

HOUSTON-GALVESTON AREA COUNCIL



Temporary Pedestrian/Bicycle Counters
Data Summary

Deployment Summary	
Sponsoring Agency	City of Bellaire
Deployment Period	Wednesday, June 24, 2015 – Wednesday, July 15, 2015
Number of Counters Deployed	3
Locations Deployed	
Counter #1	S. Rice at Condit Elementary School
Counter #2	S. Rice at Bellaire City Hall
Counter #3	S. Rice at Beechnut Ditch

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.

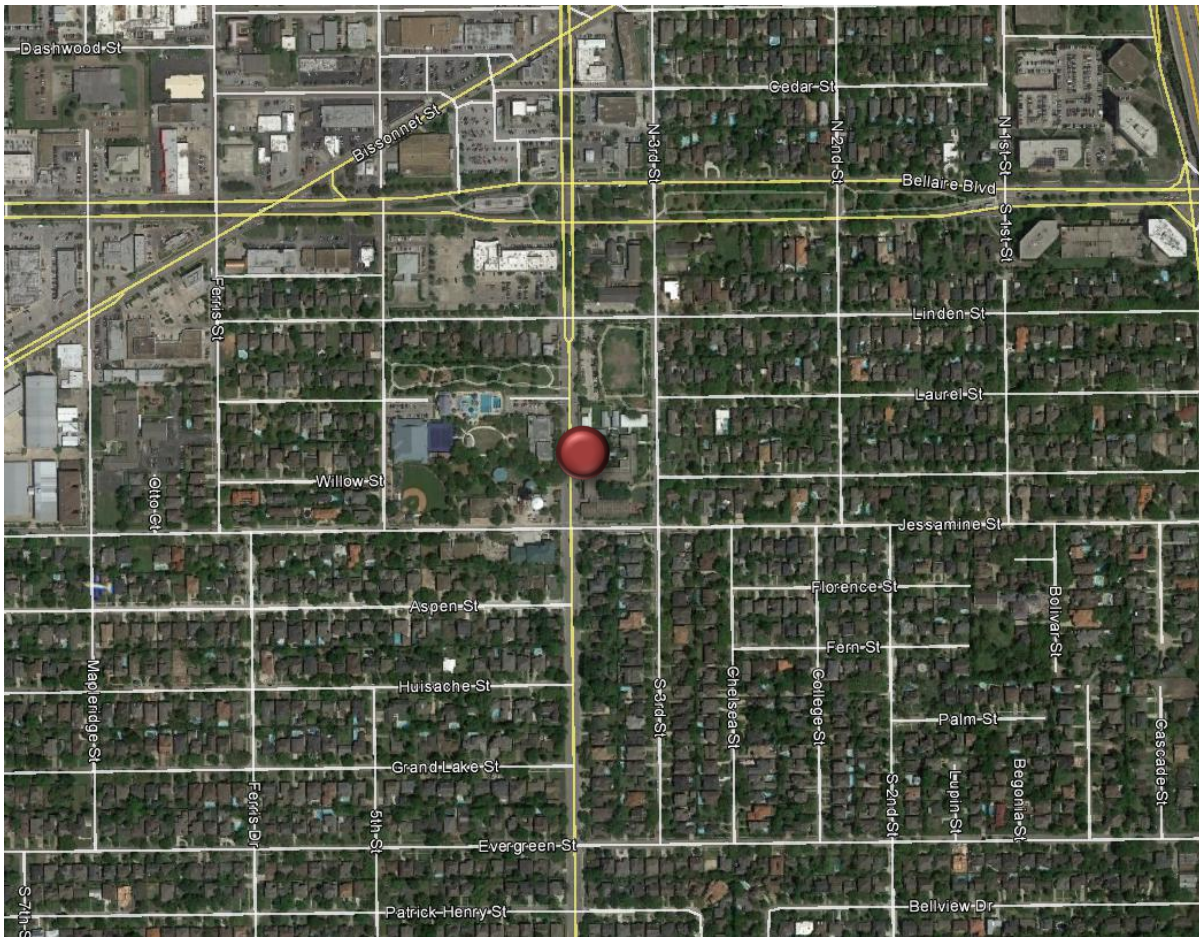
Counter #1

S. Rice at Condit Elementary School

Location Information		
Location Name	S. Rice at Condit Elementary School	
Location Description	Sidewalks on S. Rice Ave. (Northbound) by Condit Elementary School	
Jurisdiction	City of Bellaire	
Agency Deployed	City of Bellaire	
GPS Coordinates	29°42'11"N, 95°28'4"W	
Surrounding Land Uses	North	Single-Family Residential, Retail, Institutional (Church)
	South	Single-Family Residential
	East	Condit Elementary School
	West	Bellaire City Hall, Bellaire-Zindler Park
What object was device secured to?	Sign Post (School Zone/No Parking/Cell Phone Use Prohibited)	
Sidewalk Width	4 feet	
Buffer Width	9 feet	
Street Width	Four-Lane Undivided Roadway with On-Street Parking on Both Sides	
Parallel Parking	Yes (On-Street Parking on Both Sides)	
Landscaping or Trees	Street Trees Planted along S. Rice Ave.	
Sidewalk Pavement Type	Concrete	
ADA Ramps	Yes	
Sidewalk Condition	Good	
Speed Limit	35 mph (also within School Zone: 20 mph)	
Street Lighting	Yes (Intermittent lighting along S. Rice Ave.)	
Street Traffic Volume	12,070 (7500 S. Rice: 2006)	
Transit	Nearby (METRO Bus Stop about 100 feet north on S. Rice Ave.)	
Shade	Yes (Street Trees Planted along S. Rice Ave.)	
Have counts been collected by H-GAC at this location before?	No	

Trends
<ul style="list-style-type: none"> • During the deployment period, there tended to be slightly higher usage on weekends than during weekdays. Due to public events in the area (July 4th Parade and Festival), usage on Saturday, July 4 was much higher than on other weekend days. If data collected on July 4 is excluded, average daily usage on weekends drops from 34 to 18. • On weekdays, peak usage is in the morning (8:00 a.m. – 11:00 a.m.). During the deployment period, weekend usage peaked from 9:00 a.m. to 11:00 a.m. This peak in usage may be more pronounced than typical, since pedestrians were likely traveling to Bellaire’s July 4th Parade and Festival, which was held from 9:30 a.m. to 1:00 p.m. at the nearby Bellaire Town Square. • Counter #2 was placed on the opposite side of S. Rice Avenue. Counter #2 registered more than twice as many users than Counter #1 (1,512 versus 660).

