HOUSTON-GALVESTON AREA COUNCIL



Temporary Pedestrian/Bicycle Counters Data Summary

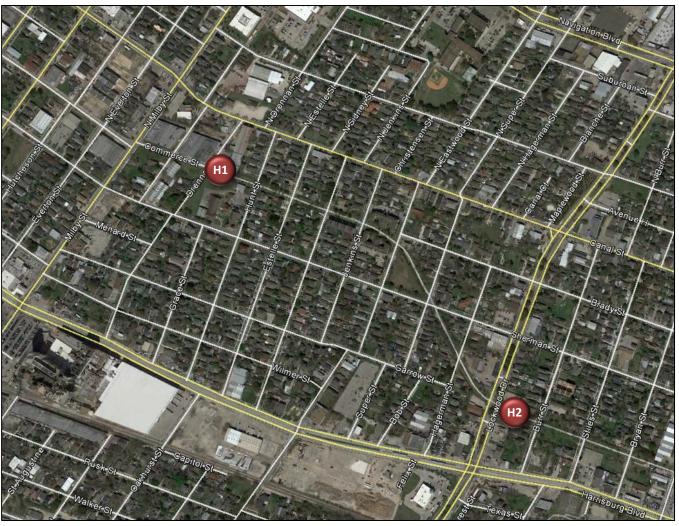
Deployment Summary				
Sponsoring Agency	City of Houston: Par	City of Houston: Parks and Recreation Department		
Deployment Period	Counters H1 – T4	Friday, September 16, 2016 – Tuesday, September 27, 2016		
	Counters T5 – T14	Friday, September 16, 2016 – Monday, September 26, 2016		
Number of Counters Deployed	20			
Facility Description	Shared-Use Paths in (Brays Bayou Trail, G	East Houston Columbia Tap Trail, and Harrisburg Trail)		
Locations Deployed (Houston-Ga	alveston Area Council	+ Texas Transportation Institute)		
Counter H1	Harrisburg Trail at D	Orennan Street		
Counter H2	Harrisburg Trail at L	ockwood Drive		
Counter H3	Brays Bayou Trail at	Pasadena Street		
Counter H4	Brays Bayou Trail at	Gus Wortham Golf Course		
Counter H5	Brays Bayou Trail at Lawndale Street			
Counter H6	Columbia Tap Trail at Live Oak Street			
Counter H7	Columbia Tap Trail at Polk Street			
Counter T1	Columbia Tap Trail at Webster Street			
Counter T2	Columbia Tap Trail at Alabama Street			
Counter T3	Columbia Tap Trail at Blodgett Street			
Counter T4	Columbia Tap Trail a	at Southmore Boulevard		
Counter T5	Columbia Tap Trail a	at North MacGregor Way		
Counter T7	Brays Bayou Trail: N	lorth Bank West of Columbia Tap Trail		
Counter T8	Brays Bayou Trail: N	lorth Bank East of Columbia Tap Trail		
Counter T9	Brays Bayou Trail: South Bank West of Columbia Tap Trail			
Counter T10	Brays Bayou Trail: South Bank East of Columbia Tap Trail			
Counter T11	Columbia Tap Trail a	at South MacGregor Way		
Counter T12	Columbia Tap Trail at State Highway 288			
Counter T13	Bill Coats Bridge at Hermann Park			
Counter T14	The Spires Pedestrian/Bicycle Bridge			

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.

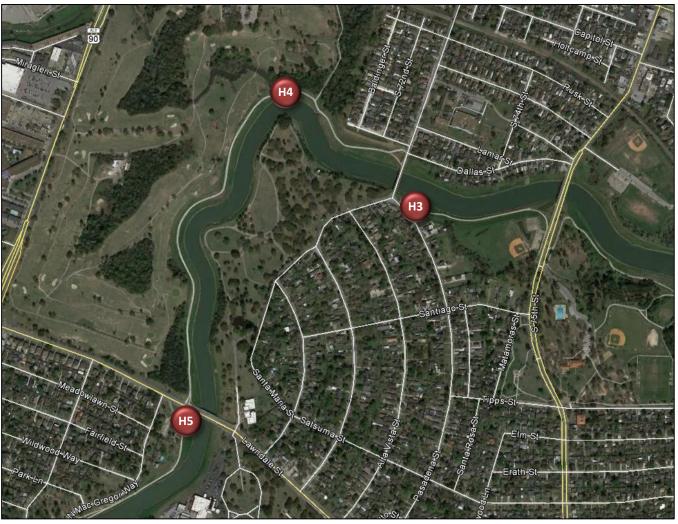
Harrisburg Trail: East End (Houston)



Counter	Location	Average Daily Usage	Total Users	Page Number
H1	Harrisburg Trail at Drennan Street	64	766	7
H2	Harrisburg Trail at Lockwood Drive	273	2,037*	12

^{*}Counter H2 stopped collecting data prior to the end of the deployment period, at approximately 11:00 a.m. on Friday, September 23, 2016 (batteries died).

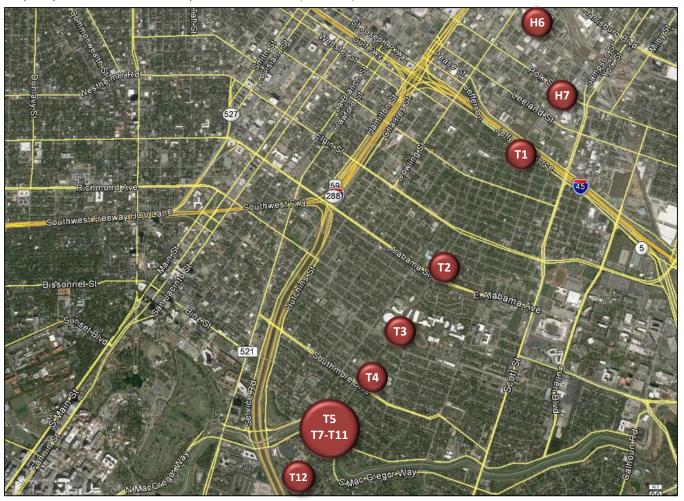
Brays Bayou Trail (Lawndale Street to S. 75th Street): East End (Houston)



Counter	Location	Average Daily Usage	Total Users	Page Number
Н3	Brays Bayou Trail at Pasadena Street	N/A*	N/A*	17
H4	Brays Bayou Trail at Gus Wortham Golf Course	87	1,044	19
H5	Brays Bayou Trail at Lawndale Street	42	506	24

^{*}Counter H3 malfunctioned and did not collect data during the deployment period.

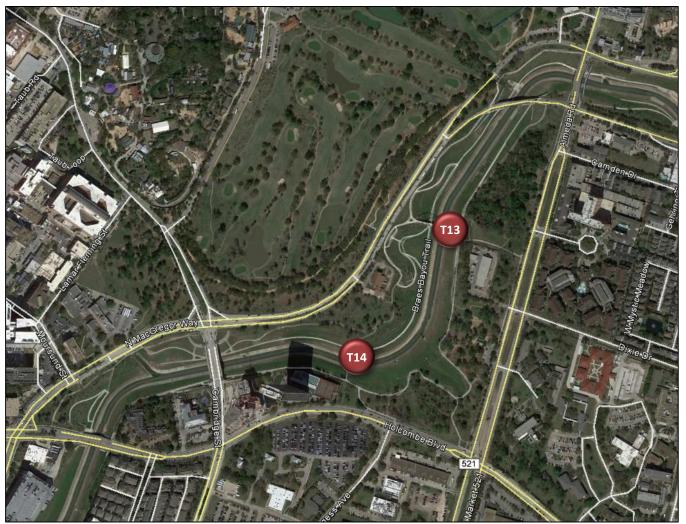
Columbia Trail: East Downtown/Third Ward (Houston)
Brays Bayou Trail at Columbia Tap Trail: Third Ward (Houston)



Counter	Location	Average Daily Usage	Total Users	Page Number
H6	Columbia Tap Trail at Live Oak Street	136	1,633	29
H7	Columbia Tap Trail at Polk Street	108	1,293	34
T1	Columbia Tap Trail at Webster Street	86	1,026	38
T2	Columbia Tap Trail at Alabama Street	178	2,130	43
T3	Columbia Tap Trail at Blodgett Street	135	1,620	48
T4	Columbia Tap Trail at Southmore Boulevard	86	1,034	52
T5	Columbia Tap Trail at North MacGregor Way	115	1,263	56
T7	Brays Bayou Trail: North Bank West of Columbia Tap Trail	68	749	61
T8	Brays Bayou Trail: North Bank East of Columbia Tap Trail	45	493	65
Т9	Brays Bayou Trail: South Bank West of Columbia Tap Trail	42	465	69
T10	Brays Bayou Trail: South Bank East of Columbia Tap Trail	74	812	73
T11	Columbia Tap Trail at South MacGregor Way	45	499	77
T12	Columbia Tap Trail at State Highway 288	N/A*	N/A*	81

^{*}Counter T12 malfunctioned and did not collet accurate data during the deployment period.

Pedestrian/Bicycle Bridges along Brays Bayou within Hermann Park (Houston)



Counter	Location	Average Daily Usage	Total Users	Page Number
T13	Bill Coats Bridge at Hermann Park	295	3,248	83
T14	The Spires Pedestrian/Bicycle Bridge	96	1,053	87

Deployment Highlights

• Weekday Usage vs. Weekend Usage

Some facilities tended to experience higher daily usage on weekdays, while others had higher daily usage during weekends.

The following pedestrian/bicycle facilities generally had higher daily usage on weekdays:

- Harrisburg Trail
- o Columbia Tap Trail (Interstate 45 to Southmore Boulevard near Texas Southern University)
- o The Spires Pedestrian/Bicycle Bridge over Brays Bayou

These facilities generally had higher daily usage during weekends:

- Columbia Tap Trail (North of Interstate 45 in East Downtown)
- Columbia Tap Trail near Brays Bayou Trail
- o Brays Bayou Trail near Columbia Tap Trail
- Bill Coats Bridge at Hermann Park

Proximity to different land uses and destinations may contribute to varying usage levels throughout the week. For example, usage along the Columbia Tap Trail near Texas Southern University may be higher on weekdays since most classes are held then; students, facility, and others are more likely to be traveling to and from campus Monday through Friday.

• Columbia Tap Trail: Decreased Usage Since Previous Deployment

At some locations, temporary pedestrian/bicycle counters have been deployed multiple times. Counters were deployed along portions of the Columbia Tap Trail in September 2015 and during the current deployment. At most locations, average daily usage decreased between September 2015 and September 2016.

Location	Average Daily Usage: September 2015	Average Daily Usage: September 2016	Percent Change (Sept. 2015 – Sept. 2016)
Columbia Tap Trail at Live Oak Street	236	136	-42%
Columbia Tap Trail at Webster Street	116	86	-26%
Columbia Tap Trail at Alabama Street	468	178	-62%
Columbia Tap Trail at North MacGregor Way	138	115	-17%

Usage also decreased between September 2015 and September 2016 at some locations along Brays Bayou Trail and Harrisburg Trail.

Further investigation is needed to determine why usage may have decreased. Weather may have been a contributing factor. It was cooler and drier in September 2015 than during the deployment in September 2016, making walking and biking more comfortable.

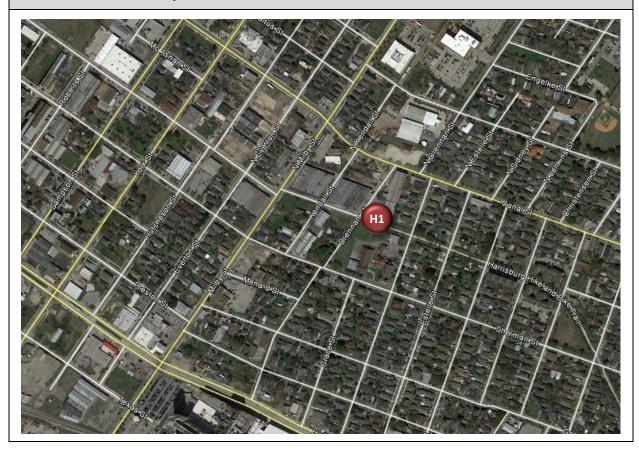
Comparison of Weather Conditions: September 2015 Deployment and September 2016 Deployment

	September 2015	September 2016
Average High Temperature (°F)	88	92
Min./Max. High Temperatures During Deployment (°F)	76/94	85/97
Average Daily Rainfall (inches)	0.01"	0.13"

Harrisburg Trail at Drennan Street

Location Information			
Location Name	Harrisburg Trail at Drennan Street		
Location Description	Harrisburg Trail (Shared-Use Path) East of Drennan Street		
Jurisdiction	City of H	ouston	
Agency Deployed	City of H	ouston: Parks and Recreation Department	
GPS Coordinates	29°44'56	.82"N, 95°20'3.33"W	
Surrounding Land Uses	North	Industrial, Single-Family Residential	
	South	Institutional (Church), Single-Family Residential	
	East	Institutional (Church), Single-Family Residential	
	West	Industrial, Single-Family Residential	
What object was device secured to?	Tree (Thi	ird Tree East of Drennan Street South of Harrisburg Trail)	
Sidewalk Width	10'		
Buffer Width	N/A (Off-	-Road Shared-Use Path)	
Street Width	N/A (Off-Road Shared-Use Path)		
Parallel Parking	N/A (Off-Road Shared-Use Path)		
Landscaping or Trees	Yes (Trees Planted at Regular Intervals)		
Sidewalk Pavement Type	Concrete		
ADA Ramps	Yes		
Sidewalk Condition	Excellent		
Speed Limit	N/A (Off-	-Road Shared-Use Path)	
Street Lighting	Yes		
Street Traffic Volume	N/A (Off-Road Shared-Use Path)		
Transit	Yes		
		us Stop 600' Northeast at Canal St./Hunt St. Intersection)	
Shade	Yes		
Have counts been collected by	Yes		
H-GAC at this location before?	(September 2015 and March 2016)		

- Average daily usage is 64 users/day.
- Usage tends to be higher on weekdays (67 users/day) than during weekends (58 users/day).
- On weekdays, usage is highest in the early morning (6:00 a.m. 7:00 a.m.) and the evening (7:00 p.m. 8:00 p.m.).
- During weekends, usage is highest in the late morning (10:00 a.m. 11:00 a.m.) and midday (12:00 p.m. 1:00 p.m.).
- Pedestrian/bicycle counts were collected at this location in September 2015, March 2016, and September 2016. Average daily usage in September 2016 (64 users/day) is lower than that recorded in September 2015 (109 users/day), but higher than usage in March 2016 (54 users/day).



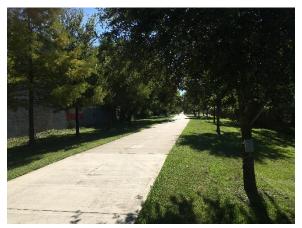


Image 1: Harrisburg Trail at Drennan Street Facing East



Image 2: Harrisburg Trail at Drennan Street Facing West

Daily Usage Harrisburg Trail at Drennan Street				
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, September 16, 2016	58	92	76	0.01
Saturday, September 17, 2016	59	96	75	0
Sunday, September 18, 2016	58	97	76	0
Monday, September 19, 2016	55	96	76	0
Tuesday, September 20, 2016	83	96	76	0
Wednesday, September 21, 2016	79	94	73	0
Thursday, September 22, 2016	66	92	75	0
Friday, September 23, 2016	50	90	75	Т
Saturday, September 24, 2016	62	92	76	0.69
Sunday, September 25, 2016	54	90	72	0.53

61

81

86

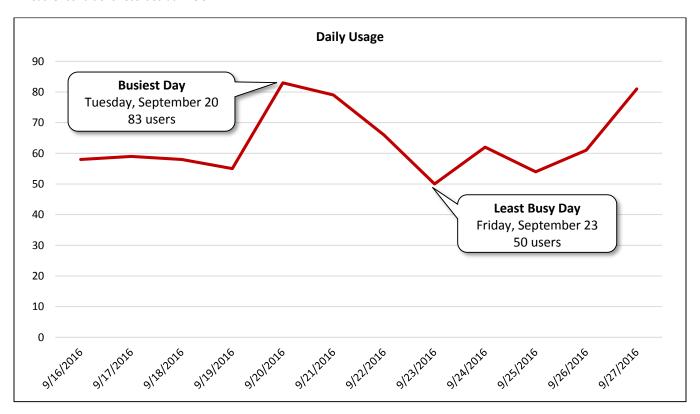
85

Total	766
Average Daily Usage	64
Average Daily Usage (Weekday)	67
Average Daily Usage (Weekend)	58

^{*}Weather conditions recorded at KHOU.

Monday, September 26, 2016

Tuesday, September 27, 2016

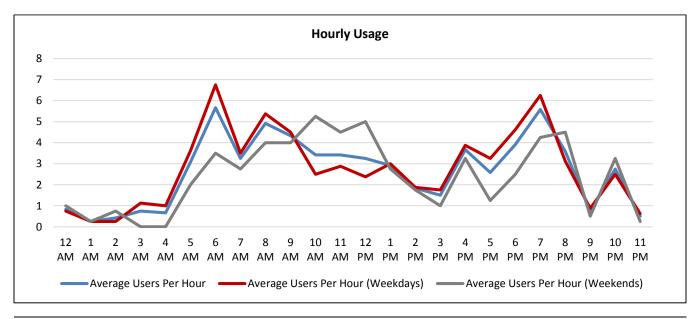


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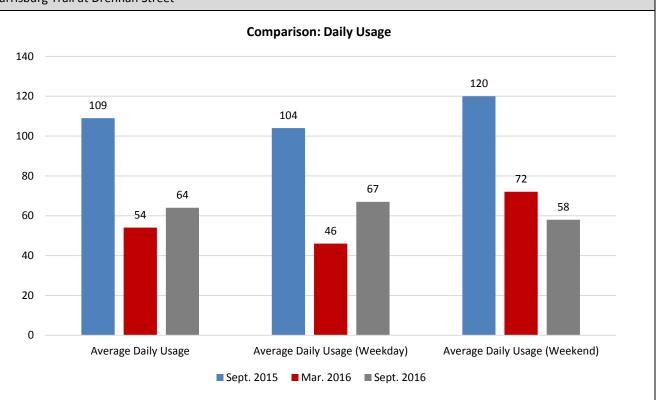
71

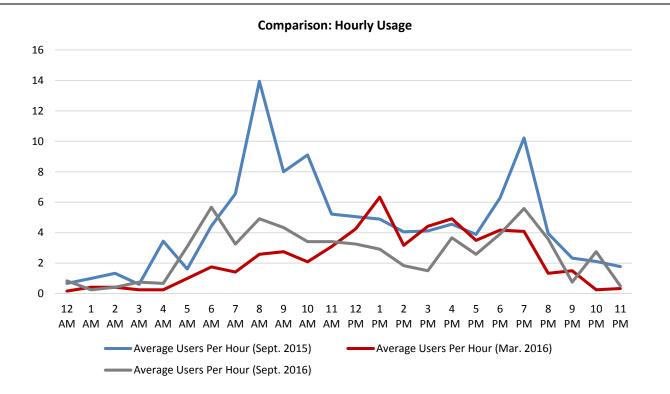
Hourly Usage Harrisburg Trail at	Drennan Street		
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.8	0.8	1.0
1:00 a.m.	0.3	0.3	0.3
2:00 a.m.	0.4	0.3	0.8
3:00 a.m.	0.8	1.1	0.0
4:00 a.m.	0.7	1.0	0.0
5:00 a.m.	3.1	3.6	2.0
6:00 a.m.	5.7	6.8	3.5
7:00 a.m.	3.3	3.5	2.8
8:00 a.m.	4.9	5.4	4.0
9:00 a.m.	4.3	4.5	4.0
10:00 a.m.	3.4	2.5	5.3
11:00 a.m.	3.4	2.9	4.5
12:00 p.m.	3.3	2.4	5.0
1:00 p.m.	2.9	3.0	2.8
2:00 p.m.	1.8	1.9	1.8
3:00 p.m.	1.5	1.8	1.0
4:00 p.m.	3.7	3.9	3.3
5:00 p.m.	2.6	3.3	1.3
6:00 p.m.	3.9	4.6	2.5
7:00 p.m.	5.6	6.3	4.3
8:00 p.m.	3.6	3.1	4.5
9:00 p.m.	0.8	0.9	0.5
10:00 p.m.	2.8	2.5	3.3
11:00 p.m.	0.5	0.6	0.3



