



Dallas Park & Recreation

DALLAS PARK AND RECREATION TRAIL COUNTER SYSTEM UPDATE



PARK AND RECREATION BOARD

November 17, 2016

Counter Assembly Installed



- The post contains a dual infrared sensor capable of detecting motion from both directions
- The loop detector installed in the concrete or asphalt will detect the metal in the rims or frame of the bicycle
- The green box contains the processing unit, battery and data transmitting unit

Trail Counter System

- Requires minimal maintenance
- Monitored for system health by vendor
- Non-obtrusive
- Waterproof
- Two year battery life
- Data is transmitted via GSM/3G to a cloud server at 5:00 am each day
- Department has access to the data 24/7
- Capable of being redeployed to additional trails with purchase of loop detector and vault box

Overview

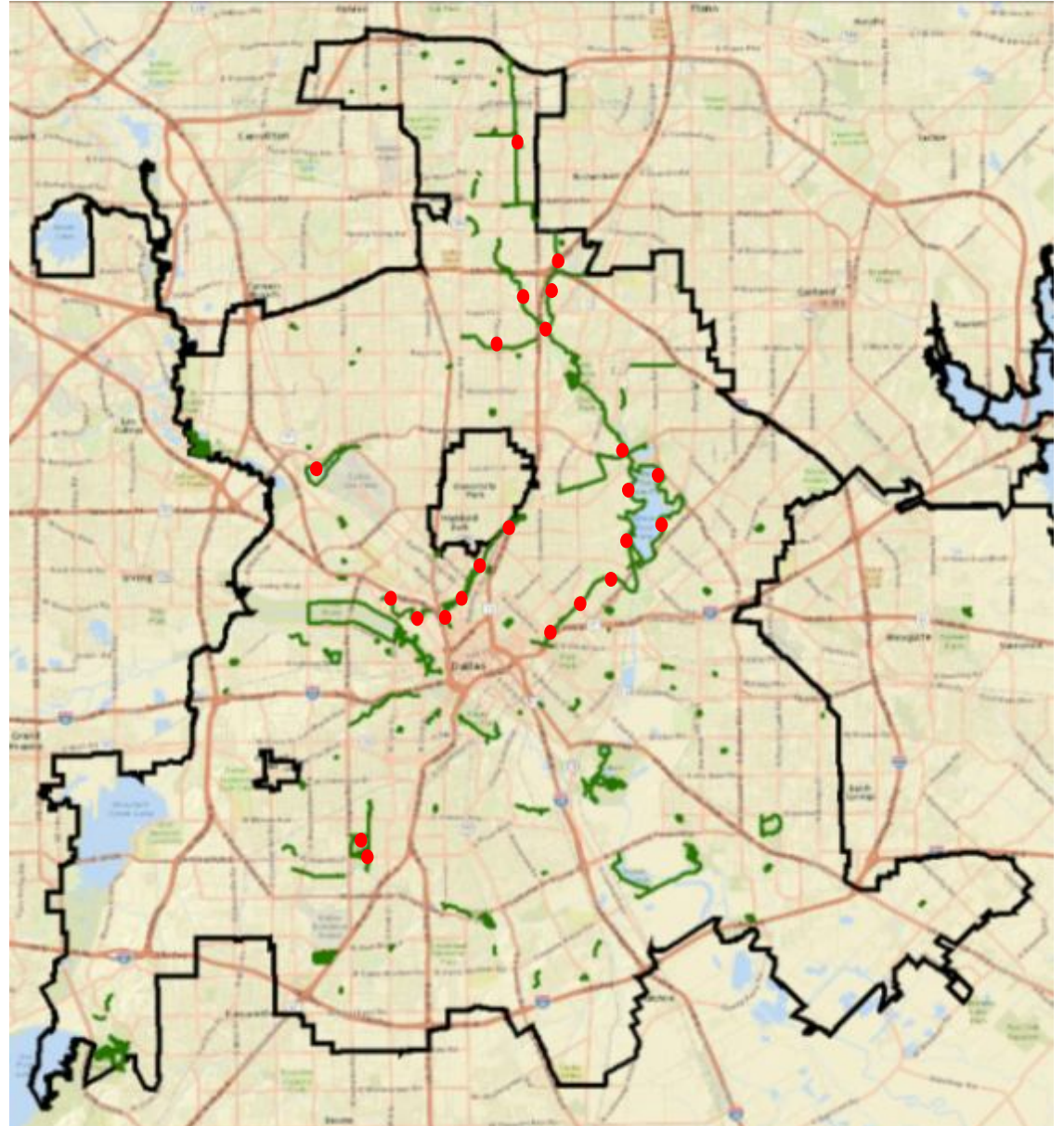
- A total of 22 trail counters have been installed at 10 Park and Recreation trails
- Installation was performed by Park Department's Facility Services
- Trail Counters have been in operation and counting since July of 2015