Location Information: Map



Location Information: Photos



Image 1: Sidewalk along S. Rice Ave. Facing North

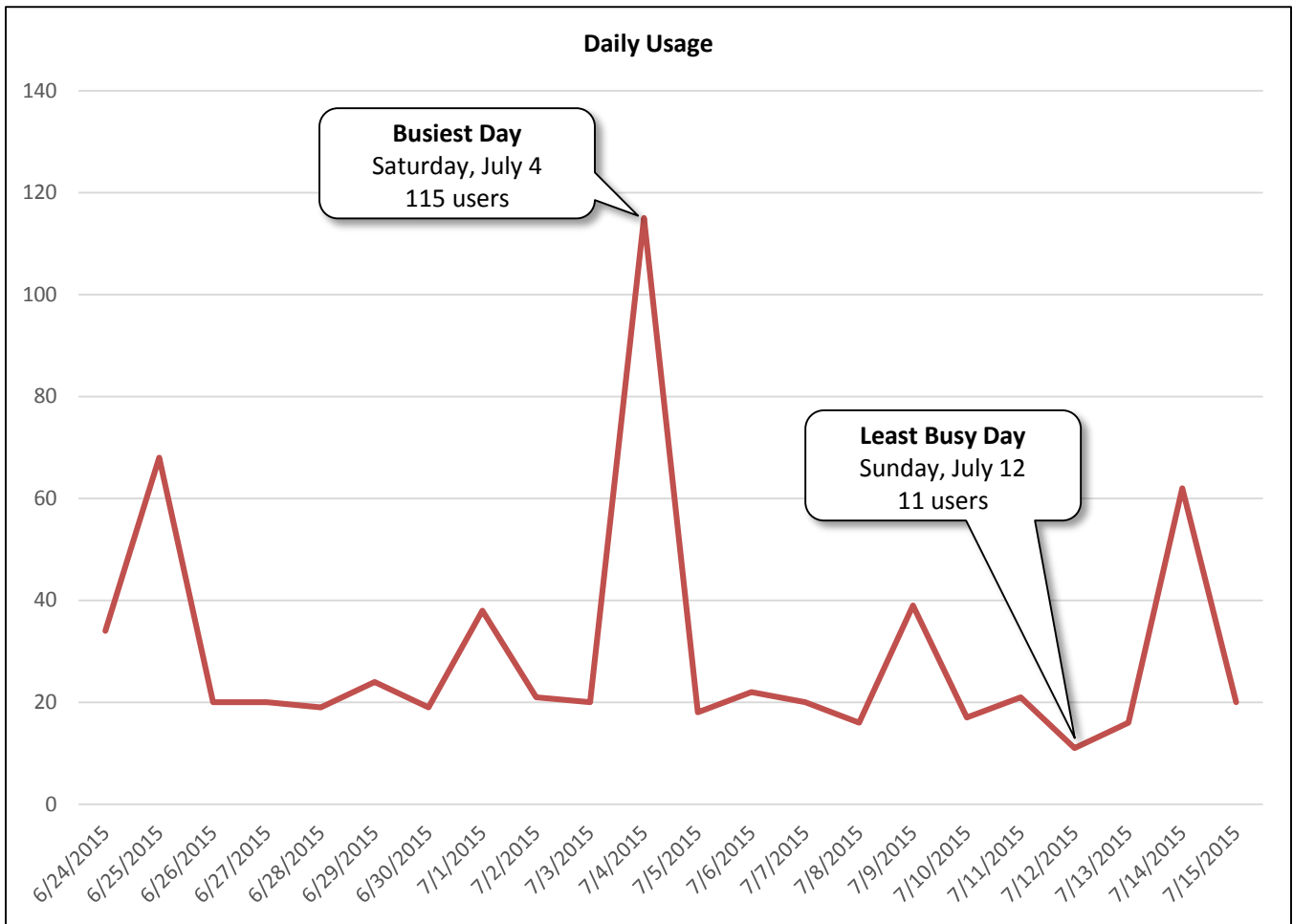


Image 2: Sidewalk along S. Rice Ave. Facing South

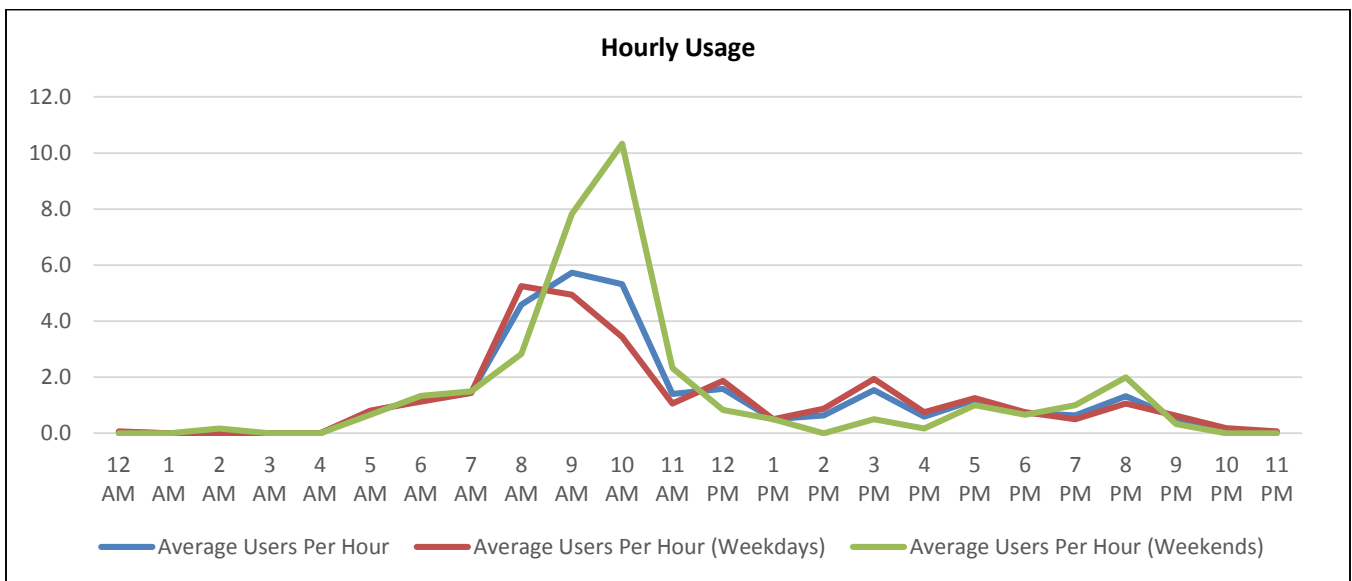
Daily Usage				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Wednesday, June 24, 2015	34	98	77	0
Thursday, June 25, 2015	68	98	77	0
Friday, June 26, 2015	20	96	78	0
Saturday, June 27, 2015	20	95	75	0.44
Sunday, June 28, 2015	19	93	73	0.16
Monday, June 29, 2015	24	93	77	0.05
Tuesday, June 30, 2015	19	95	71	3.06
Wednesday, July 1, 2015	38	89	73	0.21
Thursday, July 2, 2015	21	91	73	0
Friday, July 3, 2015	20	95	77	0
Saturday, July 4, 2015	115	95	78	0
Sunday, July 5, 2015	18	93	78	0
Monday, July 6, 2015	22	91	78	0
Tuesday, July 7, 2015	20	91	80	0
Wednesday, July 8, 2015	16	93	78	0
Thursday, July 9, 2015	39	93	77	0
Friday, July 10, 2015	17	95	77	0
Saturday, July 11, 2015	21	95	77	0
Sunday, July 12, 2015	11	98	78	0
Monday, July 13, 2015	16	98	77	0
Tuesday, July 14, 2015	62	98	77	0
Wednesday, July 15, 2015	20	96	77	0
Total	660			
Average Daily Usage	30			
Average Daily Usage (Weekday)	29			
Average Daily Usage (Weekend)	34			

