HOUSTON-GALVESTON AREA COUNCIL



Temporary Pedestrian/Bicycle Counters Data Summary

Deployment Summary						
Sponsoring Agency	Houston-Galveston Area Council					
Sportsoring Agency	Texas Transportation Institute					
Deployment Period	Friday, February 5, 2016 – Tuesday, February 16, 2016					
Number of Counters Deployed	12					
Facility Description	Sidewalks along Bridges over U.S. 59 in Montrose (City of Houston)					
Locations Deployed (Texas Trans	sportation Institute)					
Counter A	Hazard Street Southbound at U.S. 59					
Counter B	Hazard Street Northbound at U.S. 59					
Counter C	Woodhead Street Southbound at U.S. 59					
Counter D	Woodhead Street Northbound at U.S. 59					
Counter E	Dunlavy Street Southbound at U.S. 59					
Counter F	Dunlavy Street Northbound at U.S. 59					
Locations Deployed (Houston-Ga	alveston Area Council)					
Counter #1	Mandell Street Southbound at U.S. 59					
Counter #2	Mandell Street Northbound at U.S. 59					
Counter #3	Graustark Street Southbound at U.S. 59					
Counter #4	Graustark Street Northbound at U.S. 59					
Counter #5	Montrose Boulevard Southbound at U.S. 59					
Counter #6	Montrose Boulevard Northbound at U.S. 59					

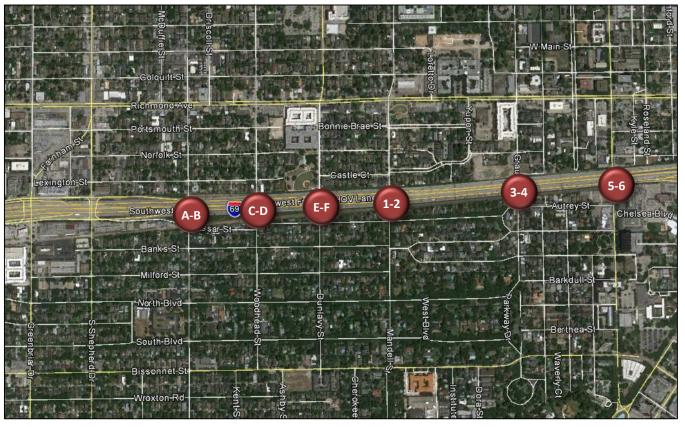
About the Temporary Pedestrian/Bicycle Counters

The Houston-Galveston Area Council (H-GAC) has temporary counters (TRAFx Infrared Trail Counters: Generation III) that can be borrowed by local governments and transportation agencies to count the number of people using off-street pedestrian and bicycle facilities. Infrared technology is used to count the number of people passing the counter. The counters do not differentiate between pedestrians and bicyclists, but count the total number of users.

The Texas Transportation Institute (TTI) owns additional temporary counters that it deploys along off-street pedestrian and bicycle facilities statewide.

Counter Locations

Sidewalks along Bridges over U.S. 59 in Montrose (City of Houston)



Counter	Location	Average Daily Usage	Total Users
Α	Hazard Street Southbound at U.S. 59	83	998
В	Hazard Street Northbound at U.S. 59	96	1,150
С	Woodhead Street Southbound at U.S. 59	28	331
D	Woodhead Street Northbound at U.S. 59	33	399
Е	Dunlavy Street Southbound at U.S. 59	162	1,941
F	Dunlavy Street Northbound at U.S. 59	32	378
1	Mandell Street Southbound at U.S. 59	81	974
2	Mandell Street Northbound at U.S. 59	94	1,133
3	Graustark Street Southbound at U.S. 59	147	1,768
4	Graustark Street Northbound at U.S. 59	87	1,039
5	Montrose Boulevard Southbound at U.S. 59	224	2,684
6	Montrose Boulevard Northbound at U.S. 59	235	2,821

Construction crews were performing work near Counter C, D, E, and F, within the utility corridor between U.S. 59 and the properties along Vassar Street.

Comparison of Pedestrian/Bicycle Usage along Each Bridge

Sidewalks are provided along both sides of each bridge that crosses U.S. 59 in Montrose. Temporary pedestrian/bicycle counters were placed along each side of the street to determine the total number of pedestrians and cyclists using sidewalks on the bridges to cross U.S. 59.

Hazard Street Bridge (Counter A and Counter B)							
Total Avg. Daily Avg. Daily Usage Avg. Daily Usage Peak Hour Peak Ho							
	Usage	Usage	(Weekdays)	(Weekends)	(Weekdays)	(Weekends)	
Sidewalk Adjacent	998	83	89	72	3:00 p.m. –	10:00 a.m. –	
to Southbound Lane					4:00 p.m.	11:00 a.m.	
Sidewalk Adjacent	1,150	96	103	81	5:00 p.m. –	11:00 a.m. –	
to Northbound Lane					6:00 p.m.	12:00 p.m.	

Woodhead Street Bridge (Counter C and Counter D)							
	Total Avg. Daily Avg. Daily Usage Avg. Daily Usa				Peak Hour	Peak Hour	
	Usage Usage (Weekdays)		(Weekdays)	(Weekends)	(Weekdays)	(Weekends)	
Sidewalk Adjacent	331	28	28	39	6:00 p.m. –	2:00 p.m. –	
to Southbound Lane					7:00 p.m.	3:00 p.m.	
Sidewalk Adjacent	399	33	36	28	3:00 p.m. –	8:00 a.m. –	
to Northbound Lane					4:00 p.m.	9:00 a.m.	

Dunlavy Street Bridge (Counter E and Counter F)								
Total Avg. Daily Avg. Daily Usage Avg. Daily Usage Peak Hour						Peak Hour		
	Usage Usage (Weekdays) (Weekends) ((Weekdays)	(Weekends)		
Sidewalk Adjacent	1,941	162	159	185	5:00 p.m. –	4:00 p.m. –		
to Southbound Lane					6:00 p.m.	5:00 p.m.		
Sidewalk Adjacent	378	32	33	39	5:00 p.m. –	11:00 a.m. –		
to Northbound Lane					6:00 p.m.	12:00 p.m.		

Mandell Street Bridge (Counter #1 and Counter #2)									
Total Avg. Daily Avg. Daily Usage Avg. Daily Usage Peak Hour Pea									
	Usage	Usage	(Weekdays)	(Weekends)	(Weekdays)	(Weekends)			
Sidewalk Adjacent	974	81	80	83	5:00 p.m. –	9:00 a.m. –			
to Southbound Lane					6:00 p.m.	10:00 a.m.			
Sidewalk Adjacent	1,133	94	88	107	5:00 p.m. –	4:00 p.m. –			
to Northbound Lane					6:00 p.m.	5:00 p.m.			

Graustark Street Bridge (Counter #3 and Counter #4)								
	Total Avg. Daily Avg. Daily L		Avg. Daily Usage	Avg. Daily Usage	Peak Hour	Peak Hour		
	Usage	Usage	(Weekdays)	(Weekends)	(Weekdays)	(Weekends)		
Sidewalk Adjacent	1,768	147	134	174	5:00 p.m. –	9:00 a.m. –		
to Southbound Lane					6:00 p.m.	10:00 a.m.		
Sidewalk Adjacent	1,039	87	77	105	5:00 p.m. –	3:00 p.m. –		
to Northbound Lane					6:00 p.m.	4:00 p.m.		

Montrose Boulevard Bridge (Counter #5 and Counter #6)							
Total Avg. Daily Avg. Daily Usage Avg. Daily Usage Peak Hour						Peak Hour	
	Usage Usage (Weekdays) (Weekends) (Weekday				(Weekdays)	(Weekends)	
Sidewalk Adjacent	2,684	224	212	246	6:00 p.m. –	5:00 p.m. –	
to Southbound Lane					7:00 p.m.	6:00 p.m.	
Sidewalk Adjacent	2,821	235	255	195	5:00 p.m. –	12:00 p.m. –	
to Northbound Lane					6:00 p.m.	1:00 p.m.	

At most of the bridges over U.S. 59, sidewalks on both sides of the street had similar pedestrian/bicycle volumes. At four of the six bridges, total usage of sidewalks adjacent to the southbound and northbound travel lanes were within 25 percent of each other.

Difference in Total Usage between Sidewalks Adjacent to Southbound and Northbound Lanes

Location	Total Usage: Sidewalk Adjacent to Southbound Lane	Total Usage: Sidewalk Adjacent to Northbound Lane	% Difference in Usage
Hazard Street Bridge (Counter A and Counter B)	998	1,150	15% higher usage adjacent to northbound lane
Woodhead Street Bridge (Counter C and Counter D)	331	399	21% higher usage adjacent to northbound lane
Dunlavy Street Bridge (Counter E and Counter F)	1,941	378	413% higher usage adjacent to southbound lane
Mandell Street Bridge (Counter #1 and Counter #2)	974	1,133	16% higher usage adjacent to northbound lane
Graustark Street Bridge (Counter #3 and Counter #4)	1,768	1,039	70% higher usage adjacent to southbound lane
Montrose Boulevard Bridge (Counter #5 and Counter #6)	2,684	2,821	5% higher usage adjacent to northbound lane

At Dunlavy Street and Graustark Street, there were significantly higher volumes along sidewalks adjacent to the southbound travel lanes compared to sidewalks on the opposite side of the street. These differences could be attributed to lane use patterns and connectivity of the pedestrian network.

At Dunlavy Street, total usage was 413% higher on the sidewalk adjacent to the southbound travel lane than on the sidewalk adjacent to the northbound travel lane. Several destinations are located on the western side of the street and can be accessed directly from the sidewalk adjacent to the southbound travel lane. These destinations include Ervan Chew Park and Fairmont Museum District, an apartment complex with more than 200 units. While the sidewalk adjacent to the southbound travel lane is continuous, there are several gaps on the opposite side of the street. North of U.S. 59 adjacent to the northbound travel lane, there is no sidewalk between Bonnie Brae Street and Norfolk Street, and there is a short segment missing midblock between Norfolk Street and Castle Court. South of U.S. 59, the sidewalk ends at Vassar Street (approximately 100 feet south of U.S. 59) and does not begin again until just north of North Boulevard, leaving a gap of about 2 ½ blocks (approximately 750 feet). Due to the discontinuous sidewalks along the northbound travel lane, pedestrians are more likely to use the sidewalk adjacent to the southbound travel lane.

At Graustrark Street, the sidewalk adjacent to the southbound travel lane had 70% more pedestrian/bicycle traffic than the sidewalk on the other side of the street. Several destinations are located on the western side of the street, accessible by the sidewalk adjacent to the southbound travel lane. Approximately 175 feet north of U.S. 59, there is a small shopping center at the southwest corner of Castle Court and Graustark Street that includes a laundromat and a coffee shop. Farther north, there is a large apartment complex on the west side of Graustark Street (Muse at Museum District) with more than 250 units. Pedestrians traveling to and from these destinations will likely use the sidewalk adjacent to the southbound lane of Graustark Street, since it provides more direct access to their destinations. Note that there are no continuous sidewalks on either side of Graustark Street south of Autrey Street, and there is a short gap (about 100 feet) on the west side of Graustark Street between Castle Court and the Muse at Museum District.

Counter A

Hazard Street Southbound at U.S. 59

Location Information		
Location Name	Hazard S	treet Southbound at U.S. 59
Location Description		along Hazard Street Southbound South of Bridge over U.S. 59 in
		e (City of Houston)
Jurisdiction	•	ouston/Montrose Management District
Agency Deployed		Galveston Area Council and Texas Transportation Institute
GPS Coordinates	29°43'49	.61"N, 95°24'25.60"W
Surrounding Land Uses	North	Single-Family Residential, Multi-Family Residential
	South	Single-Family Residential
	East	Single-Family Residential
	West	Commercial/Retail, Single-Family Residential
What object was device secured to?	Sign Post over U.S.	(Unauthorized Posting of Signs Prohibited by Law) South of Bridge 59
Sidewalk Width	Bridge: 5	'; Approach: 5'
Buffer Width	Bridge: 5	'; Approach: 6'
Street Width	Two-Land	e Undivided Roadway
Parallel Parking	No	
Landscaping or Trees	Yes	
Sidewalk Pavement Type	Bridge: B	rick Pavers; Approach: Concrete
ADA Ramps	Yes	
Sidewalk Condition	Good	
Speed Limit	30 miles	per hour
Street Lighting	Yes	
Street Traffic Volume	N/A	
Transit	No	
Shade	Intermitt	ent
Have counts been collected by H-GAC at this location before?	No	

- Usage tends to be higher on weekdays than during weekends.
- On weekdays, usage is highest in the late afternoon (3:00 p.m. 4:00 p.m.). There is also a pronounced increase in usage during the morning (7:00 a.m. 8:00 a.m.) and evening (5:00 p.m. 6:00 p.m.).
- During weekends, usage is highest in the late morning (10:00 a.m. 12:00 p.m.).

