



CENTRAL MASSACHUSETTS 2013 REGIONAL TRAIL AND BICYCLE LANE COUNT REPORT MARCH 2014



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Cover Photo: Southern New England Trunkline Trail (SNETT) Central Street, Millville, MA. Nick Burnham, CMRPC Staff.



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INTRODUCTION

Upon completion of the Central Massachusetts Regional Bicycle and Pedestrian Plan in 2011, CMRPC Staff, in conjunction with both the Central Massachusetts Metropolitan Planning Organization (CMMPO) and CMMPO Bicycle and Pedestrian Committee, launched a pilot bicycle and pedestrian count program to monitor biking and walking trips within the region's existing trail network.

The purpose of the initial count program was to collect raw data and evaluate overall trail usage in the region over time. In 2012, CMRPC Staff further expanded the count program to include a roadway in the City of Worcester which have marked, on-road bicycle lanes. In 2013, the count program added three additional roads with marked, on-road bicycle lanes in the Canal District neighborhood of Worcester to overlook lane usage.

Listed below is a brief synopsis of each trail included in the 2013 count program:

Blackstone River Greenway: The Massachusetts portion of the greenway operates as a 2.5 mile off-road bike path in the Town of Millbury and the City of Worcester. Design and conceptual plans are in place to extend the greenway south through the communities of Sutton, Grafton, Northbridge, Uxbridge, Millville, and Blackstone to connect with Rhode Island. An additional 2.5 mile on-road stretch to connect the current terminus in Worcester to Union Station in Worcester is included on the CMMPO FY15 Transportation Improvement Program (TIP). CMRPC staff performed counts on the greenway at two locations in Worcester in 2011 and 2012, and in Millbury in 2012.

Mass Central Rail Trail: The trail is a non-motorized multi-use trail that will conceptually connect 24 communities over 104 miles, from Boston to Northampton. In Central Massachusetts, the trail functions as on road, and off road segments from Sterling to Barre and travels through the CMRPC communities of West Boylston,



INTRODUCTION

Holden, Rutland, Oakham, and Barre. CMRPC staff collected counts at the West Boylston location in 2011 and 2012, and at the Holden location in 2012.

Southern New England Trunkline Trail: The SNETT is a non-motorized multi-use trail that begins at the Franklin State Forest in Franklin and travels through Bellingham and the CMRPC communities of Blackstone, Millville, Uxbridge, and Douglas before ending at the Douglas State Forest. Similar to the Mass Central Rail Trail, the SNETT functions as on-road, off-road, and missing segments through Blackstone and Uxbridge. CMRPC staff has not conducted any counts on this trail prior to 2013.



COUNT INFORMATION

The 2013 bicycle and pedestrian data collection season was split into two different parts; bicycle lane counts within the City of Worcester, and bicycle and pedestrian counts on regional off-road, multi-use trails. The bicycle lane counts within the City of Worcester were conducted at select intersections on Green, Millbury, and Water Streets within the Canal District, and at Lake Avenue near Quinsigamond State Park. Trail usage counts took place on the Blackstone Valley Greenway in Millbury, the Mass Central Rail Trail in Holden and Rutland, and the Southern New England Trunkline Trail (SNETT) split between Douglas and Millville.

Each bicycle lane count location received two counts that were performed on weekdays, one from 7:00 AM to 10:00 AM, and the other from 4:00 PM to 7:00 PM. Weekend counts were conducted on Saturdays from 10:00 AM to 3:00 PM, with a one-hour break at 12:00 PM. Sunday counts took place from 12:00 PM to 3:00 PM.

Each trail count location received two counts that were performed on weekdays, one from 7:00 AM to 10:00 AM, and the other from 4:00 PM to 8:00 PM. Weekend counts were conducted on Saturdays from 10:00 AM to 4:00 PM, with a one-hour break at 12:00 PM. Sunday counts took place from 12:00 PM to 3:00 PM.

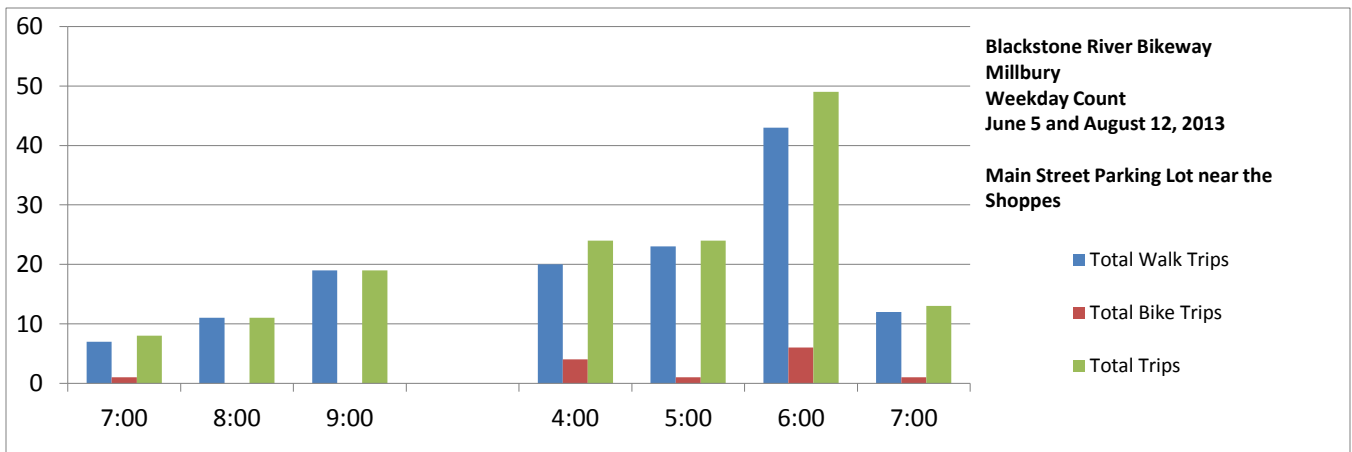
An additional bicycle and pedestrian count was conducted for the town of West Brookfield at the intersection of Ware Street and Route 9 (West Main Street), per the request of MassDOT District #2 offices. The count was performed on a weekday evening from 3:00 PM to 6:00 PM to monitor bicycle and walking trips in a mixed residential and light commercial section of the community.

Slight alterations were made to count times depending on counter availability, weather, and other unforeseen circumstances.

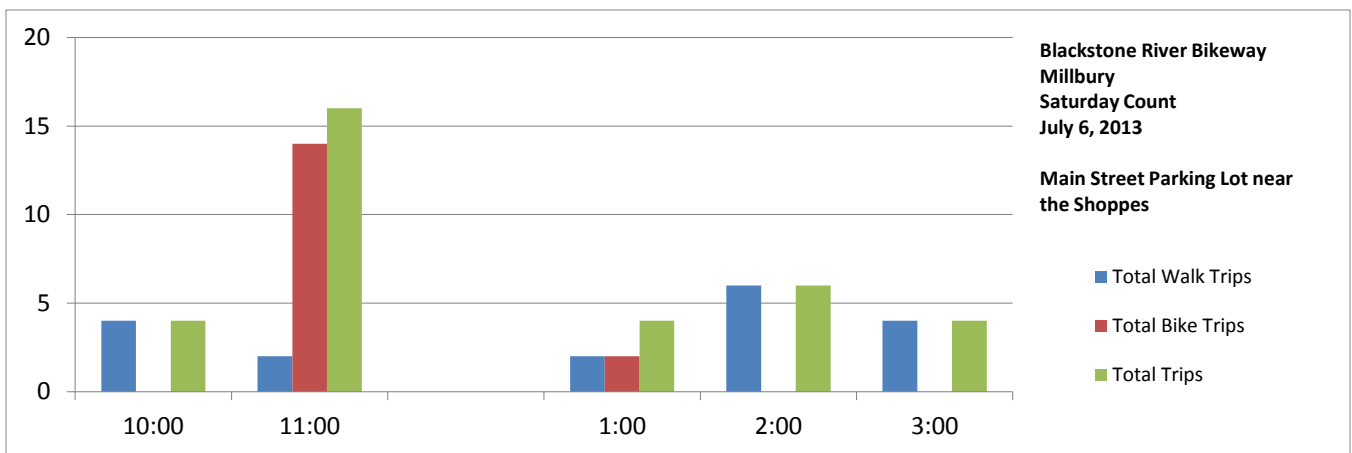


2013 REGIONAL TRAIL COUNTS

Blackstone River Greenway, Main Street, Millbury



The weekday count at this location shows significantly more walking trips than biking, as there were 135 pedestrians to 13 bicyclists, for a total of 148 trips. Versus the 2012 weekday count, there was a 25% increase in pedestrians and a 82% decrease in bicyclists. For the total trips, there was an decrease of 18%.