*Weather conditions recorded at KMCJ (Houston, TX).

Notes
<ul style="list-style-type: none"> Bellaire's July 4th Parade and Festival was held from 9:30 a.m. to 1:00 p.m. at the Bellaire Town Square, which is located behind Bellaire City Hall. There was higher-than-average pedestrian activity at this location between 9:00 a.m. and 11:00 a.m. on July 4. A replacement for Condit Elementary School is currently under construction immediately north of the existing building. Construction activity is underway just north of the counter location. Students at Condit Elementary School are on summer break from May 29, 2015 until August 24, 2015.



Hourly Usage			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.0	0.1	0.0
1:00 a.m.	0.0	0.0	0.0
2:00 a.m.	0.0	0.0	0.2
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	0.8	0.7
6:00 a.m.	1.2	1.1	1.3
7:00 a.m.	1.5	1.4	1.5
8:00 a.m.	4.6	5.3	2.8
9:00 a.m.	5.7	4.9	7.8
10:00 a.m.	5.3	3.4	10.3
11:00 a.m.	1.4	1.1	2.3
12:00 p.m.	1.6	1.9	0.8
1:00 p.m.	0.5	0.5	0.5
2:00 p.m.	0.6	0.9	0.0
3:00 p.m.	1.5	1.9	0.5
4:00 p.m.	0.6	0.8	0.2
5:00 p.m.	1.2	1.3	1.0
6:00 p.m.	0.7	0.8	0.7
7:00 p.m.	0.6	0.5	1.0
8:00 p.m.	1.3	1.1	2.0
9:00 p.m.	0.5	0.6	0.3
10:00 p.m.	0.1	0.2	0.0
11:00 p.m.	0.0	0.1	0.0