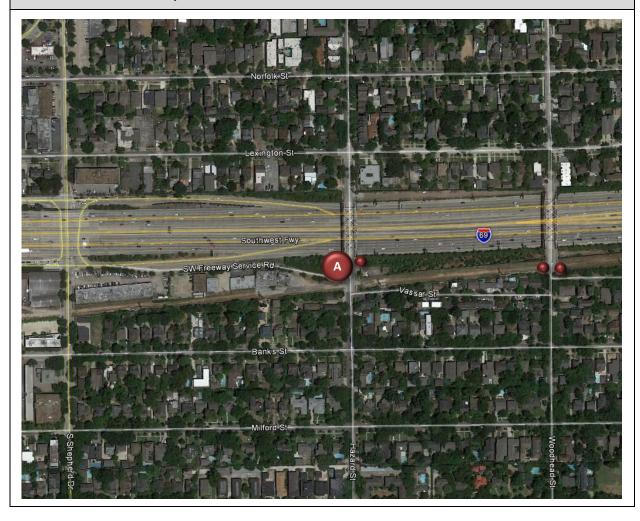




Image 1: Sidewalk along Hazard Street Southbound **Facing North**



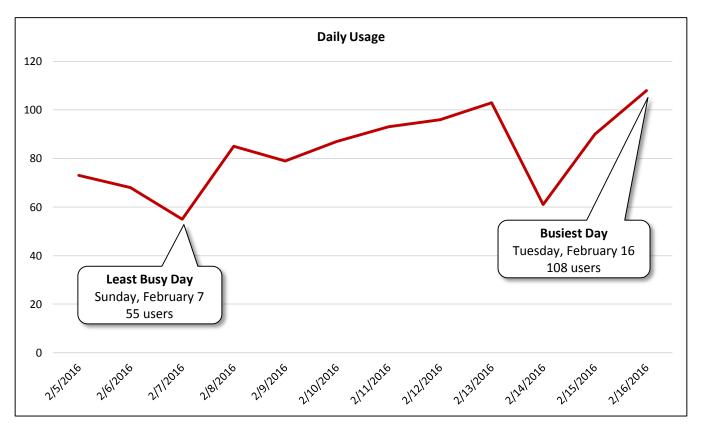
Image 2: Sidewalk along Hazard Street Southbound Facing South

Daily Usage	
Hazard Street Southbound at U.S. 50	

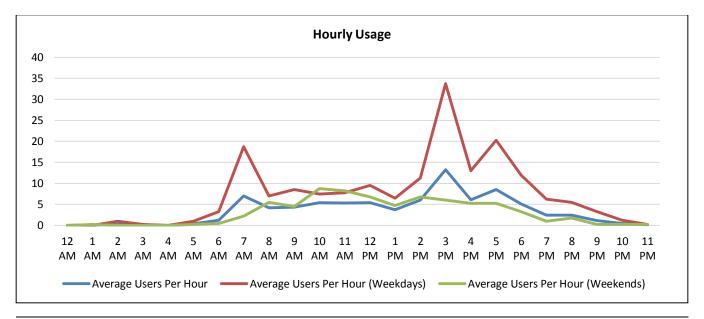
	Select Weather Data*					
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)		
Friday, February 5, 2016	73	59	33	0		
Saturday, February 6, 2016	68	60	41	0.15		
Sunday, February 7, 2016	55	66	34	0		
Monday, February 8, 2016	85	63	44	0		
Tuesday, February 9, 2016	79	66	39	0		
Wednesday, February 10, 2016	87	71	38	0		
Thursday, February 11, 2016	93	80	55	0		
Friday, February 12, 2016	96	78	55	0		
Saturday, February 13, 2016	103	67	51	0		
Sunday, February 14, 2016	61	74	57	0		
Monday, February 15, 2016	90	76	46	Т		
Tuesday, February 16, 2016	108	79	41	0		

Total	998
Average Daily Usage	83
Average Daily Usage (Weekday)	89
Average Daily Usage (Weekend)	72

^{*}Weather conditions recorded at KHOU.



Hourly Usage Hazard Street Southbound at U.S. 59					
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)		
12:00 a.m.	0.0	0.0	0.0		
1:00 a.m.	0.1	0.0	0.3		
2:00 a.m.	0.3	1.0	0.0		
3:00 a.m.	0.1	0.3	0.0		
4:00 a.m.	0.0	0.0	0.0		
5:00 a.m.	0.4	1.0	0.3		
6:00 a.m.	1.3	3.3	0.5		
7:00 a.m.	7.0	18.8	2.3		
8:00 a.m.	4.2	7.0	5.5		
9:00 a.m.	4.3	8.5	4.5		
10:00 a.m.	5.4	7.5	8.8		
11:00 a.m.	5.3	7.8	8.3		
12:00 p.m.	5.4	9.5	6.8		
1:00 p.m.	3.8	6.5	4.8		
2:00 p.m.	6.0	11.3	6.8		
3:00 p.m.	13.3	33.8	6.0		
4:00 p.m.	6.1	13.0	5.3		
5:00 p.m.	8.5	20.3	5.3		
6:00 p.m.	5.1	12.0	3.3		
7:00 p.m.	2.4	6.3	1.0		
8:00 p.m.	2.4	5.5	1.8		
9:00 p.m.	1.2	3.3	0.3		
10:00 p.m.	0.5	1.3	0.3		
11:00 p.m.	0.2	0.3	0.3		



Counter B

Hazard Street Northbound at U.S. 59

Location Information				
Location Name	Hazard Street Northbound at U.S. 59			
Location Description		Sidewalk along Hazard Street Northbound South of Bridge over U.S. 59 in Montrose (City of Houston)		
Jurisdiction	City of Ho	uston/Montrose Management District		
Agency Deployed	Houston-C	Galveston Area Council and Texas Transportation Institute		
GPS Coordinates	29°43'49.6	51"N, 95°24'24.70"W		
Surrounding Land Uses	North	Single-Family Residential, Multi-Family Residential		
	South	Single-Family Residential		
	East	Single-Family Residential		
	West	Commercial/Retail, Single-Family Residential		
What object was device secured to?	Sign Post (Unauthorized Posting of Signs Prohibited by Law) South of Bridge over U.S. 59			
Sidewalk Width	Bridge: 5';	Bridge: 5'; Approach: 5'		
Buffer Width	Bridge: 5'; Approach: 6'			
Street Width	Two-Lane Undivided Roadway			
Parallel Parking	No			
Landscaping or Trees	Yes			
Sidewalk Pavement Type	Bridge: Brick Pavers; Approach: Concrete			
ADA Ramps	Yes			
Sidewalk Condition	Good			
Speed Limit	30 miles per hour			
Street Lighting	Yes			
Street Traffic Volume	N/A			
Transit	No			
Shade	Intermittent			
Have counts been collected by H-GAC at this location before?	No			

- Usage tends to be higher on weekdays than during weekends.
- On weekdays, usage is highest in the morning (7:00 a.m. 8:00 a.m.) and evening (5:00 p.m. 6:00 p.m.). There is also a pronounced increase in usage during the late afternoon (3:00 p.m. 4:00 p.m.).
- During weekends, usage is highest in the morning (9:00 a.m. 12:00 p.m.) and evening (4:00 p.m. 6:00 p.m.).

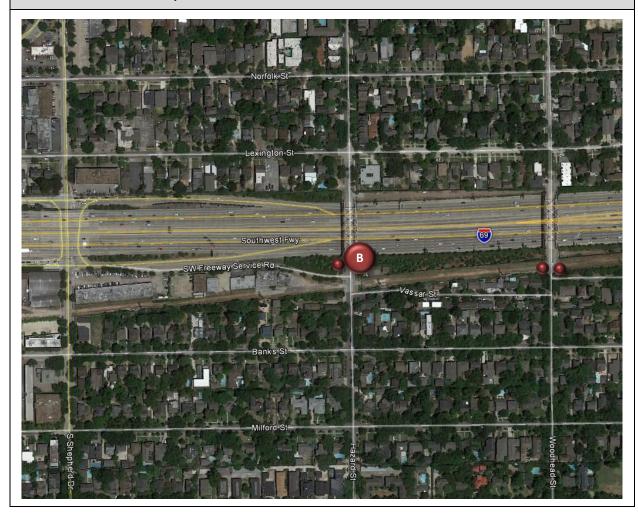




Image 3: Sidewalk along Hazard Street Northbound Facing North



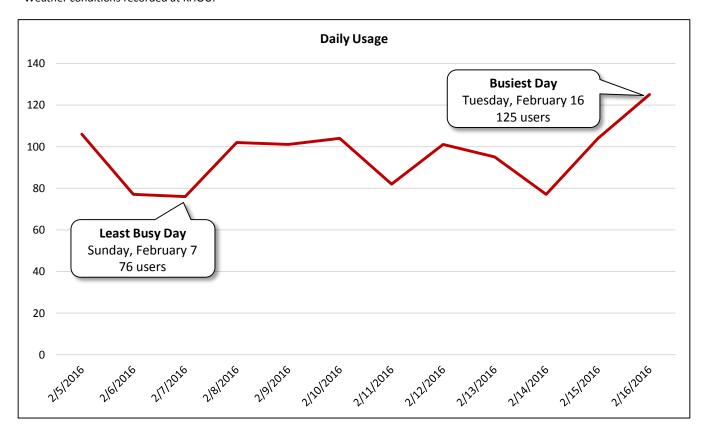
Image 4: Sidewalk along Hazard Street Northbound Facing South

Daily Usage	
Hazard Street Northbound at U.S. 5	9

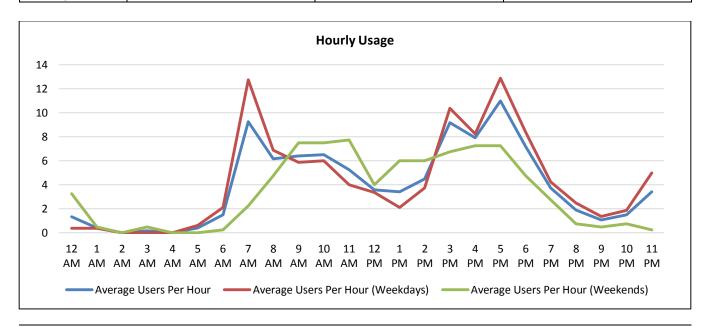
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, February 5, 2016	106	59	33	0
Saturday, February 6, 2016	77	60	41	0.15
Sunday, February 7, 2016	76	66	34	0
Monday, February 8, 2016	102	63	44	0
Tuesday, February 9, 2016	101	66	39	0
Wednesday, February 10, 2016	104	71	38	0
Thursday, February 11, 2016	82	80	55	0
Friday, February 12, 2016	101	78	55	0
Saturday, February 13, 2016	95	67	51	0
Sunday, February 14, 2016	77	74	57	0
Monday, February 15, 2016	104	76	46	Т
Tuesday, February 16, 2016	125	79	41	0

Total	1,150
Average Daily Usage	96
Average Daily Usage (Weekday)	103
Average Daily Usage (Weekend)	81

^{*}Weather conditions recorded at KHOU.