Historical Comparison

Harrisburg Trail at Drennan Street

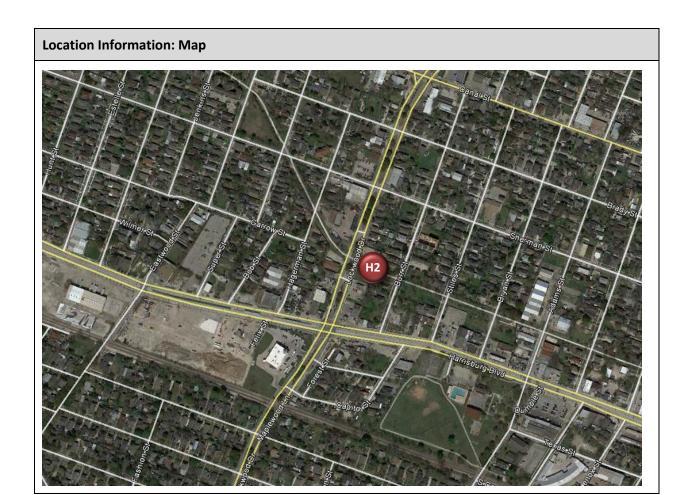




Harrisburg Trail at Lockwood Drive

Location Information			
Location Name	Harrisburg Trail at Lockwood Drive		
Location Description	Harrisburg Trail (Shared-Use Path) East of Lockwood Drive		
Jurisdiction	City of Ho	uston	
Agency Deployed	City of Ho	uston: Parks and Recreation Department	
GPS Coordinates	29°44'41"	N, 95°19'41"W	
Surrounding Land Uses	North	Commercial, Single-Family Residential	
	South	Commercial, Single-Family Residential	
	East	Single-Family Residential	
	West	Commercial, Single-Family Residential	
What object was device secured to?	Sign Post	(Bike Route/Directional Signs)	
Sidewalk Width	10'		
Buffer Width	N/A (Off-I	Road Shared-Use Path)	
Street Width	N/A (Off-I	Road Shared-Use Path)	
Parallel Parking	N/A (Off-I	Road Shared-Use Path)	
Landscaping or Trees	Yes		
Sidewalk Pavement Type	Concrete		
ADA Ramps	Yes		
Sidewalk Condition	Good		
Speed Limit	N/A (Off-I	Road Shared-Use Path)	
Street Lighting	Yes		
Street Traffic Volume	N/A (Off-I	Road Shared-Use Path)	
Transit	Yes (METRO Bus Stops 400' South at Harrisburg Blvd./Lockwood Drive and 500' North at Sherman St./Lockwood Dr.)		
Shade	Yes		
Have counts been collected by H-GAC at this location before?	Yes (September 2015 and March 2016)		
Notes	Counter H2 stopped collecting data prior to the end of the deployment period, at approximately 11:00 a.m. on Friday, September 23, 2016 (batteries died).		

- Average daily usage is 273 users/day.
- Usage tends to be higher on weekdays (316 users/day) than during weekends (155 users/day). There was unusually high usage on Thursday, September 22, 2016 (especially in the afternoon and evening) and during the morning hours of Friday, September 23, 2016.
- On weekdays, usage is highest in the morning (9:00 a.m. 10:00 a.m.).
- During weekends, usage is highest midday (11:00 a.m. 1:00 p.m.) and in the evening (5:00 p.m. 6:00 p.m.).
- Pedestrian/bicycle counts were collected at this location in September 2015, March 2016, and September 2016. Recorded usage was higher in September 2016 (273 users/day) than in September 2015 (153 users/day) and March 2016 (235 users/day).



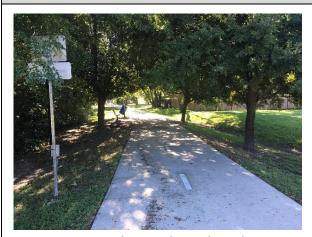


Image 3: Harrisburg Trail at Lockwood Drive Facing East



Image 4: Harrisburg Trail at Lockwood Drive Facing West

Daily Usage

Harrisburg Trail at Lockwood Drive

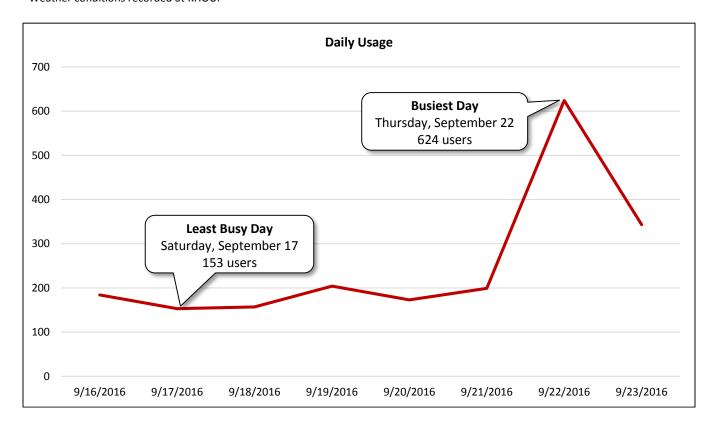
0				
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, September 16, 2016	184	92	76	0.01
Saturday, September 17, 2016	153	96	75	0
Sunday, September 18, 2016	157	97	76	0
Monday, September 19, 2016	204	96	76	0
Tuesday, September 20, 2016	173	96	76	0
Wednesday, September 21, 2016	199	94	73	0
Thursday, September 22, 2016	624	92	75	0
Friday, September 23, 2016 (until 11:00 a.m.)	343	90	75	Т

Total	2,037
Average Daily Usage	273
Average Daily Usage (Weekday)	316
Average Daily Usage (Weekend)	155

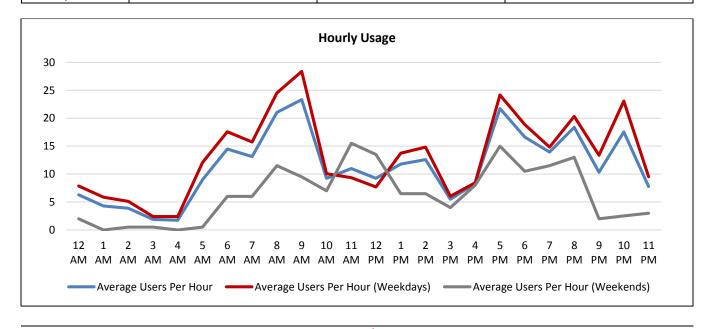
NotesCounter H2 stopped collecting data prior to the end of the deployment period, at approximately 11:00 a.m. on

Friday, September 23, 2016 (batteries died).

^{*}Weather conditions recorded at KHOU.

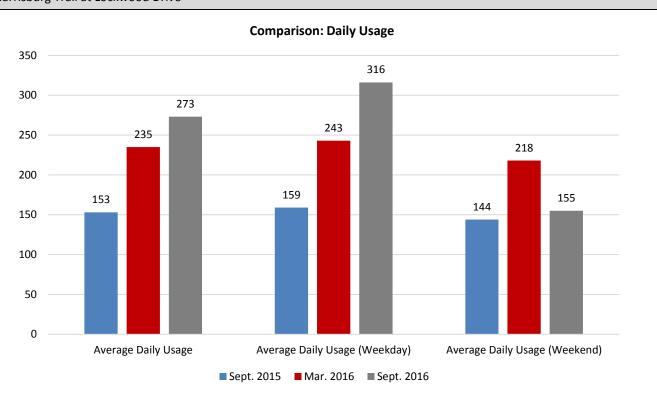


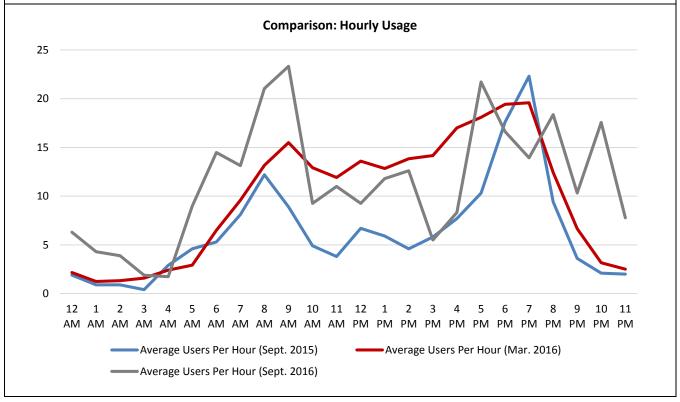
Hourly Usage Harrisburg Trail at Lockwood Drive					
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)		
12:00 a.m.	6.3	7.9	2.0		
1:00 a.m.	4.3	5.9	0.0		
2:00 a.m.	3.9	5.1	0.5		
3:00 a.m.	1.9	2.4	0.5		
4:00 a.m.	1.7	2.4	0.0		
5:00 a.m.	9.0	12.1	0.5		
6:00 a.m.	14.5	17.6	6.0		
7:00 a.m.	13.1	15.8	6.0		
8:00 a.m.	21.0	24.5	11.5		
9:00 a.m.	23.3	28.4	9.5		
10:00 a.m.	9.2	10.1	7.0		
11:00 a.m.	11.0	9.3	15.5		
12:00 p.m.	9.2	7.7	13.5		
1:00 p.m.	11.8	13.7	6.5		
2:00 p.m.	12.6	14.8	6.5		
3:00 p.m.	5.5	6.0	4.0		
4:00 p.m.	8.3	8.4	8.0		
5:00 p.m.	21.7	24.2	15.0		
6:00 p.m.	16.6	18.9	10.5		
7:00 p.m.	13.9	14.8	11.5		
8:00 p.m.	18.4	20.3	13.0		
9:00 p.m.	10.3	13.4	2.0		
10:00 p.m.	17.6	23.1	2.5		
11:00 p.m.	7.8	9.5	3.0		



Historical Comparison

Harrisburg Trail at Lockwood Drive





Brays Bayou Trail at Pasadena Street

Location Information				
Location Name	Brays Bayou Trail at Pasadena Street			
Location Description	Brays Bayou Trail (Shared-Use Path) East of			
	Forest Hill	Forest Hill Boulevard/Pasadena Street Intersection		
Jurisdiction	City of Ho	uston		
Agency Deployed	City of Ho	uston: Parks and Recreation Department		
GPS Coordinates	29°43'39.8	85"N, 95°17'57.61"W		
Surrounding Land Uses	North	Brays Bayou, Single-Family Residential,		
		Briscoe Elementary School		
	South	Single-Family Residential		
	East	Single-Family Residential, Park		
	West	Single-Family Residential, Cemetery		
What object was device secured to?	Sign Post	(Begin Bike Route)		
Sidewalk Width	10'			
Buffer Width	N/A (Off-Road Shared-Use Path)			
Street Width	N/A (Off-Road Shared-Use Path)			
Parallel Parking	N/A (Off-Road Shared-Use Path)			
Landscaping or Trees	No			
Sidewalk Pavement Type	Concrete			
ADA Ramps	Yes			
Sidewalk Condition	Good			
Speed Limit	N/A (Off-Road Shared-Use Path)			
Street Lighting	No			
Street Traffic Volume	N/A (Off-Road Shared-Use Path)			
Transit	No			
Shade	No	No		
Have counts been collected by	Yes			
H-GAC at this location before?	(March 2016)			
Notes	Counter H3 malfunctioned and did not collect data during the deployment period.			

Trends

Counter H3 malfunctioned and did not collect data during the deployment period.

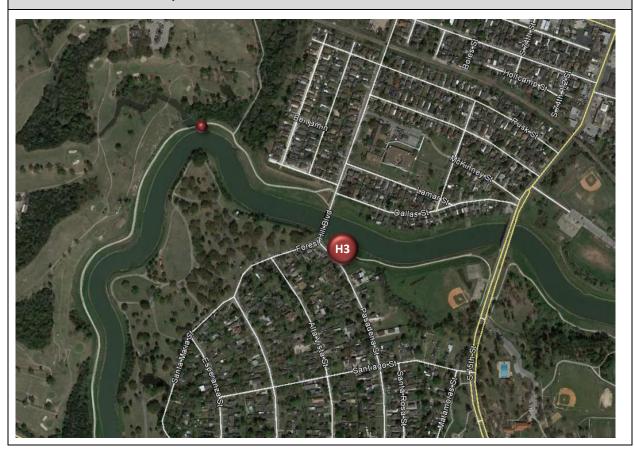




Image 5: Brays Bayou Trail at Pasadena Street Facing East



Image 6: Brays Bayou Trail at Pasadena Street Facing West

Brays Bayou Trail at Gus Wortham Golf Course

Location Information				
Location Name	Brays Bayou Trail at Gus Wortham Golf Course			
Location Description	Brays Bayou Trail (Shared-Use Path) adjacent to Gus Wortham Golf Course on a bridge crossing tributary of Brays Bayou			
Jurisdiction	City of Ho			
Agency Deployed	•	uston: Parks and Recreation Department		
GPS Coordinates		33"N, 95°18'10.71"W		
Surrounding Land Uses	North	Gus Wortham Golf Course		
Juli Odnanig Lana Oses	South	Brays Bayou, Cemetery, Single-Family Residential		
	East	Single-Family Residential, Briscoe Elementary School		
	West	Gus Wortham Golf Course		
What object was device secured to?	Bridge Rai	ling (Near Eastern End of Bridge)		
Sidewalk Width	14'			
Buffer Width	N/A (Off-Road Shared-Use Path)			
Street Width	N/A (Off-Road Shared-Use Path)			
Parallel Parking	N/A (Off-Road Shared-Use Path)			
Landscaping or Trees	No (Mostly Open)			
Sidewalk Pavement Type	Concrete			
ADA Ramps	Yes			
Sidewalk Condition	Good			
Speed Limit	N/A (Off-R	N/A (Off-Road Shared-Use Path)		
Street Lighting	No			
Street Traffic Volume	N/A (Off-Road Shared-Use Path)			
Transit	No			
Shade	No			
Have counts been collected by H-GAC at this location before?	Yes (April 2015, September 2015, and March 2016)			

- Average daily usage is 87 users/day.
- Usage tends to be higher during weekends (100 users/day) than on weekdays (80 users/day).
- On weekdays, usage is highest in the evening (6:00 p.m. 7:00 p.m.).
- During weekends, usage is highest in the morning (8:00 a.m. 10:00 a.m.).
- Pedestrian/bicycle counts have been collected at this location in April 2015, September 2015, March 2016, and September 2016. The lowest usage recorded was in September 2016 (87 users/day), compared to 121 users/day in September 2015 and 104 users/day in April 2015 and March 2016.

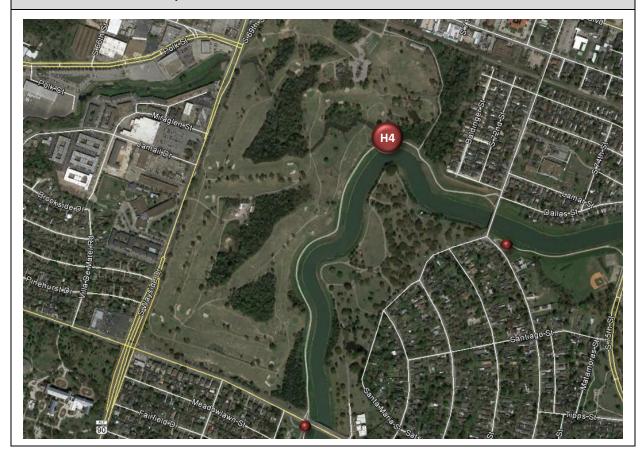




Image 7: Brays Bayou Trail at Gus Wortham Golf Course Facing East



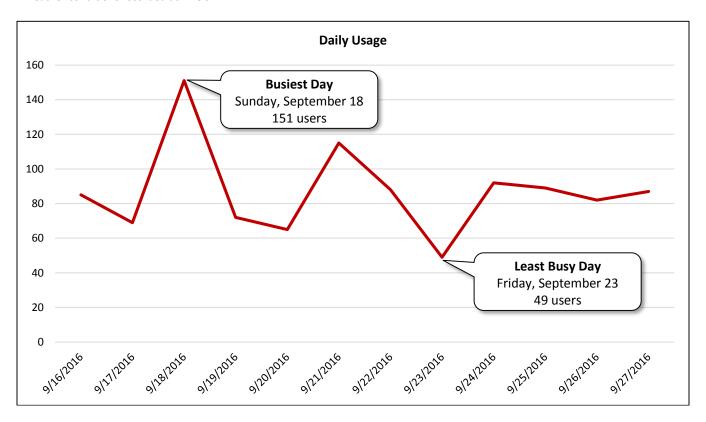
Image 8: Brays Bayou Trail at Gus Wortham Golf Course Facing West

Daily Usage
Prays Payou Trail at Gus Wortham Golf Cours

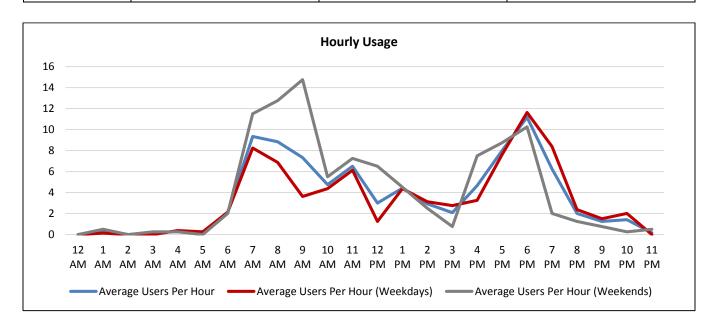
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, September 16, 2016	85	92	76	0.01
Saturday, September 17, 2016	69	96	75	0
Sunday, September 18, 2016	151	97	76	0
Monday, September 19, 2016	72	96	76	0
Tuesday, September 20, 2016	65	96	76	0
Wednesday, September 21, 2016	115	94	73	0
Thursday, September 22, 2016	88	92	75	0
Friday, September 23, 2016	49	90	75	Т
Saturday, September 24, 2016	92	92	76	0.69
Sunday, September 25, 2016	89	90	72	0.53
Monday, September 26, 2016	82	86	73	0.02
Tuesday, September 27, 2016	87	85	71	Т

Total	1,044
Average Daily Usage	87
Average Daily Usage (Weekday)	80
Average Daily Usage (Weekend)	100

^{*}Weather conditions recorded at KHOU.