Data Collected

- Total number of Trail Users
- Total number of Cyclists
 - From Left to Right (in)
 - From Right to Left (out)
- Total number of Pedestrians
 - From Left to Right (in)
 - From Right to Left (out)
- Date and time data for each count event

Current Locations

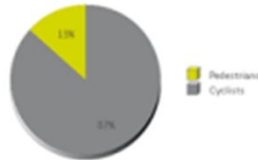
- Bachman Lake Loop Trail
- Cottonwood Creek Trail
- Katy Trail
- Kiest Park Loop Trail
- Northaven Trail
- Preston Ridge Trail
- Santa Fe Trail
- Trinity Strand Trail
- White Rock Lake Trail
- White Rock Creek Trail



Standard System Report

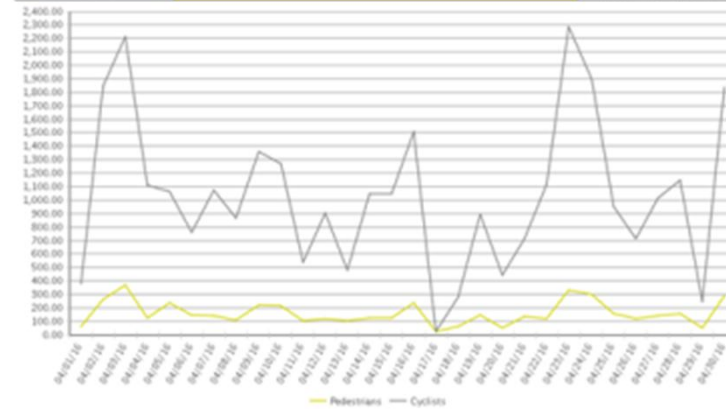
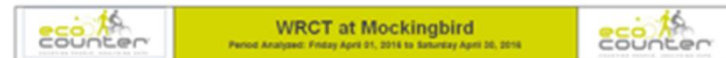


Total Traffic for the Analysis Period		Daily Average	Busiest Day of the Week	Distribution	
Pedestrians	4,807	160	Saturday	IN	50
Cyclists	31,033	1,034	Saturday	OUT	71



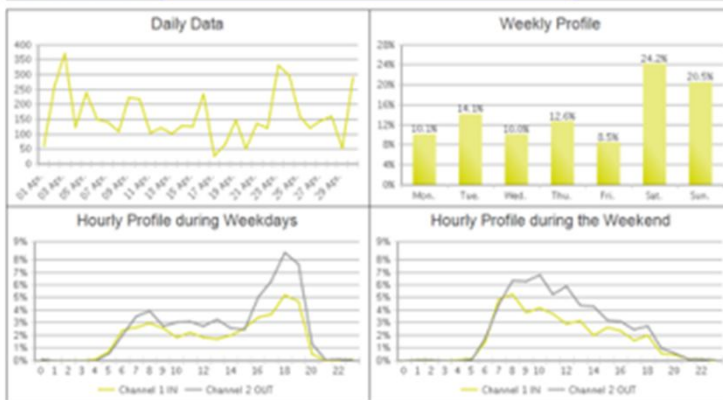
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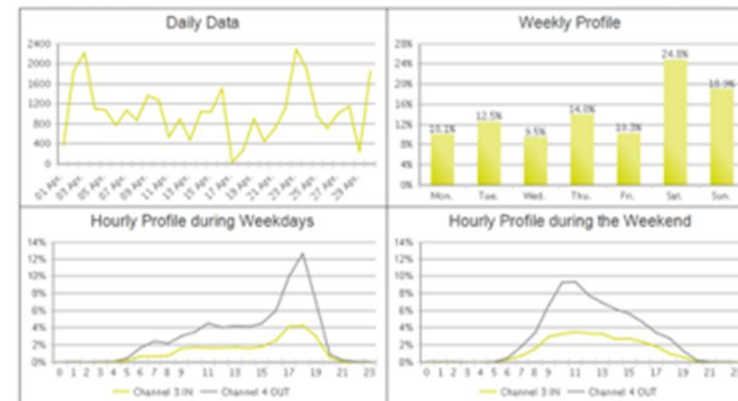
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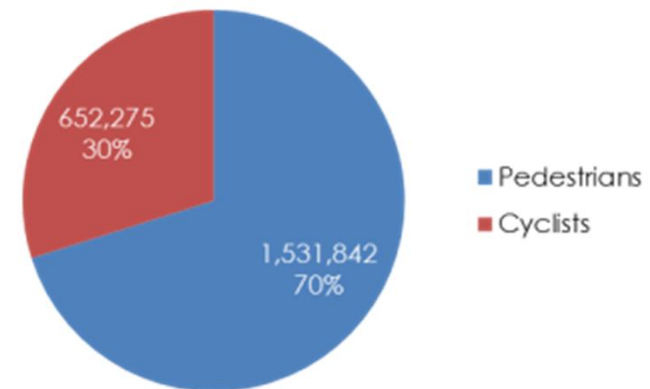
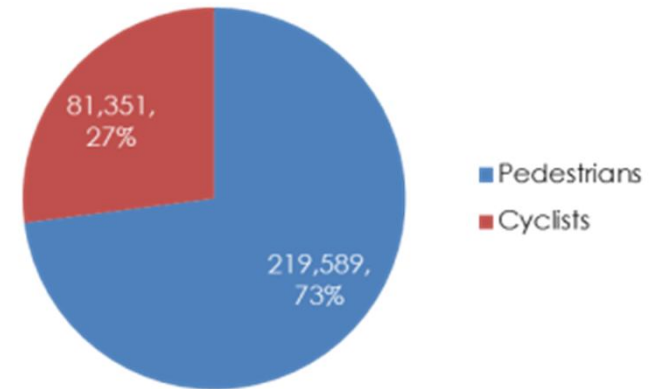