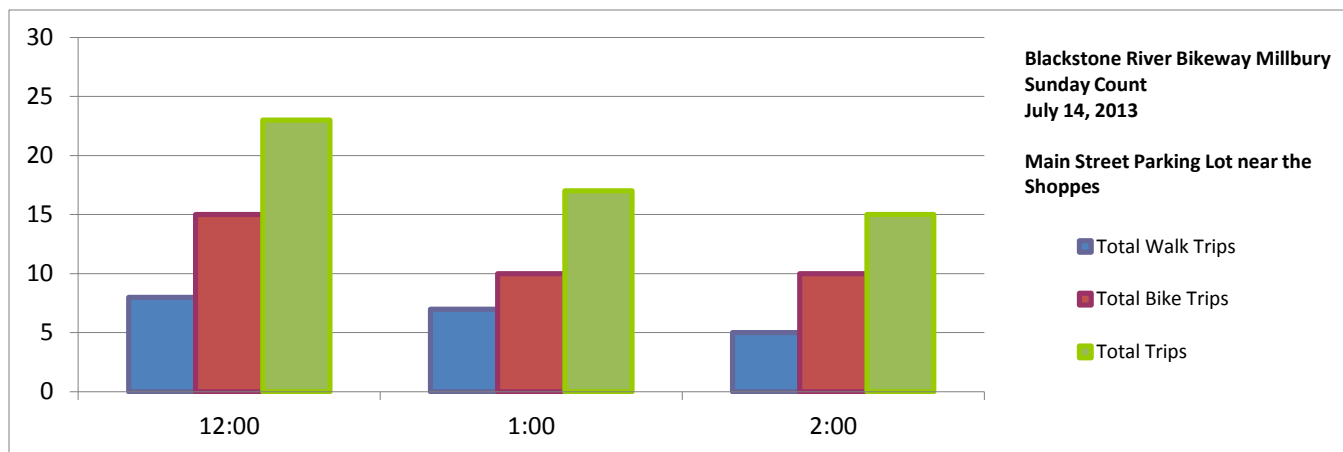


The Saturday count at this location shows slightly more walking trips than biking, as there were 18 pedestrians to 16 bicyclists, for a total of 34 trips. Versus the 2012 Saturday count, there was a 78% decrease in pedestrians and 77% decrease in bicyclists. For the total trips, there was a decrease of 77%. Extreme heat during the count may have contributed to the drastic decrease in users.



2013 REGIONAL TRAIL COUNTS

Blackstone River Greenway, Main Street, Millbury



The Sunday count at this location shows more biking trips than walking, as there were 35 bicyclists to 20 pedestrians, for a total of 55 trips. Versus the 2012 Sunday count, there was a 17% decrease in bicyclists and a 51% decrease in pedestrians. For the total trips, there was a decrease of 27%.

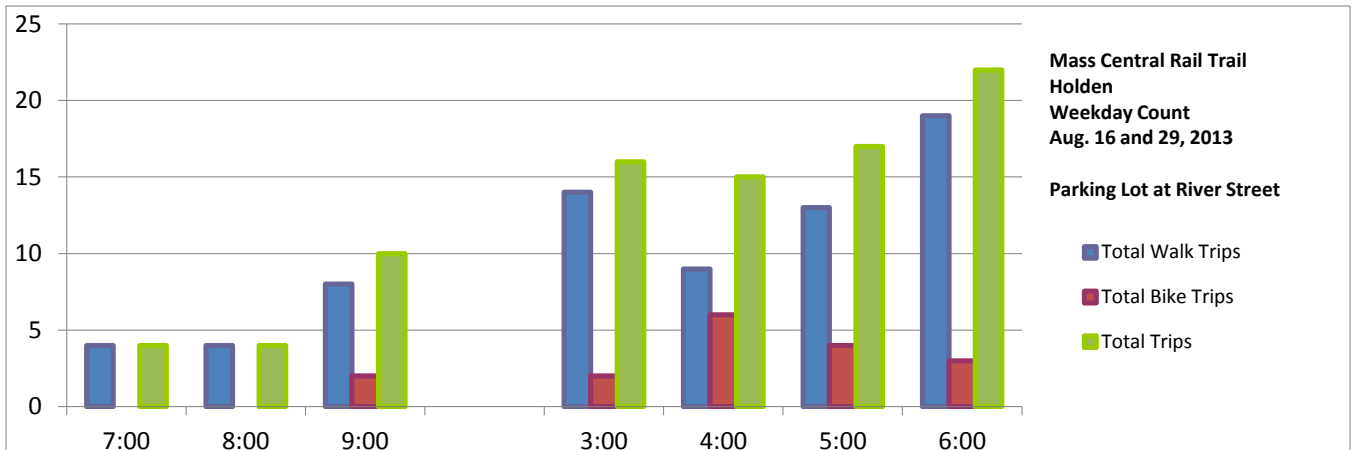
Overall Summary

	2012	2013	% DIF.
Pedestrians	225	173	-23%
Bicyclists	184	64	-65%
Total	409	237	-42%

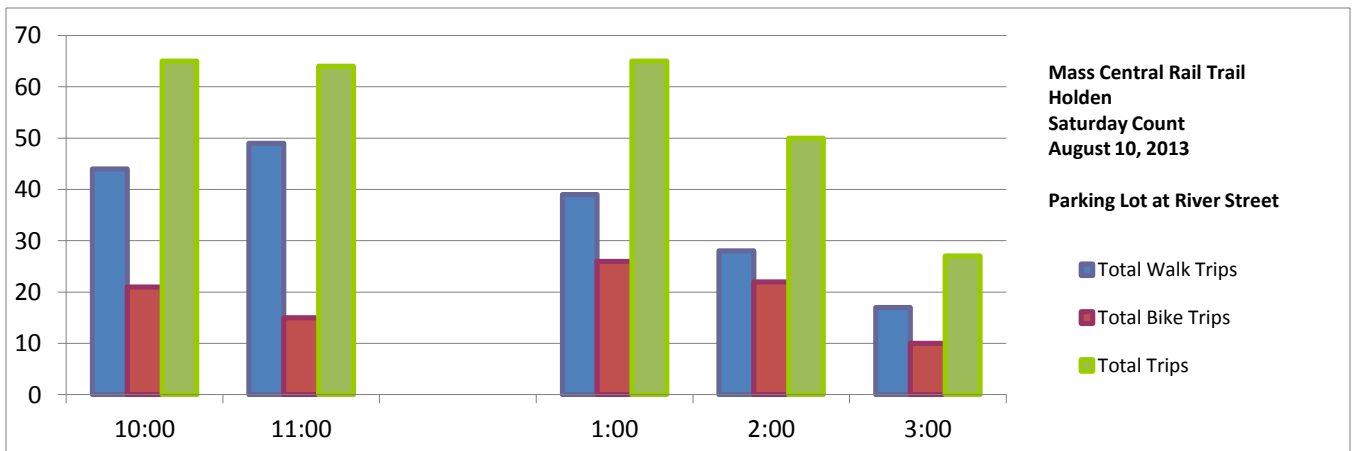


2013 REGIONAL TRAIL COUNTS

Mass Central Rail Trail, River Street, Holden



The weekday count at this location shows significantly more walking trips than biking, as there were 71 pedestrians to 17 bicyclists, for a total of 88 trips. Versus the 2012 weekday count, there was a 35% decrease in pedestrians and a 51% decrease in bicyclists. For the total trips, there was a decrease of 39%.