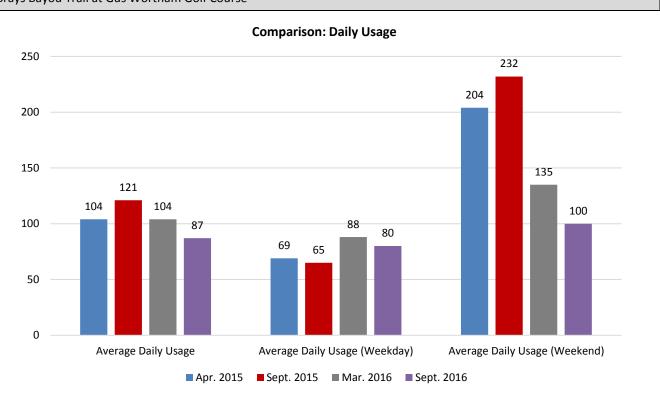


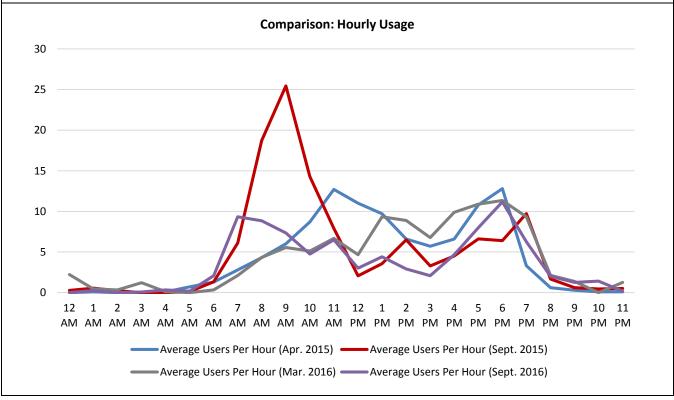
Hourly Usage Brays Bayou Trail at Gus Wortham Golf Course					
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)		
12:00 a.m.	0.0	0.0	0.0		
1:00 a.m.	0.3	0.1	0.5		
2:00 a.m.	0.0	0.0	0.0		
3:00 a.m.	0.1	0.0	0.3		
4:00 a.m.	0.3	0.4	0.3		
5:00 a.m.	0.2	0.3	0.0		
6:00 a.m.	2.1	2.1	2.0		
7:00 a.m.	9.3	8.3	11.5		
8:00 a.m.	8.8	6.9	12.8		
9:00 a.m.	7.3	3.6	14.8		
10:00 a.m.	4.8	4.4	5.5		
11:00 a.m.	6.5	6.1	7.3		
12:00 p.m.	3.0	1.3	6.5		
1:00 p.m.	4.4	4.4	4.5		
2:00 p.m.	2.9	3.1	2.5		
3:00 p.m.	2.1	2.8	0.8		
4:00 p.m.	4.7	3.3	7.5		
5:00 p.m.	8.0	7.6	8.8		
6:00 p.m.	11.2	11.6	10.3		
7:00 p.m.	6.3	8.4	2.0		
8:00 p.m.	2.0	2.4	1.3		
9:00 p.m.	1.3	1.5	0.8		
10:00 p.m.	1.4	2.0	0.3		
11:00 p.m.	0.2	0.0	0.5		



Historical Comparison

Brays Bayou Trail at Gus Wortham Golf Course





Brays Bayou Trail at Lawndale Street

Location Information			
Location Name	Brays Bayou Trail at Lawndale Street		
Location Description	Brays Bayou Trail (Shared-Use Path) south of Lawndale Street		
Jurisdiction	City of Ho	uston	
Agency Deployed	City of Ho	uston: Parks and Recreation Department	
GPS Coordinates	29°43'20.5	55"N, 95°18'20.21"W	
Surrounding Land Uses	North	Gus Wortham Golf Couse, Cemetery	
	South	Single-Family Residential, Cemetery	
	East	Brays Bayou, Cemetery, Single-Family Residential	
	West	Single-Family Residential, Gus Wortham Golf Course	
What object was device secured to?	Sign Post ((No Motor Vehicles)	
Sidewalk Width	10'		
Buffer Width	N/A (Off-Road Shared-Use Path)		
Street Width	N/A (Off-Road Shared-Use Path)		
Parallel Parking	N/A (Off-Road Shared-Use Path)		
Landscaping or Trees	No		
Sidewalk Pavement Type	Concrete		
ADA Ramps	Yes		
Sidewalk Condition	Good		
Speed Limit	N/A (Off-Road Shared-Use Path)		
Street Lighting	No		
Street Traffic Volume	N/A (Off-F	Road Shared-Use Path)	
Transit	Nearby (METRO Bus Stop 320' West at Lawndale Street/N. MacGregor Way)		
Shade	No		
Have counts been collected by H-GAC at this location before?	Yes (March 2016)		

- Average daily usage is 42 users/day.
- Usage tends to be higher on weekdays (45 users/day) than during weekends (36 users/day).
- On weekdays, usage is highest in the evening (6:00 p.m. 7:00 p.m.). There is also a pronounced increase in usage in the morning (7:00 a.m. 8:00 a.m.).
- During weekends, usage is highest in the morning (8:00 a.m. 9:00 a.m.).
- Pedestrian/bicycle counts have been collected at this location in March 2016 and September 2016. Usage in September 2016 (42 users/day) was lower than usage recorded in March 2016 (58 users/day).

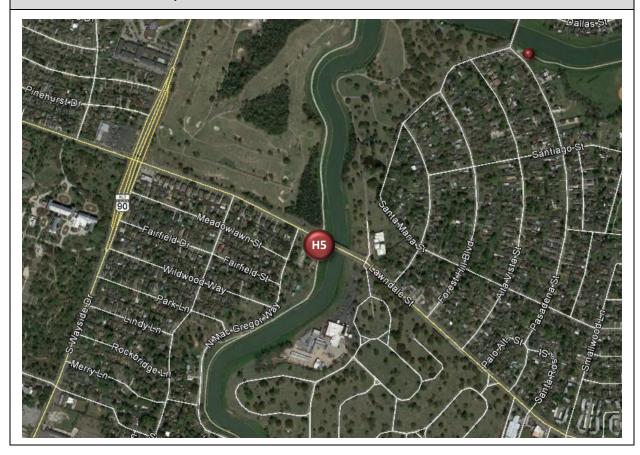




Image 9: Brays Bayou Trail at Lawndale Street Facing North



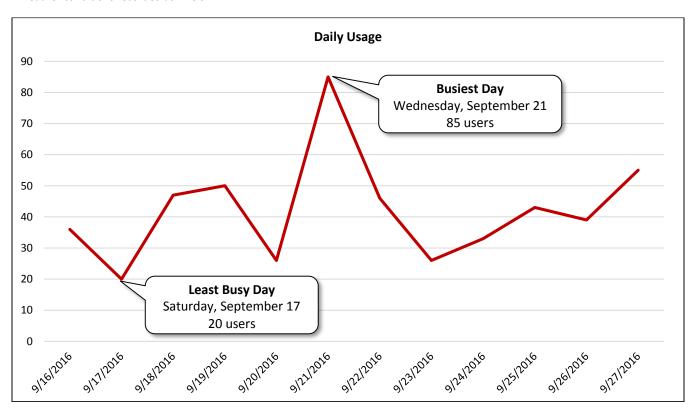
Image 10: Brays Bayou Trail at Lawndale Street Facing South

Daily Usage
Brays Bayou Trail at Lawndale Stree

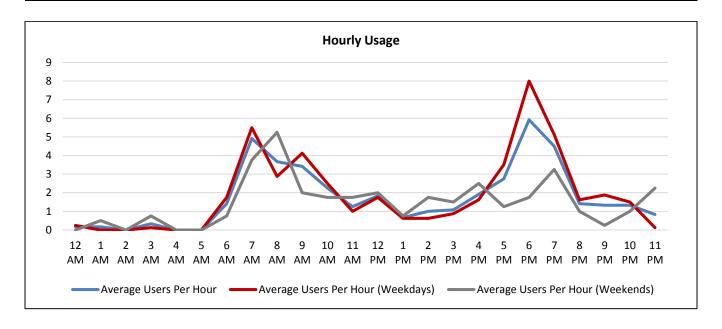
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, September 16, 2016	36	92	76	0.01
Saturday, September 17, 2016	20	96	75	0
Sunday, September 18, 2016	47	97	76	0
Monday, September 19, 2016	50	96	76	0
Tuesday, September 20, 2016	26	96	76	0
Wednesday, September 21, 2016	85	94	73	0
Thursday, September 22, 2016	46	92	75	0
Friday, September 23, 2016	26	90	75	Т
Saturday, September 24, 2016	33	92	76	0.69
Sunday, September 25, 2016	43	90	72	0.53
Monday, September 26, 2016	39	86	73	0.02
Tuesday, September 27, 2016	55	85	71	Т

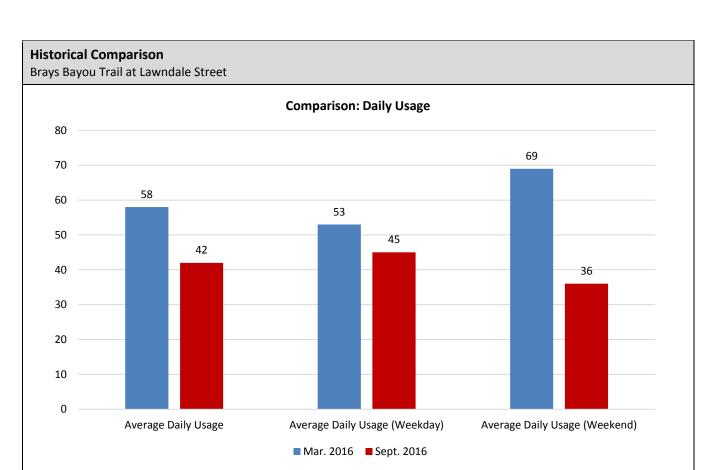
Total	506
Average Daily Usage	42
Average Daily Usage (Weekday)	45
Average Daily Usage (Weekend)	36

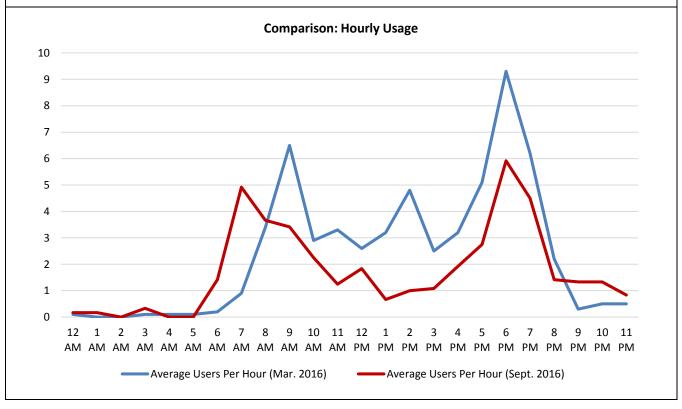
^{*}Weather conditions recorded at KHOU.



Hourly Usage Brays Bayou Trail a	nt Lawndale Street		
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	0.0	0.5
2:00 a.m.	0.0	0.0	0.0
3:00 a.m.	0.3	0.1	0.8
4:00 a.m.	0.0	0.0	0.0
5:00 a.m.	0.0	0.0	0.0
6:00 a.m.	1.4	1.8	0.8
7:00 a.m.	4.9	5.5	3.8
8:00 a.m.	3.7	2.9	5.3
9:00 a.m.	3.4	4.1	2.0
10:00 a.m.	2.3	2.5	1.8
11:00 a.m.	1.3	1.0	1.8
12:00 p.m.	1.8	1.8	2.0
1:00 p.m.	0.7	0.6	0.8
2:00 p.m.	1.0	0.6	1.8
3:00 p.m.	1.1	0.9	1.5
4:00 p.m.	1.9	1.6	2.5
5:00 p.m.	2.8	3.5	1.3
6:00 p.m.	5.9	8.0	1.8
7:00 p.m.	4.5	5.1	3.3
8:00 p.m.	1.4	1.6	1.0
9:00 p.m.	1.3	1.9	0.3
10:00 p.m.	1.3	1.5	1.0
11:00 p.m.	0.8	0.1	2.3



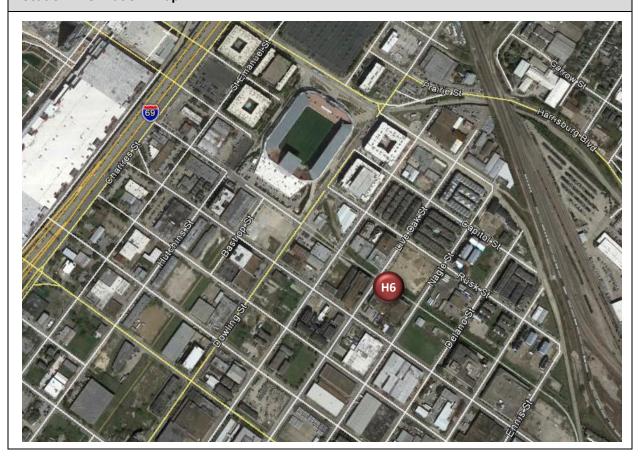




Columbia Tap Trail at Live Oak Street

Location Information			
Location Name	Columbia Tap Trail at Live Oak Street		
Location Description	Columbia Tap Trail (Shared-Use Path) at Live Oak Street (East of Roadway)		
Jurisdiction	City of Houston		
Agency Deployed	City of F	Houston: Parks and Recreation Department	
GPS Coordinates	29°44'5	8.24"N, 95°21'2.90"W	
Surrounding Land Uses	North	Industrial, Multi-Family Residential	
	South	Industrial	
	East	Industrial	
	West	Industrial, BBVA Compass Stadium	
What object was device secured to?	Tree (Se	cond Tree East of Live Oak Street North of Columbia Tap Trail)	
Sidewalk Width	10'		
Buffer Width	N/A (Off-Road Shared-Use Path)		
Street Width	N/A (Off-Road Shared-Use Path)		
Parallel Parking	N/A (Off-Road Shared-Use Path)		
Landscaping or Trees	Yes (Trees Planted at Regular Intervals)		
Sidewalk Pavement Type	Concrete		
ADA Ramps	Yes		
Sidewalk Condition	Good		
Speed Limit	N/A (Of	f-Road Shared-Use Path)	
Street Lighting	No		
Street Traffic Volume	N/A (Off-Road Shared-Use Path)		
Transit	Yes		
	(Bus Stop 350' South at McKinney/Live Oak)		
Shade	No (Small Trees)		
Have counts been collected by	Yes		
H-GAC at this location before?	(September 2015)		

- Average daily usage is 136 users/day.
- Usage tends to be higher during weekends (146 users/day) than on weekdays (131 users/day).
- On weekdays, usage is highest in the evening (5:00 p.m. 8:00 p.m.).
- During weekends, usage is highest in the evening (6:00 p.m. 8:00 p.m.).
- Pedestrian/bicycle counts have been collected at this location in September 2015 and September 2016.
 Usage in September 2016 (136 users/day) was lower than usage recorded in September 2015 (236 users/day).



Location Information: Photos



Image 11: Columbia Tap Trail at Live Oak Street Facing East



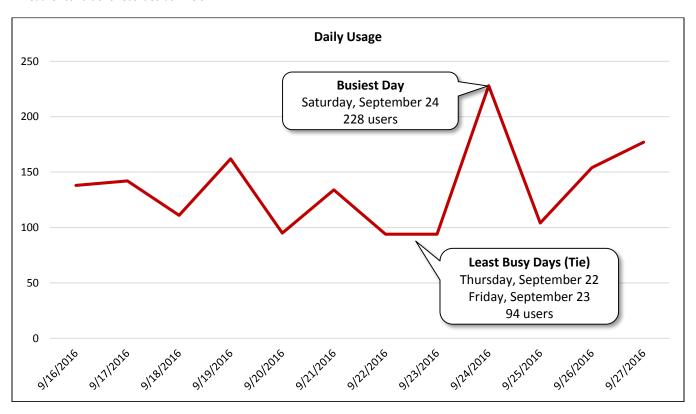
Image 12: Columbia Tap Trail at Live Oak Street
Facing West

30

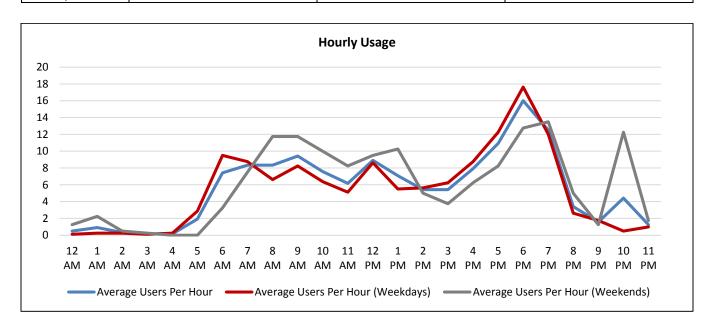
Daily Usage Columbia Tap Trail at Live Oak Street				
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, September 16, 2016	138	92	76	0.01
Saturday, September 17, 2016	142	96	75	0
Sunday, September 18, 2016	111	97	76	0
Monday, September 19, 2016	162	96	76	0
Tuesday, September 20, 2016	95	96	76	0
Wednesday, September 21, 2016	134	94	73	0
Thursday, September 22, 2016	94	92	75	0
Friday, September 23, 2016	94	90	75	Т
Saturday, September 24, 2016	228	92	76	0.69
Sunday, September 25, 2016	104	90	72	0.53
Monday, September 26, 2016	154	86	73	0.02
Tuesday, September 27, 2016	177	85	71	Т

Total	1,633
Average Daily Usage	136
Average Daily Usage (Weekday)	131
Average Daily Usage (Weekend)	146

^{*}Weather conditions recorded at KHOU.

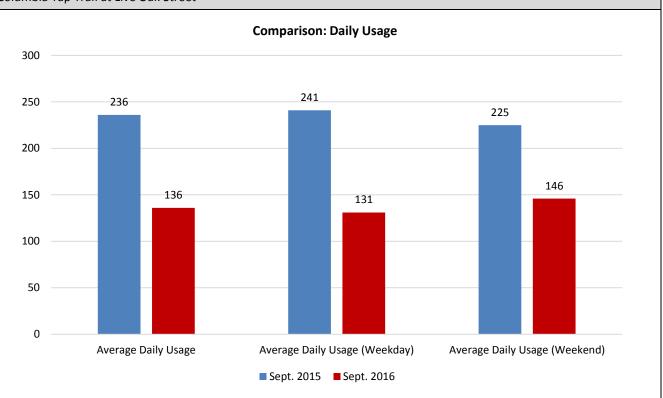


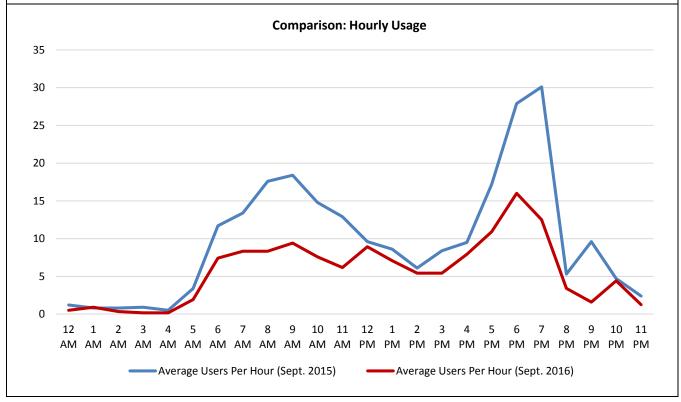
Hourly Usage Columbia Tap Trail	at Live Oak Street		
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.5	0.1	1.3
1:00 a.m.	0.9	0.3	2.3
2:00 a.m.	0.3	0.3	0.5
3:00 a.m.	0.2	0.1	0.3
4:00 a.m.	0.2	0.3	0.0
5:00 a.m.	1.9	2.9	0.0
6:00 a.m.	7.4	9.5	3.3
7:00 a.m.	8.3	8.8	7.5
8:00 a.m.	8.3	6.6	11.8
9:00 a.m.	9.4	8.3	11.8
10:00 a.m.	7.6	6.4	10.0
11:00 a.m.	6.2	5.1	8.3
12:00 p.m.	8.9	8.6	9.5
1:00 p.m.	7.1	5.5	10.3
2:00 p.m.	5.4	5.6	5.0
3:00 p.m.	5.4	6.3	3.8
4:00 p.m.	7.9	8.8	6.3
5:00 p.m.	10.9	12.3	8.3
6:00 p.m.	16.0	17.6	12.8
7:00 p.m.	12.5	12.0	13.5
8:00 p.m.	3.4	2.6	5.0
9:00 p.m.	1.6	1.8	1.3
10:00 p.m.	4.4	0.5	12.3
11:00 p.m.	1.3	1.0	1.8



Historical Comparison

Columbia Tap Trail at Live Oak Street





Columbia Tap Trail at Polk Street

Location Information				
Location Name	Columbia Tap Trail at Polk Street			
Location Description	Columbia Tap Trail (Shared-Use Path) at Polk Street (South of Roadway)			
Jurisdiction	City of H	City of Houston		
Agency Deployed	City of H	ouston: Parks and Recreation Department		
GPS Coordinates	29°44'33	.98"N, 95°20'53.92"W		
Surrounding Land Uses	North	Medical Offices, Industrial, Vacant Land, Single-Family Residential, Multi-Family Residential		
	South	Vacant Land, Industrial, Single-Family Residential		
	East	Industrial, Multi-Family Residential, Single-Family Residential		
	West	Medical Offices, Industrial, Single-Family Residential, Multi-Family Residential, Vacant Land		
What object was device secured to?	Sign Post	(Bicycles Yield to Pedestrians)		
Sidewalk Width	10'	10'		
Buffer Width	7.5'			
	(includes wire/post barrier between Columbia Tap Trail and Velasco Street)			
Street Width	Two-Lane Roadway			
Parallel Parking	No			
Landscaping or Trees	Yes (Trees Planted at Regular Intervals)			
Sidewalk Pavement Type	Concrete			
ADA Ramps	Yes			
Sidewalk Condition	Good			
Speed Limit	30 miles	per hour		
Street Lighting	Yes			
Street Traffic Volume	N/A			
Transit	Nearby (METRO Bus Stop 320' North at Polk Street/Velasco Street)			
Shade	No (Small Trees)			
Have counts been collected by H-GAC at this location before?	No			

- Average daily usage is 108 users/day.
- Usage tends to be similar on weekdays (107 users/day) as during weekends (110 users/day).
- On weekdays, usage is highest in the morning (7:00 a.m. 9:00 a.m.).
- During weekends, usage is highest in the morning (8:00 a.m. 9:00 a.m.).