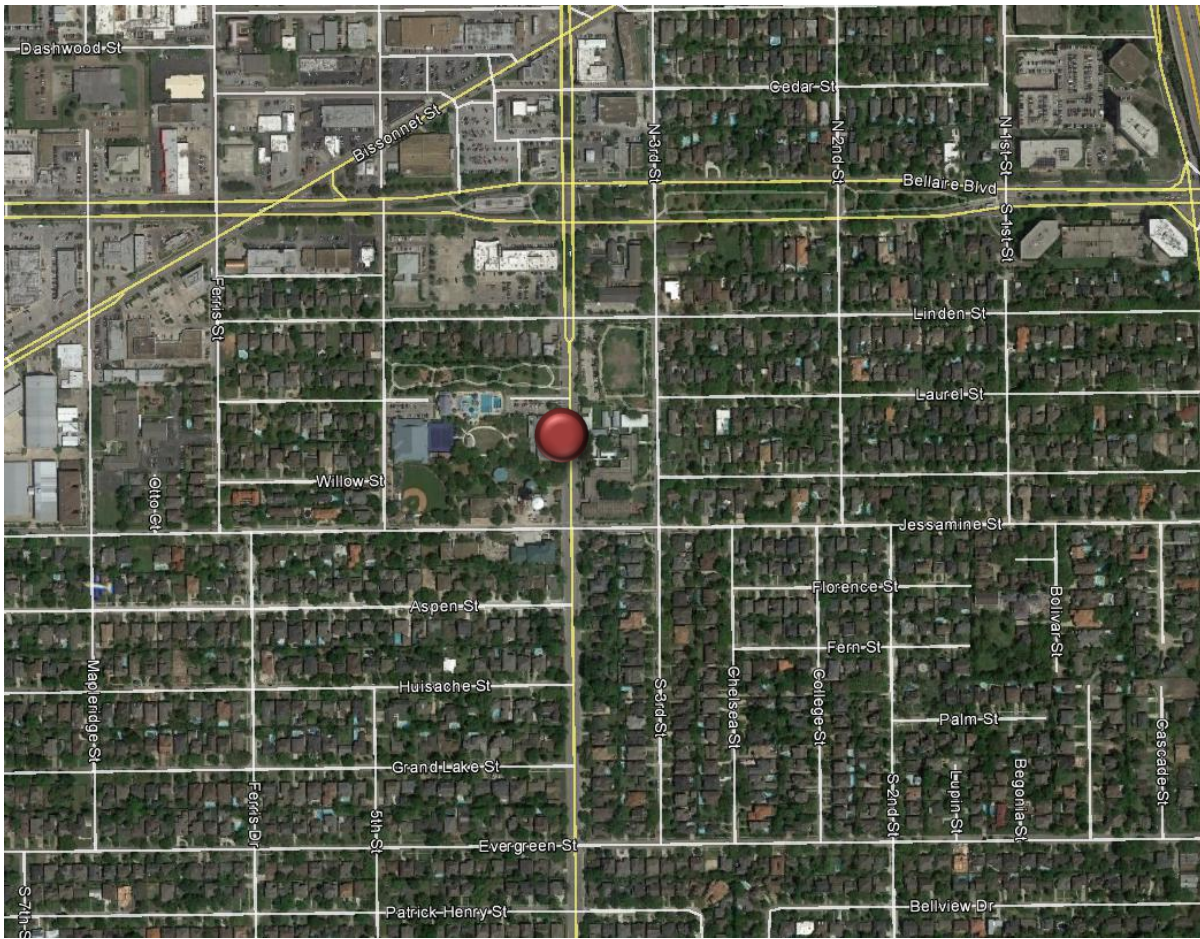
Counter #2

S. Rice at Bellaire City Hall

Location Information		
Location Name	S. Rice at Bellaire City Hall	
Location Description	Sidewalks on S. Rice Ave. (Southbound) by Bellaire City Hall	
Jurisdiction	City of Bellaire	
Agency Deployed	City of Bellaire	
GPS Coordinates	29°42'11.5"N, 95°28'5"W	
Surrounding Land Uses	North	Single-Family Residential, Retail, Institutional (Church)
	South	Single-Family Residential
	East	Condit Elementary School
	West	Bellaire City Hall, Bellaire-Zindler Park
What object was device secured to?	Oak Tree (Second Tree on S. Rice Ave. South of Laurel Street)	
Sidewalk Width	8 feet (Note: Sidewalk narrows to 4 feet at each end of the block.)	
Buffer Width	11 feet	
Street Width	Four-Lane Undivided Roadway with On-Street Parking on Both Sides	
Parallel Parking	Yes (On-Street Parking on Both Sides)	
Landscaping or Trees	Street Trees Planted along S. Rice Ave.	
Sidewalk Pavement Type	Concrete with Exposed Aggregate	
ADA Ramps	Yes	
Sidewalk Condition	Good	
Speed Limit	35 mph (also within School Zone: 20 mph)	
Street Lighting	Yes (Intermittent lighting along S. Rice Ave.)	
Street Traffic Volume	12,070 (7500 S. Rice: 2006)	
Transit	Nearby (METRO Bus Stops about 100 feet north and 400 feet south on S. Rice Ave.)	
Shade	Yes (Street Trees Planted along S. Rice Ave.)	
Have counts been collected by H-GAC at this location before?	No	

Trends
<ul style="list-style-type: none"> • During the deployment period, there tended to be higher usage on weekends than during weekdays. Due to public events in the area (July 4th Parade and Festival), usage on Saturday, July 4 was much higher than other weekend days. If data collected on July 4 is excluded, average daily usage on weekends drops from 69 to 30. • On weekdays, usage remained relatively steady during daylight hours, with slightly higher usage in the morning. • During the deployment period, weekend usage peaked in the late morning and mid-day. This peak in usage may be more pronounced than typical, since pedestrians were likely traveling to Bellaire’s July 4th Parade and Festival, which was held from 9:30 a.m. to 1:00 p.m. at the nearby Bellaire Town Square. There was higher-than-average pedestrian activity at this location between 9:00 a.m. to 1:00 p.m. on July 4 (445 people passed the counter during that period, while average usage between 9:00 a.m. and 1:00 p.m. on non-holiday weekend days is 5.6).