Hourly Usage Hazard Street Northbound at U.S. 59				
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)	
12:00 a.m.	1.3	0.4	3.3	
1:00 a.m.	0.4	0.4	0.5	
2:00 a.m.	0.0	0.0	0.0	
3:00 a.m.	0.2	0.0	0.5	
4:00 a.m.	0.0	0.0	0.0	
5:00 a.m.	0.4	0.6	0.0	
6:00 a.m.	1.5	2.1	0.3	
7:00 a.m.	9.3	12.8	2.3	
8:00 a.m.	6.2	6.9	4.8	
9:00 a.m.	6.4	5.9	7.5	
10:00 a.m.	6.5	6.0	7.5	
11:00 a.m.	5.3	4.0	7.8	
12:00 p.m.	3.6	3.4	4.0	
1:00 p.m.	3.4	2.1	6.0	
2:00 p.m.	4.5	3.8	6.0	
3:00 p.m.	9.2	10.4	6.8	
4:00 p.m.	7.9	8.3	7.3	
5:00 p.m.	11.0	12.9	7.3	
6:00 p.m.	7.2	8.4	4.8	
7:00 p.m.	3.8	4.3	2.8	
8:00 p.m.	1.9	2.5	0.8	
9:00 p.m.	1.1	1.4	0.5	
10:00 p.m.	1.5	1.9	0.8	
11:00 p.m.	3.4	5.0	0.3	



Counter C

Woodhead Street Southbound at U.S. 59

Location Information			
Location Name	Woodhead Street Southbound at U.S. 59		
Location Description	Sidewalk along Woodhead Street Southbound South of Bridge over U.S. 59		
	in Montro	se (City of Houston)	
Jurisdiction	City of Ho	uston/Montrose Management District	
Agency Deployed	Houston-0	Galveston Area Council and Texas Transportation Institute	
GPS Coordinates	29°43'49.4	47"N, 95°24'16.33"W	
Surrounding Land Uses	North	Single-Family Residential, Multi-Family Residential, Park	
	South	Single-Family Residential	
	East	Single-Family Residential	
	West	Single-Family Residential	
What object was device secured to?	Sign Post	(No Parking) South of Bridge over U.S. 59	
Sidewalk Width	Bridge: 5';	Approach: 4'	
Buffer Width	Bridge: 6'; Approach: 6'		
Street Width	Two-Lane Undivided Roadway		
Parallel Parking	No		
Landscaping or Trees	Yes		
Sidewalk Pavement Type	Bridge: Brick Pavers; Approach: Concrete		
ADA Ramps	Yes		
Sidewalk Condition	Good		
Speed Limit	30 miles p	per hour	
Street Lighting	Yes		
Street Traffic Volume	1,570 (4600 Woodhead: TxDOT 2012)		
Transit	No		
Shade	Intermittent		
Have counts been collected by H-GAC at this location before?	No		
Notes	Construction crews were performing work nearby, within the utility corridor between U.S. 59 and the properties along Vassar Street.		

- Usage tends to be slightly higher during weekends than on weekdays.
- On weekdays, usage is highest in the evening (6:00 p.m. 7:00 p.m.).
- During weekends, usage is highest in the mid-afternoon (2:00 p.m. 3:00 p.m.).

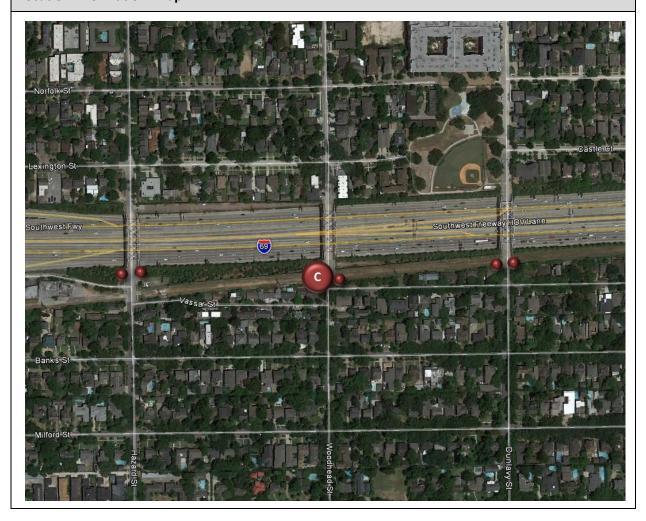




Image 5: Sidewalk along Woodhead Street Southbound Facing North



Image 6: Sidewalk along Woodhead Street Southbound Facing South

Daily Usage Woodhead Street Southbound at U.S. 59 Select Weather Data* **Date** Users **High Temperature** Low Temperature Precipitation (°F) (°F) (inches) Friday, February 5, 2016 0.15 Saturday, February 6, 2016 Sunday, February 7, 2016 Monday, February 8, 2016 Tuesday, February 9, 2016 Wednesday, February 10, 2016

1, ,	
Total	331
Average Daily Usage	28
Average Daily Usage (Weekday)	28
Average Daily Usage (Weekend)	30

^{*}Weather conditions recorded at KHOU.

Thursday, February 11, 2016

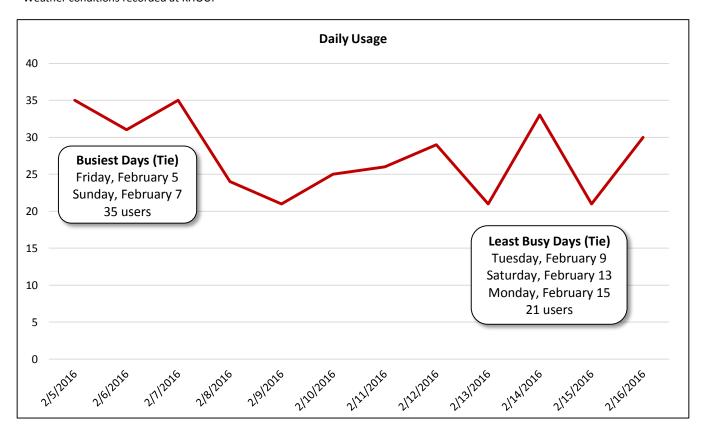
Saturday, February 13, 2016

Sunday, February 14, 2016

Monday, February 15, 2016

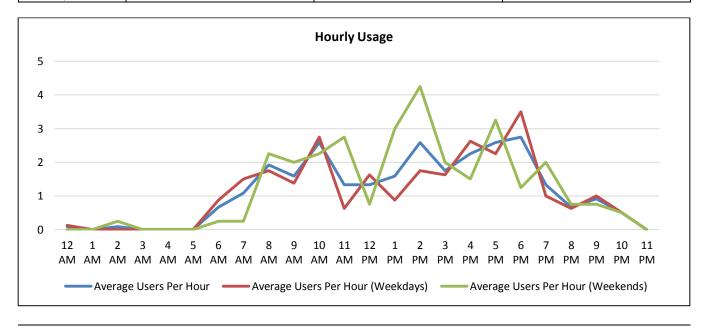
Tuesday, February 16, 2016

Friday, February 12, 2016



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Hourly Usage Woodhead Street Southbound at U.S. 59				
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)	
12:00 a.m.	0.1	0.1	0.0	
1:00 a.m.	0.0	0.0	0.0	
2:00 a.m.	0.1	0.0	0.3	
3:00 a.m.	0.0	0.0	0.0	
4:00 a.m.	0.0	0.0	0.0	
5:00 a.m.	0.0	0.0	0.0	
6:00 a.m.	0.7	0.9	0.3	
7:00 a.m.	1.1	1.5	0.3	
8:00 a.m.	1.9	1.8	2.3	
9:00 a.m.	1.6	1.4	2.0	
10:00 a.m.	2.6	2.8	2.3	
11:00 a.m.	1.3	0.6	2.8	
12:00 p.m.	1.3	1.6	0.8	
1:00 p.m.	1.6	0.9	3.0	
2:00 p.m.	2.6	1.8	4.3	
3:00 p.m.	1.8	1.6	2.0	
4:00 p.m.	2.3	2.6	1.5	
5:00 p.m.	2.6	2.3	3.3	
6:00 p.m.	2.8	3.5	1.3	
7:00 p.m.	1.3	1.0	2.0	
8:00 p.m.	0.7	0.6	0.8	
9:00 p.m.	0.9	1.0	0.8	
10:00 p.m.	0.5	0.5	0.5	
11:00 p.m.	0.0	0.0	0.0	



Counter D

Woodhead Street Northbound at U.S. 59

Location Information			
Location Name	Woodhead Street Northbound at U.S. 59		
Location Description	Sidewalk along Woodhead Street Northbound South of Bridge over U.S. 59		
	in Montro	se (City of Houston)	
Jurisdiction	City of Ho	uston/Montrose Management District	
Agency Deployed	Houston-0	Galveston Area Council and Texas Transportation Institute	
GPS Coordinates	29°43'49.4	47"N, 95°24'15.64"W	
Surrounding Land Uses	North	Single-Family Residential, Multi-Family Residential, Park	
	South	Single-Family Residential	
	East	Single-Family Residential	
	West	Single-Family Residential	
What object was device secured to?	Sign Post over U.S.	(Unauthorized Posting of Signs Prohibited by Law) South of Bridge	
Sidewalk Width	Bridge: 5'; Approach: 4'		
Buffer Width	Bridge: 6'; Approach: 5'		
Street Width	Two-Lane Undivided Roadway		
Parallel Parking	No		
Landscaping or Trees	Yes		
Sidewalk Pavement Type	Bridge: Brick Pavers; Approach: Concrete		
ADA Ramps	Yes		
Sidewalk Condition	Good		
Speed Limit	30 miles p	er hour	
Street Lighting	Yes		
Street Traffic Volume	1,570 (4600 Woodhead: TxDOT 2012)		
Transit	No		
Shade	Intermittent		
Have counts been collected by H-GAC at this location before?	No		
Notes	Construction crews were performing work nearby, within the utility corridor between U.S. 59 and the properties along Vassar Street.		

- Usage tends to be higher on weekdays than during weekends.
- On weekdays, usage is highest in the morning (7:00 a.m. 8:00 a.m.). There is also a pronounced increase in usage in the late afternoon and evening (3:00 p.m. 6:00 p.m.).
- During weekends, usage is highest in the morning (8:00 a.m. 9:00 a.m. and 10:00 a.m. 11:00 a.m.).

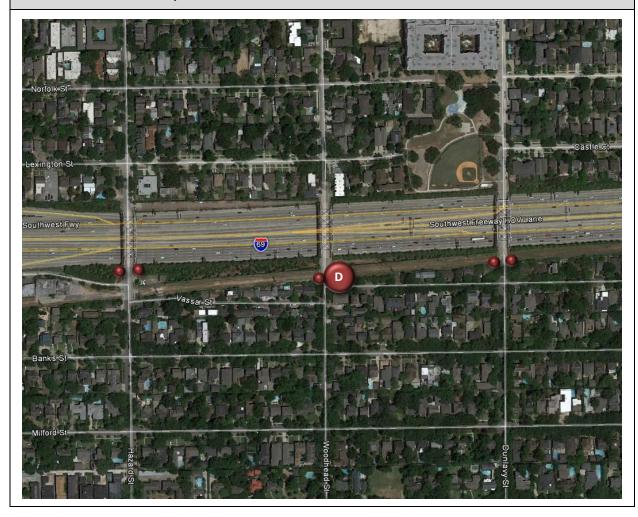




Image 7: Sidewalk along Woodhead Street Northbound Facing North



Image 8: Sidewalk along Woodhead Street
Northbound Facing South

Daily Usage Woodhead Street Northbound at U.S. 59					
		Select Weather Data* High Temperature Low Temperature Precipitat (°F) (°F) (inches			
Date	Users				
Friday, February 5, 2016	44	59	33	0	
Saturday, February 6, 2016	31	60	41	0.15	
Sunday, February 7, 2016	28	66	34	0	
Monday, February 8, 2016	41	63	44	0	
Tuesday, February 9, 2016	39	66	39	0	
Wednesday, February 10, 2016	33	71	38	0	
Thursday, February 11, 2016	28	80	55	0	
Friday, February 12, 2016	35	78	55	0	
Saturday, February 13, 2016	29	67	51	0	
Sunday, February 14, 2016	24	74	57	0	
Monday, February 15, 2016	29	76	46	Т	