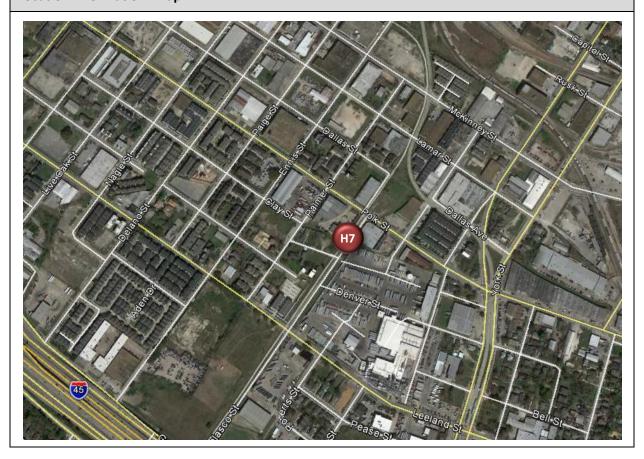




Image 13: Columbia Tap Trail at Polk Street Facing North

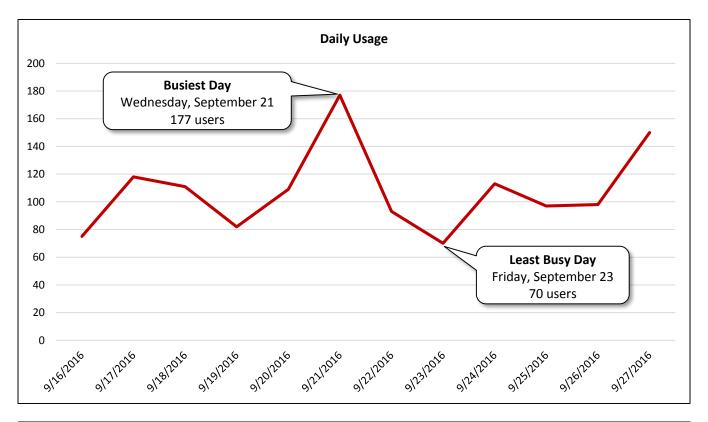


Image 14: Columbia Tap Trail at Polk Street Facing South

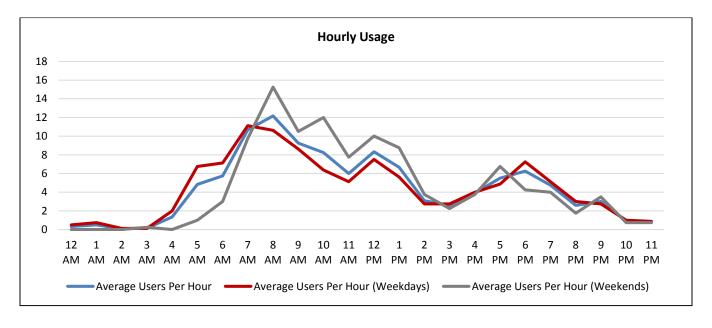
Daily Usage				
Columbia Tap Trail at Polk Street				
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, September 16, 2016	75	92	76	0.01
Saturday, September 17, 2016	118	96	75	0
Sunday, September 18, 2016	111	97	76	0
Monday, September 19, 2016	82	96	76	0
Tuesday, September 20, 2016	109	96	76	0
Wednesday, September 21, 2016	177	94	73	0
Thursday, September 22, 2016	93	92	75	0
Friday, September 23, 2016	70	90	75	Т
Saturday, September 24, 2016	113	92	76	0.69
Sunday, September 25, 2016	97	90	72	0.53
Monday, September 26, 2016	98	86	73	0.02
Tuesday September 27, 2016	150	85	71	Т

Total	1,293
Average Daily Usage	108
Average Daily Usage (Weekday)	107
Average Daily Usage (Weekend)	110

^{*}Weather conditions recorded at KHOU.



Hourly Usage Columbia Tap Trail	at Polk Street		
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.3	0.5	0.0
1:00 a.m.	0.5	0.8	0.0
2:00 a.m.	0.1	0.1	0.0
3:00 a.m.	0.2	0.1	0.3
4:00 a.m.	1.3	2.0	0.0
5:00 a.m.	4.8	6.8	1.0
6:00 a.m.	5.8	7.1	3.0
7:00 a.m.	10.7	11.1	9.8
8:00 a.m.	12.2	10.6	15.3
9:00 a.m.	9.3	8.6	10.5
10:00 a.m.	8.3	6.4	12.0
11:00 a.m.	6.0	5.1	7.8
12:00 p.m.	8.3	7.5	10.0
1:00 p.m.	6.7	5.6	8.8
2:00 p.m.	3.1	2.8	3.8
3:00 p.m.	2.6	2.8	2.3
4:00 p.m.	3.9	4.0	3.8
5:00 p.m.	5.5	4.9	6.8
6:00 p.m.	6.3	7.3	4.3
7:00 p.m.	4.8	5.1	4.0
8:00 p.m.	2.6	3.0	1.8
9:00 p.m.	3.0	2.8	3.5
10:00 p.m.	0.9	1.0	0.8
11:00 p.m.	0.8	0.9	0.8



Columbia Tap Trail at Webster Street

Location Information				
Location Name	Columbia	Columbia Tap Trail at Webster Street		
Location Description	Columbia	Columbia Tap Trail (Shared-Use Path) at Webster Street (North of Roadway)		
Jurisdiction	City of Ho	uston		
Agency Deployed	City of Ho	uston: Parks and Recreation Department		
GPS Coordinates	29°44'14.7	72"N, 95°21'9.36"W		
Surrounding Land Uses	North	Multi-Family Residential, Interstate 45		
	South	Single-Family Residential, Institutional (Church), Vacant Land		
	East	Institutional (Church), Vacant Land		
	West	Multi-Family Residential, Single-Family Residential		
What object was device secured to?	Sign Post ((Columbia Tap Rail to Trail)		
Sidewalk Width	10'			
Buffer Width	N/A (Off-Road Shared-Use Path)			
Street Width	N/A (Off-Road Shared-Use Path)			
Parallel Parking	N/A (Off-Road Shared-Use Path)			
Landscaping or Trees	None			
Sidewalk Pavement Type	Concrete			
ADA Ramps	Yes			
Sidewalk Condition	Good			
Speed Limit	N/A (Off-R	Road Shared-Use Path)		
Street Lighting	None			
Street Traffic Volume	N/A (Off-R	Road Shared-Use Path)		
Transit	Nearby (Bus Stop 300' Northeast at Interstate 45 Frontage Road/Tierwester)			
Shade	No			
Have counts been collected by H-GAC at this location before?	Yes (September 2015)			

- Average daily usage is 86 users/day.
- Usage tends to be higher on weekdays (89 users/day) than during weekends (78 users/day).
- On weekdays, usage is highest in the morning (8:00 a.m. 9:00 a.m.) and evening (7:00 p.m. 8:00 p.m.).
- During weekends, usage is highest in the morning (9:00 a.m. 10:00 a.m.) and midday (11:00 a.m. 12:00 p.m.).
- Pedestrian/bicycle counts were collected at this location in September 2015 and September 2016. Usage in September 2016 (86 users/day) was lower than usage recorded in September 2015 (116 users/day).

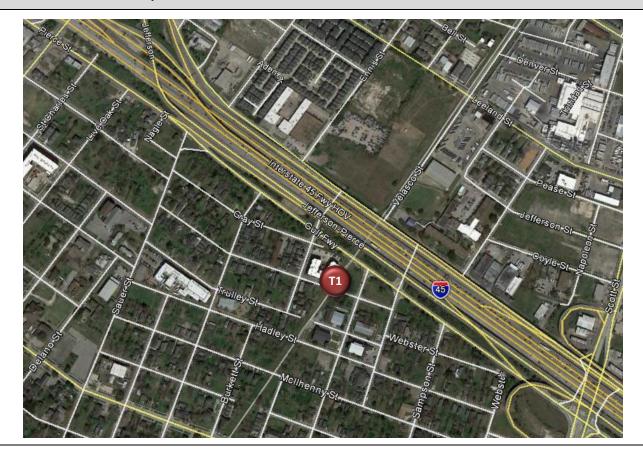




Image 15: Columbia Tap Trail at Webster Street Facing North

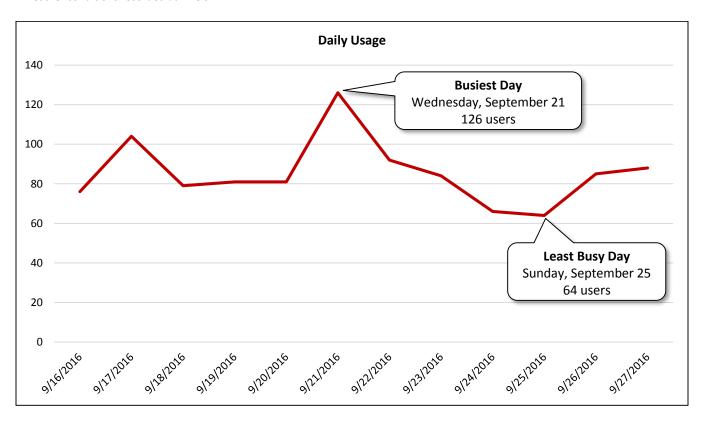


Image 16: Columbia Tap Trail at Webster Street Facing South

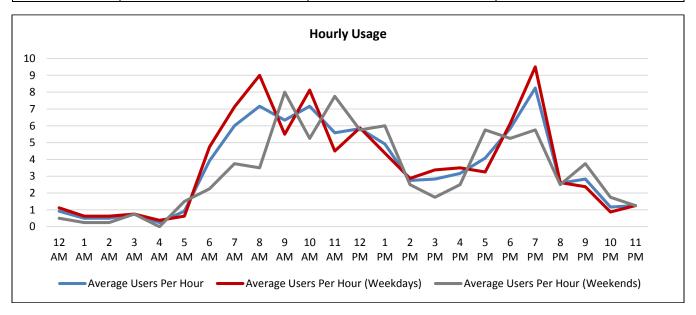
Daily Usage					
Columbia Tap Trail at Webster Street					
		Select Weather Data*			
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)	
Friday, September 16, 2016	76	92	76	0.01	
Saturday, September 17, 2016	104	96	75	0	
Sunday, September 18, 2016	79	97	76	0	
Monday, September 19, 2016	81	96	76	0	
Tuesday, September 20, 2016	81	96	76	0	
Wednesday, September 21, 2016	126	94	73	0	
Thursday, September 22, 2016	92	92	75	0	
Friday, September 23, 2016	84	90	75	Т	
Saturday, September 24, 2016	66	92	76	0.69	
Sunday, September 25, 2016	64	90	72	0.53	
Monday, September 26, 2016	85	86	73	0.02	
Tuesday, September 27, 2016	88	85	71	Т	

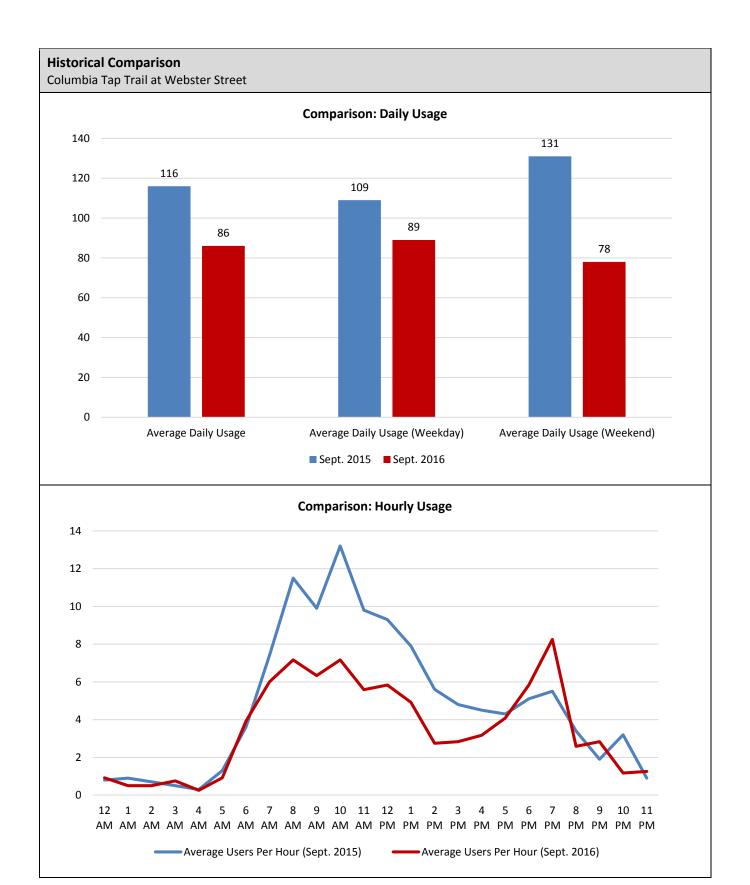
Total	1,026
Average Daily Usage	86
Average Daily Usage (Weekday)	89
Average Daily Usage (Weekend)	78

^{*}Weather conditions recorded at KHOU.



Hourly Usage Columbia Tap Trail at Webster Street				
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)	
12:00 a.m.	0.9	1.1	0.5	
1:00 a.m.	0.5	0.6	0.3	
2:00 a.m.	0.5	0.6	0.3	
3:00 a.m.	0.8	0.8	0.8	
4:00 a.m.	0.3	0.4	0.0	
5:00 a.m.	0.9	0.6	1.5	
6:00 a.m.	3.9	4.8	2.3	
7:00 a.m.	6.0	7.1	3.8	
8:00 a.m.	7.2	9.0	3.5	
9:00 a.m.	6.3	5.5	8.0	
10:00 a.m.	7.2	8.1	5.3	
11:00 a.m.	5.6	4.5	7.8	
12:00 p.m.	5.8	5.9	5.8	
1:00 p.m.	4.9	4.4	6.0	
2:00 p.m.	2.8	2.9	2.5	
3:00 p.m.	2.8	3.4	1.8	
4:00 p.m.	3.2	3.5	2.5	
5:00 p.m.	4.1	3.3	5.8	
6:00 p.m.	5.8	6.1	5.3	
7:00 p.m.	8.3	9.5	5.8	
8:00 p.m.	2.6	2.6	2.5	
9:00 p.m.	2.8	2.4	3.8	
10:00 p.m.	1.2	0.9	1.8	
11:00 p.m.	1.3	1.3	1.3	





Columbia Tap Trail at Alabama Street

Location Information				
Location Name	Columbia Tap Trail at Alabama Street			
Location Description	Columbia	Columbia Tap Trail (Shared-Use Path) at Alabama Street (North of Roadway)		
Jurisdiction	City of Ho	uston		
Agency Deployed	City of Ho	uston: Parks and Recreation Department		
GPS Coordinates	29°43'36.:	19"N, 95°21'39.80"W		
Surrounding Land Uses	North	Single-Family Residential		
	South	Vacant Land, Commercial/Retail, Single-Family Residential, Multi-Family Residential, Texas Southern University		
	East	Single-Family Residential, Multi-Family Residential, Commercial		
	West Single-Family Residential, Institutional (Church), Government Offices			
What object was device secured to?	Sign Post	(Bicycles Yield to Pedestrians)		
Sidewalk Width	10'			
Buffer Width	N/A (Off-Road Shared-Use Path)			
Street Width	N/A (Off-Road Shared-Use Path)			
Parallel Parking	N/A (Off-Road Shared-Use Path)			
Landscaping or Trees	None			
Sidewalk Pavement Type	Concrete			
ADA Ramps	Yes			
Sidewalk Condition	Good			
Speed Limit	N/A (Off-F	Road Shared-Use Path)		
Street Lighting	No			
Street Traffic Volume	N/A (Off-Road Shared-Use Path)			
Transit	Yes (METRO Bus Stop 650' West at Ennis/Alabama)			
Shade	No			
Have counts been collected by H-GAC at this location before?	Yes (September 2015)			

- Average daily usage is 178 users/day.
- Usage tends to be higher on weekdays (185 users/day) than during weekends (164 users/day).
- On weekdays, usage is highest in the morning (9:00 a.m. 10:00 a.m.) and evening (6:00 p.m. 8:00 p.m.).
- During weekends, usage is highest in the morning (9:00 a.m. 10:00 a.m.). There is also a pronounced increase in usage in the evening (5:00 p.m. 6:00 p.m.).
- Pedestrian/bicycle counts have been collected at this location in September 2015 and September 2016. Usage
 in September 2016 (178 users/day) was significantly lower than usage recorded in September 2015 (468
 users/day).