Location Information: Map



Location Information: Photos



Image 3: Sidewalk along S. Rice Ave. Facing North

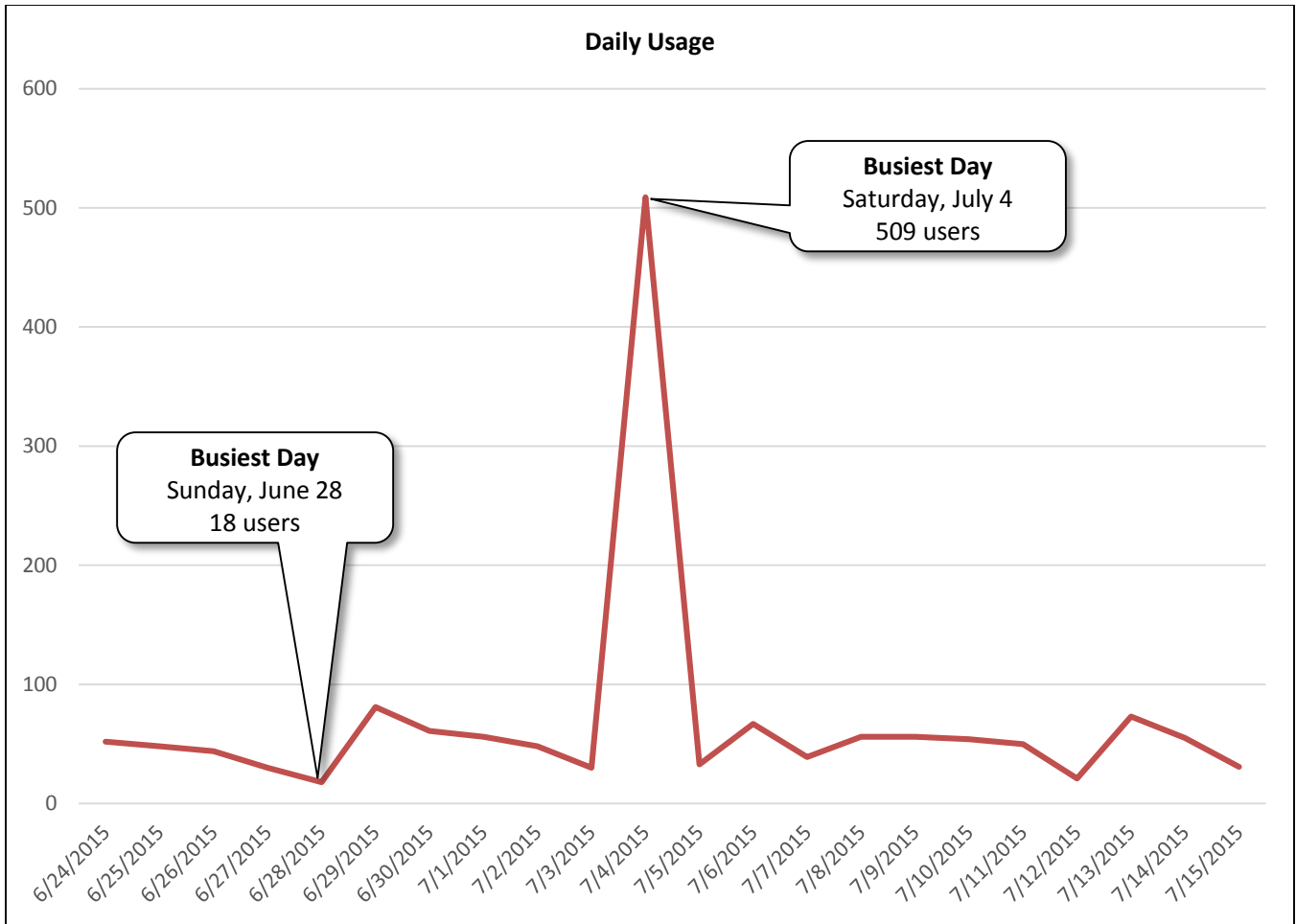


Image 4: Sidewalk along S. Rice Ave. Facing South

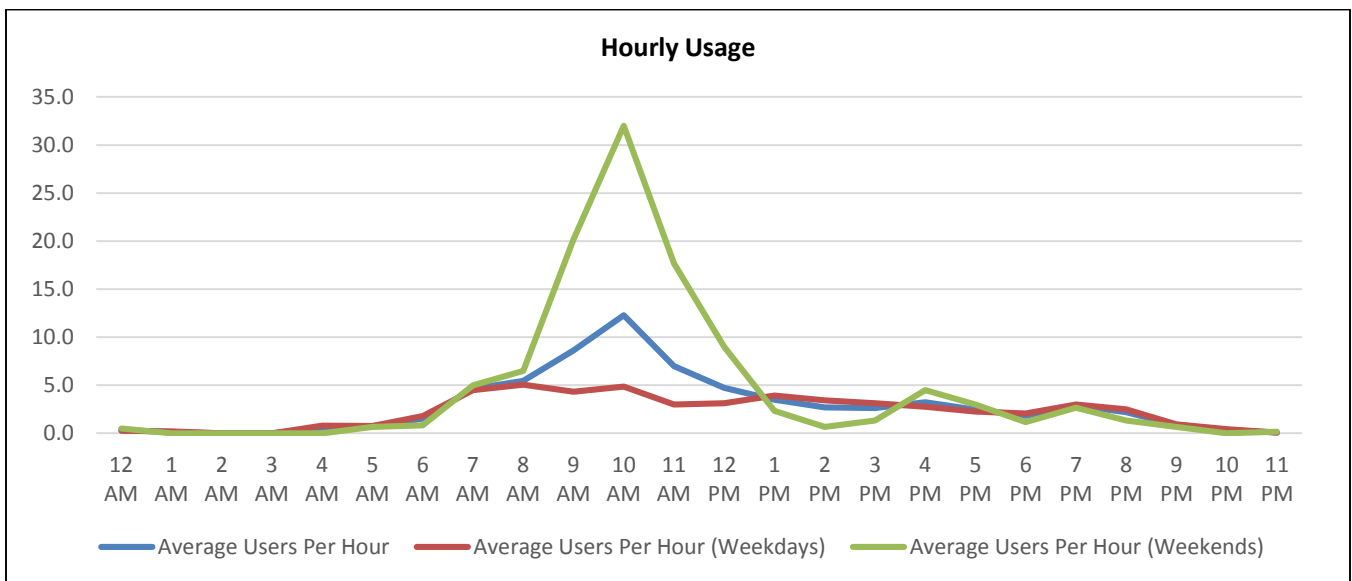
Daily Usage				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Wednesday, June 24, 2015	52	98	77	0
Thursday, June 25, 2015	48	98	77	0
Friday, June 26, 2015	44	96	78	0
Saturday, June 27, 2015	30	95	75	0.44
Sunday, June 28, 2015	18	93	73	0.16
Monday, June 29, 2015	81	93	77	0.05
Tuesday, June 30, 2015	61	95	71	3.06
Wednesday, July 1, 2015	56	89	73	0.21
Thursday, July 2, 2015	48	91	73	0
Friday, July 3, 2015	30	95	77	0
Saturday, July 4, 2015	509	95	78	0
Sunday, July 5, 2015	33	93	78	0
Monday, July 6, 2015	67	91	78	0
Tuesday, July 7, 2015	39	91	80	0
Wednesday, July 8, 2015	56	93	78	0
Thursday, July 9, 2015	56	93	77	0
Friday, July 10, 2015	54	95	77	0
Saturday, July 11, 2015	50	95	77	0
Sunday, July 12, 2015	21	98	78	0
Monday, July 13, 2015	73	98	77	0
Tuesday, July 14, 2015	55	98	77	0
Wednesday, July 15, 2015	31	96	77	0
Total	1,512			
Average Daily Usage	69			
Average Daily Usage (Weekday)	53			
Average Daily Usage (Weekend)	110			

*Weather conditions recorded at KMCJ (Houston, TX).