79

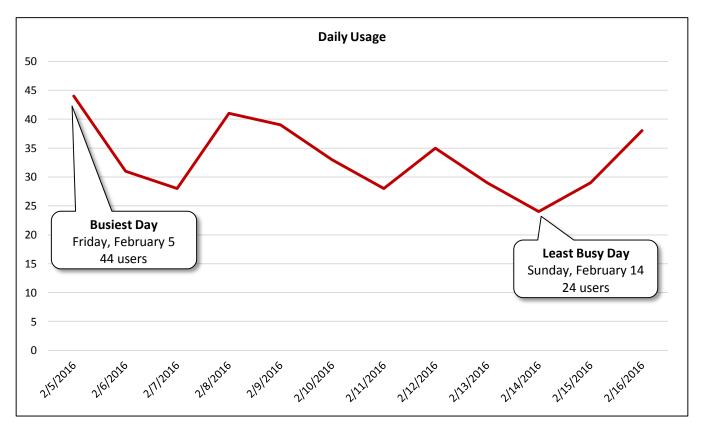
41

38

Total	399
Average Daily Usage	33
Average Daily Usage (Weekday)	36
Average Daily Usage (Weekend)	28

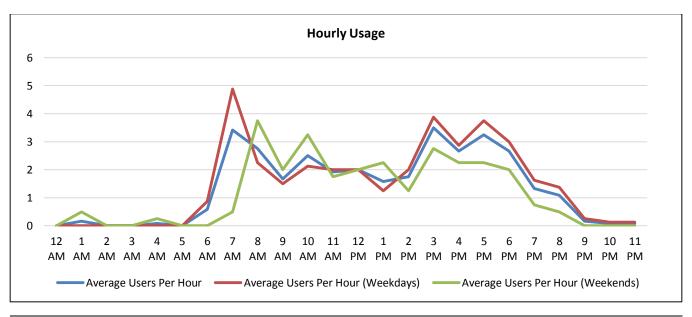
^{*}Weather conditions recorded at KHOU.

Tuesday, February 16, 2016



0

Hourly Usage Woodhead Street Northbound at U.S. 59					
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)		
12:00 a.m.	0.0	0.0	0.0		
1:00 a.m.	0.2	0.0	0.5		
2:00 a.m.	0.0	0.0	0.0		
3:00 a.m.	0.0	0.0	0.0		
4:00 a.m.	0.1	0.0	0.3		
5:00 a.m.	0.0	0.0	0.0		
6:00 a.m.	0.6	0.9	0.0		
7:00 a.m.	3.4	4.9	0.5		
8:00 a.m.	2.8	2.3	3.8		
9:00 a.m.	1.7	1.5	2.0		
10:00 a.m.	2.5	2.1	3.3		
11:00 a.m.	1.9	2.0	1.8		
12:00 p.m.	2.0	2.0	2.0		
1:00 p.m.	1.6	1.3	2.3		
2:00 p.m.	1.8	2.0	1.3		
3:00 p.m.	3.5	3.9	2.8		
4:00 p.m.	2.7	2.9	2.3		
5:00 p.m.	3.3	3.8	2.3		
6:00 p.m.	2.7	3.0	2.0		
7:00 p.m.	1.3	1.6	0.8		
8:00 p.m.	1.1	1.4	0.5		
9:00 p.m.	0.2	0.3	0.0		
10:00 p.m.	0.1	0.1	0.0		
11:00 p.m.	0.1	0.1	0.0		



Counter E

Dunlavy Street Southbound at U.S. 59

Location Information			
Location Name	Dunlavy Street Southbound at U.S. 59		
Location Description	Sidewalk along Dunlavy Street Southbound South of Bridge over U.S. 59 in		
	Montrose	(City of Houston)	
Jurisdiction	City of Ho	uston/Montrose Management District	
Agency Deployed	Houston-0	Galveston Area Council and Texas Transportation Institute	
GPS Coordinates	29°43'50.3	32"N, 95°24'7.98"W	
Surrounding Land Uses	North	Park, Single-Family Residential, Multi-Family Residential	
	South	Single-Family Residential	
	East	Single-Family Residential	
	West	Single-Family Residential	
What object was device secured to?	Sign Post (Unauthorized Posting of Signs Prohibited by Law) South of Bridge over U.S. 59		
Sidewalk Width	Bridge: 5'; Approach: 4'		
Buffer Width	Bridge: 6'; Approach: 5'		
Street Width	Two-Lane Undivided Roadway		
Parallel Parking	No		
Landscaping or Trees	Yes		
Sidewalk Pavement Type	Bridge: Brick Pavers; Approach: Concrete		
ADA Ramps	Yes		
Sidewalk Condition	Good		
Speed Limit	30 miles p	er hour	
Street Lighting	Yes		
Street Traffic Volume	2,910 (4600 Dunlavy: TxDOT 2012)		
Transit	No		
Shade	Yes		
Have counts been collected by H-GAC at this location before?	No		
Notes	Construction crews were performing work nearby, within the utility corridor between U.S. 59 and the properties along Vassar Street.		

- Usage tends to be higher during weekends than on weekdays.
- On weekdays, usage is highest in the evening (4:00 p.m. − 7:00 p.m.).
- During weekends, usage remains relatively steady during daylight hours, peaking midday (11:00 p.m. 12:00 p.m.) and in the late afternoon (4:00 p.m. 5:00 p.m.).

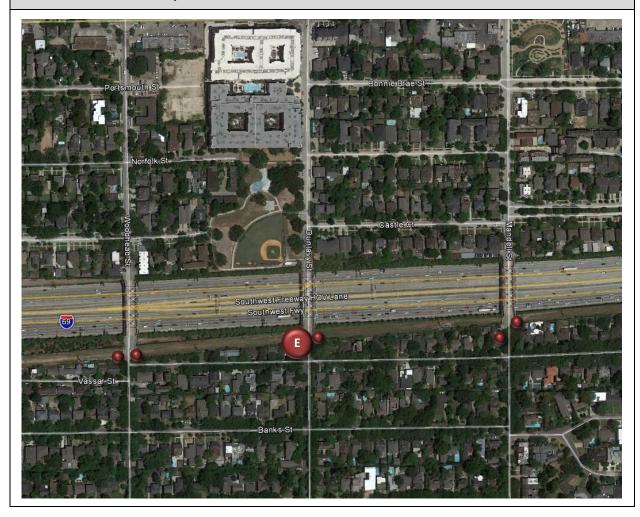




Image 9: Sidewalk along Dunlavy Street Southbound Facing North



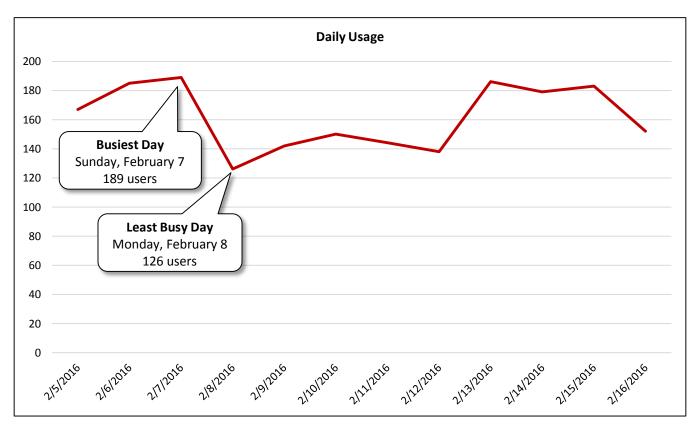
Image 10: Sidewalk along Dunlavy Street Southbound Facing South

Daily Usage Dunlavy Street Southbound at U.S. 59						
		Select Weather Data*				
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)		
Friday, February 5, 2016	167	59	33	0		
Saturday, February 6, 2016	185	60	41	0.15		
Sunday, February 7, 2016	189	66	34	0		
Monday, February 8, 2016	126	63	44	0		
Tuesday, February 9, 2016	142	66	39	0		
1				_		

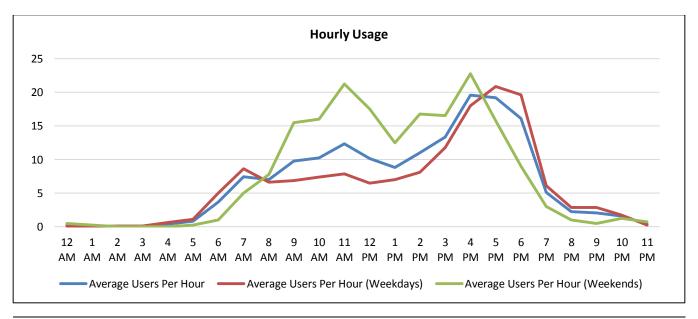
, , ,				
Saturday, February 6, 2016	185	60	41	0.15
Sunday, February 7, 2016	189	66	34	0
Monday, February 8, 2016	126	63	44	0
Tuesday, February 9, 2016	142	66	39	0
Wednesday, February 10, 2016	150	71	38	0
Thursday, February 11, 2016	144	80	55	0
Friday, February 12, 2016	138	78	55	0
Saturday, February 13, 2016	186	67	51	0
Sunday, February 14, 2016	179	74	57	0
Monday, February 15, 2016	183	76	46	Т
Tuesday, February 16, 2016	152	79	41	0
Total	1,941			

Total	1,941
Average Daily Usage	162
Average Daily Usage (Weekday)	150
Average Daily Usage (Weekend)	185

^{*}Weather conditions recorded at KHOU.



Hourly Usage Dunlavy Street Southbound at U.S. 59					
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)		
12:00 a.m.	0.3	0.1	0.5		
1:00 a.m.	0.1	0.0	0.3		
2:00 a.m.	0.1	0.1	0.0		
3:00 a.m.	0.1	0.1	0.0		
4:00 a.m.	0.4	0.6	0.0		
5:00 a.m.	0.8	1.1	0.3		
6:00 a.m.	3.7	5.0	1.0		
7:00 a.m.	7.4	8.6	5.0		
8:00 a.m.	7.0	6.6	7.8		
9:00 a.m.	9.8	6.9	15.5		
10:00 a.m.	10.3	7.4	16.0		
11:00 a.m.	12.3	7.9	21.3		
12:00 p.m.	10.2	6.5	17.5		
1:00 p.m.	8.8	7.0	12.5		
2:00 p.m.	11.0	8.1	16.8		
3:00 p.m.	13.3	11.8	16.5		
4:00 p.m.	19.6	18.0	22.8		
5:00 p.m.	19.2	20.9	15.8		
6:00 p.m.	16.1	19.6	9.0		
7:00 p.m.	5.1	6.1	3.0		
8:00 p.m.	2.3	2.9	1.0		
9:00 p.m.	2.1	2.9	0.5		
10:00 p.m.	1.6	1.8	1.3		
11:00 p.m.	0.4	0.3	0.8		



Counter F

Dunlavy Street Northbound at U.S. 59

Location Information			
Location Name	Dunlavy Street Northbound at U.S. 59		
Location Description	Sidewalk along Dunlavy Street Northbound South of Bridge over U.S. 59 in Montrose (City of Houston)		
Jurisdiction	City of F	Houston/Montrose Management District	
Agency Deployed	Houston	n-Galveston Area Council and Texas Transportation Institute	
GPS Coordinates	29°43'5	0.38"N, 95°24'7.07"W	
Surrounding Land Uses	North Park, Single-Family Residential, Multi-Family Residential		
	South	Single-Family Residential	
	East	Single-Family Residential	
	West	Single-Family Residential	
What object was device secured to?	Sign Pos over U.S	st (Unauthorized Posting of Signs Prohibited by Law) South of Bridge 5. 59	
Sidewalk Width	Bridge: 5'; Approach: 4'		
Buffer Width	Bridge: 6'; Approach: 6'		
Street Width	Two-Lane Undivided Roadway		
Parallel Parking	No		
Landscaping or Trees	Yes		
Sidewalk Pavement Type	Bridge: Brick Pavers; Approach: Concrete		
ADA Ramps	Yes		
Sidewalk Condition	Good		
Speed Limit	30 miles	s per hour	
Street Lighting	Yes		
Street Traffic Volume	2,910 (4600 Dunlavy: TxDOT 2012)		
Transit	No		
Shade	Yes		
Have counts been collected by H-GAC at this location before?	No		
Notes	Construction crews were performing work nearby, within the utility corridor between U.S. 59 and the properties along Vassar Street.		

