2	0	1	1	0	0	4	34	35
05:00	0	0	2	0	0	0	1	1	3	0	1	0	0	0	8	26	31
06:00	0	0	1	0	1	2	2	2	4	4	0	0	0	0	16	28	29
07:00	0	1	5	2	7	3	6	11	17	11	0	1	0	0	64	27	29
08:00	0	0	2	8	6	3	14	23	24	19	4	1	0	0	104	28	29
09:00	0	1	3	8	1	8	4	7	28	17	6	2	0	0	85	29	31
10:00	0	2	0	5	5	3	20	28	18	6	4	2	0	0	93	26	31
11:00	0	0	2	2	2	5	13	18	16	16	5	1	0	0	80	28	31
12 PM	0	0	0	8	4	7	11	24	30	13	7	1	1	0	106	28	31
13:00	0	0	0	2	3	3	14	24	15	15	7	1	0	0	84	29	31
14:00	0	0	2	5	2	5	12	33	28	16	2	0	1	0	106	27	29
15:00	0	0	3	1	2	3	13	29	45	27	7	2	0	0	132	28	31
16:00	0	1	2	7	11	9	12	38	52	37	14	2	0	0	185	29	31
17:00	0	2	2	7	17	10	18	35	39	30	11	1	1	0	173	28	31
18:00	1	2	6	7	10	7	15	29	26	16	7	0	0	0	126	27	30
19:00	0	0	5	5	9	7	8	11	11	4	3	0	0	0	63	26	29
20:00	0	0	0	5	7	2	6	9	6	3	1	0	0	0	39	26	29
21:00	0	0	2	2	1	2	4	8	7	3	3	0	0	0	32	28	31
22:00	0	0	0	3	0	3	1	8	3	2	0	1	0	0	21	26	29
23:00	0	0	0	2	0	0	2	2	3	1_	1	0	0	0	11	28	31
Total	11	10	38	79	88	82	177	344	378	241	84	16	3	0	1541		
Percent	0.1%	0.6%	2.5%	5.1%	5.7%	5.3%	11.5%	22.3%	24.5%	15.6%	5.5%	1.0%	0.2%	0.0%			
AM Peak		10:00	07:00	08:00	07:00	09:00	10:00	10:00	09:00	08:00	09:00	09:00			08:00		
Vol.		2	5	8	7	8	20	28	28	19	6	2			104		
PM Peak	18:00	17:00	18:00	12:00	17:00	17:00	17:00	16:00	16:00	16:00	16:00	15:00	12:00		16:00		
Vol.	1_	2	6	8	17	10	18	38	52	37	14	2	1_		185		
Grand Total	2	16	60	122	143	152	340	618	707	454	161	30	9	1	2815		
Percent	0.1%	0.6%	2.1%	4.3%	5.1%	5.4%	12.1%	22.0%	25.1%	16.1%	5.7%	1.1%	0.3%	0.0%			

15th Percentile : 16 MPH 50th Percentile : 23 MPH 85th Percentile : 28 MPH 95th Percentile : 31 MPH

Statistics 10 MPH Pace Speed: 21-30 MPH Number in Pace: 1892

Percent in Pace : 67.2%

Number of Vehicles > 25 MPH : 1126

Percent of Vehicles > 25 MPH : 40.0%

Mean Speed(Average) : 23 MPH

260551SPDA2

Appendix E: Post-Reconstruction Traffic Counts and Speeds

978-664-2565

Location: Lakeview Avenue Location: North of Brattle Street City/State: Cambridge, MA

44306VOL

Start	10/27/2016	<u> </u>	NB	Hour	Totals		SB	Hour	Totals	Combine	ed Totals
Time	Thu	Morning	Afternoon		Afternoon	Morning	Afternoon	Morning		Morning	Afternoon
12:00		0	15			0	6				
12:15		1	11			0	11				
12:30		1	16			0	12				
12:45		2	9	4	51	1	3	1	32	5	83
01:00		1	15			0	3				
01:15		0	19			0	12				
01:30		0	15			0	7				
01:45		0	20	1	69	1	8	1	30	2	99
02:00		0	18			0	8				
02:15		0	13			1	13				
02:30		0	24			0	13				
02:45		0	27	0	82	0	13	1	47	1	129
03:00		0	24			0	13				
03:15		0	32			0	10				
03:30		0	33			0	14				
03:45		0	32 33 36	0	125	0	10	0	47	0	172
04:00		0	33 28			0	8				
04:15		0	28			1	8				
04:30		0	49			1	7				
04:45		0	50	0	160	0	12	2	35	2	195
05:00		2 1	45			1	12				
05:15		1	59			0	9				
05:30		0 2	54			3	10				
05:45		2	44	5	202	4	19	8	50	13	252
06:00		2	43			2 4	14				
06:15			36				8				
06:30		1	24 26			6	7				
06:45		2	26	9	129	13	3	25	32	34	161
07:00		11	17			14	11				
07:15		11	25			16	7				
07:30		38 29	13			24	8				
07:45		29	13 12	89	68	44	4	98	30	187	98
08:00		14	12			47	2				
08:15		24	3			23	0				
08:30		25 20	8			27	0				
08:45		20	11	83	34	26	3	123	5	206	39
09:00		10	13			15	2				
09:15		10	8			16	0				
09:30		19	10			20	5				
09:45		18	5	57	36	26	3	77	10	134	46
10:00		16	8			13	1				
10:15		17	9			19	1				
10:30		23	4	70	0.5	4	1	4.0		444	22
10:45		14	4	70	25	8	0	44	3	114	28
11:00		14	0			7	1				
11:15		13	4			11	1				
11:30		13	2	F0	0	8	1	0.4	7	0.7	4.5
11:45		13	2	53	8	8	4	34	7	87	15
Total		371	989			414	328			785	1317
Percent		27.3%	72.7%			55.8%	44.2%			37.3%	62.7%