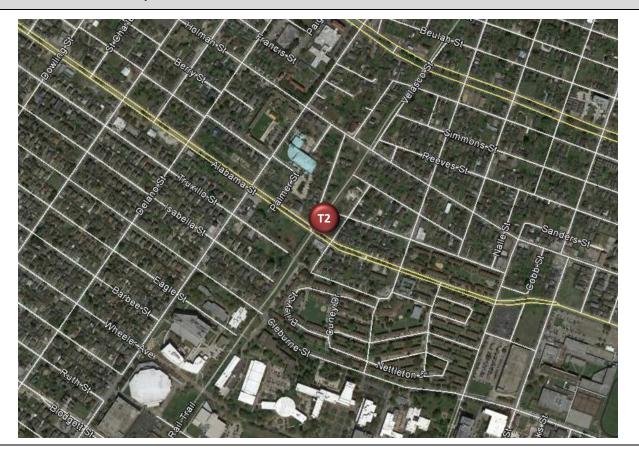




Image 17: Columbia Tap Trail at Alabama Street Facing North



Image 18: Columbia Tap Trail at Alabama Street Facing South

Daily Usage					
Columbia Tap Trail at Alabama Street					
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)	
Friday, September 16, 2016	179	92	76	0.01	
Saturday, September 17, 2016	140	96	75	0	
Sunday, September 18, 2016	139	97	76	0	
Monday, September 19, 2016	162	96	76	0	
Tuesday, September 20, 2016	184	96	76	0	
Wednesday, September 21, 2016	204	94	73	0	
Thursday, September 22, 2016	190	92	75	0	
Friday, September 23, 2016	167	90	75	Т	
Saturday, September 24, 2016	201	92	76	0.69	
Sunday, September 25, 2016	174	90	72	0.53	
Monday, September 26, 2016	164	86	73	0.02	
Tuesday, September 27, 2016	226	85	71	Т	
Total	2,130				

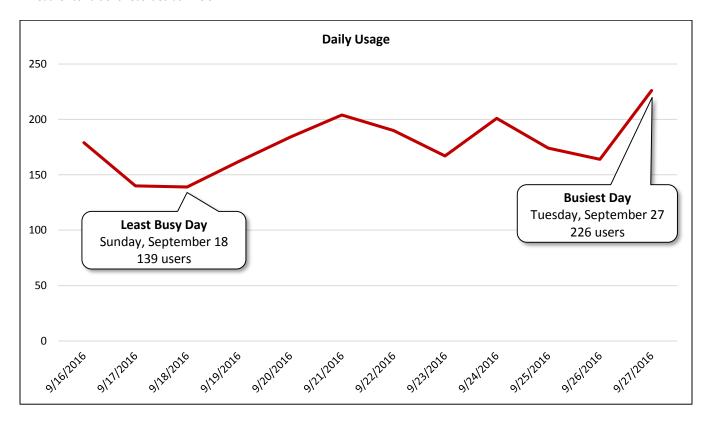
178

185

164

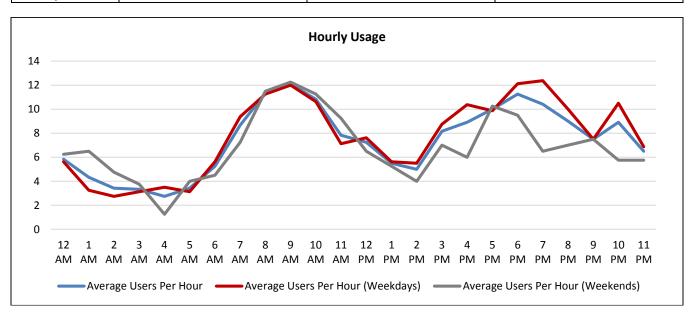
Average Daily Usage (Weekday)

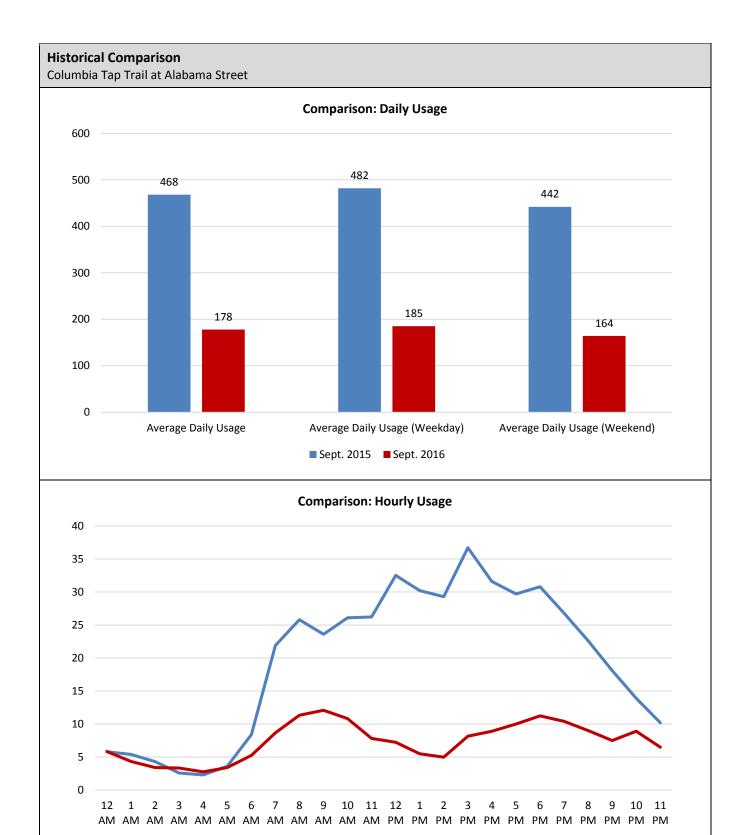
Average Daily Usage



^{*}Weather conditions recorded at KHOU.

Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	5.8	5.6	6.3
1:00 a.m.	4.3	3.3	6.5
2:00 a.m.	3.4	2.8	4.8
3:00 a.m.	3.3	3.1	3.8
4:00 a.m.	2.8	3.5	1.3
5:00 a.m.	3.4	3.1	4.0
6:00 a.m.	5.3	5.6	4.5
7:00 a.m.	8.7	9.4	7.3
8:00 a.m.	11.3	11.3	11.5
9:00 a.m.	12.1	12.0	12.3
10:00 a.m.	10.8	10.6	11.3
11:00 a.m.	7.8	7.1	9.3
12:00 p.m.	7.3	7.6	6.5
1:00 p.m.	5.5	5.6	5.3
2:00 p.m.	5.0	5.5	4.0
3:00 p.m.	8.2	8.8	7.0
4:00 p.m.	8.9	10.4	6.0
5:00 p.m.	10.0	9.9	10.3
6:00 p.m.	11.3	12.1	9.5
7:00 p.m.	10.4	12.4	6.5
8:00 p.m.	9.0	10.0	7.0
9:00 p.m.	7.5	7.5	7.5
10:00 p.m.	8.9	10.5	5.8
11:00 p.m.	6.5	6.9	5.8





Average Users Per Hour (Sept. 2016)

Average Users Per Hour (Sept. 2015)

Columbia Tap Trail at Blodgett Street

Location Information	Location Information				
Location Name	Columbia Tap Trail at Blodgett Street				
Location Description	Columbia	Columbia Tap Trail (Shared-Use Path) at Blodgett Street (North of Roadway)			
Jurisdiction	City of Ho	uston			
Agency Deployed	City of Ho	uston: Parks and Recreation Department			
GPS Coordinates	29°43'16.	11"N, 95°21'55.60"W			
Surrounding Land Uses	North Institutional (Church), Utility Substation, Texas Southern University				
	South	Office, Vacant Land, Single-Family Residential			
	East	Utility Substation, Vacant Land, Texas Southern University (and Athletic Facilities)			
	West Institutional (Church), Office, Single-Family Residential, Commercial/Retail, Parking Garage				
What object was device secured to?	Sign Post (Columbia Tap Rail to Trail)				
Sidewalk Width	10'				
Buffer Width	N/A (Off-Road Shared-Use Path)				
Street Width	N/A (Off-Road Shared-Use Path)				
Parallel Parking	N/A (Off-Road Shared-Use Path)				
Landscaping or Trees	Yes				
Sidewalk Pavement Type	Concrete				
ADA Ramps	Yes				
Sidewalk Condition	Good				
Speed Limit	N/A (Off-F	Road Shared-Use Path)			
Street Lighting	No				
Street Traffic Volume	N/A (Off-Road Shared-Use Path)				
Transit	No				
Shade	No				
Have counts been collected by H-GAC at this location before?	No				

- Average daily usage is 135 users/day.
- Usage tends to be much higher on weekdays (154 users/day) than during weekends (97 users/day).
- On weekdays, usage is highest in the morning (7:00 a.m. 8:00 a.m.).
- During weekends, usage is highest in the evening (6:00 p.m. 7:00 p.m.).

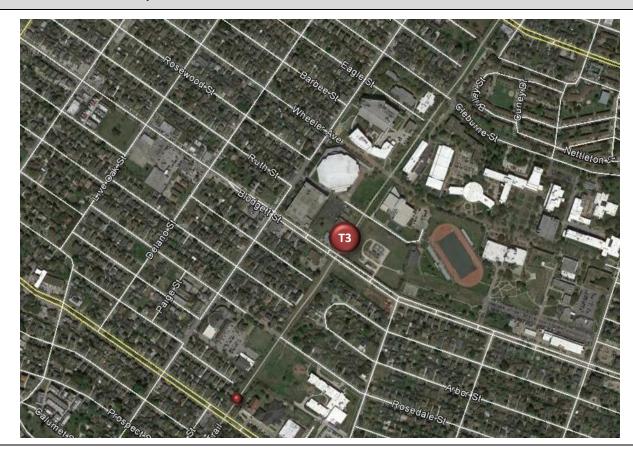




Image 19: Columbia Tap Trail at Blodgett Street Facing North



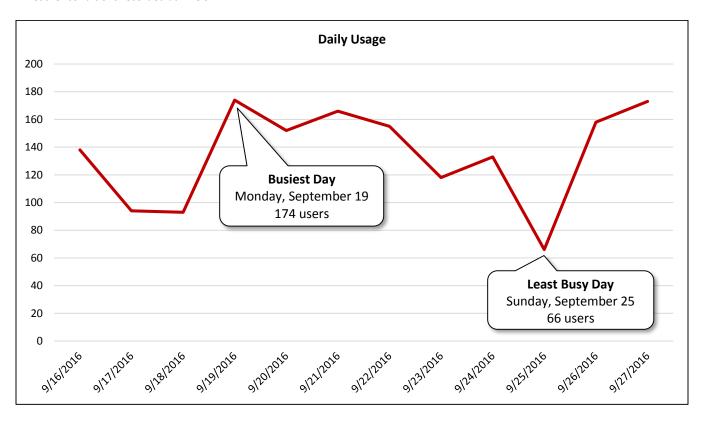
Image 20: Columbia Tap Trail at Blodgett Street Facing South

Columbia Tap Trail at Blodgett Street					
Select Weather Data*					
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)	
Friday, September 16, 2016	138	92	76	0.01	
Saturday, September 17, 2016	94	96	75	0	
Sunday, September 18, 2016	93	97	76	0	
Monday, September 19, 2016	174	96	76	0	
Tuesday, September 20, 2016	152	96	76	0	

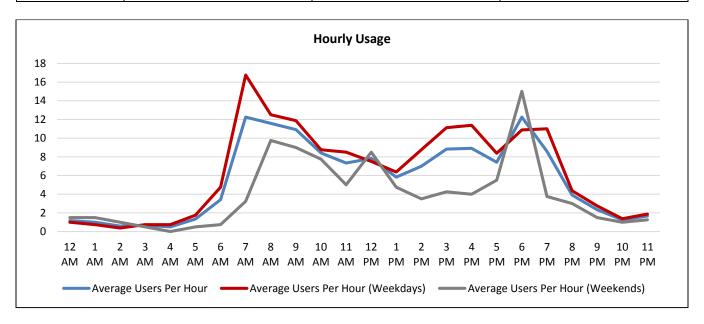
Saturday, September 17, 2016	94	96	75	0
Sunday, September 18, 2016	93	97	76	0
Monday, September 19, 2016	174	96	76	0
Tuesday, September 20, 2016	152	96	76	0
Wednesday, September 21, 2016	166	94	73	0
Thursday, September 22, 2016	155	92	75	0
Friday, September 23, 2016	118	90	75	Т
Saturday, September 24, 2016	133	92	76	0.69
Sunday, September 25, 2016	66	90	72	0.53
Monday, September 26, 2016	158	86	73	0.02
Tuesday, September 27, 2016	173	85	71	Т
Total	1 620			

Total	1,620
Average Daily Usage	135
Average Daily Usage (Weekday)	154
Average Daily Usage (Weekend)	97

^{*}Weather conditions recorded at KHOU.



Hourly Usage Columbia Tap Trail at Blodgett Street				
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)	
12:00 a.m.	1.2	1.0	1.5	
1:00 a.m.	1.0	0.8	1.5	
2:00 a.m.	0.6	0.4	1.0	
3:00 a.m.	0.7	0.8	0.5	
4:00 a.m.	0.5	0.8	0.0	
5:00 a.m.	1.3	1.8	0.5	
6:00 a.m.	3.4	4.8	0.8	
7:00 a.m.	12.3	16.8	3.3	
8:00 a.m.	11.6	12.5	9.8	
9:00 a.m.	10.9	11.9	9.0	
10:00 a.m.	8.4	8.8	7.8	
11:00 a.m.	7.3	8.5	5.0	
12:00 p.m.	7.8	7.5	8.5	
1:00 p.m.	5.8	6.4	4.8	
2:00 p.m.	7.0	8.8	3.5	
3:00 p.m.	8.8	11.1	4.3	
4:00 p.m.	8.9	11.4	4.0	
5:00 p.m.	7.4	8.4	5.5	
6:00 p.m.	12.3	10.9	15.0	
7:00 p.m.	8.6	11.0	3.8	
8:00 p.m.	3.9	4.4	3.0	
9:00 p.m.	2.3	2.8	1.5	
10:00 p.m.	1.3	1.4	1.0	
11:00 p.m.	1.7	1.9	1.3	



Columbia Tap Trail at Southmore Boulevard

Location Information	Location Information				
Location Name	Columbia Tap Trail at Southmore Boulevard				
Location Description	Columbia Tap Trail (Shared-Use Path) at Southmore Boulevard (North of Roadway)				
Jurisdiction	City of Ho	uston			
Agency Deployed	City of Ho	uston: Parks and Recreation Department			
GPS Coordinates	29°43'3.0	5"N, 95°22'6.12"W			
Surrounding Land Uses	North	Single-Family Residential, Institutional (Church), Lockhart Elementary School			
	South	Single-Family Residential, Institutional (Church), Commercial/Retail			
	East	Institutional (Church), Single-Family Residential, Commercial/Retail, Multi-Family Residential, Lockhart Elementary School			
	West	Single-Family Residential, Institutional (Church), Multi-Family Residential			
What object was device secured to?	Sign Post (Bicycles Yield to Pedestrians)				
Sidewalk Width	10'				
Buffer Width	N/A (Off-Road Shared-Use Path)				
Street Width	N/A (Off-Road Shared-Use Path)				
Parallel Parking	N/A (Off-Road Shared-Use Path)				
Landscaping or Trees No					
Sidewalk Pavement Type	Concrete				
ADA Ramps	Yes				
Sidewalk Condition	Good				
Speed Limit	N/A (Off-F	Road Shared-Use Path)			
Street Lighting	No				
Street Traffic Volume	N/A (Off-Road Shared-Use Path)				
Transit	Nearby (METRO Bus Stops 150' - 200' South at Southmore Boulevard/Columbia Tap Trail)				
Shade	No				
Have counts been collected by H-GAC at this location before?	No				

- Average daily usage is 86 users/day.
- Usage tends to be higher on weekdays (92 users/day) than during weekends (75 users/day).
- On weekdays, usage is highest in the morning (8:00 a.m. 9:00 a.m.).
- During weekends, usage is highest in the late morning (10:00 a.m. − 11:00 a.m.).

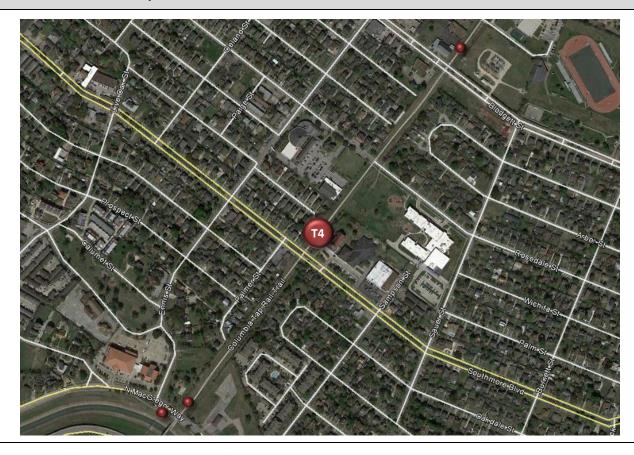




Image 21: Columbia Tap Trail at Southmore Boulevard Facing North



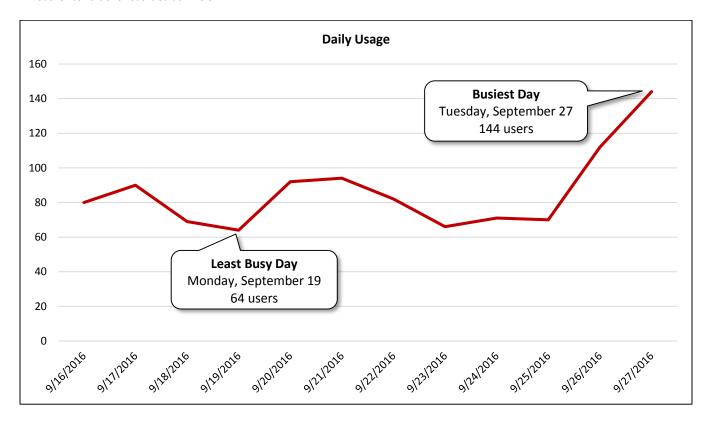
Image 22: Columbia Tap Trail at Southmore Boulevard Facing South

Daily Usage
Columbia Tap Trail at Southmore Boulevard

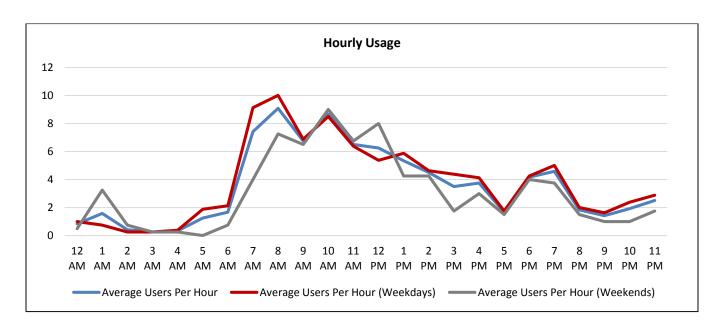
		Select Weather Data*			
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)	
Friday, September 16, 2016	80	92	76	0.01	
Saturday, September 17, 2016	90	96	75	0	
Sunday, September 18, 2016	69	97	76	0	
Monday, September 19, 2016	64	96	76	0	
Tuesday, September 20, 2016	92	96	76	0	
Wednesday, September 21, 2016	94	94	73	0	
Thursday, September 22, 2016	82	92	75	0	
Friday, September 23, 2016	66	90	75	Т	
Saturday, September 24, 2016	71	92	76	0.69	
Sunday, September 25, 2016	70	90	72	0.53	
Monday, September 26, 2016	112	86	73	0.02	
Tuesday, September 27, 2016	144	85	71	Т	

Total	1,034
Average Daily Usage	86
Average Daily Usage (Weekday)	92
Average Daily Usage (Weekend)	75

^{*}Weather conditions recorded at KHOU.



Hourly Usage Columbia Tap Trail at Southmore Boulevard				
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)	
12:00 a.m.	0.8	1.0	0.5	
1:00 a.m.	1.6	0.8	3.3	
2:00 a.m.	0.4	0.3	0.8	
3:00 a.m.	0.3	0.3	0.3	
4:00 a.m.	0.3	0.4	0.3	
5:00 a.m.	1.3	1.9	0.0	
6:00 a.m.	1.7	2.1	0.8	
7:00 a.m.	7.4	9.1	4.0	
8:00 a.m.	9.1	10.0	7.3	
9:00 a.m.	6.8	6.9	6.5	
10:00 a.m.	8.7	8.5	9.0	
11:00 a.m.	6.5	6.4	6.8	
12:00 p.m.	6.3	5.4	8.0	
1:00 p.m.	5.3	5.9	4.3	
2:00 p.m.	4.5	4.6	4.3	
3:00 p.m.	3.5	4.4	1.8	
4:00 p.m.	3.8	4.1	3.0	
5:00 p.m.	1.7	1.8	1.5	
6:00 p.m.	4.2	4.3	4.0	
7:00 p.m.	4.6	5.0	3.8	
8:00 p.m.	1.8	2.0	1.5	
9:00 p.m.	1.4	1.6	1.0	
10:00 p.m.	1.9	2.4	1.0	
11:00 p.m.	2.5	2.9	1.8	



Columbia Tap Trail at North MacGregor Way

Location Information			
Location Name	Columbia Tap Trail at North MacGregor Way		
Location Description	Columbia	Tap Trail (Shared-Use Path) at North MacGregor Way	
	(North of	Roadway)	
Jurisdiction	City of Ho	uston	
Agency Deployed	City of Ho	uston: Parks and Recreation Department	
GPS Coordinates	29°42'50.6	50"N, 95°22'15.95"W	
Surrounding Land Uses	North	Single-Family Residential, Multi-Family Residential	
	South	Brays Bayou, Single-Family Residential, Multi-Family Residential	
	East	Vacant Land, Multi-Family Residential, Single-Family Residential	
	West	Institutional (Church), Single-Family Residential	
What object was device secured to?	Sign Post (Columbia Tap Rail to Trail)	
Sidewalk Width	10'		
Buffer Width	N/A (Off-Road Shared-Use Path)		
Street Width	N/A (Off-Road Shared-Use Path)		
Parallel Parking	N/A (Off-Road Shared-Use Path)		
Landscaping or Trees	None		
Sidewalk Pavement Type	Concrete		
ADA Ramps	Yes		
Sidewalk Condition	Good		
Speed Limit	N/A (Off-R	Road Shared-Use Path)	
Street Lighting	No		
Street Traffic Volume	N/A (Off-Road Shared-Use Path)		
Transit	Yes		
	(METRO Bus Stops 100' East on N. MacGregor and 200' West at Ennis/N. MacGregor)		
Shade	No		
Have counts been collected by	Yes		
H-GAC at this location before?	(September 2015)		

- Average daily usage is 115 users/day.
- Usage tends to be slightly higher during weekends (119 users/day) than on weekdays (113 users/day).
- On weekdays, usage is highest in the morning (8:00 a.m. 9:00 a.m.) and evening (6:00 p.m. 8:00 p.m.).
- During weekends, usage is highest in the morning (8:00 a.m. 9:00 a.m.).
- Pedestrian/bicycle counts were collected at this location in September 2015 and September 2016. Usage was higher in September 2015 (138 users/day) than in September 2016 (115 users/day).