- Usage tends to be slightly higher on weekdays than during weekends.
- On weekdays, usage is highest in the morning (7:00 a.m. 8:00 a.m.) and evening (4:00 p.m. 7:00 p.m.).
- During weekends, usage is highest midday (11:00 a.m. 12:00 p.m.).

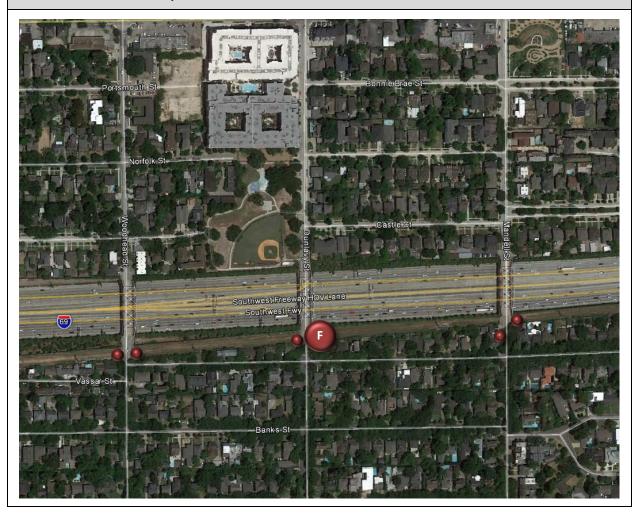




Image 11: Sidewalk along Dunlavy Street Northbound Facing North



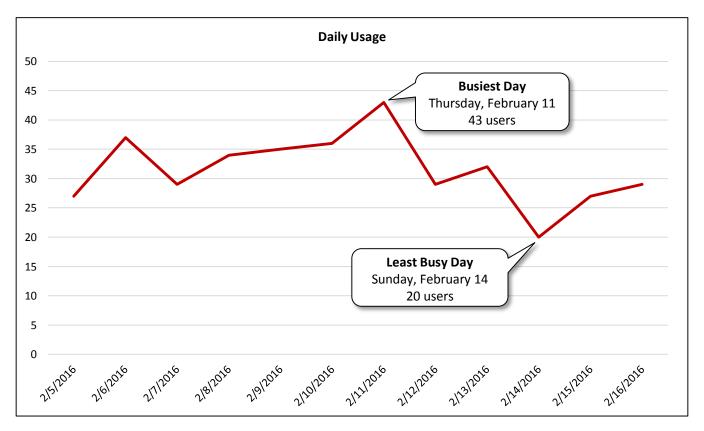
Image 12: Sidewalk along Dunlavy Street Northbound Facing South

Daily Usage	
Dunlavy Street Northbound at U.S. 59)

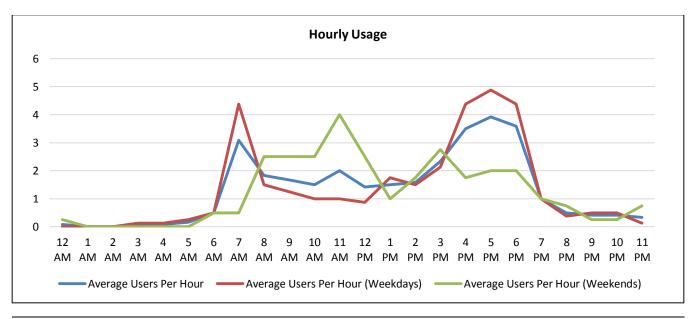
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, February 5, 2016	27	59	33	0
Saturday, February 6, 2016	37	60	41	0.15
Sunday, February 7, 2016	29	66	34	0
Monday, February 8, 2016	34	63	44	0
Tuesday, February 9, 2016	35	66	39	0
Wednesday, February 10, 2016	36	71	38	0
Thursday, February 11, 2016	43	80	55	0
Friday, February 12, 2016	29	78	55	0
Saturday, February 13, 2016	32	67	51	0
Sunday, February 14, 2016	20	74	57	0
Monday, February 15, 2016	27	76	46	Т
Tuesday, February 16, 2016	29	79	41	0

Total	378
Average Daily Usage	32
Average Daily Usage (Weekday)	33
Average Daily Usage (Weekend)	30

^{*}Weather conditions recorded at KHOU.



Hourly Usage Dunlavy Street Northbound at U.S. 59					
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)		
12:00 a.m.	0.1	0.0	0.3		
1:00 a.m.	0.0	0.0	0.0		
2:00 a.m.	0.0	0.0	0.0		
3:00 a.m.	0.1	0.1	0.0		
4:00 a.m.	0.1	0.1	0.0		
5:00 a.m.	0.2	0.3	0.0		
6:00 a.m.	0.5	0.5	0.5		
7:00 a.m.	3.1	4.4	0.5		
8:00 a.m.	1.8	1.5	2.5		
9:00 a.m.	1.7	1.3	2.5		
10:00 a.m.	1.5	1.0	2.5		
11:00 a.m.	2.0	1.0	4.0		
12:00 p.m.	1.4	0.9	2.5		
1:00 p.m.	1.5	1.8	1.0		
2:00 p.m.	1.6	1.5	1.8		
3:00 p.m.	2.3	2.1	2.8		
4:00 p.m.	3.5	4.4	1.8		
5:00 p.m.	3.9	4.9	2.0		
6:00 p.m.	3.6	4.4	2.0		
7:00 p.m.	1.0	1.0	1.0		
8:00 p.m.	0.5	0.4	0.8		
9:00 p.m.	0.4	0.5	0.3		
10:00 p.m.	0.4	0.5	0.3		
11:00 p.m.	0.3	0.1	0.8		



Counter #1

Mandell Street Southbound at U.S. 59

Location Information			
Location Name	Mandell Street Southbound at U.S. 59		
Location Description	Sidewalk along Mandell Street Southbound South of Bridge over U.S. 59 in Montrose (City of Houston)		
Jurisdiction	City of H	ouston/Montrose Management District	
Agency Deployed	Houston-	Galveston Area Council and Texas Transportation Institute	
GPS Coordinates	29°43'50	.33"N, 95°23'58.30"W	
Surrounding Land Uses	North	Single-Family Residential, Multi-Family Residential	
	South	Single-Family Residential, Multi-Family Residential	
	East	Single-Family Residential	
	West	Single-Family Residential	
What object was device secured to?	Oak Tree	South of Bridge over U.S. 59	
Sidewalk Width	Bridge: 5	'; Approach: 4'	
Buffer Width	Bridge: 6'; Approach: 4'		
Street Width	Two-Lane Undivided Roadway		
Parallel Parking	No		
Landscaping or Trees	Yes		
Sidewalk Pavement Type	Bridge: Brick Pavers; Approach: Concrete		
ADA Ramps	Yes		
Sidewalk Condition	Good		
Speed Limit	30 miles per hour		
Street Lighting	Yes		
Street Traffic Volume	N/A		
Transit	No		
Shade	Yes		
Have counts been collected by H-GAC at this location before?	No		

- Usage tends to be slightly higher during weekends than on weekdays.
- On weekdays, usage is highest in the evening (4:00 p.m. 7:00 p.m.).
- During weekends, usage remains relatively steady during daylight hours, peaking in the morning (9:00 a.m. 11:00 a.m.).

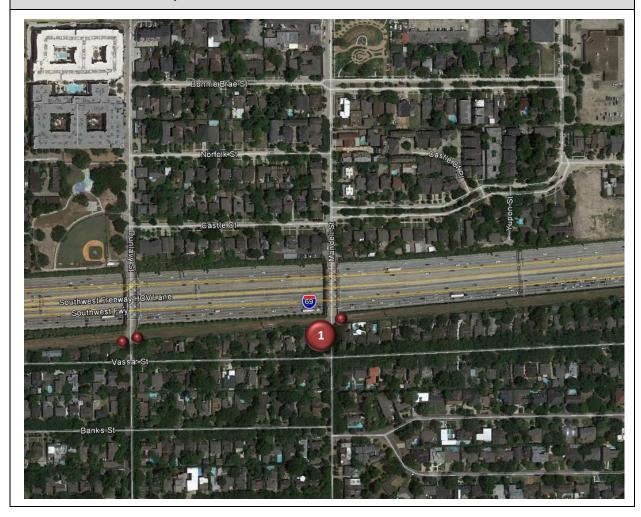




Image 13: Sidewalk along Mandell Street Southbound Facing North

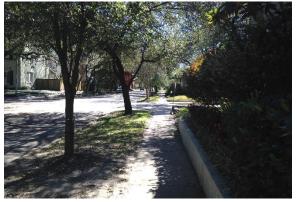


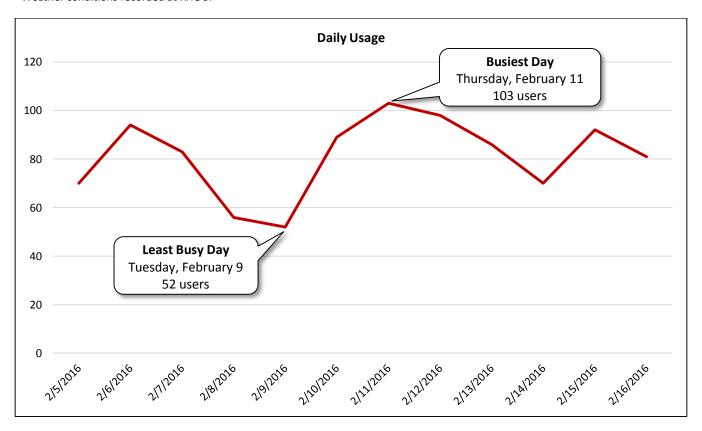
Image 14: Sidewalk along Mandell Street Southbound Facing South

Daily Usage	
Mandall Street Southhound at LLS	50

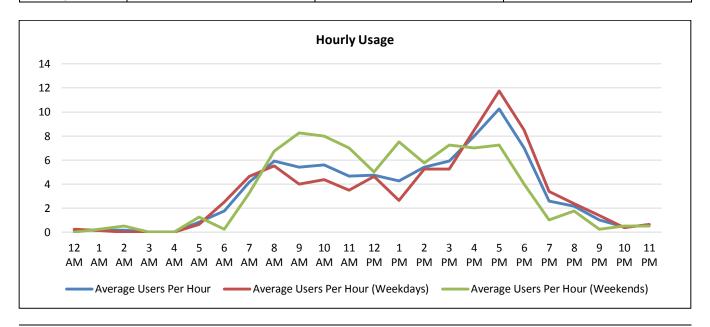
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, February 5, 2016	70	59	33	0
Saturday, February 6, 2016	94	60	41	0.15
Sunday, February 7, 2016	83	66	34	0
Monday, February 8, 2016	56	63	44	0
Tuesday, February 9, 2016	52	66	39	0
Wednesday, February 10, 2016	89	71	38	0
Thursday, February 11, 2016	103	80	55	0
Friday, February 12, 2016	98	78	55	0
Saturday, February 13, 2016	86	67	51	0
Sunday, February 14, 2016	70	74	57	0
Monday, February 15, 2016	92	76	46	Т
Tuesday, February 16, 2016	81	79	41	0

Total	974
Average Daily Usage	81
Average Daily Usage (Weekday)	80
Average Daily Usage (Weekend)	83

^{*}Weather conditions recorded at KHOU.