978-664-2565

Location: Lakeview Avenue Location: North of Brattle Street City/State: Cambridge, MA

44306VOL

Start	10/28/2016	N	NB	Hour	Totals		SB	Hour	Totals	Combine	ed Totals
Time	Fri	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		1	21	Worming	Alternoon	0	4	Worming	Alternoon	Morning	Alternoon
12:15		7	16			2	8				
12:30			14			2	10				
12:45		3	20	11	71	1	6	5	28	16	99
01:00		0	22			Ö	7	· ·	20		00
01:15		2	17			0	11				
01:30		2	18			1	12				
01:45		0	23	4	80	0	9	1	39	5	119
02:00		0	17			0	19				
02:15		1	14			1	9				
02:30		0	23			0	18				
02:45		0	34	1	88	0	13	1	59	2	147
03:00		1	17			1	10				
03:15		4	42			2	6				
03:30		1	32			1	10				
03:45		0	26	6	117	4	10	8	36	14	153
04:00		2	32			2	4				
04:15		2	32			1	3				
04:30		0	24			2	6				
04:45		0	38	4	126	0	8	5	21	9	147
05:00		0	58			1	8				
05:15		3	39			4	12				
05:30		0	48			0	9				
05:45		1	38	4	183	2	11	7	40	11	223
06:00		1	39			3	8				
06:15		4	22			1	9				
06:30		2	20			8	7				
06:45		3	15	10	96	12	9	24	33	34	129
07:00		7	14			15	6				
07:15		15	14			14	8				
07:30		29	8			26	8				
07:45		23	7	74	43	33	3	88	25	162	68
08:00		16	8			31	2				
08:15		22	10			28	3				
08:30		18 18	6	74	00	31 28	6	440	40	400	45
08:45			8	74	32		2	118	13	192	45
09:00		16 20	7 8			19 22	2 2				
09:15		20 15				13	2				
09:30 09:45		17	7 9	68	31	21	4	75	10	143	41
10:00		13	7	00	31	5	3	73	10	143	41
10:00		9	4			10	1				
10:13		8	4			8	3				
10:45		12	4	42	19	9	4	32	11	74	30
11:00		10	4	42	19	4	2	32	11	74	30
11:15		13	1			4	0				
11:30		12	3			12	2				
11:45		13	2	48	10	14	0	34	4	82	14
Total		346	896		.0	398	319	01	•	744	1215
Percent		27.9%	72.1%			55.5%	44.5%			38.0%	62.0%
Grand								-			
Total		717	1885			812	647			1529	2532
Percent		27.6%	72.4%			55.7%	44.3%			37.7%	62.3%
. 5.55/10		,				30 70	70			5 70	

ADT ADT 2,031 AADT 2,031

978-664-2565

Location: Lakeview Avenue Location: North of Brattle Street City/State: Cambridge, MA

44306VOL

Start	10/24/2	2016	Tu	e	Wed		Th	าน	F	ri	Sat		Sun		Week Av	/erage
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	ŠВ
12:00 AM	*	*	*	*	*	*	4	1	11	5	*	*	*	*	8	3
01:00	*	*	*	*	*	*	1	1	4	1	*	*	*	*	2	1
02:00	*	*	*	*	*	*	0	1	1	1	*	*	*	*	0	1
03:00	*	*	*	*	*	*	0	0	6	8	*	*	*	*	3	4
04:00	*	*	*	*	*	*	0	2	4	5	*	*	*	*	2	4
05:00	*	*	*	*	*	*	5	8	4	7	*	*	*	*	4	8
06:00	*	*	*	*	*	*	9	25	10	24	*	*	*	*	10	24
07:00	*	*	*	*	*	*	89	98	74	88	*	*	*	*	82	93
08:00	*	*	*	*	*	*	83	123	74	118	*	*	*	*	78	120
09:00	*	*	*	*	*	*	57	77	68	75	*	*	*	*	62	76
10:00	*	*	*	*	*	*	70	44	42	32	*	*	*	*	56	38
11:00	*	*	*	*	*	*	53	34	48	34	*	*	*	*	50	34
12:00 PM	*	*	*	*	*	*	51	32	71	28	*	*	*	*	61	30
01:00	*	*	*	*	*	*	69	30	80	39	*	*	*	*	74	34
02:00	*	*	*	*	*	*	82	47	88	59	*	*	*	*	85	53
03:00	*	*	*	*	*	*	125	47	117	36	*	*	*	*	121	42
04:00	*	*	*	*	*	*	160	35	126	21	*	*	*	*	143	28
05:00	*	*	*	*	*	*	202	50	183	40	*	*	*	*	192	45
06:00	*	*	*	*	*	*	129	32	96	33	*	*	*	*	112	32
07:00	*	*	*	*	*	*	68	30	43	25	*	*	*	*	56	28
08:00	*	*	*	*	*	*	34	5	32	13	*	*	*	*	33	9
09:00	*	*	*	*	*	*	36	10	31	10	*	*	*	*	34	10
10:00	*	*	*	*	*	*	25	3	19	11	*	*	*	*	22	7
11:00	*	*	*	*	*	*	8	7	10	4	*	*	*	*	9	6
Lane	0	0	0	0	0	0	1360	742	1242	717	0	0	0	0	1299	730
Day	0		0		0		210		195		0		0		2029	
AM Peak	-	-	-	-	-	-	07:00	08:00	07:00	08:00	-	-	-	-	07:00	08:00
Vol.	-	-	-	-	-	-	89	123	74	118	-	-	-	-	82	120
PM Peak	-	-	-	-	-	-	17:00	17:00	17:00	14:00	-	-	-	-	17:00	14:00
Vol.	-	-	-	-	-	-	202	50	183	59	-	-	-	-	192	<u>53</u>
Comb. Total	0			0	0		2	102	1	1959	()	C)	20	029
ADT	AD	OT 2,031	AAD	T 2,031												