Notes
<ul style="list-style-type: none"> Bellaire's July 4th Parade and Festival was held at from 9:30 a.m. to 1:00 p.m. at the Bellaire Town Square, which is located behind Bellaire City Hall. There was higher-than-average pedestrian activity at this location between 9:00 a.m. to 1:00 p.m. on July 4 (445 people passed the counter during that period, while average usage between 9:00 a.m. and 1:00 p.m. on non-holiday weekend days is 5.6). Students at Condit Elementary School, which is located across from Bellaire City Hall, are on summer break from May 29, 2015 until August 24, 2015.



Hourly Usage			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.3	0.3	0.5
1:00 a.m.	0.1	0.2	0.0
2:00 a.m.	0.0	0.0	0.0
3:00 a.m.	0.0	0.0	0.0
4:00 a.m.	0.6	0.8	0.0
5:00 a.m.	0.7	0.8	0.7
6:00 a.m.	1.5	1.8	0.8
7:00 a.m.	4.6	4.5	5.0
8:00 a.m.	5.5	5.1	6.5
9:00 a.m.	8.6	4.3	20.2
10:00 a.m.	12.3	4.9	32.0
11:00 a.m.	7.0	3.0	17.7
12:00 p.m.	4.7	3.1	9.0
1:00 p.m.	3.5	3.9	2.3
2:00 p.m.	2.7	3.4	0.7
3:00 p.m.	2.6	3.1	1.3
4:00 p.m.	3.2	2.8	4.5
5:00 p.m.	2.5	2.3	3.0
6:00 p.m.	1.8	2.1	1.2
7:00 p.m.	2.9	3.0	2.7
8:00 p.m.	2.2	2.5	1.3
9:00 p.m.	0.9	0.9	0.7
10:00 p.m.	0.3	0.4	0.0
11:00 p.m.	0.1	0.1	0.2