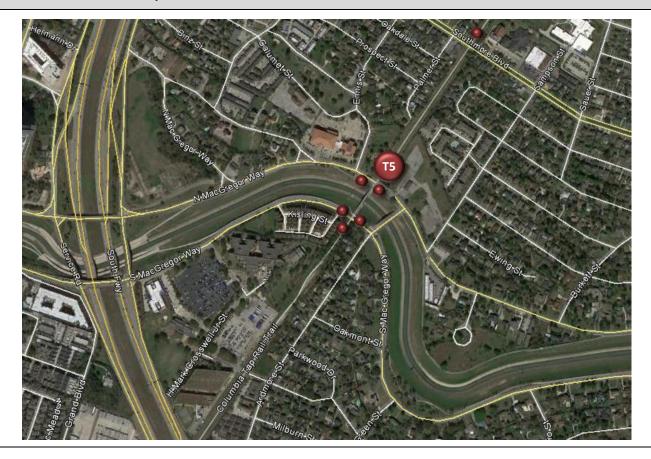




Image 23: Columbia Tap Trail at North MacGregor Way Facing North



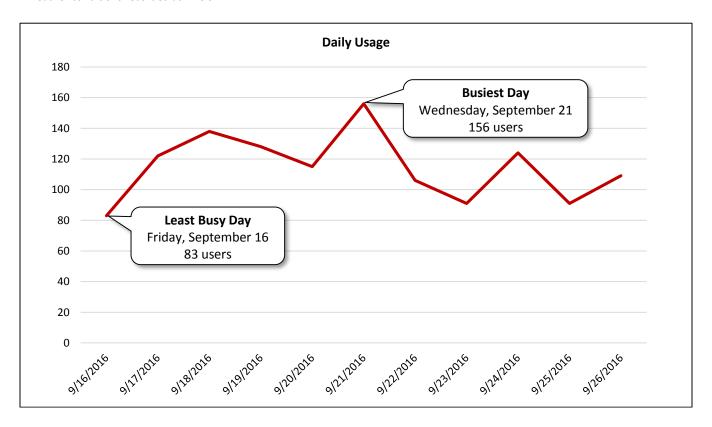
Image 24: Columbia Tap Trail at North MacGregor Way Facing South

Daily Usage	
Columbia Tap Trail at North MacGrego	r Way

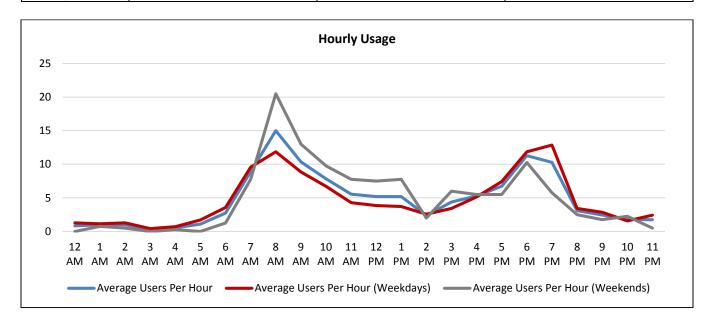
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, September 16, 2016	83	92	76	0.01
Saturday, September 17, 2016	122	96	75	0
Sunday, September 18, 2016	138	97	76	0
Monday, September 19, 2016	128	96	76	0
Tuesday, September 20, 2016	115	96	76	0
Wednesday, September 21, 2016	156	94	73	0
Thursday, September 22, 2016	106	92	75	0
Friday, September 23, 2016	91	90	75	Т
Saturday, September 24, 2016	124	92	76	0.69
Sunday, September 25, 2016	91	90	72	0.53
Monday, September 26, 2016	109	86	73	0.02

Total	1,263
Average Daily Usage	115
Average Daily Usage (Weekday)	113
Average Daily Usage (Weekend)	119

^{*}Weather conditions recorded at KHOU.

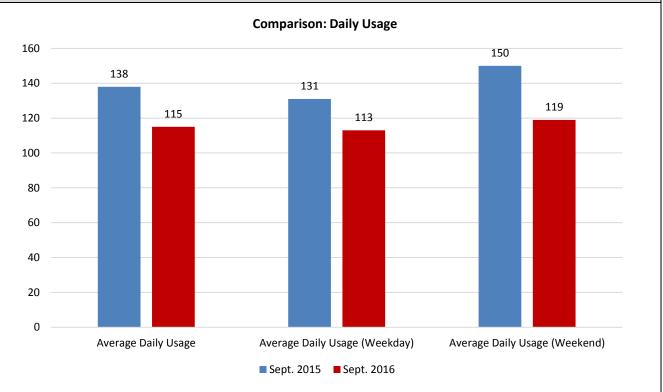


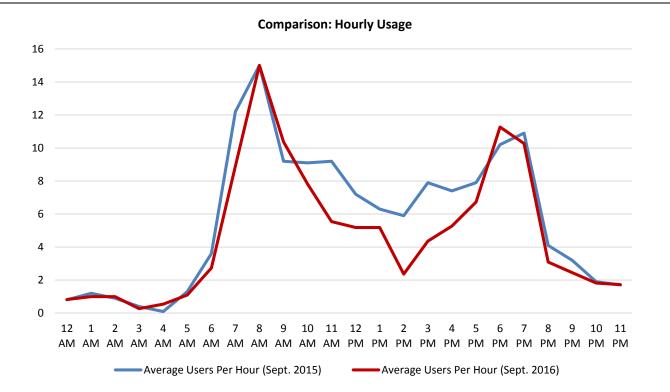
Hourly Usage Columbia Tap Trail at North MacGregor Way				
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)	
12:00 a.m.	0.8	1.3	0.0	
1:00 a.m.	1.0	1.1	0.8	
2:00 a.m.	1.0	1.3	0.5	
3:00 a.m.	0.3	0.4	0.0	
4:00 a.m.	0.5	0.7	0.3	
5:00 a.m.	1.1	1.7	0.0	
6:00 a.m.	2.7	3.6	1.3	
7:00 a.m.	8.9	9.6	7.8	
8:00 a.m.	15.0	11.9	20.5	
9:00 a.m.	10.4	8.9	13.0	
10:00 a.m.	7.8	6.7	9.8	
11:00 a.m.	5.5	4.3	7.8	
12:00 p.m.	5.2	3.9	7.5	
1:00 p.m.	5.2	3.7	7.8	
2:00 p.m.	2.4	2.6	2.0	
3:00 p.m.	4.4	3.4	6.0	
4:00 p.m.	5.3	5.1	5.5	
5:00 p.m.	6.7	7.4	5.5	
6:00 p.m.	11.3	11.9	10.3	
7:00 p.m.	10.3	12.9	5.8	
8:00 p.m.	3.1	3.4	2.5	
9:00 p.m.	2.5	2.9	1.8	
10:00 p.m.	1.8	1.6	2.3	
11:00 p.m.	1.7	2.4	0.5	



Historical Comparison

Columbia Tap Trail at North MacGregor Way





Brays Bayou Trail: North Bank (West of Columbia Tap Trail)

Location Information			
Location Name	Brays Bayou Trail: North Bank (West of Columbia Tap Trail)		
Location Description	Brays Bayou Trail (Shared-Use Path) on North Bank of Brays Bayou West of Columbia Tap Trail		
Jurisdiction	City of Ho	uston	
Agency Deployed	City of Ho	uston: Parks and Recreation Department	
GPS Coordinates	29°42'50.2	22"N, 95°22'17.20"W	
Surrounding Land Uses	North	Bennett Mills Park, Vacant Land, Single-Family Residential, Multi-Family Residential	
	South	Brays Bayou, Single-Family Residential	
	East	Vacant Land, Multi-Family Residential, Single-Family Residential	
	West	Bennett Mills Park, Institutional (Church), Single-Family Residential, Brays Bayou	
What object was device secured to? Utility Pole		e	
Sidewalk Width	10'		
Buffer Width	13' (Varies)		
Street Width	Three-Lane One-Way Roadway		
Parallel Parking	No		
Landscaping or Trees	Yes		
Sidewalk Pavement Type	Asphalt		
ADA Ramps	Yes		
Sidewalk Condition	Good (Mi	nor Unevenness and Edge Deterioration)	
Speed Limit	35 miles p	per hour	
Street Lighting	Yes		
Street Traffic Volume	7,332 (3231 North MacGregor Way: City of Houston – 2009)		
Transit	Nearby (METRO Bus Stops 150' West at Ennis St./N. MacGregor and 175' East along N. MacGregor)		
Shade	No		
Have counts been collected by H-GAC at this location before?	No		

- Average daily usage is 68 users/day.
- Usage tends to be higher during weekends (76 users/day) than on weekdays (64 users/day).
- On weekdays, usage is highest in the evening (5:00 p.m. 7:00 p.m.).
- During weekends, usage is highest midday (11:00 a.m. − 1:00 p.m.).

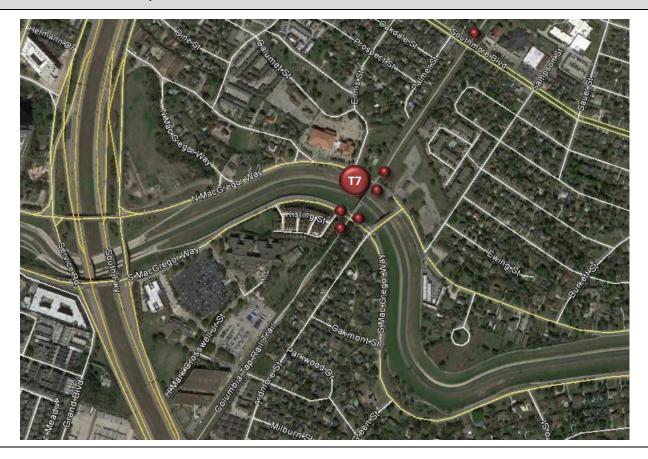




Image 25: Brays Bayou Trail – North Bank (West of Columbia Tap Trail) Facing East



Image 26: Brays Bayou Trail – North Bank (West of Columbia Tap Trail) Facing West

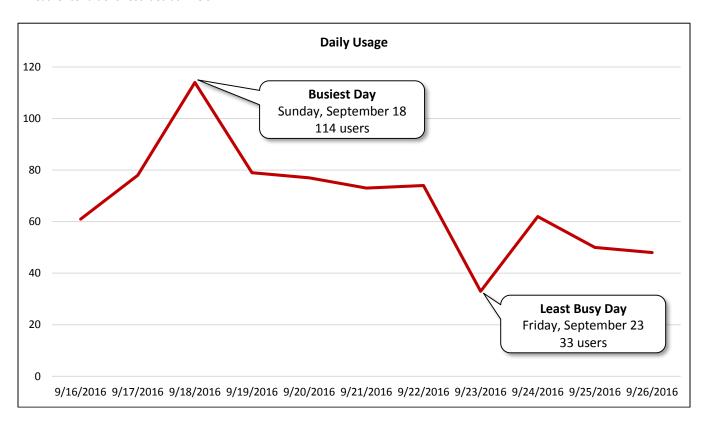
Daily Usage	
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Brays Bayou Trail: North Bank (West of Columbia Tap Trail)

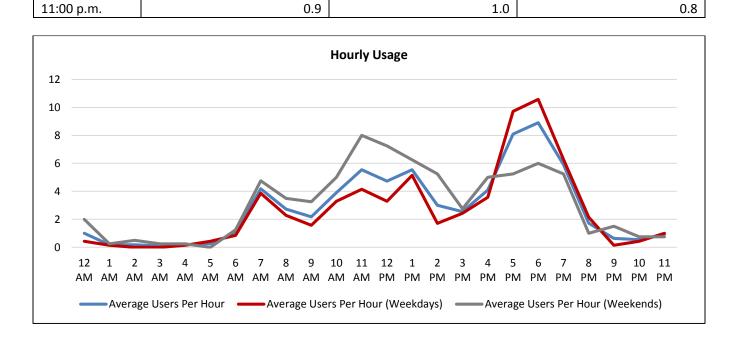
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, September 16, 2016	61	92	76	0.01
Saturday, September 17, 2016	78	96	75	0
Sunday, September 18, 2016	114	97	76	0
Monday, September 19, 2016	79	96	76	0
Tuesday, September 20, 2016	77	96	76	0
Wednesday, September 21, 2016	73	94	73	0
Thursday, September 22, 2016	74	92	75	0
Friday, September 23, 2016	33	90	75	Т
Saturday, September 24, 2016	62	92	76	0.69
Sunday, September 25, 2016	50	90	72	0.53
Monday, September 26, 2016	48	86	73	0.02

Total	749
Average Daily Usage	68
Average Daily Usage (Weekday)	64
Average Daily Usage (Weekend)	76

^{*}Weather conditions recorded at KHOU.



Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	1.0	0.4	2.0
1:00 a.m.	0.2	0.1	0.3
2:00 a.m.	0.2	0.0	0.5
3:00 a.m.	0.1	0.0	0.3
4:00 a.m.	0.2	0.1	0.3
5:00 a.m.	0.3	0.4	0.0
6:00 a.m.	1.0	0.9	1.3
7:00 a.m.	4.2	3.9	4.8
8:00 a.m.	2.7	2.3	3.5
9:00 a.m.	2.2	1.6	3.3
10:00 a.m.	3.9	3.3	5.0
11:00 a.m.	5.5	4.1	8.0
12:00 p.m.	4.7	3.3	7.3
1:00 p.m.	5.5	5.1	6.3
2:00 p.m.	3.0	1.7	5.3
3:00 p.m.	2.5	2.4	2.8
4:00 p.m.	4.1	3.6	5.0
5:00 p.m.	8.1	9.7	5.3
6:00 p.m.	8.9	10.6	6.0
7:00 p.m.	5.9	6.3	5.3
8:00 p.m.	1.7	2.1	1.0
9:00 p.m.	0.6	0.1	1.5
10:00 p.m.	0.5	0.4	0.8



Brays Bayou Trail: North Bank (East of Columbia Tap Trail)

Location Information				
Location Name	Brays Bay	Brays Bayou Trail: North Bank (East of Columbia Tap Trail)		
Location Description		Brays Bayou Trail (Shared-Use Path) on North Bank of Brays Bayou East of Columbia Tap Trail		
Jurisdiction	City of Ho	uston		
Agency Deployed	City of Ho	uston: Parks and Recreation Department		
GPS Coordinates	29°42'49.	45"N, 95°22'15.67"W		
Surrounding Land Uses	North	Vacant Land, Bennett Mills Park, Single-Family Residential, Multi-Family Residential		
	South	Brays Bayou, Single-Family Residential		
	East	Vacant Land, Multi-Family Residential, Single-Family Residential		
	West Bennett Mills Park, Institutional (Church), Single-Family Residential, Brays Bayou			
What object was device secured to?	Tree (Second Tree West of Ardmore Street South of North MacGregor Way)			
Sidewalk Width	8'			
Buffer Width	7' (Varies)			
Street Width	Three-Lar	ne One-Way Roadway		
Parallel Parking	No			
Landscaping or Trees	Yes			
Sidewalk Pavement Type	Asphalt			
ADA Ramps	Yes			
Sidewalk Condition	Good (Minor Unevenness and Edge Deterioration)			
Speed Limit	35 miles per hour			
Street Lighting	Yes			
Street Traffic Volume	7,332 (3231 North MacGregor Way: City of Houston - 2009)			
Transit	Nearby (METRO Bu	s Stop Directly Across N. MacGregor Way on North Side of Roadway)		
Shade	Intermitte	ent		
Have counts been collected by H-GAC at this location before?	No			

- Average daily usage is 45 users/day.
- Usage tends to be higher during weekends (60 users/day) than on weekdays (36 users/day).
- On weekdays, usage is highest in the morning (7:00 a.m. 9:00 a.m.).
- During weekends, usage generally increases as the morning progresses, peaking midday (11:00 a.m. 12:00 p.m.).

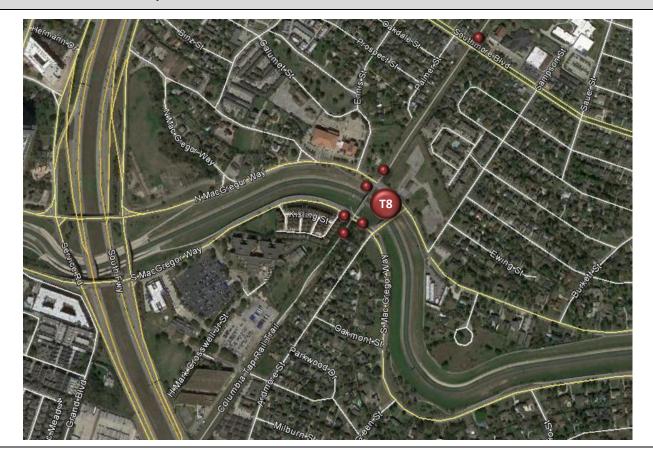




Image 27: Brays Bayou Trail – North Bank (East of Columbia Tap Trail) Facing East



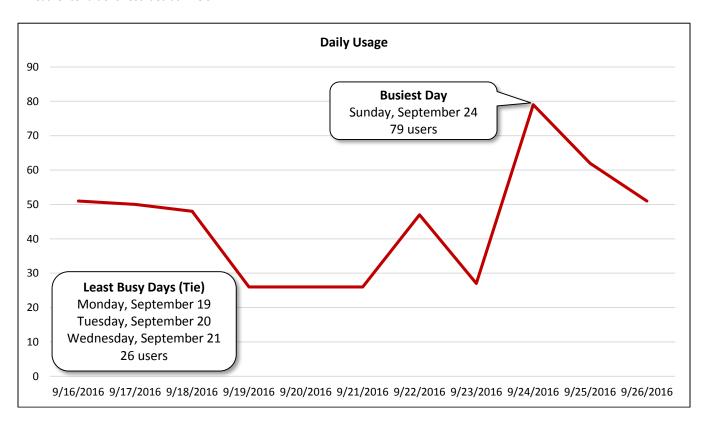
Image 28: Brays Bayou Trail – North Bank (East of Columbia Tap Trail) Facing West

Daily Usage
Brays Bayou Trail: North Bank (East of Columbia Tap Trail)

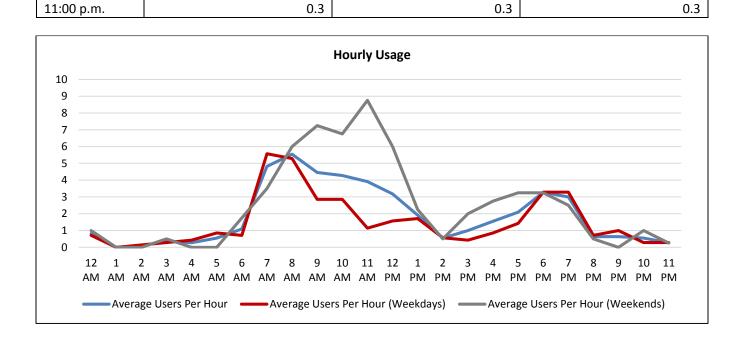
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, September 16, 2016	51	92	76	0.01
Saturday, September 17, 2016	50	96	75	0
Sunday, September 18, 2016	48	97	76	0
Monday, September 19, 2016	26	96	76	0
Tuesday, September 20, 2016	26	96	76	0
Wednesday, September 21, 2016	26	94	73	0
Thursday, September 22, 2016	47	92	75	0
Friday, September 23, 2016	27	90	75	Т
Saturday, September 24, 2016	79	92	76	0.69
Sunday, September 25, 2016	62	90	72	0.53
Monday, September 26, 2016	51	86	73	0.02

Total	493
Average Daily Usage	45
Average Daily Usage (Weekday)	36
Average Daily Usage (Weekend)	60

^{*}Weather conditions recorded at KHOU.