44306CLS

Accurate Counts

978-664-2565

Location: Lakeview Avenue Location: North of Brattle Street

City/State: Cambridge, MA

ΝŔ

01:00	
10/27/16	
01:00	<u>ti Total</u>
02:00	0 4
03:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1
04:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0
05:00	0 0
06:00 0 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0
07:00 0 74 9 2 1 2 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 5
08:00 0 70 8 3 0 1 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9
09:00	0 89
10:00	0 83
11:00	0 57
12 PM	0 70
13:00	0 53
14:00 1 64 13 1 2 1 0 </td <td>0 51</td>	0 51
15:00 0 112 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 69
16:00 0 150 7 0 3 0 </td <td>0 82</td>	0 82
17:00	0 125
18:00 0 124 5 0 </td <td>0 160</td>	0 160
19:00 0 63 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 202
20:00 0 32 2 0 <td>0 129</td>	0 129
21:00 0 34 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 68
22:00 0 24 0 0 1 0 <td>0 34</td>	0 34
23:00 0 8 0 <td>0 35</td>	0 35
Day Total 5 1220 103 9 11 9 0 2 0 0 0 0 0 Percent 0.4% 89.8% 7.6% 0.7% 0.8% 0.7% 0.0% 0.1% 0.0%	0 25
Total 3 1220 103 9 11 9 0 2 0 <th< td=""><td>8 0</td></th<>	8 0
Percent 0.4% 89.8% 7.6% 0.7% 0.8% 0.7% 0.0% 0.1% 0.0%	0 1359
AM Peak 09:00 07:00 10:00 08:00 07:00 07:00 Vol. 2 74 11 3 1 2 1 PM Peak 14:00 17:00 14:00 13:00 16:00 12:00	6
Vol. 2 74 11 3 1 2 1 PM Peak 14:00 17:00 14:00 13:00 16:00 12:00	07:00
PM Peak 14:00 17:00 14:00 13:00 16:00 12:00	89
	17:00
	202

44306CLS

Accurate Counts

978-664-2565

Location: Lakeview Avenue Location: North of Brattle Street City/State: Cambridge, MA

NR

2 Axle Buses 6 Tire 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 2 3 1 2 0 1 2 0 1 1 0 0 0 0 0	3 Axle Single 0 0 0 0 0 0 0 0	4 Axle Single 0 0 0 0 0 0 0 0 0	<5 Axl Double 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 Axle Double 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	>6 Axl Double 0 0 0 0 0 0 0 0	<6 Axl Multi 0 0 0 0 0 0 0 0 0 0 0 0	6 Axle Multi 0 0 0 0 0 0 0	>6 Axl Multi 0 0 0 0 0 0	Total 11 4 1 6 4 10 74
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	11 4 1 6 4 4
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	4 1 6 4 4
0 0 0 0 0 0 1 0 0 2 3 1 2 0 1 2 0 1	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0	1 6 4 4 10
0 0 0 0 1 0 0 2 3 1 2 0 1 2 0 1 1 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0	4 4 10
0 0 1 0 0 2 3 1 2 0 1 2 0 1 1 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0	0 0 0	4 4 10
1 0 2 3 1 2 0 1 2 0 1 1 0	0 0 0 0 0	0 0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0	0	
0 2 3 1 2 0 1 2 0 1 1 0	0 0 0 0	0 0 0	0 0 0	0	0 0	0	0	0	
3 1 2 0 1 2 0 1 1 0	0 0 0 0	0 0 0	0 0	0	0	0			
2 0 1 2 0 1 1 0	0 0 0	0	0	-	-	-	0	0	71
1 2 0 1 1 0	0 0	0		0	0			•	
0 1 1 0	0	-	Λ			0	0	0	74
1 0		Λ		0	0	0	0	0	68
	Λ		0	0	0	0	0	0	42
0 0	-	-		_		-			48
	1		-	-					71
•	1	-	-	-	-	-	-		80
	1								88
2 0		0		0	0	-			117
1 0		0		0	0				126
0 1	0	0	0	0	0	0	0	0	183
0 1	0	0	0	0	0	0	0	0	95
		-	-	•	-	•	-	-	43
									32
		-		-	-	-	-		31
									19
0 0	0	0	0	0	0	0	0	0	10
12 10	3	0	1	0	0	0	0	0	1241
1 00/2 0 90/2	0.29/	0.00/	O 10/	0.00/-	n no/-	0.00%	0.00/	n no/	
	0.2 /0	0.076	U. 1 /0	0.076	0.076	0.076	0.076	0.0 /0	07:00
									74
	12:00		12:00						17:00
			12.00						183
- '	•		•						100
04	4.0	•	^	•	^	^	•	^	0000
21 21	12	Ü	3	U	U	U	U	U	2600
	0.5%	0.0%	0.1%	0.0%	0.0%				
	0 0 1 1 1 0 1 2 0 1 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0	0 0 1 1 1 1 0 1 1 2 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 12 10 3 1.0% 0.8% 0.2% 07:00 06:00 3 2 1 1 2 1 1	0 0 1 0 1 1 1 0 0 1 1 0 2 0 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <	0 0 1 0 1 1 1 1 0 0 0 1 1 0 0 2 0 0 0 0 1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <td>0 0 1 0 1 0 1 1 1 0 0 0 0 0 1 1 0 0 0 0 2 0 0 0 0 0 0 1 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 <</td> <td>0 0 1 0 1 0 0 1 1 1 0 0 0 0 0 1 1 0 0 0 0 2 0 0 0 0 0 0 1 0 0 0 0 0 0 0 1 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 12 10 3 0 1 0 0 0 0 0 0 0 0</td> <td>0 0 1 0 1 0</td> <td>0 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td> <td>0 0 1 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0</td>	0 0 1 0 1 0 1 1 1 0 0 0 0 0 1 1 0 0 0 0 2 0 0 0 0 0 0 1 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 <	0 0 1 0 1 0 0 1 1 1 0 0 0 0 0 1 1 0 0 0 0 2 0 0 0 0 0 0 1 0 0 0 0 0 0 0 1 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 12 10 3 0 1 0 0 0 0 0 0 0 0	0 0 1 0 1 0	0 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0