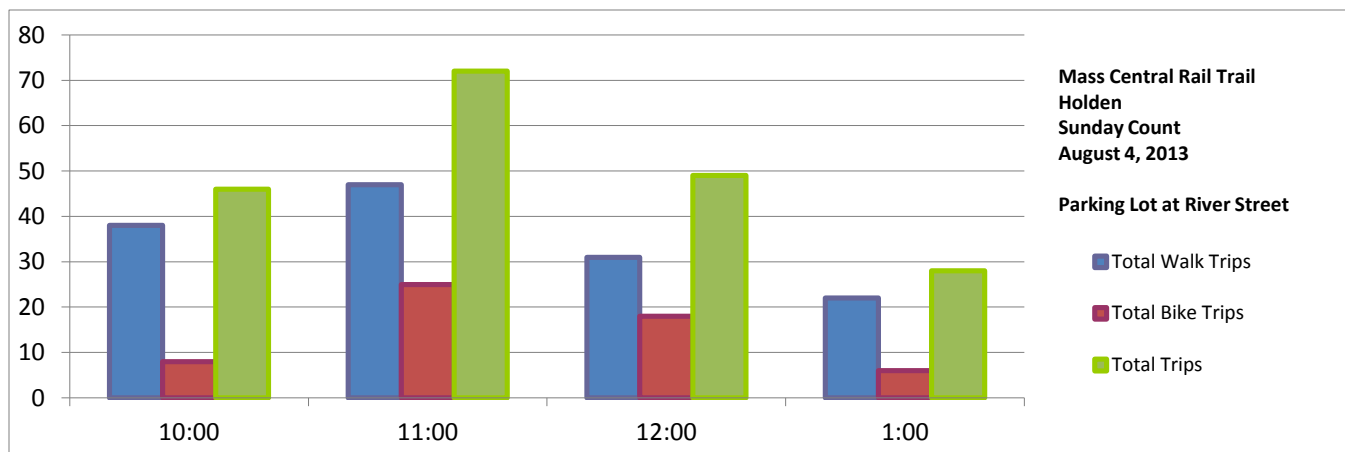


The Saturday count at this location shows notably more walking trips than biking, as there were 177 pedestrians to 94 bicyclists, for a total of 271 trips. Versus the 2012 Saturday count, there was a 69% increase in pedestrians and 77% increase in bicyclists. For the total trips, there was an increase of 72%.



2013 REGIONAL TRAIL COUNTS

Mass Central Rail Trail, River Street, Holden



The Sunday count at this location shows more walking trips than biking, as there were 138 pedestrians to 57 bicyclists, for a total of 195 trips. Versus the 2012 Sunday count, there was a 29% increase in pedestrians and a 34% decrease in bicyclists. For the total trips, there was an increase of 1%.

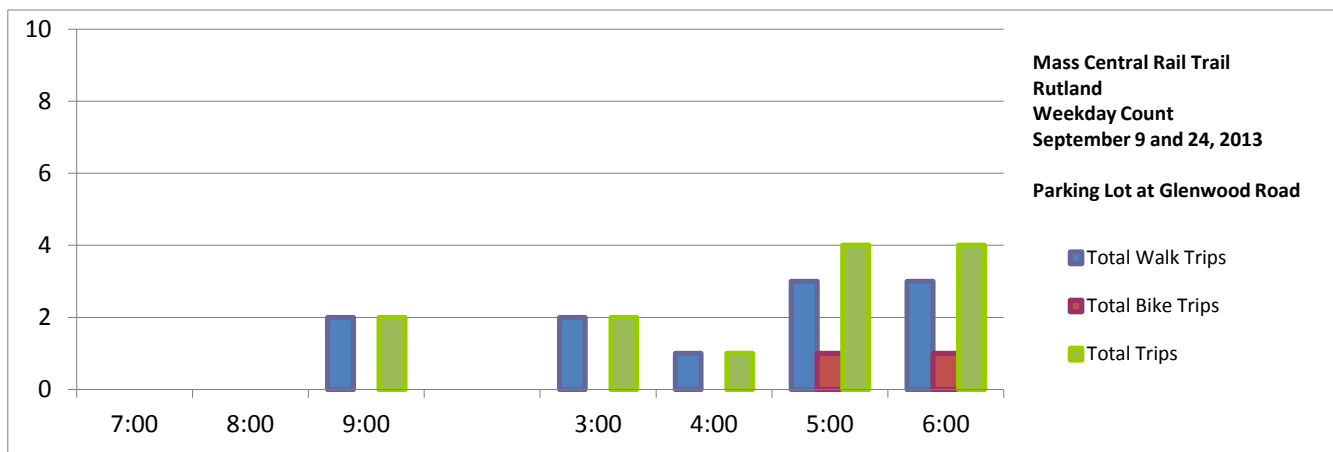
Overall Summary

	2012	2013	% DIF.
Pedestrians	322	386	20%
Bicyclists	174	168	-3%
Total	496	554	12%

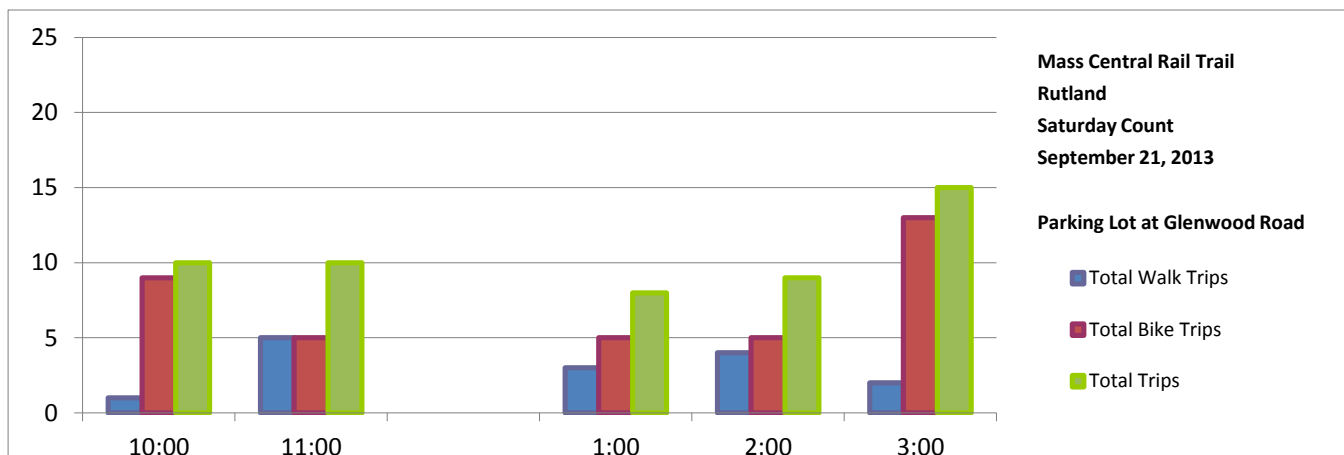


2013 REGIONAL TRAIL COUNTS

Mass Central Rail Trail, Glenwood Road, Rutland



The weekday count at this location shows more walking trips than biking, as there were 11 pedestrians to 2 bicyclists, for a total of 13 trips. This was the first weekday count performed at the Rutland location, and the amount of trail users was drastically lower than the Holden location (88 in 2013, 145 in 2012).