Hourly Usage Brays Bayou Trail: North Bank (East of Columbia Tap Trail)				
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)	
12:00 a.m.	0.8	0.7	1.0	
1:00 a.m.	0.0	0.0	0.0	
2:00 a.m.	0.1	0.1	0.0	
3:00 a.m.	0.4	0.3	0.5	
4:00 a.m.	0.3	0.4	0.0	
5:00 a.m.	0.5	0.9	0.0	
6:00 a.m.	1.1	0.7	1.8	
7:00 a.m.	4.8	5.6	3.5	
8:00 a.m.	5.5	5.3	6.0	
9:00 a.m.	4.5	2.9	7.3	
10:00 a.m.	4.3	2.9	6.8	
11:00 a.m.	3.9	1.1	8.8	
12:00 p.m.	3.2	1.6	6.0	
1:00 p.m.	1.9	1.7	2.3	
2:00 p.m.	0.5	0.6	0.5	
3:00 p.m.	1.0	0.4	2.0	
4:00 p.m.	1.5	0.9	2.8	
5:00 p.m.	2.1	1.4	3.3	
6:00 p.m.	3.3	3.3	3.3	
7:00 p.m.	3.0	3.3	2.5	
8:00 p.m.	0.6	0.7	0.5	



1.0

0.3

0.0

1.0

0.6

0.5

9:00 p.m.

10:00 p.m.

Brays Bayou Trail: South Bank (West of Columbia Tap Trail)

Location Information				
Location Name	Brays Bay	Brays Bayou Trail: South Bank (West of Columbia Tap Trail)		
Location Description	Brays Bayou Trail (Shared-Use Path) on South Bank of Brays Bayou West of			
	Columbia	Tap Trail		
Jurisdiction	City of Ho	uston		
Agency Deployed	City of Ho	uston: Parks and Recreation Department		
GPS Coordinates	29°42'47.7	76"N, 95°22'19.02"W		
Surrounding Land Uses	North	Brays Bayou, Vacant Land, Bennett Mills Park,		
		Institutional (Church)		
	South	Single-Family Residential, Office		
	East	Single-Family Residential, Brays Bayou		
	West	Single-Family Residential, Office		
What object was device secured to?	Utility Pol	e		
Sidewalk Width	10'	10'		
Buffer Width	8' (Varies)			
Street Width	Three-Lan	Three-Lane One-Way Roadway		
Parallel Parking	No	No		
Landscaping or Trees	No			
Sidewalk Pavement Type	Asphalt			
ADA Ramps	Yes			
Sidewalk Condition	Good (Minor Unevenness and Edge Deterioration)			
Speed Limit	30 miles per hour			
Street Lighting	Yes			
Street Traffic Volume	10,248 (3334 South MacGregor Way: City of Houston - 2009)			
Transit	Nearby (Two METRO Bus Stops 200 - 300' East at South MacGregor Way/Ardmore Street)			
Shade	No			
Have counts been collected by H-GAC at this location before?	No			

- Average daily usage is 42 users/day.
- Usage tends to be higher during weekends (45 users/day) than on weekdays (41 users/day).
- On weekdays, usage is highest in the morning (9:00 a.m. 10:00 a.m.).
- During weekends, usage is highest in the morning (9:00 a.m. 10:00 a.m.).

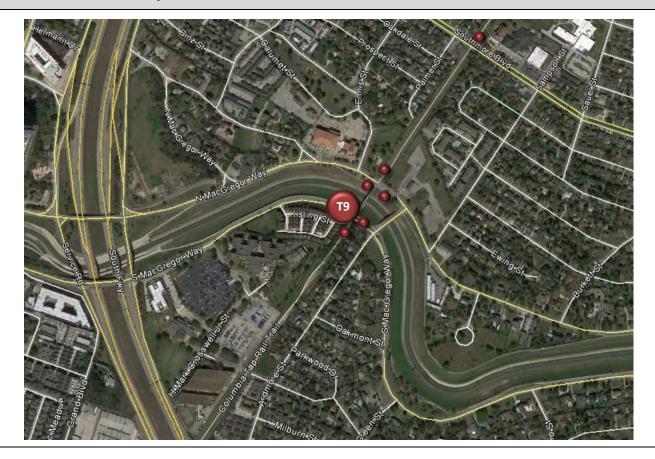




Image 29: Brays Bayou Trail – South Bank (West of Columbia Tap Trail) Facing East



Image 30: Brays Bayou Trail – South Bank (West of Columbia Tap Trail) Facing West

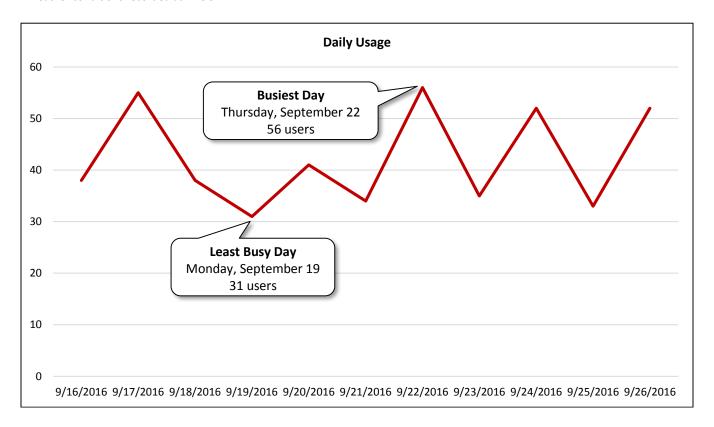
Daily Usage

Brays Bayou Trail: South Bank (West of Columbia Tap Trail)

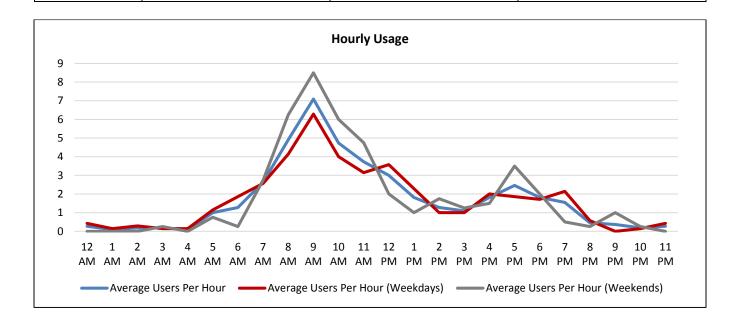
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, September 16, 2016	38	92	76	0.01
Saturday, September 17, 2016	55	96	75	0
Sunday, September 18, 2016	38	97	76	0
Monday, September 19, 2016	31	96	76	0
Tuesday, September 20, 2016	41	96	76	0
Wednesday, September 21, 2016	34	94	73	0
Thursday, September 22, 2016	56	92	75	0
Friday, September 23, 2016	35	90	75	Т
Saturday, September 24, 2016	52	92	76	0.69
Sunday, September 25, 2016	33	90	72	0.53
Monday, September 26, 2016	52	86	73	0.02

Total	465
Average Daily Usage	42
Average Daily Usage (Weekday)	41
Average Daily Usage (Weekend)	45

^{*}Weather conditions recorded at KHOU.



Hourly Usage Brays Bayou Trail: South Bank (West of Columbia Tap Trail)			
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.	0.1	0.1	0.0
2:00 a.m.	0.2	0.3	0.0
3:00 a.m.	0.2	0.1	0.3
4:00 a.m.	0.1	0.1	0.0
5:00 a.m.	1.0	1.1	0.8
6:00 a.m.	1.3	1.9	0.3
7:00 a.m.	2.6	2.6	2.8
8:00 a.m.	4.9	4.1	6.3
9:00 a.m.	7.1	6.3	8.5
10:00 a.m.	4.7	4.0	6.0
11:00 a.m.	3.7	3.1	4.8
12:00 p.m.	3.0	3.6	2.0
1:00 p.m.	1.8	2.3	1.0
2:00 p.m.	1.3	1.0	1.8
3:00 p.m.	1.1	1.0	1.3
4:00 p.m.	1.8	2.0	1.5
5:00 p.m.	2.5	1.9	3.5
6:00 p.m.	1.8	1.7	2.0
7:00 p.m.	1.5	2.1	0.5
8:00 p.m.	0.5	0.6	0.3
9:00 p.m.	0.4	0.0	1.0



0.1

0.4

0.3

0.0

0.2

0.3

10:00 p.m.

11:00 p.m.

Brays Bayou Trail: South Bank (East of Columbia Tap Trail)

Location Information			
Location Name	Brays Bayou Trail: South Bank (East of Columbia Tap Trail)		
Location Description		Brays Bayou Trail (Shared-Use Path) on South Bank of Brays Bayou East of Columbia Tap Trail	
Jurisdiction	City of Ho	uston	
Agency Deployed	City of Ho	uston: Parks and Recreation Department	
GPS Coordinates	29°42'46.8	85"N, 95°22'17.55"W	
Surrounding Land Uses	North	Brays Bayou, Vacant Land, Bennett Mills Park, Institutional (Church)	
	South	Single-Family Residential, Office	
	East	Single-Family Residential, Brays Bayou	
	West	Single-Family Residential, Office	
What object was device secured to?	Utility Pol	e	
Sidewalk Width	10'	10'	
Buffer Width	9' (Varies)		
Street Width	Three-Lan	e One-Way Roadway	
Parallel Parking	No		
Landscaping or Trees	No	No	
Sidewalk Pavement Type	Concrete		
ADA Ramps	Yes		
Sidewalk Condition	Good	Good	
Speed Limit	30 miles per hour		
Street Lighting	Yes		
Street Traffic Volume	10,248 (3334 South MacGregor Way: City of Houston – 2009)		
Transit	Nearby (Two METRO Bus Stops 75 - 175' East at South MacGregor Way/Ardmore Street)		
Shade	No		
Have counts been collected by H-GAC at this location before?	No		

- Average daily usage is 74 users/day.
- Usage tends to be higher during weekends (83 users/day) than on weekdays (69 users/day).
- On weekdays, usage is highest in the morning (7:00 a.m. 9:00 a.m.).
- During weekends, usage is highest in the morning (9:00 a.m. 10:00 a.m.).

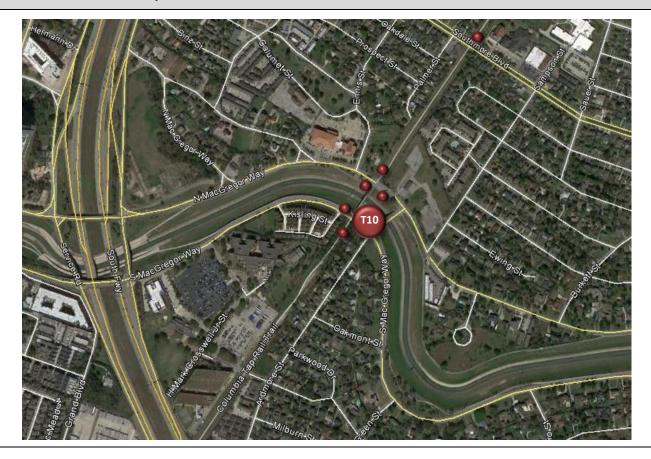




Image 31: Brays Bayou Trail – South Bank (East of Columbia Tap Trail) Facing East



Image 32: Brays Bayou Trail – South Bank (East of Columbia Tap Trail) Facing West

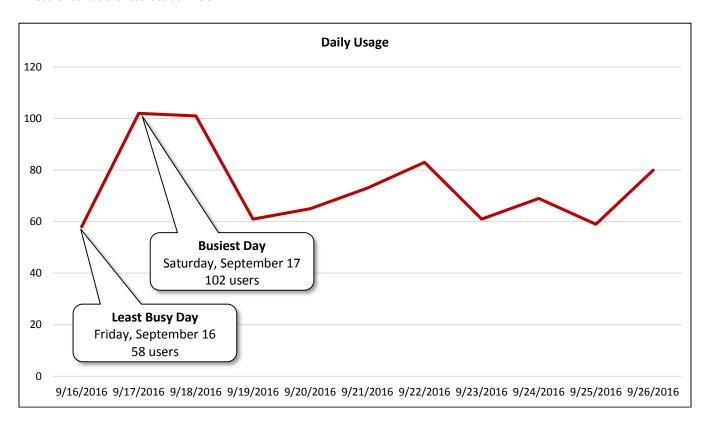
Daily Usage

Brays Bayou Trail: South Bank (East of Columbia Tap Trail)

	Select Weather Data*			•
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, September 16, 2016	58	92	76	0.01
Saturday, September 17, 2016	102	96	75	0
Sunday, September 18, 2016	101	97	76	0
Monday, September 19, 2016	61	96	76	0
Tuesday, September 20, 2016	65	96	76	0
Wednesday, September 21, 2016	73	94	73	0
Thursday, September 22, 2016	83	92	75	0
Friday, September 23, 2016	61	90	75	Т
Saturday, September 24, 2016	69	92	76	0.69
Sunday, September 25, 2016	59	90	72	0.53
Monday, September 26, 2016	80	86	73	0.02

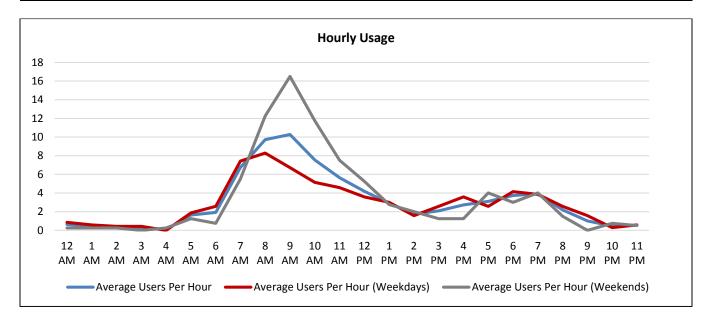
Total	812
Average Daily Usage	74
Average Daily Usage (Weekday)	69
Average Daily Usage (Weekend)	83

^{*}Weather conditions recorded at KHOU.



Hourly Usage			
Brays Bayou Trail:	Brays Bayou Trail: South Bank (East of Columbia Tap Trail)		

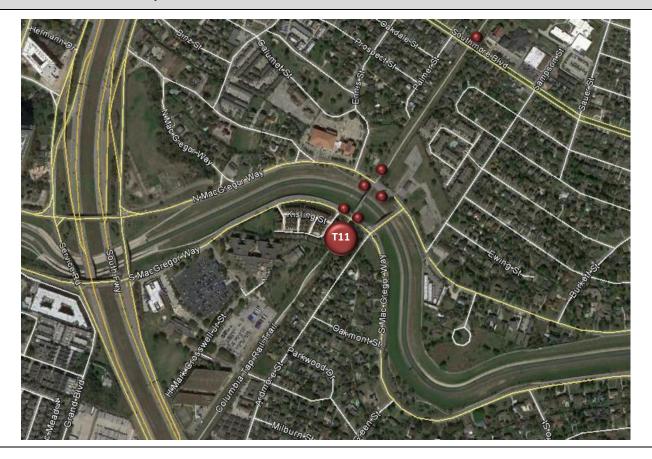
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.6	0.9	0.3
1:00 a.m.	0.5	0.6	0.3
2:00 a.m.	0.4	0.4	0.3
3:00 a.m.	0.3	0.4	0.0
4:00 a.m.	0.1	0.0	0.3
5:00 a.m.	1.6	1.9	1.3
6:00 a.m.	1.9	2.6	0.8
7:00 a.m.	6.7	7.4	5.5
8:00 a.m.	9.7	8.3	12.3
9:00 a.m.	10.3	6.7	16.5
10:00 a.m.	7.5	5.1	11.8
11:00 a.m.	5.6	4.6	7.5
12:00 p.m.	4.2	3.6	5.3
1:00 p.m.	2.9	3.0	2.8
2:00 p.m.	1.7	1.6	2.0
3:00 p.m.	2.1	2.6	1.3
4:00 p.m.	2.7	3.6	1.3
5:00 p.m.	3.1	2.6	4.0
6:00 p.m.	3.7	4.1	3.0
7:00 p.m.	3.9	3.9	4.0
8:00 p.m.	2.2	2.6	1.5
9:00 p.m.	1.0	1.6	0.0
10:00 p.m.	0.5	0.3	0.8
11:00 p.m.	0.5	0.6	0.5



Columbia Tap Trail at South MacGregor Way

Location Information			
Location Name	Columbia Tap Trail at South MacGregor Way		
Location Description	Columbia Tap Trail (Shared-Use Path) South of South MacGregor Way		
Jurisdiction	City of Ho	uston	
Agency Deployed	City of Ho	uston: Parks and Recreation Department	
GPS Coordinates	29°42'46.4	46"N, 95°22'19.28"W	
Surrounding Land Uses	North	Brays Bayou, Bennett Mills Park, Vacant Land, Institutional (Church)	
	South	Single-Family Residential, Office	
	East	Single-Family Residential	
	West	Single-Family Residential, Office	
What object was device secured to?	Tree (Wes	t of Columbia Tap Trail)	
Sidewalk Width	10'		
Buffer Width	N/A (Off-Road Shared-Use Path)		
Street Width	N/A (Off-Road Shared-Use Path)		
Parallel Parking	N/A (Off-F	N/A (Off-Road Shared-Use Path)	
Landscaping or Trees	Yes		
Sidewalk Pavement Type	Concrete		
ADA Ramps	Yes		
Sidewalk Condition	Good		
Speed Limit	N/A (Off-Road Shared-Use Path)		
Street Lighting	No		
Street Traffic Volume	N/A (Off-F	Road Shared-Use Path)	
Transit	Nearby (METRO Bus Stop 150' East at South MacGregor Way/Ardmore Street)		
Shade	Yes		
Have counts been collected by H-GAC at this location before?	No		

- Average daily usage is 45 users/day.
- Usage tends to be higher during weekends (55 users/day) than on weekdays (40 users/day).
- On weekdays, usage remains relatively steady during daylight hours, peaking in the morning (9:00 a.m. 10:00 a.m.) and midday (11:00 a.m. 12:00 p.m.).
- During weekends, usage is highest midday (11:00 a.m. 12:00 p.m.).