978-664-2565

Location: Lakeview Avenue Location: North of Brattle Street City/State: Cambridge, MA

44306CLS

SB

30														
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axl	5 Axle	>6 Axl	<6 AxI	6 Axle	>6 AxI	
Time	MtrCyc	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
10/27/16	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
05:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
06:00	0	21	2	0	1	1	0	0	0	0	0	0	0	25
07:00	0	83	12	2	0	1	0	0	0	0	0	0	0	98
08:00	1	109	11	0	1	1	0	0	0	0	0	0	0	123
09:00	0	67	7	0	3	0	0	0	0	0	0	0	0	77
10:00	0	35	9	0	0	0	0	0	0	0	0	0	0	44
11:00	0	29	4	1	0	0	0	0	0	0	0	0	0	34
12 PM	0	24	7	0	1	0	0	0	0	0	0	0	0	32
13:00	0	28	1	0	0	0	1	0	0	0	0	0	0	30
14:00	0	36	10	1	0	0	0	0	0	0	0	0	0	47
15:00	2	38	4	1	2	0	0	0	0	0	0	0	0	47
16:00	0	29	5	0	0	0	0	0	0	0	0	0	0	34
17:00	0	45	4	1	0	0	0	0	0	0	0	0	0	50
18:00	1	29	2	0	0	0	0	0	0	0	0	0	0	32
19:00	0	27	2	0	1	0	0	0	0	0	0	0	0	30
20:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
21:00	1	9	0	0	0	0	0	0	0	0	0	0	0	10
22:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
23:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
Day Total	5	633	84	6	9	3	1	0	0	0	0	0	0	741
Percent	0.7%	85.4%	11.3%	0.8%	1.2%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	08:00	07:00	07:00	09:00	06:00	0.170	0.070	0.070	0.070	0.070	0.070	0.070	08:00
Vol.	1	109	12	2	3	1								123
PM Peak	15:00	17:00	14:00	14:00	15:00		13:00							17:00
Vol.	2	45	14.00	1	2		1							50
v O1.	_	70	10	1	_									00

44306CLS

Accurate Counts

978-664-2565

Location: Lakeview Avenue Location: North of Brattle Street

City/State: Cambridge, MA SB

SB														
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 AxI	5 Axle	>6 AxI	<6 AxI	6 Axle	>6 Axl	
Time	MtrCyc	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
10/28/16	0	5	Ö	0	0	0	0	0	0	0	0	0	0	5
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
03:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
04:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
05:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
06:00	0	23	1	0	0	0	0	0	0	0	0	0	0	24
07:00	0	83	4	1	0	0	0	0	0	0	0	0	0	88
08:00	0	108	10	0	0	0	0	0	0	0	0	0	0	118
09:00	2	65	7	0	1	0	0	0	0	0	0	0	0	75
10:00	0	26	6	0	0	0	0	0	0	0	0	0	0	32
11:00	1	27	6	0	0	0	0	0	0	0	0	0	0	34
12 PM	0	21	6	1	0	0	0	0	0	0	0	0	0	28
13:00	1	36	2	0	0	0	0	0	0	0	0	0	0	39
14:00	1	48	7	1	1	1	0	0	0	0	0	0	0	59
15:00	0	31	3	0	1	1	0	0	0	0	0	0	0	36
16:00	0	17	3	1	0	0	0	0	0	0	0	0	0	21
17:00	2	31	5	1	1	0	0	0	0	0	0	0	0	40
18:00	0	33	0	0	0	0	0	0	0	0	0	0	0	33
19:00	0	21	4	0	0	0	0	0	0	0	0	0	0	25
20:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13
21:00	0	9	1	0	0	0	0	0	0	0	0	0	0	10
22:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
23:00	1	3	0	0	0	0	0	0	0	0	0	0	0	4
Day Total	8	631	66	5	5	2	0	0	0	0	0	0	0	717
Percent	1.1%	88.0%	9.2%	0.7%	0.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	08:00	08:00	07:00	02:00									08:00
Vol.	2	108	10	1	1									118
PM Peak	17:00	14:00	14:00	12:00	14:00	14:00								14:00
Vol.	2	48	7	1	1	1								59
Grand Total	13	1264	150	11	14	5	1	0	0	0	0	0	0	1458
Percent	0.9%	86.7%	10.3%	0.8%	1.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