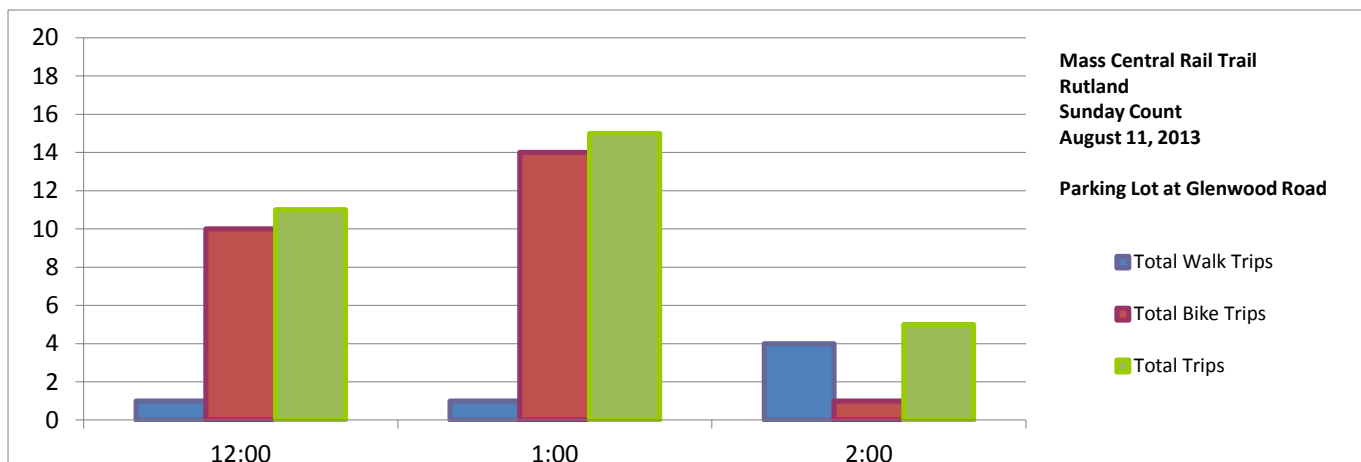


The Saturday count at this location shows more biking trips than walking, as there were 37 bicyclists to 15 pedestrians, for a total of 52 trips.



2013 REGIONAL TRAIL COUNTS

Mass Central Rail Trail, Glenwood Road, Rutland



The Sunday count at this location shows significantly more biking trips than walking, as there were 25 bicyclists and 6 pedestrians, for a total of 31 trips.

Overall Summary

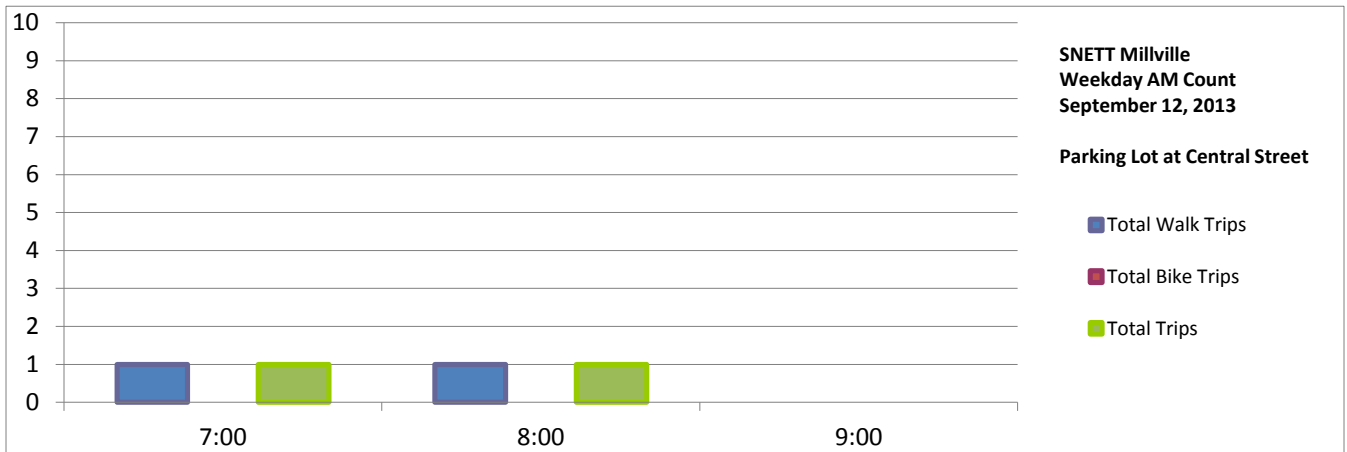
As this was the first year conducting a bicycle and pedestrian count at the Rutland segment, the table below highlights the count totals at the Holden and West Boylston segments of the Mass Central Rail Trail.

	Rutland 2013	Holden 2013	Holden 2012	West Boylston 2012	West Boylston 2011
Pedestrians	32	386	322	778	919
Bicyclists	64	168	174	339	258

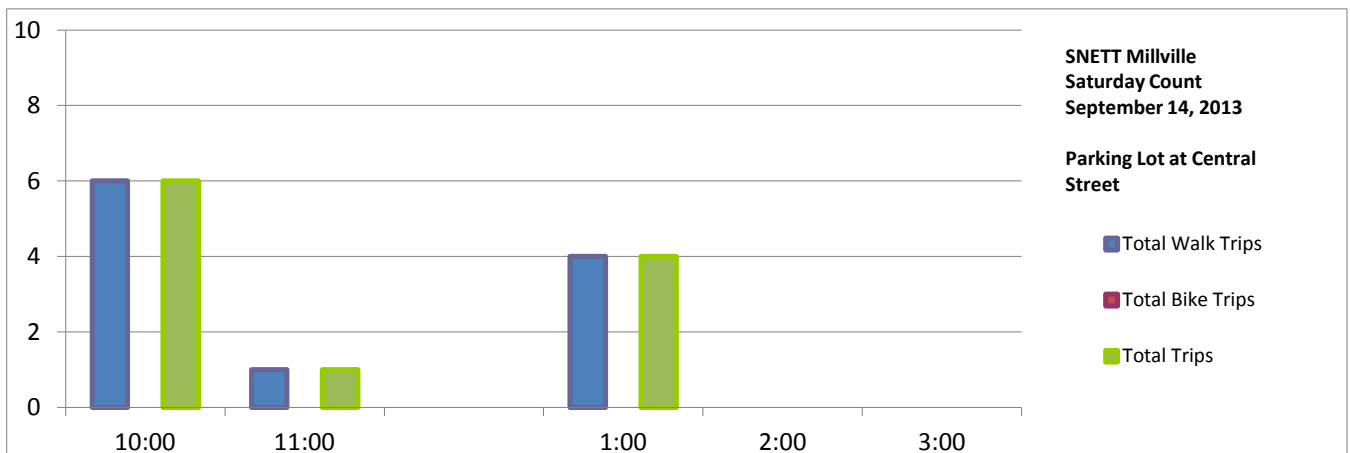


2013 REGIONAL TRAIL COUNTS

Southern New England Trunkline Trail, Central Street, Millville



The weekday morning count at this location reveals virtually no use, as there were 2 pedestrians observed. Staff noted that the parking lot is used as a bus stop for both Millville Elementary School and Blackstone-Millville Regional High School throughout the morning, which could be a deterrent to potential trail users.

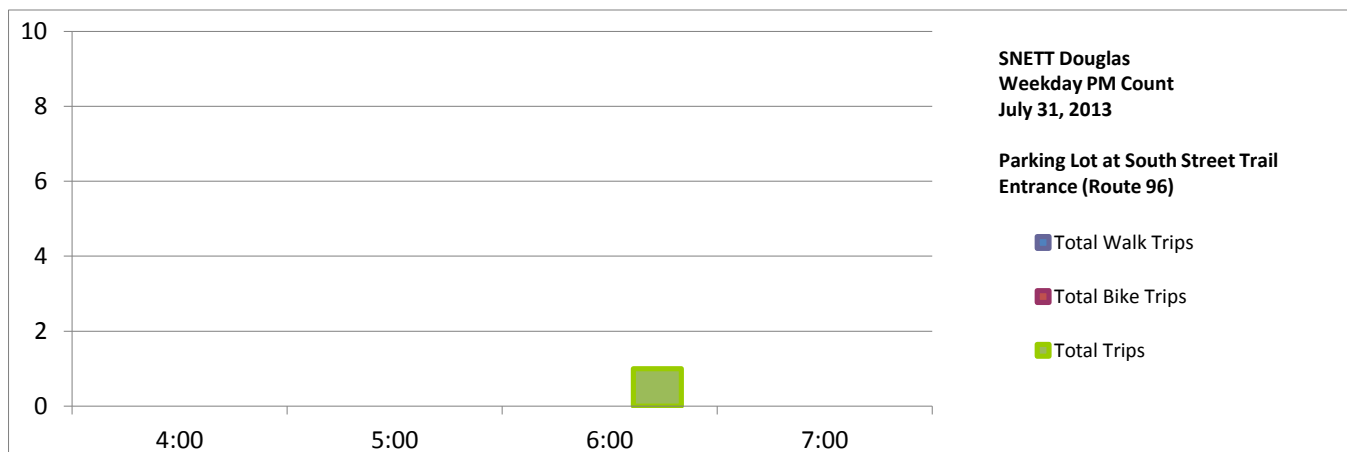


The Saturday count at this location shows only walking trips, as there were 11 pedestrians. This section of the trail is relatively flat and open to bicyclists, but across Central Street, the other section of trail is full of brush and rough terrain. These conditions may be a hindrance to potential bicyclists.