Location Information: Photos



Image 33: Columbia Tap Trail at South MacGregor Way Facing North



Image 34: Columbia Tap Trail at South MacGregor Way Facing South

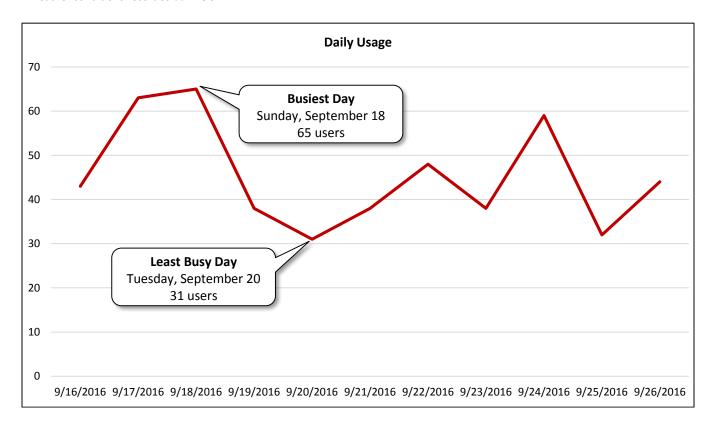
78

Daily Usage
Columbia Tan Trail at South MacGregor Way

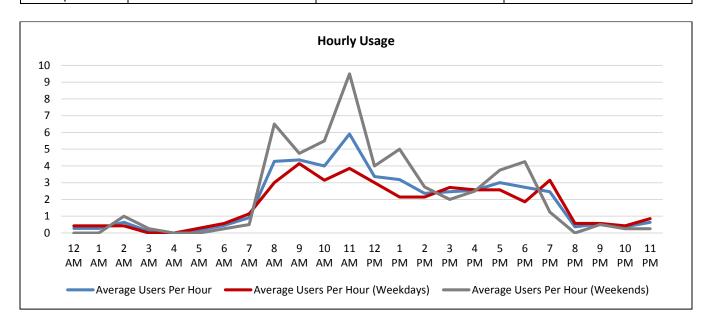
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, September 16, 2016	43	92	76	0.01
Saturday, September 17, 2016	63	96	75	0
Sunday, September 18, 2016	65	97	76	0
Monday, September 19, 2016	38	96	76	0
Tuesday, September 20, 2016	31	96	76	0
Wednesday, September 21, 2016	38	94	73	0
Thursday, September 22, 2016	48	92	75	0
Friday, September 23, 2016	38	90	75	Т
Saturday, September 24, 2016	59	92	76	0.69
Sunday, September 25, 2016	32	90	72	0.53
Monday, September 26, 2016	44	86	73	0.02

Total	499
Average Daily Usage	45
Average Daily Usage (Weekday)	40
Average Daily Usage (Weekend)	55

^{*}Weather conditions recorded at KHOU.



Hourly Usage Columbia Tap Trail	at South MacGregor Way		
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	0.4	0.0
2:00 a.m.	0.6	0.4	1.0
3:00 a.m.	0.1	0.0	0.3
4:00 a.m.	0.0	0.0	0.0
5:00 a.m.	0.2	0.3	0.0
6:00 a.m.	0.5	0.6	0.3
7:00 a.m.	0.9	1.1	0.5
8:00 a.m.	4.3	3.0	6.5
9:00 a.m.	4.4	4.1	4.8
10:00 a.m.	4.0	3.1	5.5
11:00 a.m.	5.9	3.9	9.5
12:00 p.m.	3.4	3.0	4.0
1:00 p.m.	3.2	2.1	5.0
2:00 p.m.	2.4	2.1	2.8
3:00 p.m.	2.5	2.7	2.0
4:00 p.m.	2.5	2.6	2.5
5:00 p.m.	3.0	2.6	3.8
6:00 p.m.	2.7	1.9	4.3
7:00 p.m.	2.5	3.1	1.3
8:00 p.m.	0.4	0.6	0.0
9:00 p.m.	0.5	0.6	0.5
10:00 p.m.	0.4	0.4	0.3
11:00 p.m.	0.6	0.9	0.3



Columbia Tap Trail at State Highway 288

Location Information				
Location Name	Columbia Tap Trail at State Highway 288			
Location Description	Columbia Tap Trail (Shared-Use Path) at Pedestrian/Bicycle Bridge over State Highway 288			
Jurisdiction	City of Ho	uston		
Agency Deployed	City of Ho	uston: Parks and Recreation Department		
GPS Coordinates	29°42'29.	21"N, 95°22'32.92"W		
Surrounding Land Uses	North	DeBakey High School for Health Professions, Multi-Family Residential, Single-Family Residential		
	South	State Highway 288, Industrial		
	East	Multi-Family Residential, Single-Family Residential		
	West	Debakey High School for Health Professions, State Highway 288, Industrial		
What object was device secured to?	Fence (We Highway 2	est of Columbia Tap Trail at Northern End of Bridge over State 288)		
Sidewalk Width	10'	10'		
Buffer Width	N/A (Off-Road Shared-Use Path)			
Street Width	N/A (Off-Road Shared-Use Path)			
Parallel Parking	N/A (Off-I	Road Shared-Use Path)		
Landscaping or Trees	No			
Sidewalk Pavement Type	Concrete			
ADA Ramps	Yes			
Sidewalk Condition	Good			
Speed Limit	N/A (Off-Road Shared-Use Path)			
Street Lighting	No			
Street Traffic Volume	N/A (Off-Road Shared-Use Path)			
Transit	No			
Shade	No			
Have counts been collected by H-GAC at this location before?	No			
Notes	Counter T12 malfunctioned and did not collect accurate data during the deployment period. Insects inside or around Counter T12 may have interfered with the counts.			

Trends

Counter T12 malfunctioned and did not collect accurate data during the deployment period. Insects inside or around Counter T12 may have interfered with the counts.

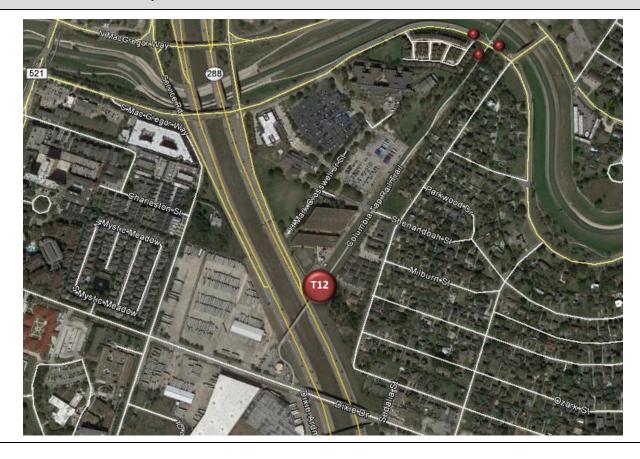




Image 35: Columbia Tap Trail at State Highway 288
Facing North



Image 36: Columbia Tap Trail at State Highway 288
Facing South

Bill Coats Bridge at Hermann Park

Location Information			
Location Name	Bill Coats Bridge at Hermann Park		
Location Description	Pedestriar	Pedestrian/Bicycle Bridge over Brays Bayou at Hermann Park	
Jurisdiction	City of Ho	uston	
Agency Deployed	City of Ho	uston: Parks and Recreation Department	
GPS Coordinates	29°42'36.2	22"N, 95°23'5.51"W	
Surrounding Land Uses	North	Hermann Park	
	South	Hermann Park	
	East	Hermann Park, Multi-Family Residential	
	West	Hermann Park	
What object was device secured to?	Bridge Rai	ling (East End of Bridge)	
Sidewalk Width	13.5'		
Buffer Width	N/A (Off-Road Shared-Use Path)		
Street Width	N/A (Off-Road Shared-Use Path)		
Parallel Parking	N/A (Off-Road Shared-Use Path)		
Landscaping or Trees	No		
Sidewalk Pavement Type	Concrete		
ADA Ramps	Yes		
Sidewalk Condition	Excellent		
Speed Limit	N/A (Off-Road Shared-Use Path)		
Street Lighting	Yes		
Street Traffic Volume	N/A (Off-F	Road Shared-Use Path)	
Transit	Nearby (METRO Bus Stop 650' East at Almeda Road/Camden Drive)		
Shade	No		
Have counts been collected by H-GAC at this location before?	No		

- Average daily usage is 295 users/day.
- Usage tends to be higher during weekends (309 users/day) than on weekdays (288 users/day).
- On weekdays, usage is highest in the evening (6:00 p.m. 8:00 p.m.). There is also a pronounced increase in usage during the morning hours (7:00 a.m. 9:00 a.m.).
- During weekends, usage is highest in the morning (8:00 a.m. 10:00 a.m.). There is also a pronounced increase in usage during the evening hours (7:00 p.m. 8:00 p.m.).

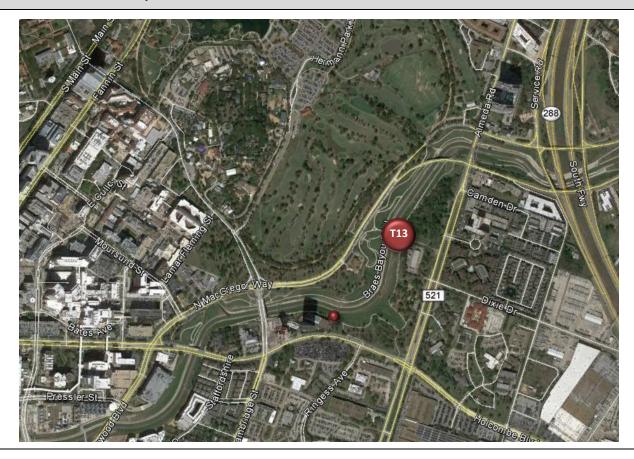




Image 37: Bill Coats Bridge at Hermann Park Facing East



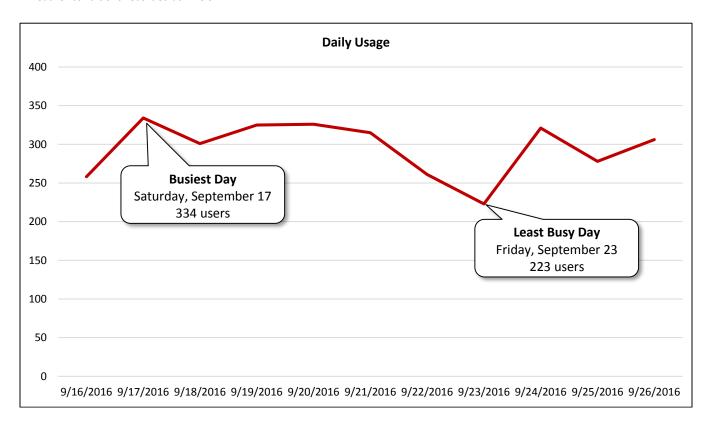
Image 38: Bill Coats Bridge at Hermann Park Facing West

Daily Usage
Bill Coats Bridge at Hermann Park

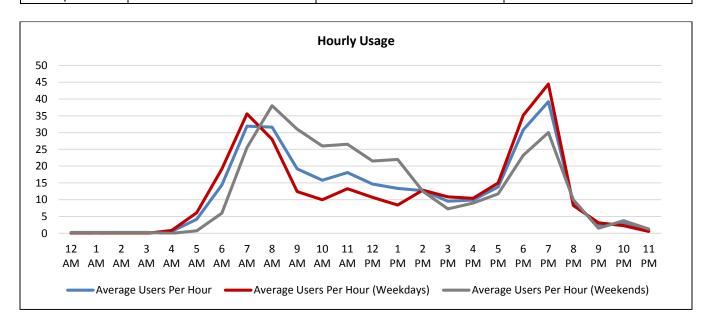
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, September 16, 2016	258	92	76	0.01
Saturday, September 17, 2016	334	96	75	0
Sunday, September 18, 2016	301	97	76	0
Monday, September 19, 2016	325	96	76	0
Tuesday, September 20, 2016	326	96	76	0
Wednesday, September 21, 2016	315	94	73	0
Thursday, September 22, 2016	261	92	75	0
Friday, September 23, 2016	223	90	75	Т
Saturday, September 24, 2016	321	92	76	0.69
Sunday, September 25, 2016	278	90	72	0.53
Monday, September 26, 2016	306	86	73	0.02

Total	3,248
Average Daily Usage	295
Average Daily Usage (Weekday)	288
Average Daily Usage (Weekend)	309

^{*}Weather conditions recorded at KHOU.



Hourly Usage Bill Coats Bridge at Hermann Park				
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.	0.2	0.1	0.3	
2:00 a.m.	0.1	0.0	0.3	
3:00 a.m.	0.1	0.0	0.3	
4:00 a.m.	0.5	0.9	0.0	
5:00 a.m.	4.2	6.1	0.8	
6:00 a.m.	14.4	19.1	6.0	
7:00 a.m.	31.9	35.6	25.5	
8:00 a.m.	31.6	28.0	38.0	
9:00 a.m.	19.2	12.4	31.0	
10:00 a.m.	15.8	10.0	26.0	
11:00 a.m.	18.1	13.3	26.5	
12:00 p.m.	14.6	10.7	21.5	
1:00 p.m.	13.4	8.4	22.0	
2:00 p.m.	12.7	12.9	12.5	
3:00 p.m.	9.5	10.9	7.3	
4:00 p.m.	9.9	10.4	9.0	
5:00 p.m.	13.8	15.0	11.8	
6:00 p.m.	30.8	35.1	23.3	
7:00 p.m.	39.2	44.4	30.0	
8:00 p.m.	8.9	8.3	10.0	
9:00 p.m.	2.5	3.1	1.5	
10:00 p.m.	2.8	2.3	3.8	
11:00 p.m.	0.8	0.6	1.3	



The Spires Pedestrian/Bicycle Bridge

Location Information			
Location Name	The Spires Pedestrian/Bicycle Bridge		
Location Description	Pedestrian/Bicycle Bridge over Brays Bayou near Hermann Park and east of The Spires Condominiums (2001 Holcombe Boulevard)		
Jurisdiction	City of Houston		
Agency Deployed	City of Houston: Parks and Recreation Department		
GPS Coordinates	29°42'28.50"N, 95°23'13.84"W		
Surrounding Land Uses	North Hermann Park		
	South	Multi-Family Residential, Parking Lots, Office	
	East	Hermann Park, Commercial/Retail	
	West	Multi-Family Residential, Hermann Park, Office	
What object was device secured to?	Bridge Rai	iling (North End of Bridge)	
Sidewalk Width	7'		
Buffer Width	N/A (Off-F	Road Shared-Use Path)	
Street Width	N/A (Off-Road Shared-Use Path)		
Parallel Parking	N/A (Off-Road Shared-Use Path)		
Landscaping or Trees	Yes		
Sidewalk Pavement Type	Bridge: Metal Grating Shared-Use Path Approaches: Asphalt		
ADA Ramps	Yes		
Sidewalk Condition	Good		
Speed Limit	N/A (Off-Road Shared-Use Path)		
Street Lighting	No		
Street Traffic Volume	N/A (Off-Road Shared-Use Path)		
Transit	Nearby (METRO Bus Stop 550' South at Holcombe Boulevard/Ringess Avenue)		
Shade	No		
Have counts been collected by H-GAC at this location before?	No		
Notes	During the deployment period, Brays Bayou Trail: North Bank west of Counter T14 was closed due to construction. This pedestrian/bicycle bridge was signed as a detour for pedestrians and cyclists using the shared-use path.		

- Average daily usage is 96 users/day.
- Usage tends to be higher on weekdays (101 users/day) than during weekends (86 users/day).
- On weekdays, usage is highest in the evening (6:00 p.m. 7:00 p.m.). There is also a pronounced increase in usage during the morning hours (8:00 a.m. 9:00 a.m.).
- During weekends, usage is highest in the morning (8:00 a.m. 11:00 a.m.).

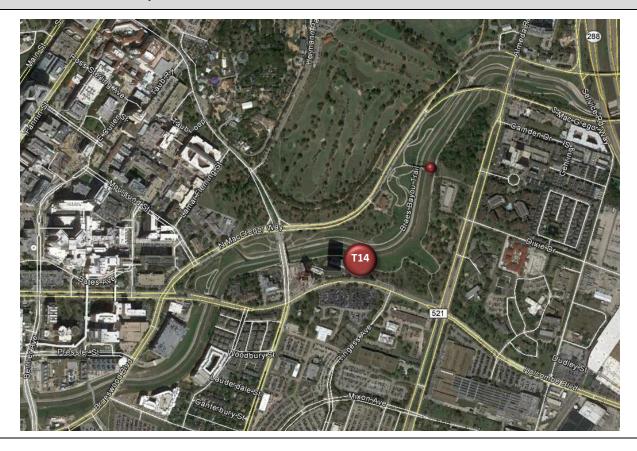




Image 39: The Spires Pedestrian/Bicycle Bridge Facing North



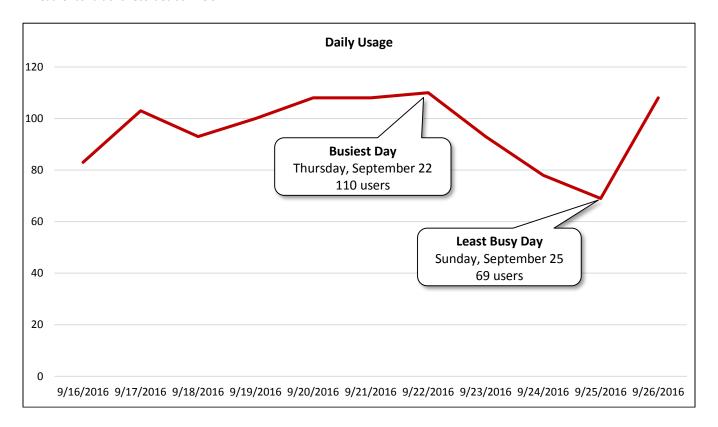
Image 40: The Spires Pedestrian/Bicycle Bridge Facing South

Daily Usage
The Spires Pedestrian/Bicycle Bridge

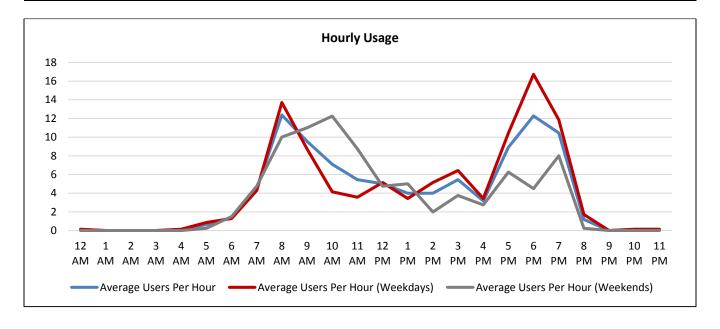
		Select Weather Data*		
Date	Users	High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Friday, September 16, 2016	83	92	76	0.01
Saturday, September 17, 2016	103	96	75	0
Sunday, September 18, 2016	93	97	76	0
Monday, September 19, 2016	100	96	76	0
Tuesday, September 20, 2016	108	96	76	0
Wednesday, September 21, 2016	108	94	73	0
Thursday, September 22, 2016	110	92	75	0
Friday, September 23, 2016	93	90	75	Т
Saturday, September 24, 2016	78	92	76	0.69
Sunday, September 25, 2016	69	90	72	0.53
Monday, September 26, 2016	108	86	73	0.02

Total	1,053
Average Daily Usage	96
Average Daily Usage (Weekday)	101
Average Daily Usage (Weekend)	86

^{*}Weather conditions recorded at KHOU.



Hourly Usage The Spires Pedestrian/Bicycle Bridge				
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.	0.0	0.0	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.	0.6	0.9	0.3	
6:00 a.m.	1.4	1.3	1.5	
7:00 a.m.	4.5	4.3	4.8	
8:00 a.m.	12.4	13.7	10.0	
9:00 a.m.	9.5	8.7	11.0	
10:00 a.m.	7.1	4.1	12.3	
11:00 a.m.	5.5	3.6	8.8	
12:00 p.m.	5.0	5.1	4.8	
1:00 p.m.	4.0	3.4	5.0	
2:00 p.m.	4.0	5.1	2.0	
3:00 p.m.	5.5	6.4	3.8	
4:00 p.m.	3.2	3.4	2.8	
5:00 p.m.	8.9	10.4	6.3	
6:00 p.m.	12.3	16.7	4.5	
7:00 p.m.	10.5	11.9	8.0	
8:00 p.m.	1.2	1.7	0.3	
9:00 p.m.	0.0	0.0	0.0	
10:00 p.m.	0.1	0.1	0.0	
11:00 p.m.	0.1	0.1	0.0	



Participants

City of Houston: Parks and Recreation Department

www.houstontx.gov/parks/

Houston-Galveston Area Council: Pedestrian-Bicyclist Planning

www.h-gac.com/go/pedbike

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