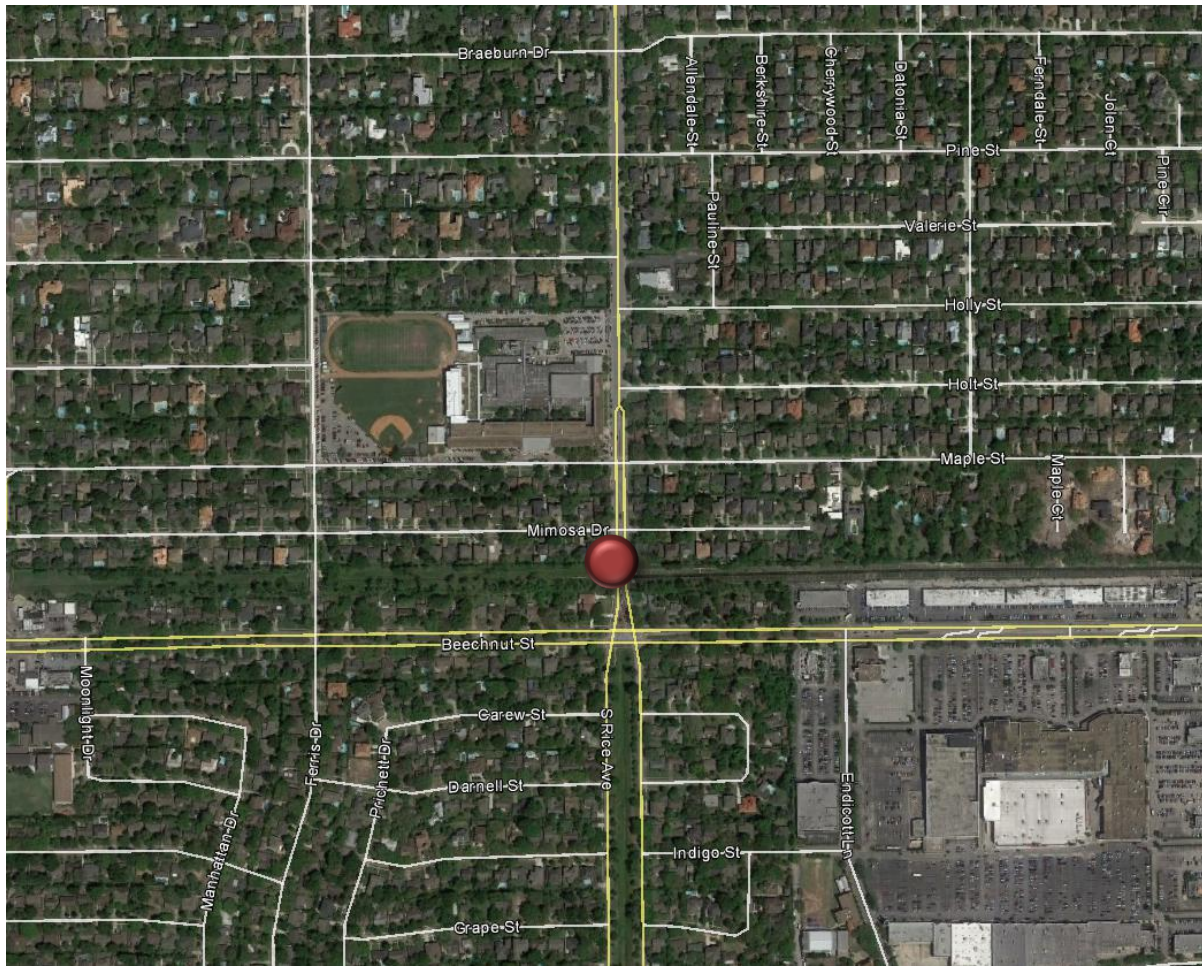
Counter #3

S. Rice at Beechnut Ditch

Location Information		
Location Name	S. Rice at Beechnut Ditch	
Location Description	Sidewalks on S. Rice Ave. (Southbound) by Bridge over Beechnut Ditch	
Jurisdiction	City of Bellaire	
Agency Deployed	City of Bellaire	
GPS Coordinates	29°41'24"N, 95°28'4"W	
Surrounding Land Uses	North	Single-Family Residential and Bellaire High School
	South	Single-Family Residential
	East	Single-Family Residential
	West	Single-Family Residential
What object was device secured to?	Sign Post (No Parking)	
Sidewalk Width	4 feet	
Buffer Width	8 feet (Note: No Buffer between Sidewalk and Travel Lanes on Nearby Bridge)	
Street Width	Four-Lane Roadway with Landscaped Median	
Parallel Parking	No	
Landscaping or Trees	None	
Sidewalk Pavement Type	Concrete	
ADA Ramps	Yes	
Sidewalk Condition	Good	
Speed Limit	35 mph	
Street Lighting	Yes (Intermittent lighting along S. Rice Ave.)	
Street Traffic Volume	10,680 (8300 S. Rice: 2006)	
Transit	Nearby (METRO Bus Stop about 350 feet south on S. Rice Ave.)	
Shade	No	
Have counts been collected by H-GAC at this location before?	No	

Trends
<ul style="list-style-type: none"> • Usage varied significantly from day-to-day, ranging from 10 to 95 users. • Average daily usage during weekdays was significantly higher than average daily usage on weekends. City of Houston employees were seen performing maintenance work on the north bank of the Beechnut Ditch near the counter on July 6 and July 7. Higher counts on weekdays could be attributed to the presence of those workers. • On weekends, usage peaked in the morning. • On weekdays, usage was highest from 7:00 a.m. to 8:00 a.m. and from 10:00 a.m. to 11:00 a.m. These peaks in usage may be more pronounced than typical weekdays, since workers were performing maintenance on a nearby drainage ditch.