Hourly Usage Mandell Street Southbound at U.S. 59				
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)	
12:00 a.m.	0.2	0.3	0.0	
1:00 a.m.	0.2	0.1	0.3	
2:00 a.m.	0.2	0.0	0.5	
3:00 a.m.	0.0	0.0	0.0	
4:00 a.m.	0.0	0.0	0.0	
5:00 a.m.	0.8	0.6	1.3	
6:00 a.m.	1.8	2.5	0.3	
7:00 a.m.	4.2	4.6	3.3	
8:00 a.m.	5.9	5.5	6.8	
9:00 a.m.	5.4	4.0	8.3	
10:00 a.m.	5.6	4.4	8.0	
11:00 a.m.	4.7	3.5	7.0	
12:00 p.m.	4.8	4.6	5.0	
1:00 p.m.	4.3	2.6	7.5	
2:00 p.m.	5.4	5.3	5.8	
3:00 p.m.	5.9	5.3	7.3	
4:00 p.m.	8.0	8.5	7.0	
5:00 p.m.	10.3	11.8	7.3	
6:00 p.m.	7.0	8.5	4.0	
7:00 p.m.	2.6	3.4	1.0	
8:00 p.m.	2.2	2.4	1.8	
9:00 p.m.	1.0	1.4	0.3	
10:00 p.m.	0.4	0.4	0.5	
11:00 p.m.	0.6	0.6	0.5	



Counter #2

Mandell Street Northbound at U.S. 59

Location Information			
Location Name	Mandell Street Northbound at U.S. 59		
Location Description	Sidewalk along Mandell Street Northbound South of Bridge over U.S. 59 in Montrose (City of Houston)		
Jurisdiction	City of Ho	uston/Montrose Management District	
Agency Deployed	Houston-0	Galveston Area Council and Texas Transportation Institute	
GPS Coordinates	29°43'51.2	12"N, 95°23'57.85"W	
Surrounding Land Uses	North	Single-Family Residential, Multi-Family Residential	
	South	Single-Family Residential, Multi-Family Residential	
	East	Single-Family Residential	
	West	Single-Family Residential	
What object was device secured to?	Sign Post (Unauthorized Posting of Signs Prohibited by Law) South of Bridge over U.S. 59		
Sidewalk Width	Bridge: 5';	Approach: 4'	
Buffer Width	Bridge: 6'; Approach: 4'		
Street Width	Two-Lane Undivided Roadway		
Parallel Parking	No		
Landscaping or Trees	Yes		
Sidewalk Pavement Type	Bridge: Brick Pavers; Approach: Concrete		
ADA Ramps	Yes		
Sidewalk Condition	Good		
Speed Limit	30 miles per hour		
Street Lighting	Yes		
Street Traffic Volume	N/A		
Transit	No		
Shade	Yes		
Have counts been collected by H-GAC at this location before?	No		

- Usage tends to be higher during weekends than on weekdays.
- On weekdays, usage is highest in the evening (5:00 p.m. 6:00 p.m.).
- During weekends, usage is highest in the early afternoon (1:00 p.m. 2:00 p.m.) and late afternoon (4:00 p.m. 5:00 p.m.).

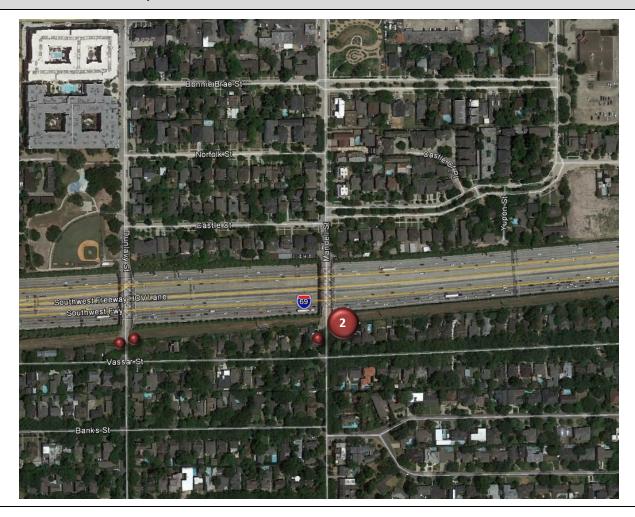




Image 15: Sidewalk along Mandell Street Northbound Facing North



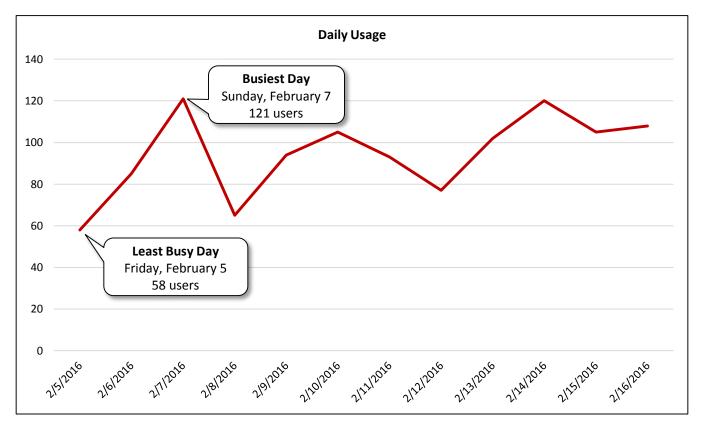
Image 16: Sidewalk along Mandell Street Northbound Facing South

Daily UsageMandell Street Northbound at U.S. 59

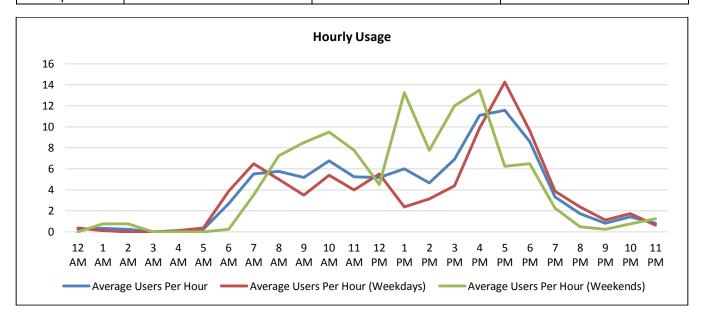
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, February 5, 2016	58	59	33	0
Saturday, February 6, 2016	85	60	41	0.15
Sunday, February 7, 2016	121	66	34	0
Monday, February 8, 2016	65	63	44	0
Tuesday, February 9, 2016	94	66	39	0
Wednesday, February 10, 2016	105	71	38	0
Thursday, February 11, 2016	93	80	55	0
Friday, February 12, 2016	77	78	55	0
Saturday, February 13, 2016	102	67	51	0
Sunday, February 14, 2016	120	74	57	0
Monday, February 15, 2016	105	76	46	Т
Tuesday, February 16, 2016	108	79	41	0

Total	1,133
Average Daily Usage	94
Average Daily Usage (Weekday)	88
Average Daily Usage (Weekend)	107

^{*}Weather conditions recorded at KHOU.



Hourly Usage Mandell Street Northbound at U.S. 59				
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)	
12:00 a.m.	0.3	0.4	0.0	
1:00 a.m.	0.3	0.1	0.8	
2:00 a.m.	0.3	0.0	0.8	
3:00 a.m.	0.0	0.0	0.0	
4:00 a.m.	0.1	0.1	0.0	
5:00 a.m.	0.3	0.4	0.0	
6:00 a.m.	2.7	3.9	0.3	
7:00 a.m.	5.5	6.5	3.5	
8:00 a.m.	5.8	5.0	7.3	
9:00 a.m.	5.2	3.5	8.5	
10:00 a.m.	6.8	5.4	9.5	
11:00 a.m.	5.3	4.0	7.8	
12:00 p.m.	5.2	5.5	4.5	
1:00 p.m.	6.0	2.4	13.3	
2:00 p.m.	4.7	3.1	7.8	
3:00 p.m.	6.9	4.4	12.0	
4:00 p.m.	11.1	9.9	13.5	
5:00 p.m.	11.6	14.3	6.3	
6:00 p.m.	8.6	9.6	6.5	
7:00 p.m.	3.3	3.9	2.3	
8:00 p.m.	1.8	2.4	0.5	
9:00 p.m.	0.8	1.1	0.3	
10:00 p.m.	1.4	1.8	0.8	
11:00 p.m.	0.8	0.6	1.3	



36

Graustark Street Southbound at U.S. 59

Location Information				
Location Name	Graustark	Graustark Street Southbound at U.S. 59		
Location Description	Sidewalk along Graustark Street Southbound South of Bridge over U.S. 59 in Montrose (City of Houston)			
Jurisdiction	City of Ho	uston/Montrose Management District		
Agency Deployed	Houston-C	Houston-Galveston Area Council and Texas Transportation Institute		
GPS Coordinates	29°43'51.6	54"N, 95°23'41.19"W		
Surrounding Land Uses	North	Single-Family Residential, Multi-Family Residential		
	South	Single-Family Residential, Multi-Family Residential		
	East	Single-Family Residential, Multi-Family Residential, Institutional (Post Oak High School), Commercial/Retail		
	West	Single-Family Residential		
What object was device secured to?	Utility Pole South of Bridge over U.S. 59			
Sidewalk Width	Bridge: 5'; Approach: 5'			
Buffer Width	Bridge: 5'; Approach: 4'			
Street Width	Two-Lane	Undivided Roadway		
Parallel Parking	No			
Landscaping or Trees	Yes			
Sidewalk Pavement Type	Bridge: Br	ick Pavers; Approach: Concrete		
ADA Ramps	Yes			
Sidewalk Condition	Good			
Speed Limit	30 miles per hour			
Street Lighting	Yes			
Street Traffic Volume	N/A			
Transit	No			
Shade	No			
Have counts been collected by H-GAC at this location before?	No			

- Usage tends to be higher during weekends than on weekdays.
- On weekdays, usage is highest in the evening (4:00 p.m. 6:00 p.m.).
- During weekends, usage is highest in the morning (9:00 a.m. 10:00 a.m.) and late afternoon (3:00 p.m. 5:00 p.m.).

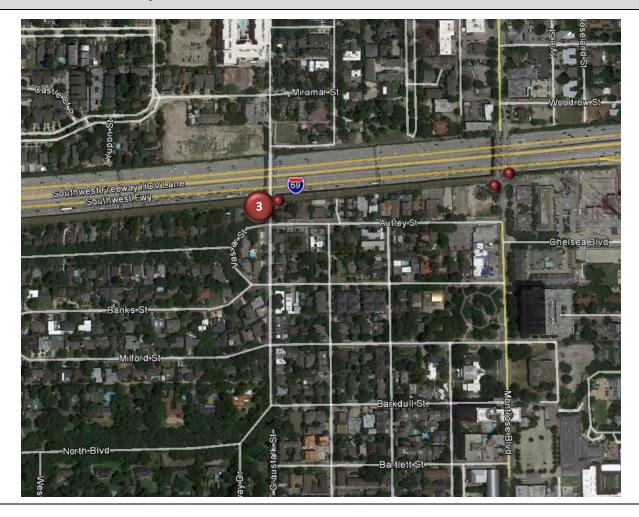




Image 17: Sidewalk along Graustark Street Southbound Facing North



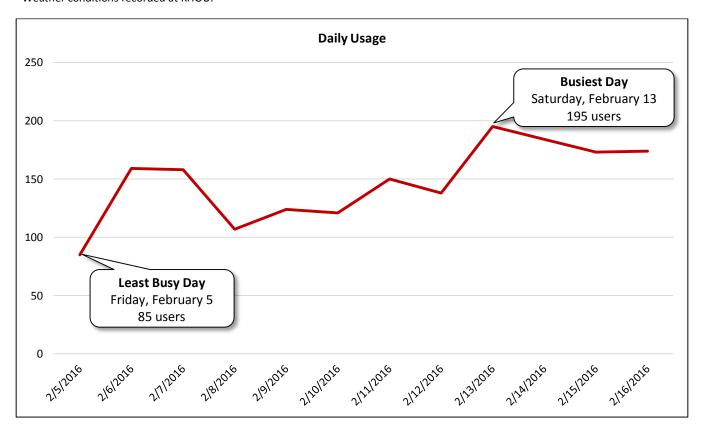
Image 18: Sidewalk along Graustark Street Southbound Facing South

Daily Usage	
Graustark Street Southhound at LLS	59

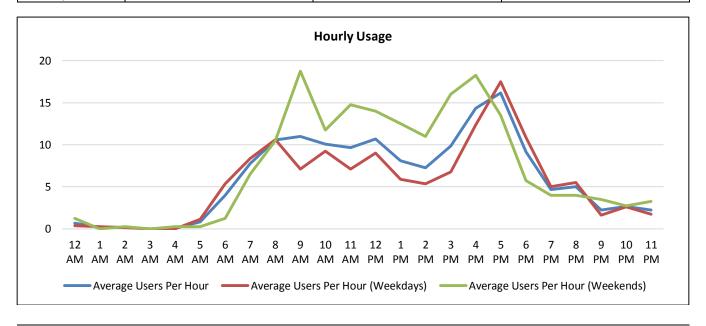
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, February 5, 2016	85	59	33	0
Saturday, February 6, 2016	159	60	41	0.15
Sunday, February 7, 2016	158	66	34	0
Monday, February 8, 2016	107	63	44	0
Tuesday, February 9, 2016	124	66	39	0
Wednesday, February 10, 2016	121	71	38	0
Thursday, February 11, 2016	150	80	55	0
Friday, February 12, 2016	138	78	55	0
Saturday, February 13, 2016	195	67	51	0
Sunday, February 14, 2016	184	74	57	0
Monday, February 15, 2016	173	76	46	Т
Tuesday, February 16, 2016	174	79	41	0

Total	1,768
Average Daily Usage	147
Average Daily Usage (Weekday)	134
Average Daily Usage (Weekend)	174

^{*}Weather conditions recorded at KHOU.