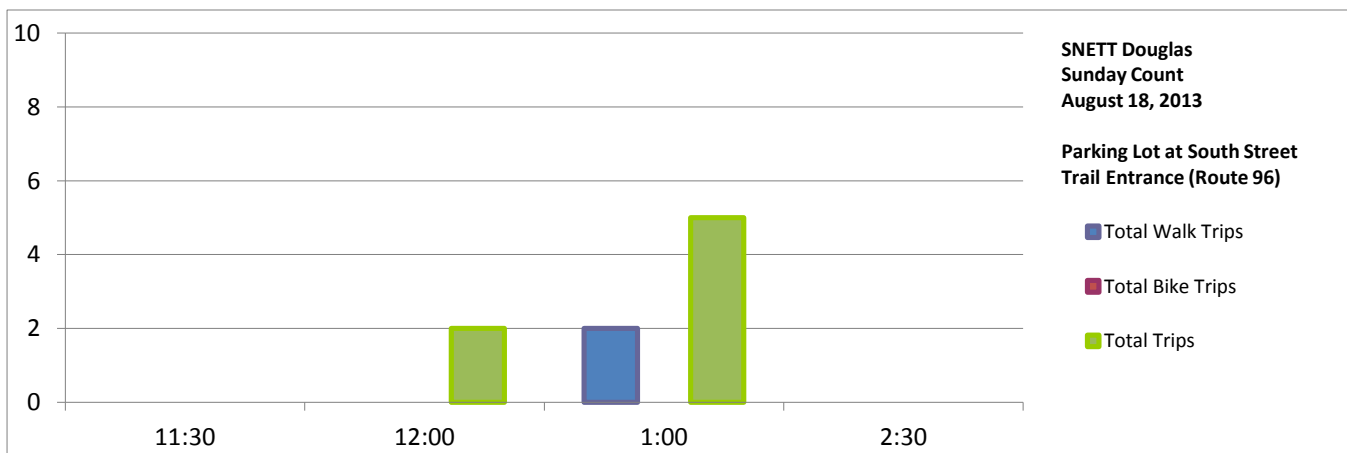


2013 REGIONAL TRAIL COUNTS

Southern New England Trunkline Trail, South Street, Douglas



The weekday evening count at this location shows no pedestrian or bicyclist use, as there was only one all-terrain vehicle (ATV) observed. Weather conditions during the observation time may have dissuaded potential trail users, as it was warm and exceptionally muggy.

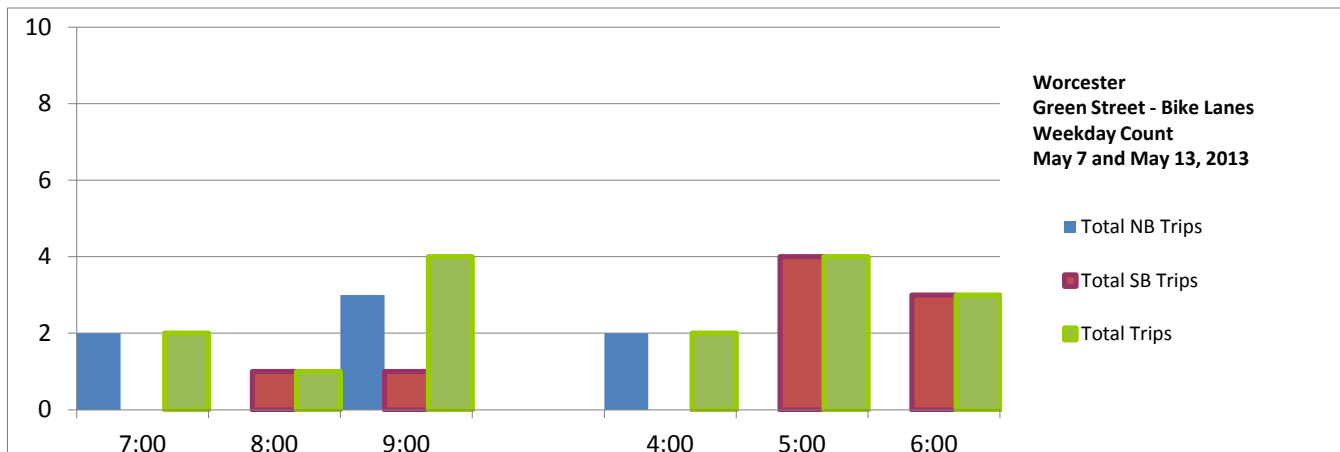


The Sunday count at this location shows only walking trips, as there were 2 pedestrians, but there were 5 equestrians. This section of the trail leads to the Douglas State Forest and the parking lot offers adequate space for horse trailers.

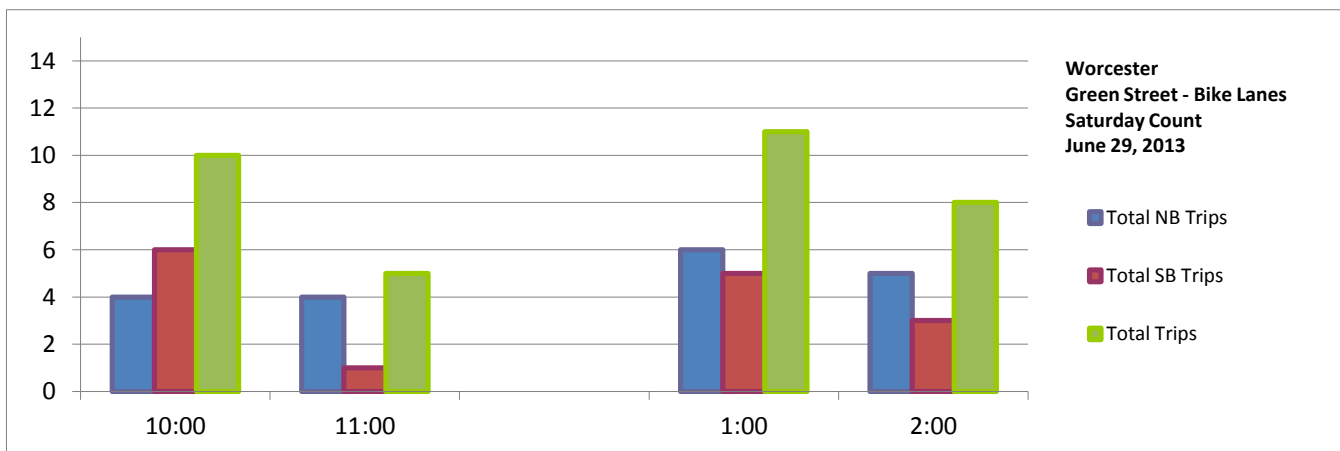


2013 BICYCLE LANE COUNTS

Green Street at the intersection of Winter Street, Worcester



The weekday count at this location shows more bicycle trips heading northbound (5) towards downtown Worcester in the morning and traveling southbound (7) in the evening hours towards the Kelley Square and Millbury Street neighborhoods.