Location Information: Map



Location Information: Photos



Image 5: Sidewalk along S. Rice Facing North

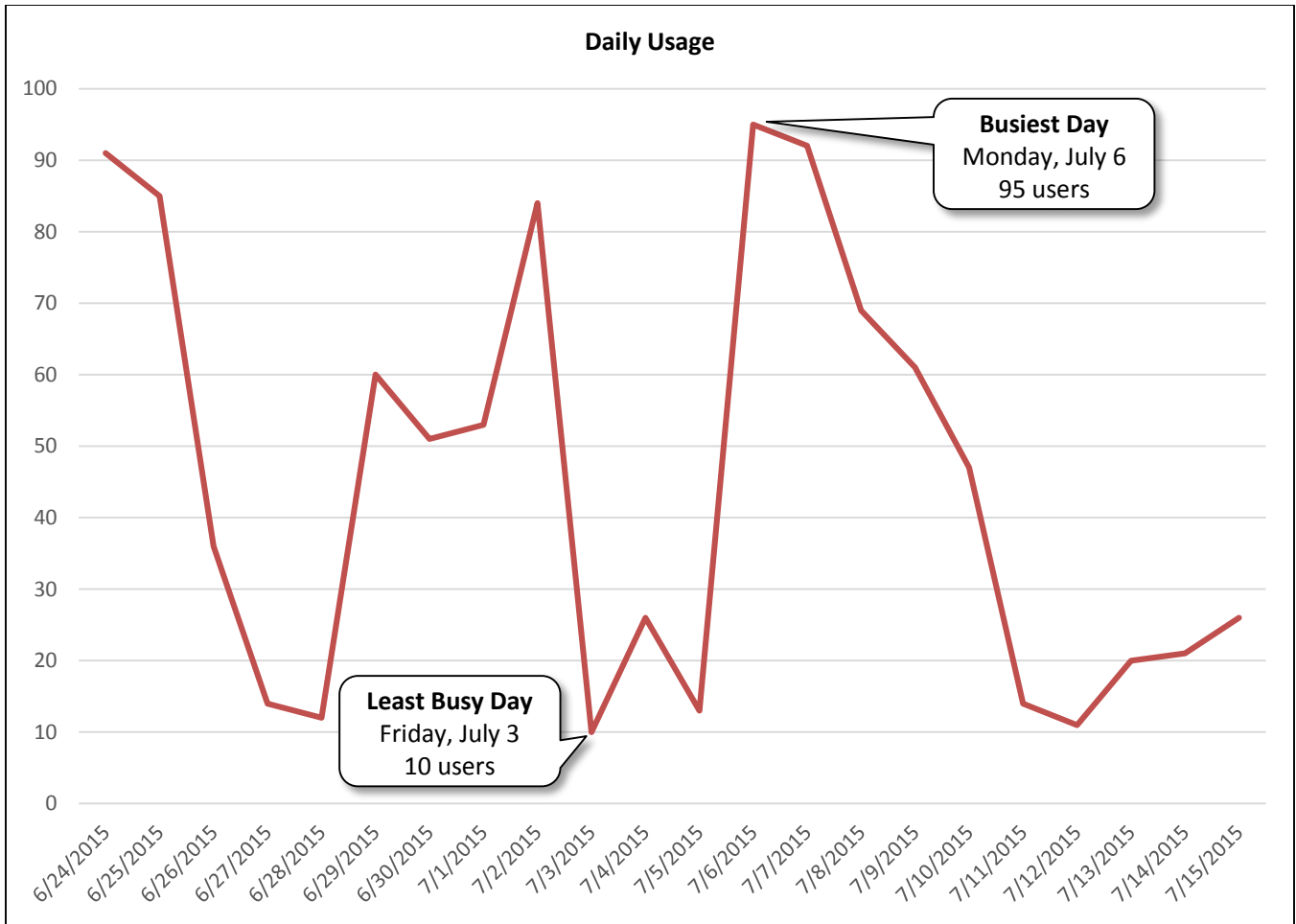


Image 6: Sidewalk along S. Rice Ave. Facing South

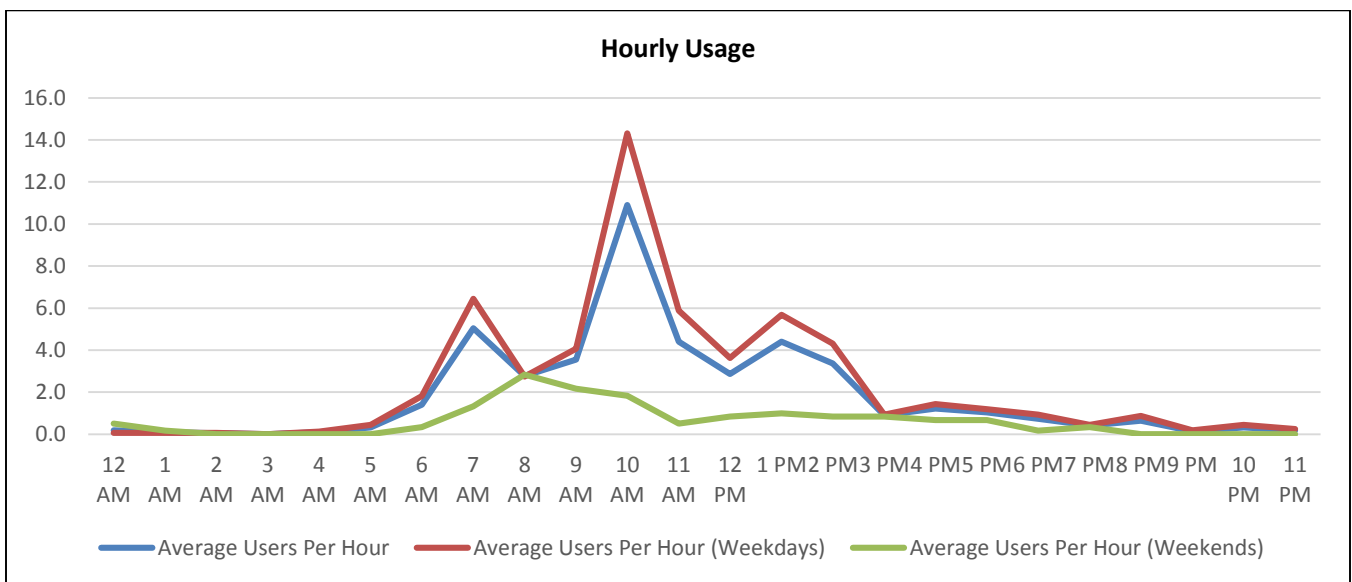
Daily Usage				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Wednesday, June 24, 2015	91	98	77	0
Thursday, June 25, 2015	85	98	77	0
Friday, June 26, 2015	36	96	78	0
Saturday, June 27, 2015	14	95	75	0.44
Sunday, June 28, 2015	12	93	73	0.16
Monday, June 29, 2015	60	93	77	0.05
Tuesday, June 30, 2015	51	95	71	3.06
Wednesday, July 1, 2015	53	89	73	0.21
Thursday, July 2, 2015	84	91	73	0
Friday, July 3, 2015	10	95	77	0
Saturday, July 4, 2015	26	95	78	0
Sunday, July 5, 2015	13	93	78	0
Monday, July 6, 2015	95	91	78	0
Tuesday, July 7, 2015	92	91	80	0
Wednesday, July 8, 2015	69	93	78	0
Thursday, July 9, 2015	61	93	77	0
Friday, July 10, 2015	47	95	77	0
Saturday, July 11, 2015	14	95	77	0
Sunday, July 12, 2015	11	98	78	0
Monday, July 13, 2015	20	98	77	0
Tuesday, July 14, 2015	21	98	77	0
Wednesday, July 15, 2015	26	96	77	0
Total	991			
Average Daily Usage	45			
Average Daily Usage (Weekday)	56			
Average Daily Usage (Weekend)	15			

*Weather conditions recorded at KMCJ (Houston, TX).

Notes
<ul style="list-style-type: none"> City of Houston employees were seen performing maintenance work on the north bank of the Beechnut Ditch near the counter on July 6 and July 7. Higher counts on those days could be attributed to the presence of those workers. Bellaire High School is located along S. Rice Avenue about 450 feet north of the counter location. Students at Bellaire High School are on summer break from May 29, 2015 until August 24, 2015.



Hourly Usage			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.2	0.1	0.5
1:00 a.m.	0.1	0.1	0.2
2:00 a.m.	0.0	0.1	0.0
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.	1.4	1.8	0.3
7:00 a.m.	5.0	6.4	1.3
8:00 a.m.	2.8	2.8	2.8
9:00 a.m.	3.5	4.1	2.2
10:00 a.m.	10.9	14.3	1.8
11:00 a.m.	4.4	5.9	0.5
12:00 p.m.	2.9	3.6	0.8
1:00 p.m.	4.4	5.7	1.0
2:00 p.m.	3.4	4.3	0.8
3:00 p.m.	0.9	0.9	0.8
4:00 p.m.	1.2	1.4	0.7
5:00 p.m.	1.0	1.2	0.7
6:00 p.m.	0.7	0.9	0.2
7:00 p.m.	0.4	0.4	0.3
8:00 p.m.	0.6	0.9	0.0
9:00 p.m.	0.1	0.2	0.0
10:00 p.m.	0.3	0.4	0.0
11:00 p.m.	0.2	0.3	0.0



Counter Locations



Participants

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

City of Bellaire
www.ci.bellaire.tx.us

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