Hourly Usage Graustark Street Southbound at U.S. 59				
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)	
12:00 a.m.	0.7	0.4	1.3	
1:00 a.m.	0.2	0.3	0.0	
2:00 a.m.	0.2	0.1	0.3	
3:00 a.m.	0.0	0.0	0.0	
4:00 a.m.	0.1	0.0	0.3	
5:00 a.m.	0.8	1.1	0.3	
6:00 a.m.	4.0	5.4	1.3	
7:00 a.m.	7.8	8.4	6.5	
8:00 a.m.	10.6	10.6	10.5	
9:00 a.m.	11.0	7.1	18.8	
10:00 a.m.	10.1	9.3	11.8	
11:00 a.m.	9.7	7.1	14.8	
12:00 p.m.	10.7	9.0	14.0	
1:00 p.m.	8.1	5.9	12.5	
2:00 p.m.	7.3	5.4	11.0	
3:00 p.m.	9.8	6.8	16.0	
4:00 p.m.	14.3	12.4	18.3	
5:00 p.m.	16.2	17.5	13.5	
6:00 p.m.	9.2	10.9	5.8	
7:00 p.m.	4.7	5.0	4.0	
8:00 p.m.	5.0	5.5	4.0	
9:00 p.m.	2.3	1.6	3.5	
10:00 p.m.	2.7	2.6	2.8	
11:00 p.m.	2.3	1.8	3.3	



Graustark Street Northbound at U.S. 59

Location Information				
Location Name	Graustark	Graustark Street Northbound at U.S. 59		
Location Description		Sidewalk along Graustark Street Northbound South of Bridge over U.S. 59 in Montrose (City of Houston)		
Jurisdiction	City of Ho	uston/Montrose Management District		
Agency Deployed	Houston-0	Houston-Galveston Area Council and Texas Transportation Institute		
GPS Coordinates	29°43'52.2	20"N, 95°23'40.47"W		
Surrounding Land Uses	North	Single-Family Residential, Multi-Family Residential		
	South	Single-Family Residential, Multi-Family Residential		
	East	Single-Family Residential, Multi-Family Residential, Institutional (Post Oak High School), Commercial/Retail		
	West	Single-Family Residential		
What object was device secured to?	Fence Post South of Bridge over U.S. 59			
Sidewalk Width	Bridge: 5'; Approach: 5'			
Buffer Width	Bridge: 3'; Approach: 2'			
Street Width	Two-Lane Undivided Roadway			
Parallel Parking	No	No		
Landscaping or Trees	Yes			
Sidewalk Pavement Type	Bridge: Br	ick Pavers; Approach: Concrete		
ADA Ramps	Yes			
Sidewalk Condition	Good			
Speed Limit	30 miles per hour			
Street Lighting	Yes			
Street Traffic Volume	N/A			
Transit	No			
Shade	No			
Have counts been collected by H-GAC at this location before?	No			

- Usage tends to be higher during weekends than on weekdays.
- On weekdays, usage is highest in the evening (4:00 p.m. 6:00 p.m.).
- During weekends, usage is highest midday (11:00 a.m. 12:00 p.m.) and in the late afternoon (3:00 p.m. 5:00 p.m.).

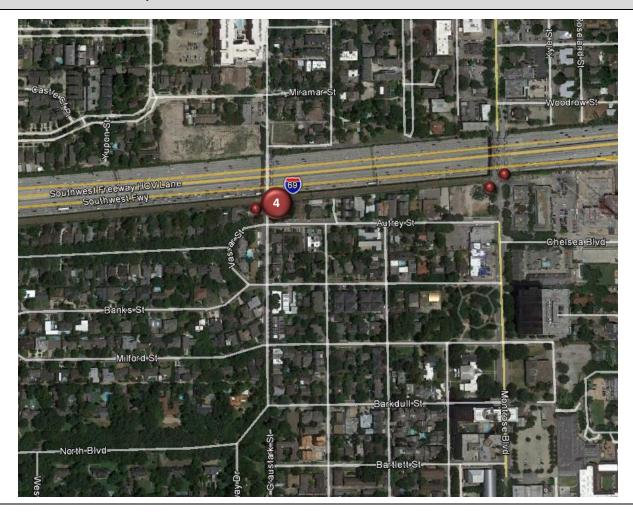




Image 19: Sidewalk along Graustark Street Northbound Facing North



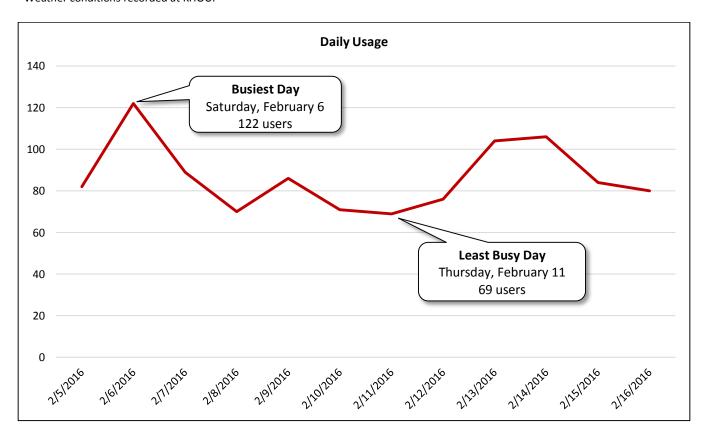
Image 20: Sidewalk along Graustark Street Northbound Facing South

Daily Usage	
Graustark Street Northhound at U.S.	59

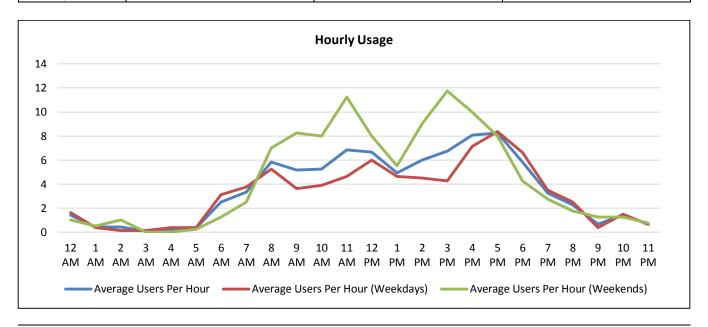
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, February 5, 2016	82	59	33	0
Saturday, February 6, 2016	122	60	41	0.15
Sunday, February 7, 2016	89	66	34	0
Monday, February 8, 2016	70	63	44	0
Tuesday, February 9, 2016	86	66	39	0
Wednesday, February 10, 2016	71	71	38	0
Thursday, February 11, 2016	69	80	55	0
Friday, February 12, 2016	76	78	55	0
Saturday, February 13, 2016	104	67	51	0
Sunday, February 14, 2016	106	74	57	0
Monday, February 15, 2016	84	76	46	Т
Tuesday, February 16, 2016	80	79	41	0

Total	1,039
Average Daily Usage	87
Average Daily Usage (Weekday)	77
Average Daily Usage (Weekend)	105

^{*}Weather conditions recorded at KHOU.



Hourly Usage Graustark Street Northbound at U.S. 59				
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)	
12:00 a.m.	1.4	1.6	1.0	
1:00 a.m.	0.4	0.4	0.5	
2:00 a.m.	0.4	0.1	1.0	
3:00 a.m.	0.1	0.1	0.0	
4:00 a.m.	0.3	0.4	0.0	
5:00 a.m.	0.3	0.4	0.3	
6:00 a.m.	2.5	3.1	1.3	
7:00 a.m.	3.3	3.8	2.5	
8:00 a.m.	5.8	5.3	7.0	
9:00 a.m.	5.2	3.6	8.3	
10:00 a.m.	5.3	3.9	8.0	
11:00 a.m.	6.8	4.6	11.3	
12:00 p.m.	6.7	6.0	8.0	
1:00 p.m.	4.9	4.6	5.5	
2:00 p.m.	6.0	4.5	9.0	
3:00 p.m.	6.8	4.3	11.8	
4:00 p.m.	8.1	7.1	10.0	
5:00 p.m.	8.3	8.4	8.0	
6:00 p.m.	5.8	6.6	4.3	
7:00 p.m.	3.3	3.5	2.8	
8:00 p.m.	2.3	2.5	1.8	
9:00 p.m.	0.7	0.4	1.3	
10:00 p.m.	1.4	1.5	1.3	
11:00 p.m.	0.7	0.6	0.8	



Montrose Boulevard Southbound at U.S. 59

Location Information				
Location Name	Montrose	Montrose Boulevard Southbound at U.S. 59		
Location Description	Sidewalk along Montrose Boulevard Southbound South of Bridge over U.S. 59 in Montrose (City of Houston)			
Jurisdiction	City of Ho	uston/Montrose Management District		
Agency Deployed	Houston-0	Galveston Area Council and Texas Transportation Institute		
GPS Coordinates	29°43'52.	61"N, 95°23'28.43"W		
Surrounding Land Uses	North	Multi-Family Residential, Commercial/Retail, Single-Family Residential		
	South	Commercial/Retail, Multi-Family Residential, Park, Institutional (Church)		
	East	Commercial/Retail, Multi-Family Residential, Institutional (The Joy School)		
	West	Institutional (Post Oak High School), Multi-Family Residential, Single-Family Residential		
What object was device secured to?	Oak Tree	(First Tree South of U.S. 59)		
Sidewalk Width	Bridge: 5'; Approach: 5'			
Buffer Width	Bridge: 4'	; Approach: 8'		
Street Width	Four-Lane	· Undivided Roadway		
Parallel Parking	No			
Landscaping or Trees	Yes			
Sidewalk Pavement Type	Bridge: Br	rick Pavers; Approach: Concrete		
ADA Ramps	Yes	Yes		
Sidewalk Condition	Good			
Speed Limit	30 miles per hour			
Street Lighting	Yes			
Street Traffic Volume	24,190 (4400 Montrose: TxDOT 2012)			
Transit	Nearby (METRO Bus Stop 150' South at Montrose Boulevard/Autrey Street Intersection)			
Shade	Yes			
Have counts been collected by H-GAC at this location before?	No			

- Usage tends to be higher during weekends than on weekdays.
- On weekdays, usage generally increases as the day progresses, peaking in the evening (5:00 p.m. 7:00 p.m.).
- During weekends, usage generally increases as the day progresses, peaking in the evening (4:00 p.m. 6:00 p.m.).