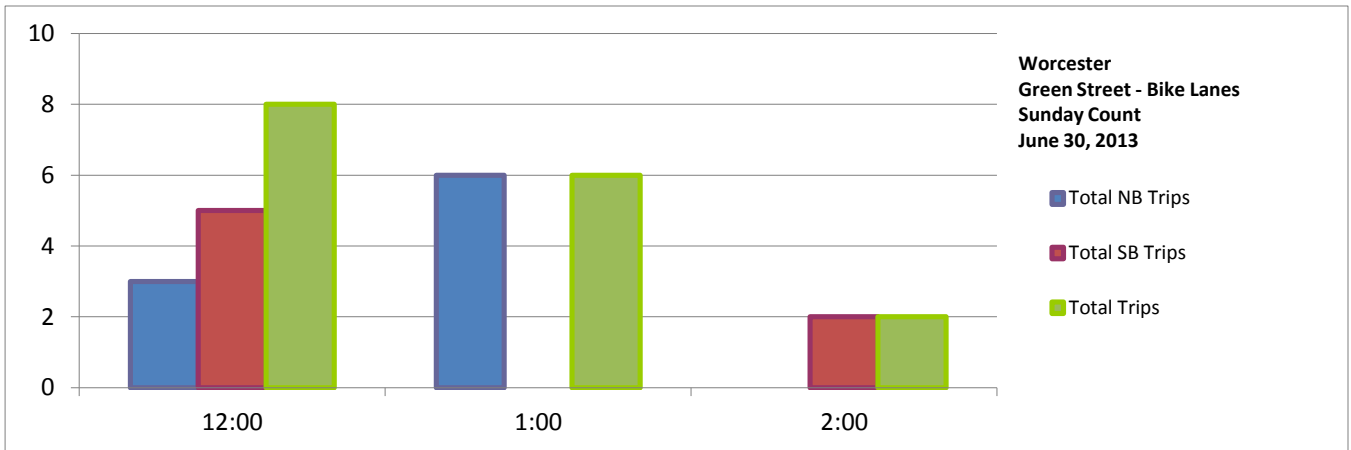


The Saturday count at this location shows more bicycle activity than versus the weekday count. There were 19 bicyclists traveling northbound towards downtown Worcester and 15 bicyclists traveling southbound towards the Kelley Square and Millbury Street neighborhoods.



2013 BICYCLE LANE COUNTS

Green Street at the intersection of Winter Street, Worcester



The Sunday count at this location reveals about the same amount of bicyclists traveling northbound towards downtown Worcester (9) versus southbound towards the Kelley Square and Millbury Street neighborhoods (7).

Overall Summary

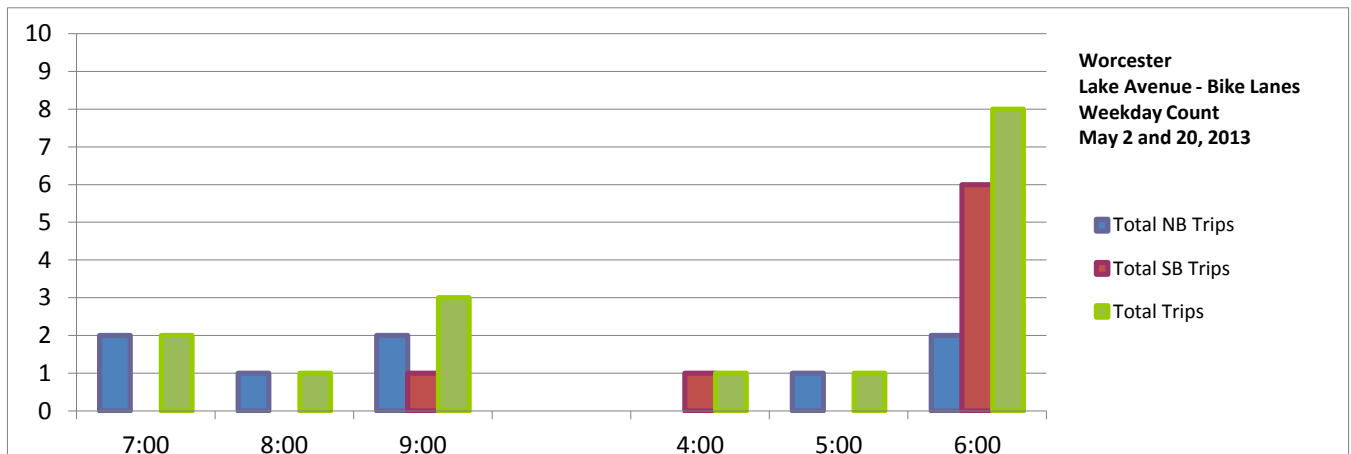
As this was the first year conducting a bicycle lane count at the Green Street location, the table below highlights the details from each count.

Direction	Weekday	Saturday	Sunday	Total
Northbound	7	19	9	35
Southbound	9	15	7	31

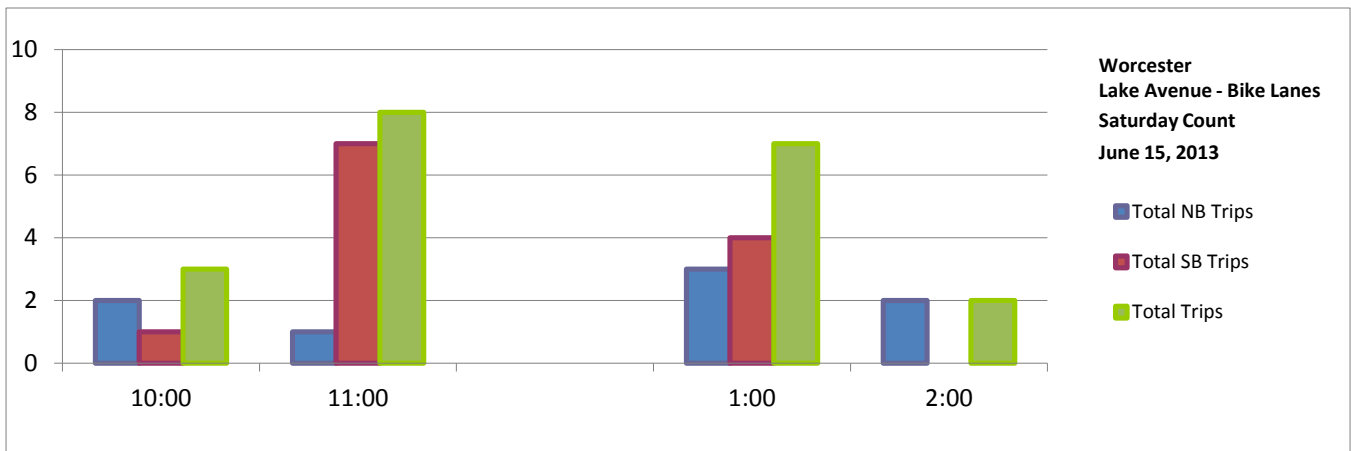


2013 BICYCLE LANE COUNTS

Lake Avenue at the intersection of Hamilton Street, Worcester



The weekday count at this location shows more bicycle trips heading northbound towards Route 9 and the UMass Medical School in the morning (5), and more trips heading southbound towards Route 20 in the evening (7). Versus the 2012 weekday count, there was a 20% increase in the morning and a 71% decrease in the evening.