978-664-2565

Location: Lakeview Avenue
Location: North of Brattle Street
City/State: Cambridge MA

City/State: Cambridge, MA 44306CLS

NB, SB

110, 00														
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axl	5 Axle	>6 AxI	<6 AxI	6 Axle	>6 AxI	
Time	MtrCyc	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
10/27/16	0	4	1	0	0	0	0	0	0	0	0	0	0	5
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
05:00	0	11	1	1	0	0	0	0	0	0	0	0	0	13
06:00	0	30	2	0	1	1	0	0	0	0	0	0	0	34
07:00	0	157	21	4	1	3	0	1	0	0	0	0	0	187
08:00	1	179	19	3	1	2	0	1	0	0	0	0	0	206
09:00	2	118	10	0	4	0	0	0	0	0	0	0	0	134
10:00	0	92	20	1	0	1	0	0	0	0	0	0	0	114
11:00	1	77	7	1	0	1	0	0	0	0	0	0	0	87
12 PM	0	65	15	0	2	1	0	0	0	0	0	0	0	83
13:00	0	89	7	1	0	1	1	0	0	0	0	0	0	99
14:00	1	100	23	2	2	1	0	0	0	0	0	0	0	129
15:00	2	150	17	1	2	0	0	0	0	0	0	0	0	172
16:00	0	179	12	0	3	0	0	0	0	0	0	0	0	194
17:00	1	235	12	1	2	1	0	0	0	0	0	0	0	252
18:00	1	153	7	0	0	0	0	0	0	0	0	0	0	161
19:00	0	90	7	0	1	0	0	0	0	0	0	0	0	98
20:00	0	37	2	0	0	0	0	0	0	0	0	0	0	39
21:00	1	43	1	0	0	0	0	0	0	0	0	0	0	45
22:00	0	26	1	0	1	0	0	0	0	0	0	0	0	28
23:00	0	14	1_	0	0	0	0	0	0	0	0	0	0	15
Day Total	10	1853	187	15	20	12	1	2	0	0	0	0	0	2100
Percent	0.5%	88.2%	8.9%	0.7%	1.0%	0.6%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	08:00	07:00	07:00	09:00	07:00		07:00						08:00
Vol.	2	179	21	4	4	3		1						206
PM Peak	15:00	17:00	14:00	14:00	16:00	12:00	13:00							17:00
Vol.	2	235	23	2	3	1	1							252

Location: Lakeview Avenue Location: North of Brattle Street

NB, SB

City/State: Cambridge, MA 44306CLS

IND, OD														
Start		Cars &	2 Axle	_	2 Axle	3 Axle	4 Axle	<5 AxI	5 Axle	>6 AxI	<6 Axl	6 Axle	>6 Axl	_
Time	MtrCyc	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
10/28/16	0	16	0	0	0	0	0	0	0	0	0	0	0	16
01:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
02:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2
03:00	0	14	0	0	0	0	0	0	0	0	0	0	0	14
04:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
05:00	0	10	0	1	0	0	0	0	0	0	0	0	0	11
06:00	0	30	2	0	2	0	0	0	0	0	0	0	0	34
07:00	0	145	12	4	1	0	0	0	0	0	0	0	0	162
08:00	0	177	13	2	0	0	0	0	0	0	0	0	0	192
09:00	2	123	14	1	3	0	0	0	0	0	0	0	0	143
10:00	0	62	11	0	1	0	0	0	0	0	0	0	0	74
11:00	1	66	14	1	0	0	0	0	0	0	0	0	0	82
12 PM	0	87	9	1	0	1	0	1	0	0	0	0	0	99
13:00	2	108	6	1	1	1	0	0	0	0	0	0	0	119
14:00	1	130	11	1	2	2	0	0	0	0	0	0	0	147
15:00	0	143	6	2	1	1	0	0	0	0	0	0	0	153
16:00	0	132	13	2	0	0	0	0	0	0	0	0	0	147
17:00	3	206	11	1	2	0	0	0	0	0	0	0	0	223
18:00	2	122	3	0	1	0	0	0	0	0	0	0	0	128
19:00	0	60	8	0	0	0	0	0	0	0	0	0	0	68
20:00	0	42	3	0	0	0	0	0	0	0	0	0	0	45
21:00	0	37	4	0	0	0	0	0	0	0	0	0	0	41
22:00	0	28	2	0	0	0	0	0	0	0	0	0	0	30
23:00	2	11	1_	0	0	0	0	0	0	0	0	0	0	14
Day Total	13	1762	145	17	15	5	0	1	0	0	0	0	0	1958
Percent	0.7%	90.0%	7.4%	0.9%	0.8%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	08:00	09:00	07:00	09:00									08:00
Vol.	2	177	14	4	3									192
PM Peak	17:00	17:00	16:00	15:00	14:00	14:00		12:00						17:00
Vol.	3	206	13	2	2	2		1						223
Grand Total	23	3615	332	32	35	17	1	3	0	0	0	0	0	4058
Percent	0.6%	89.1%	8.2%	0.8%	0.9%	0.4%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	