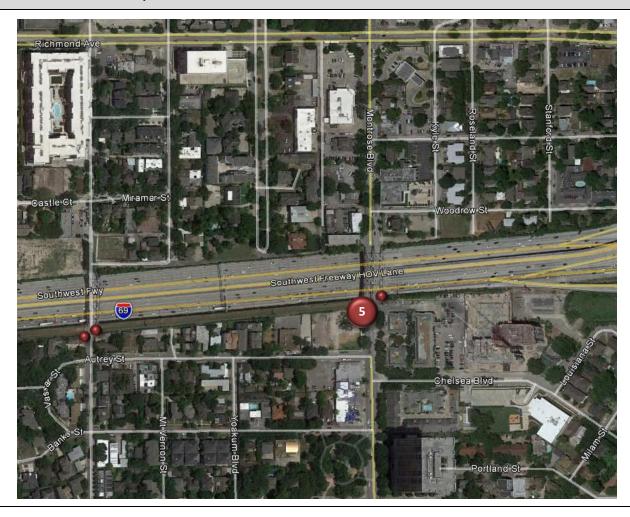




Image 21: Sidewalk along Montrose Boulevard Southbound Facing North



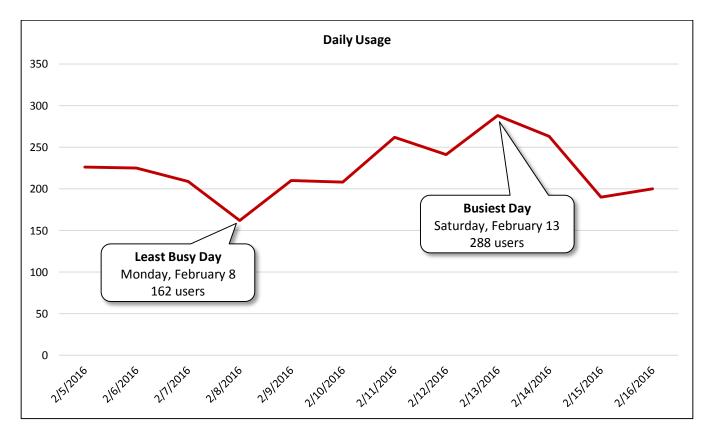
Image 22: Sidewalk along Montrose Boulevard Southbound Facing South

Daily Usage	
Montrose Boulevard Southbound at U.S. 59	Э

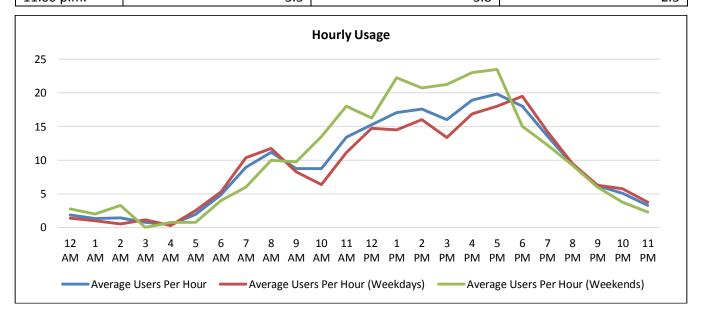
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, February 5, 2016	226	59	33	0
Saturday, February 6, 2016	225	60	41	0.15
Sunday, February 7, 2016	209	66	34	0
Monday, February 8, 2016	162	63	44	0
Tuesday, February 9, 2016	210	66	39	0
Wednesday, February 10, 2016	208	71	38	0
Thursday, February 11, 2016	262	80	55	0
Friday, February 12, 2016	241	78	55	0
Saturday, February 13, 2016	288	67	51	0
Sunday, February 14, 2016	263	74	57	0
Monday, February 15, 2016	190	76	46	Т
Tuesday, February 16, 2016	200	79	41	0

Total	2,684
Average Daily Usage	224
Average Daily Usage (Weekday)	212
Average Daily Usage (Weekend)	246

^{*}Weather conditions recorded at KHOU.



Hourly Usage Montrose Boulevard Southbound at U.S. 59				
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)	
12:00 a.m.	1.8	1.4	2.8	
1:00 a.m.	1.3	1.0	2.0	
2:00 a.m.	1.4	0.5	3.3	
3:00 a.m.	0.8	1.1	0.0	
4:00 a.m.	0.4	0.3	0.8	
5:00 a.m.	1.9	2.5	0.8	
6:00 a.m.	4.8	5.3	4.0	
7:00 a.m.	8.9	10.4	6.0	
8:00 a.m.	11.2	11.8	10.0	
9:00 a.m.	8.8	8.3	9.8	
10:00 a.m.	8.8	6.4	13.5	
11:00 a.m.	13.4	11.1	18.0	
12:00 p.m.	15.3	14.8	16.3	
1:00 p.m.	17.1	14.5	22.3	
2:00 p.m.	17.6	16.0	20.8	
3:00 p.m.	16.0	13.4	21.3	
4:00 p.m.	18.9	16.9	23.0	
5:00 p.m.	19.8	18.0	23.5	
6:00 p.m.	18.0	19.5	15.0	
7:00 p.m.	13.6	14.3	12.3	
8:00 p.m.	9.4	9.5	9.3	
9:00 p.m.	6.2	6.3	6.0	
10:00 p.m.	5.1	5.8	3.8	
11:00 p.m.	3.3	3.8	2.3	



Montrose Boulevard Northbound at U.S. 59

Location Information				
Location Name	Montrose Boulevard Northbound at U.S. 59			
Location Description	Sidewalk along Montrose Boulevard Northbound South of Bridge over U.S. 59 in Montrose (City of Houston)			
Jurisdiction	City of Houston/Montrose Management District			
Agency Deployed	Houston-	Galveston Area Council and Texas Transportation Institute		
GPS Coordinates	29°43'53.	72"N, 95°23'27.45"W		
Surrounding Land Uses	North	Multi-Family Residential, Commercial/Retail, Single-Family Residential		
	South	Commercial/Retail, Multi-Family Residential, Park, Institutional (Church)		
	East	Commercial/Retail, Multi-Family Residential, Institutional (The Joy School)		
	West	Institutional (Post Oak High School), Multi-Family Residential, Single-Family Residential		
What object was device secured to?	Railing So	Railing South of U.S. 59		
Sidewalk Width	Bridge: 5'; Approach: 5'			
Buffer Width	Bridge: 4'; Approach: 8'			
Street Width	Four-Lane Undivided Roadway			
Parallel Parking	No			
Landscaping or Trees	Yes			
Sidewalk Pavement Type	Bridge: Brick Pavers; Approach: Concrete			
ADA Ramps	Yes			
Sidewalk Condition	Good			
Speed Limit	30 miles per hour			
Street Lighting	Yes			
Street Traffic Volume	24,190 (4400 Montrose: TxDOT 2012)			
Transit	Nearby (METRO Bus Stop 350' South at Montrose Boulevard/Chelsea Boulevard Intersection)			
Shade	Yes			
Have counts been collected by H-GAC at this location before?	No			

- Usage tends to be higher on weekdays than during weekends.
- On weekdays, usage is highest in the evening (5:00 p.m. 6:00 p.m.). There is a pronounced increase in usage in the morning (6:00 a.m. 7:00 a.m.) and midday (11:00 a.m. 1:00 p.m.).
- During weekends, usage is highest midday (12:00 p.m. 1:00 p.m.) and in the late afternoon (3:00 p.m. 5:00 p.m.).

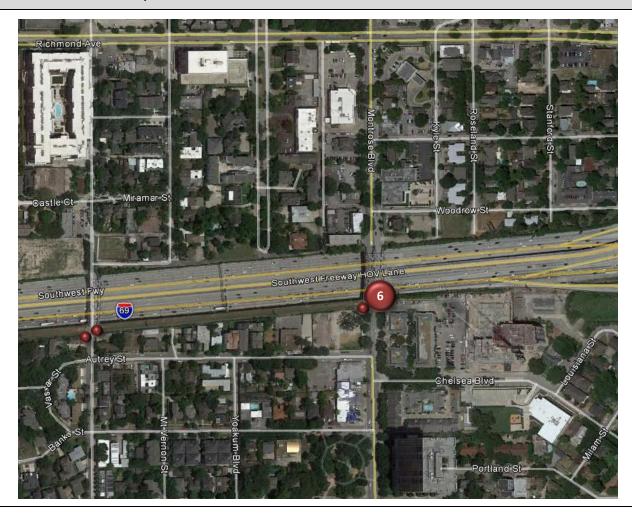




Image 23: Sidewalk along Montrose Boulevard Northbound Facing North



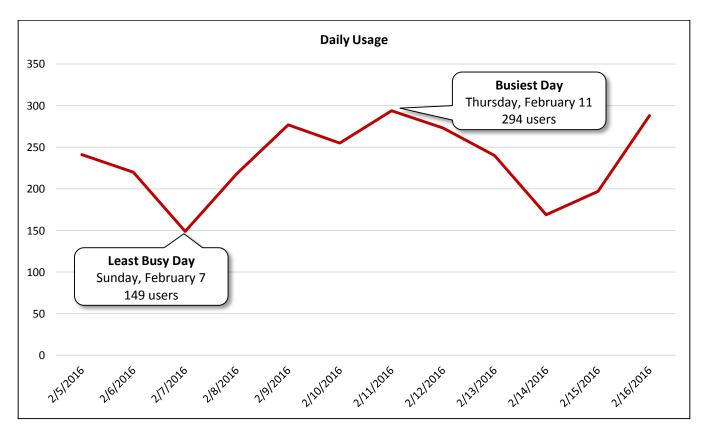
Image 24: Sidewalk along Montrose Boulevard Northbound Facing South

Daily Usage	
Montrose Boulevard Northbound at U.S. 59	

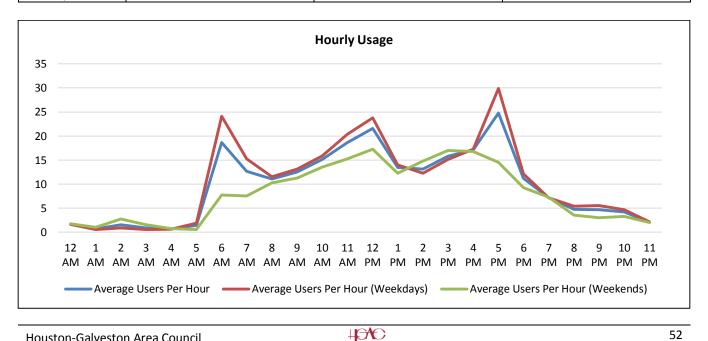
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, February 5, 2016	241	59	33	0
Saturday, February 6, 2016	220	60	41	0.15
Sunday, February 7, 2016	149	66	34	0
Monday, February 8, 2016	218	63	44	0
Tuesday, February 9, 2016	277	66	39	0
Wednesday, February 10, 2016	255	71	38	0
Thursday, February 11, 2016	294	80	55	0
Friday, February 12, 2016	273	78	55	0
Saturday, February 13, 2016	240	67	51	0
Sunday, February 14, 2016	169	74	57	0
Monday, February 15, 2016	197	76	46	Т
Tuesday, February 16, 2016	288	79	41	0

Total	2,821
Average Daily Usage	235
Average Daily Usage (Weekday)	255
Average Daily Usage (Weekend)	195

^{*}Weather conditions recorded at KHOU.



Hourly Usage Montrose Boulevard Northbound at U.S. 59				
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)	
12:00 a.m.	1.7	1.6	1.8	
1:00 a.m.	0.7	0.5	1.0	
2:00 a.m.	1.5	0.9	2.8	
3:00 a.m.	0.8	0.5	1.5	
4:00 a.m.	0.7	0.6	0.8	
5:00 a.m.	1.4	1.9	0.5	
6:00 a.m.	18.7	24.1	7.8	
7:00 a.m.	12.7	15.3	7.5	
8:00 a.m.	11.1	11.5	10.3	
9:00 a.m.	12.5	13.1	11.3	
10:00 a.m.	15.1	15.9	13.5	
11:00 a.m.	18.7	20.4	15.3	
12:00 p.m.	21.6	23.8	17.3	
1:00 p.m.	13.4	14.0	12.3	
2:00 p.m.	13.1	12.3	14.8	
3:00 p.m.	15.8	15.1	17.0	
4:00 p.m.	17.1	17.3	16.8	
5:00 p.m.	24.8	29.9	14.5	
6:00 p.m.	11.2	12.1	9.3	
7:00 p.m.	7.2	7.1	7.3	
8:00 p.m.	4.8	5.4	3.5	
9:00 p.m.	4.7	5.5	3.0	
10:00 p.m.	4.2	4.6	3.3	
11:00 p.m.	2.1	2.1	2.0	



Participants

Houston-Galveston Area Council: Pedestrian-Bicyclist Planning www.h-gac.com/go/pedbike

Texas Transportation Institute http://tti.tamu.edu/