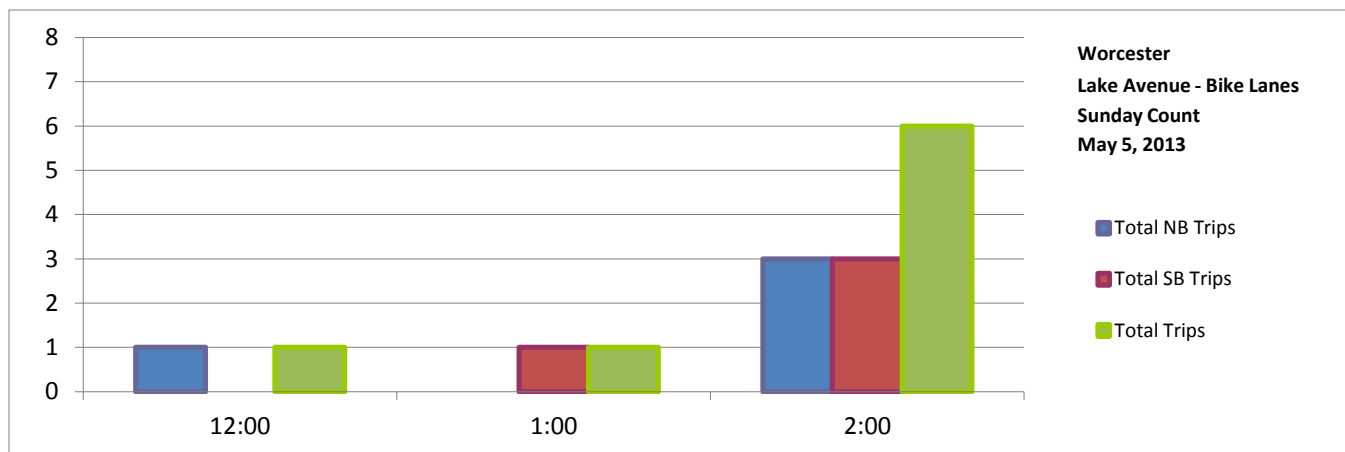


The Saturday count at this location shows more bicycle trips heading southbound towards Route 20 (12), compared to trips heading northbound towards Route 9 and the UMass Medical School (8). Versus the 2012 Saturday count, there was a 700% increase in northbound bicyclists and a 71% increase in southbound bicyclists.



2013 BICYCLE LANE COUNTS

Lake Avenue at the intersection of Hamilton Street, Worcester



The Sunday count at this location shows an equal amount of bicycle trips heading northbound and southbound (4). Versus the 2012 Sunday count, there was a 100% increase in northbound bicyclists and there were no southbound bicyclists to compare with.

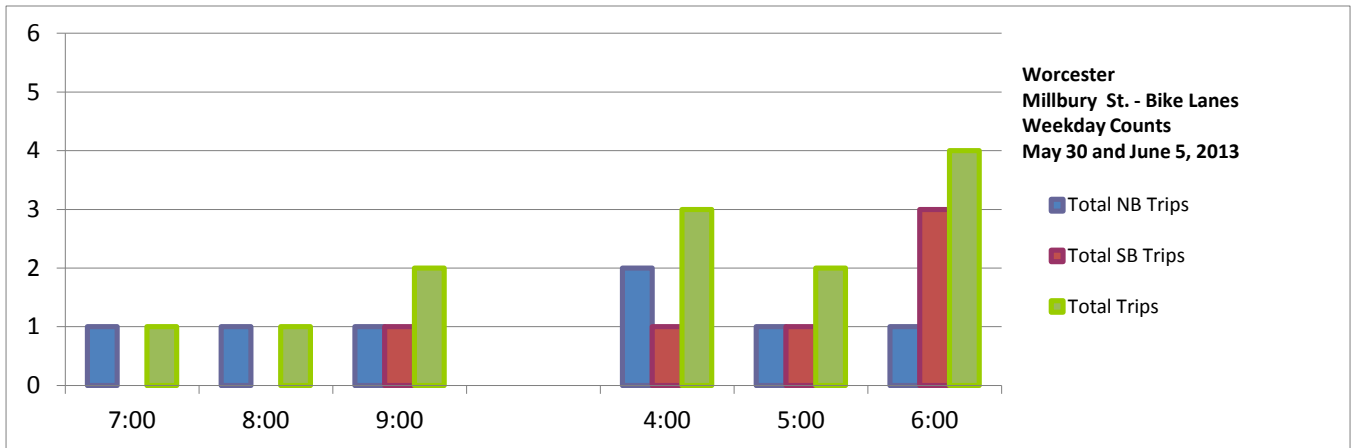
Overall Summary

Direction	2013	2012	%DIF.
Northbound	20	24	-17%
Southbound	24	25	-4%

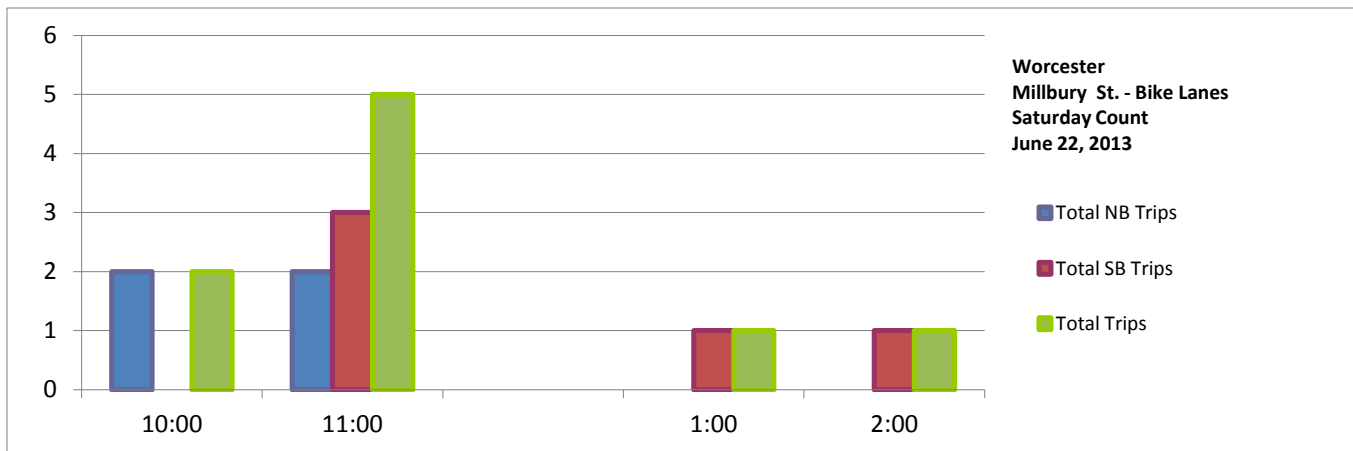


2013 BICYCLE LANE COUNTS

Millbury Street at the intersection of Lafayette Street, Worcester



The weekday count at this location shows more bicycle trips heading northbound (3) in the morning towards the Kelley Square neighborhood and traveling southbound (5) in the evening hours towards the Lower Millbury Street and Crompton Park neighborhoods.

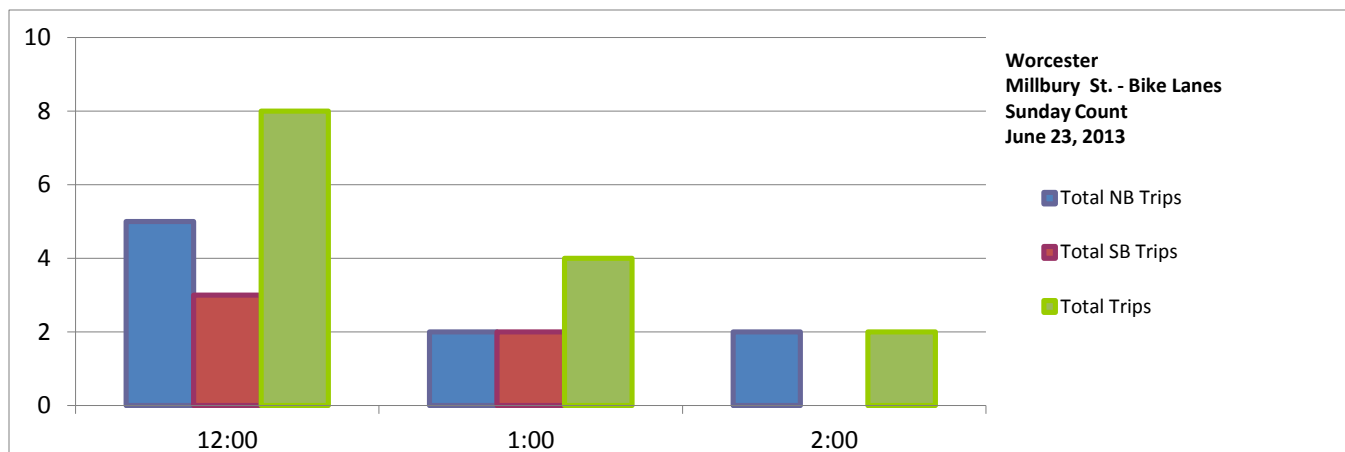


The Saturday count at this location reveals about the same amount of bicycle activity compared to the weekday count. There were 4 bicyclists traveling northbound towards the Kelley Square neighborhood and 5 bicyclists traveling southbound towards the Lower Millbury Street and Crompton Park neighborhoods.