978-664-2565

Location: Lakeview Avenue Location: North of Brattle Street

44306SPD City/State: Cambridge, MA

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Start	1	4	7	10	13	16	19	22	25	28	31	34	37	40	
Time	3	6	9	12	15	18	21	24	27	30	33	36	39	999	Total
10/27/16	0	0	0	0	0	0	0	0	1	0	3	0	0	0	4
01:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	1	1	2	0	1	0	0	5
06:00	0	0	0	0	1	0	1	1	1	3	1	1	0	0	9
07:00	4	0	0	1	5	4	10	14	23	15	8	4	0	1	89
08:00	7	0	0	3	0	3	15	15	19	12	7	2	0	0	83
09:00	4	0	0	2	2	2	5	10	17	9	3	3	0	0	57
10:00	4	0	2	5	0	0	10	13	21	6	3	5	1	0	70
11:00	3	0	0	0	1	1	2	8	15	13	8	2	0	0	53
12 PM	1	0	0	0	0	1	6	9	13	9	6	5	1	0	51
13:00	1	0	0	0	2	1	9	14	16	11	11	4	0	0	69
14:00	4	0	0	1	0	5	11	19	16	16	5	4	1	0	82
15:00	6	0	0	0	6	2	11	21	25	36	13	4	1	0	125
16:00	13	0	0	0	0	2	4	28	51	31	22	7	2	0	160
17:00	19	0	2	0	0	3	11	35	64	40	23	5	0	0	202
18:00	13	0	1	0	1	2	14	24	35	23	10	3	2	1	129
19:00	7	0	0	0	0	1	11	13	19	14	2	1	0	0	68
20:00	4	0	0	0	0	0	3	12	11	3	0	1	0	0	34
21:00	6	0	0	0	0	2	5	9	4	6	3	1	0	0	36
22:00	0	0	0	0	0	0	1	8	9	5	2	0	0	0	25
23:00	11	1	0	0	0	0	1	1	2	11	0	1	0	0	8
Total	97	1	5	12	18	30	130	255	363	255	130	54	8	2	1360

Daily 15th Percentile :

18 MPH 25 MPH 29 MPH 32 MPH 50th Percentile : 85th Percentile : 95th Percentile :

Mean Speed(Average):
10 MPH Pace Speed:
Number in Pace:
Percent in Pace:
Number of Vehicles > 25 MPH: 24 MPH 22-31 MPH 916 67.4% 691 Percent of Vehicles > 25 MPH: 50.8%

978-664-2565

Location: Lakeview Avenue
Location: North of Brattle Street

City/State: Cambridge, MA 44306SPD

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	N	г	7	

Start	1	4	7	10	13	16	19	22	25	28	31	34	37	40	
Time	3	6	9	12	15	18	21	24	27	30	33	36	39	999	Total
10/28/16	4	0	0	0	0	0	0	2	1	3	0	1	0	0	11
01:00	2	0	0	0	0	0	0	1	0	0	1	0	0	0	4
02:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
03:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
04:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
05:00	0	0	0	0	0	0	0	0	1	0	1	2	0	0	4
06:00	0	0	0	0	0	0	1	3	2	0	1	3	0	0	10
07:00	2	0	0	0	2	2	10	13	19	19	7	0	0	0	74
08:00	6	0	0	0	2	1	7	7	18	21	7	4	1	0	74
09:00	1	0	2	0	0	3	10	11	18	14	6	2	1	0	68
10:00	0	0	2	0	1	2	6	9	10	6	6	0	0	0	42
11:00	4	0	0	0	2	0	9	8	10	7	6	2	0	0	48
12 PM	2	0	2	0	3	2	5	7	20	12	9	9	0	0	71
13:00	9	0	1	0	1	4	10	11	14	22	4	4	0	0	80
14:00	2	0	0	1	3	4	15	24	19	13	3	4	0	0	88
15:00	5	0	1	1	2	1	9	25	33	26	13	0	1	0	117
16:00	7	0	1	1	0	6	5	21	38	26	16	4	1	0	126
17:00	16	0	2	4	5	3	21	33	44	39	10	5	1	0	183
18:00	11	0	1	1	1	2	9	17	31	18	4	1	0	0	96
19:00	2	0	0	0	0	5	1	7	14	8	2	4	0	0	43
20:00	0	0	0	0	0	0	3	6	12	8	3	0	0	0	32
21:00	2	0	0	1	2	0	0	6	9	6	2	3	0	0	31
22:00	1	0	0	0	0	1	0	7	5	2	2	0	1	0	19
23:00	0	0	0	0	0	0	1	2	3	3	0	0	0	1	10
Total	86	0	12	9	24	36	122	220	322	253	103	48	6	1	1242