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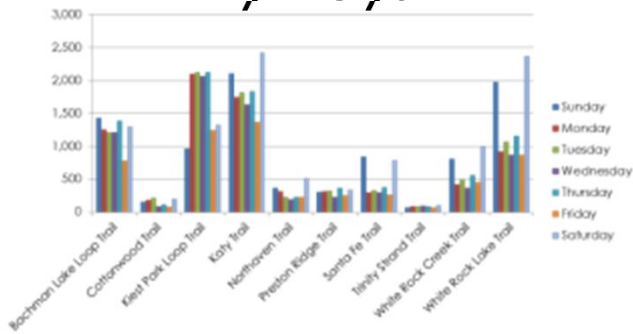
Analytical Report Prepared by Staff

- System Use Present and Historical
- Pie chart showing the total number of users for the month displayed as a percentage of Pedestrians or Cyclists
- Pie chart showing the total number of trail users since June 2015 displayed as a percentage of Pedestrians or Cyclists

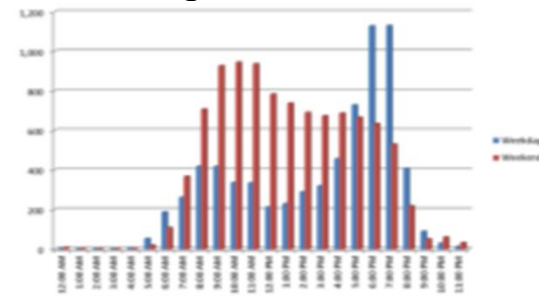


Analytical Report Prepared by Staff

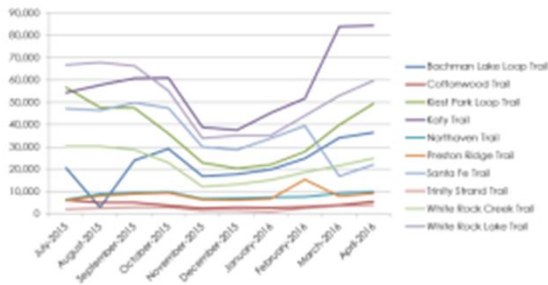
By Days



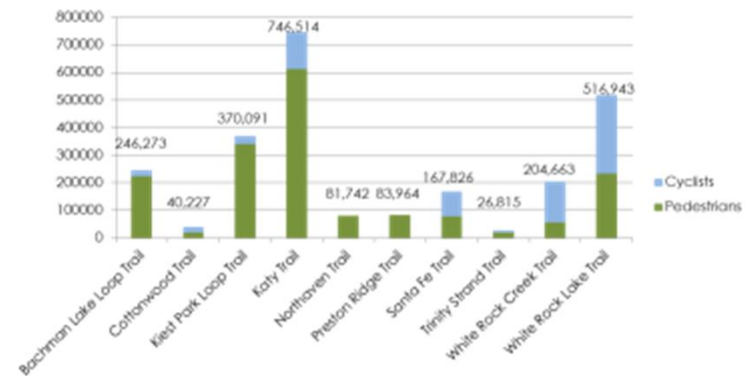
By Hours



Total Use by Month



By Pedestrians and Cyclists



Benefits to Using Counters

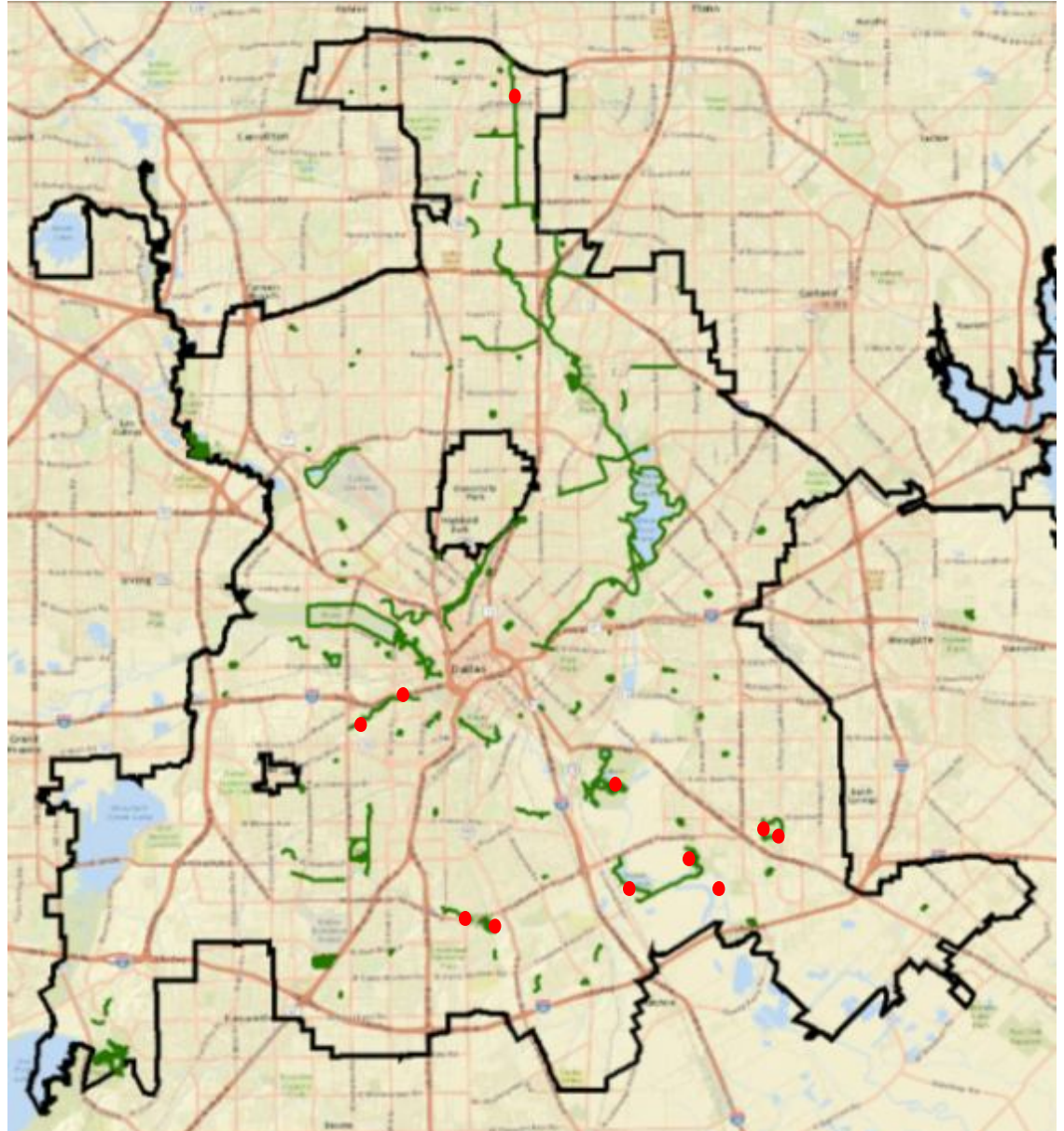
- Promotes planning for trail maintenance and inspections
- Provides insight for when and where to deploy Park Rangers
- Identifies target areas for Dallas Police Department Bicycle patrols
- Validates the resources spent on building, maintaining and growing the trail network
- Does not tie up staff time doing physical counts

Known System Issues

- Short Counts – When the system fails to register more than one pedestrian when people are walking side by side
- Over Counts – When one person walks past the same counter more than once in any visit and is counted twice
- Overhead Transmission Lines – Trails located within ONCOR right of ways are not able to take advantage of the loop detectors. New technology is being developed to counteract the interference which causes the loop detectors to malfunction

Future Expansion of Counter System

- Planned in Spring 2017
- Coombs Creek Trail (along Kessler Parkway)
- Glendale Central Loop Trail
- Glendale South Loop Trail
- Crawford Loop Trail
- Texas Buckeye Trail
- AT&T Trail
- Trinity Trail
- Preston Ridge Trail (North of Campbell Road)





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