Daily 15th Percentile: 18 MPH

50th Percentile: 25 MPH 85th Percentile: 29 MPH 95th Percentile: 32 MPH

 Mean Speed(Average):
 24 MPH

 10 MPH Pace Speed:
 21-30 MPH

 Number in Pace:
 836

 Percent in Pace:
 67.3%

 Number of Vehicles > 25 MPH:
 626

 Percent of Vehicles > 25 MPH:
 50.4%

Grand 183 1 17 21 42 66 252 475 685 508 233 102 3 2602 14 Total

Overall 15th Percentile: 18 MPH

50th Percentile: 25 MPH 85th Percentile: 29 MPH 95th Percentile: 32 MPH

 Mean Speed(Average):
 24 MPH

 10 MPH Pace Speed:
 21-30 MPH

 Number in Pace:
 1752

 Percent in Pace:
 67.3%

Number of Vehicles > 25 MPH: 1317
Percent of Vehicles > 25 MPH: 50.6%

978-664-2565

Location: Lakeview Avenue
Location: North of Brattle Street

City/State: Cambridge, MA 44306SPD

SB

Start	1	4	7	10	13	16	19	22	25	28	31	34	37	40	
Time	3	6	9	12	15	18	21	24	27	30	33	36	39	999	Total
10/27/16	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
05:00	0	0	0	0	0	0	1	2	0	2	1	0	1	1	8
06:00	0	0	0	0	1	1	2	1	10	5	3	2	0	0	25
07:00	2	0	0	0	0	2	5	17	26	30	9	3	4	0	98
08:00	3	0	0	1	0	5	13	17	38	33	9	2	2	0	123
09:00	2	0	0	0	0	0	7	17	20	20	8	2	1	0	77
10:00	4	0	0	0	2	2	4	6	10	14	1	1	0	0	44
11:00	2	0	0	0	0	0	2	4	12	8	5	1	0	0	34
12 PM	0	0	0	0	0	1	1	6	11	10	1	2	0	0	32
13:00	1	0	0	0	0	1	2	4	6	6	9	0	1	0	30
14:00	3	0	0	0	0	2	6	9	8	13	4	2	0	0	47
15:00	4	0	0	3	0	3	10	5	12	6	4	0	0	0	47
16:00	5	0	0	0	0	1	4	6	7	7	5	0	0	0	35
17:00	2	0	0	0	2	1	8	12	9	6	10	0	0	0	50
18:00	5	0	0	0	0	1	3	7	10	5	1	0	0	0	32
19:00	4	0	0	0	1	2	3	9	5	5	0	1	0	0	30
20:00	0	0	0	0	0	0	0	1	3	0	1	0	0	0	5
21:00	2	0	0	1	0	0	3	2	0	1	0	1	0	0	10
22:00	0	0	0	0	0	0	0	2	0	1	0	0	0	0	3
23:00	2	0	0	0	0	11	0	0	11	11	2	0	0	0	7
Total	41	0	0	5	6	23	74	127	190	175	74	17	9	1	742

Daily 15th Percentile: 19 MPH

50th Percentile: 25 MPH 85th Percentile: 29 MPH 95th Percentile: 32 MPH

 Mean Speed(Average):
 25 MPH

 10 MPH Pace Speed:
 21-30 MPH

 Number in Pace:
 517

 Percent in Pace:
 69.7%

 Number of Vehicles > 25 MPH:
 403

 Percent of Vehicles > 25 MPH:
 54.3%

978-664-2565

Location: Lakeview Avenue Location: North of Brattle Street

44306SPD City/State: Cambridge, MA

Start	1	4	7	10	13	16	19	22	25	28	31	34	37	40	
Time	3	6	9	12	15	18	21	24	27	30	33	36	39	999	Total
10/28/16	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
01:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
03:00	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
04:00	4	0	0	0	0	0	0	1	0	0	0	0	0	0	5
05:00	0	0	0	0	0	0	0	4	1	1	1	0	0	0	7
06:00	0	0	0	0	1	0	2	5	7	7	2	0	0	0	24
07:00	1	0	0	0	0	0	2	24	29	21	8	2	1	0	88
08:00	2	0	1	0	0	5	10	15	44	30	8	1	2	0	118
09:00	4	0	1	0	0	1	3	14	25	17	7	3	0	0	75
10:00	0	0	0	0	1	0	1	2	12	9	6	1	0	0	32
11:00	3	0	0	0	0	1	2	6	7	8	4	2	1	0	34
12 PM	2	0	0	1	1	0	2	5	7	4	5	0	1	0	28
13:00	2	0	0	0	0	0	4	17	8	3	5	0	0	0	39
14:00	1	1	1	1	1	5	7	17	10	11	4	0	0	0	59
15:00	0	0	0	0	2	1	6	5	9	9	1	2	0	1	36
16:00	0	0	0	0	0	0	5	2	5	5	3	0	1	0	21
17:00	2	0	2	0	2	2	3	10	9	7	2	1	0	0	40
18:00	1	0	0	1	0	1	1	10	11	4	4	0	0	0	33
19:00	0	0	0	1	0	3	4	2	10	2	2	1	0	0	25
20:00	1	0	0	0	0	0	0	0	6	3	2	0	1	0	13
21:00	0	0	0	0	1	1	1	4	1	2	0	0	0	0	10
22:00	0	0	0	0	0	0	1	1	5	2	1	0	1	0	11
23:00	1	0	0	0	0	1	0	11	11	0	0	00	0	00	4
Total	38	1	5	4	9	21	54	145	207	145	66	13	8	1_	717

Daily 15th Percentile : 19 MPH

50th Percentile : 25 MPH 85th Percentile : 29 MPH 32 MPH 95th Percentile:

Mean Speed(Average) : 10 MPH Pace Speed : Number in Pace : 24 MPH 22-31 MPH 519 Percent in Pace : 72.4% Number of Vehicles > 25 MPH: 371 Percent of Vehicles > 25 MPH: 51.7%

Grand 1459 79 1 5 9 15 44 128 272 397 320 140 30 17 2 Total

Overall 15th Percentile: 19 MPH

25 MPH 50th Percentile: 85th Percentile: 29 MPH 95th Percentile : 32 MPH

Mean Speed(Average) : 25 MPH 10 MPH Pace Speed: 22-31 MPH Number in Pace : 1036 71.0% 774 Percent in Pace :

Number of Vehicles > 25 MPH : Percent of Vehicles > 25 MPH : 53.0%

978-664-2565

Location: Lakeview Avenue Location: North of Brattle Street

44306SPD City/State: Cambridge, MA

NR	SB
IND.	$^{\circ}$

Start	1	4	7	10	13	16	19	22	25	28	31	34	37	40	
Time	3	6	9	12	15	18	21	24	27	30	33	36	39	999	Total
10/27/16	0	0	0	0	0	0	0	0	1	1	3	0	0	0	5
01:00	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
05:00	0	0	0	0	0	0	1	3	1	4	1	1	1	1	13
06:00	0	0	0	0	2	1	3	2	11	8	4	3	0	0	34
07:00	6	0	0	1	5	6	15	31	49	45	17	7	4	1	187
08:00	10	0	0	4	0	8	28	32	57	45	16	4	2	0	206
09:00	6	0	0	2	2	2	12	27	37	29	11	5	1	0	134
10:00	8	0	2	5	2	2	14	19	31	20	4	6	1	0	114
11:00	5	0	0	0	1	1	4	12	27	21	13	3	0	0	87
12 PM	1	0	0	0	0	2	7	15	24	19	7	7	1	0	83
13:00	2	0	0	0	2	2	11	18	22	17	20	4	1	0	99
14:00	7	0	0	1	0	7	17	28	24	29	9	6	1	0	129
15:00	10	0	0	3	6	5	21	26	37	42	17	4	1	0	172
16:00	18	0	0	0	0	3	8	34	58	38	27	7	2	0	195
17:00	21	0	2	0	2	4	19	47	73	46	33	5	0	0	252
18:00	18	0	1	0	1	3	17	31	45	28	11	3	2	1	161
19:00	11	0	0	0	1	3	14	22	24	19	2	2	0	0	98
20:00	4	0	0	0	0	0	3	13	14	3	1	1	0	0	39
21:00	8	0	0	1	0	2	8	11	4	7	3	2	0	0	46
22:00	0	0	0	0	0	0	1	10	9	6	2	0	0	0	28
23:00	3	1	0	0	0	1	11	1	3	2	2	11	0	00	15
Total	138	11	5	17	24	53	204	382	553	430	204	71	17	3	2102

Daily 15th Percentile :

19 MPH 25 MPH 29 MPH 32 MPH 50th Percentile : 85th Percentile : 95th Percentile :

Mean Speed(Average):
10 MPH Pace Speed:
Number in Pace:
Percent in Pace:
Number of Vehicles > 25 MPH:
Percent of Vehicles > 25 MPH: 24 MPH 21-30 MPH 1433 68.2% 1094 52.0%

978-664-2565

Location: Lakeview Avenue
Location: North of Brattle Street
City/State: Combridge MA

City/State: Cambridge, MA 44306SPD

NB, SB															
Start	1	4	7	10	13	16	19	22	25	28	31	34	37	40	
Time	3	6	9	12	15	18	21	24	27	30	33	36	39	999	Total
10/28/16	9	0	0	0	0	0	0	2	1	3	0	1	0	0	16
01:00	3	0	0	0	0	0	0	1	0	0	1	0	0	0	5
02:00	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
03:00	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
04:00	8	0	0	0	0	0	0	1	0	0	0	0	0	0	9
05:00	0	0	0	0	0	0	0	4	2	1	2	2	0	0	11
06:00	0	0	0	0	1	0	3	8	9	7	3	3	0	0	34
07:00	3	0	0	0	2	2	12	37	48	40	15	2	1	0	162
08:00	8	0	1	0	2	6	17	22	62	51	15	5	3	0	192
09:00	5	0	3	0	0	4	13	25	43	31	13	5	1	0	143
10:00	0	0	2	0	2	2	7	11	22	15	12	1	0	0	74
11:00	7	0	0	0	2	1	11	14	17	15	10	4	1	0	82
12 PM	4	0	2	1	4	2	7	12	27	16	14	9	1	0	99
13:00	11	0	1	0	1	4	14	28	22	25	9	4	0	0	119
14:00	3	1	1	2	4	9	22	41	29	24	7	4	0	0	147
15:00	5	0	1	1	4	2	15	30	42	35	14	2	1	1	153
16:00	7	0	1	1	0	6	10	23	43	31	19	4	2	0	147
17:00	18	0	4	4	7	5	24	43	53	46	12	6	1	0	223
18:00	12	0	1	2	1	3	10	27	42	22	8	1	0	0	129
19:00	2	0	0	1	0	8	5	9	24	10	4	5	0	0	68
20:00	1	0	0	0	0	0	3	6	18	11	5	0	1	0	45
21:00	2	0	0	1	3	1	1	10	10	8	2	3	0	0	41
22:00	1	0	0	0	0	1	1	8	10	4	3	0	2	0	30
23:00	1	0	0	0	0	11	11	3	4	3	0	0	0	1	14
Total	124	1	17	13	33	57	176	365	529	398	169	61	14	2	1959

Daily 15th Percentile: 18 MPH

50th Percentile: 25 MPH 85th Percentile: 29 MPH 95th Percentile: 32 MPH

 Mean Speed(Average):
 24 MPH

 10 MPH Pace Speed:
 21-30 MPH

 Number in Pace:
 1351

 Percent in Pace:
 69.0%

 Number of Vehicles > 25 MPH:
 997

 Percent of Vehicles > 25 MPH:
 50.9%

Grand 262 2 22 30 57 110 380 747 1082 828 373 132 31 5 4061 Total

Overall 15th Percentile: 18 MPH

50th Percentile: 25 MPH 85th Percentile: 29 MPH 95th Percentile: 32 MPH

 Mean Speed(Average):
 24 MPH

 10 MPH Pace Speed:
 21-30 MPH

 Number in Pace:
 2784

 Percent in Pace:
 68.6%

Number of Vehicles > 25 MPH : 2090
Percent of Vehicles > 25 MPH : 51.5%