2013 BICYCLE LANE COUNTS

Millbury Street at the intersection of Lafayette Street, Worcester



The Saturday count at this location shows the highest amount of bicycle activity compared to the weekday and Saturday counts. There were 9 bicyclists traveling northbound towards the Kelley Square neighborhood and 5 bicyclists traveling southbound towards the Lower Millbury Street and Crompton Park neighborhoods.

Overall Summary

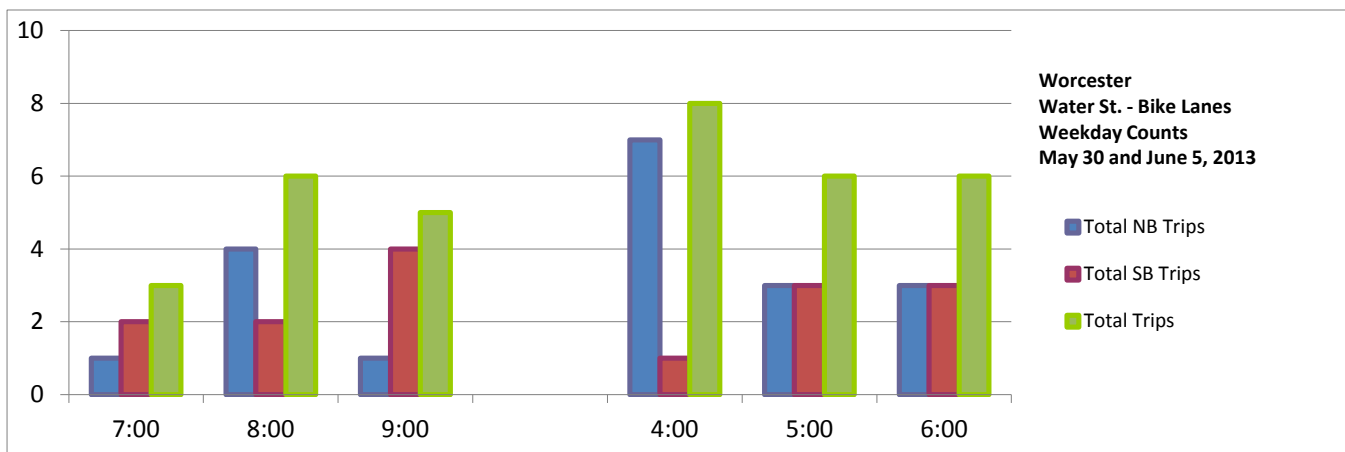
As this was the first year conducting a bicycle lane count at the Millbury Street location, the table below highlights the details from each count.

Direction	Weekday	Saturday	Sunday	Total
Northbound	7	4	9	20
Southbound	6	5	5	16

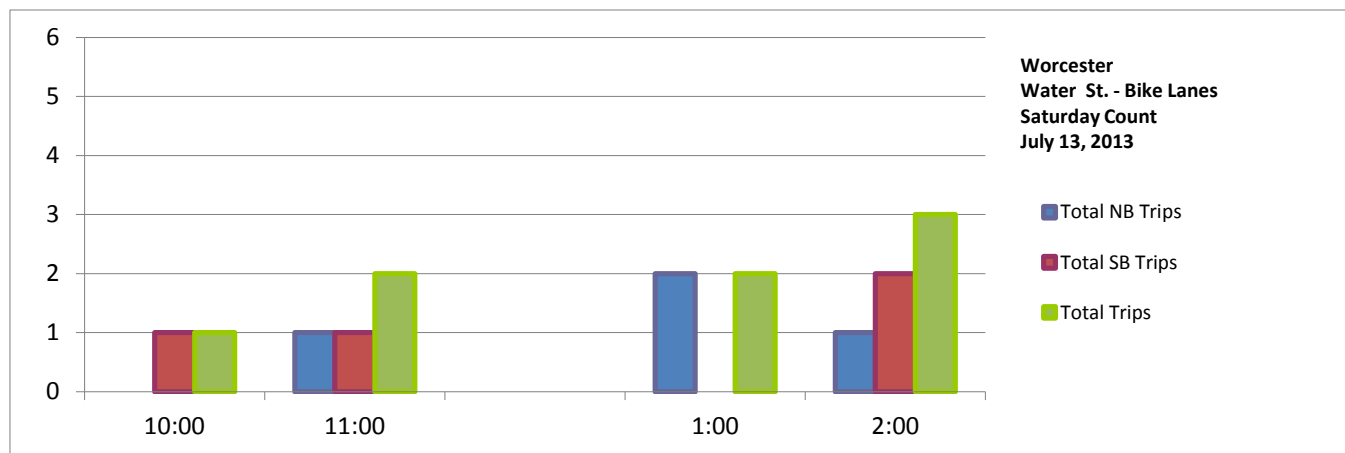


2013 BICYCLE LANE COUNTS

Water Street at the intersection of Harrison Street, Worcester



The weekday count at this location shows more bicycle trips heading southbound (8) towards the Kelley Square and Millbury Street neighborhoods in the morning and traveling northbound (13) in the evening hours towards Grafton Street (Route 122) and downtown Worcester.

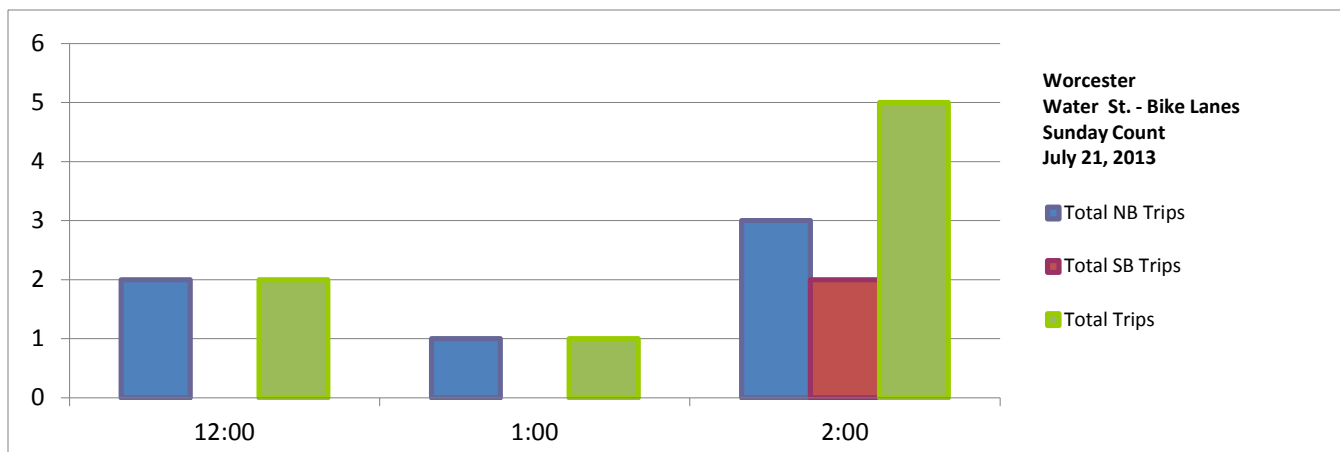


The Saturday count at this location shows significantly less bicycle activity versus the weekday morning and evening counts. There were the same amount of bicyclists (4) traveling northbound and southbound.



2013 BICYCLE LANE COUNTS

Water Street at the intersection of Harrison Street, Worcester



The Sunday count at this location shows the same amount of bicycle activity as the Saturday count, but with more bicyclists heading northbound (6) towards Grafton Street and downtown Worcester than those heading southbound (2) towards the Kelley Square and Millbury Street neighborhoods.

Overall Summary

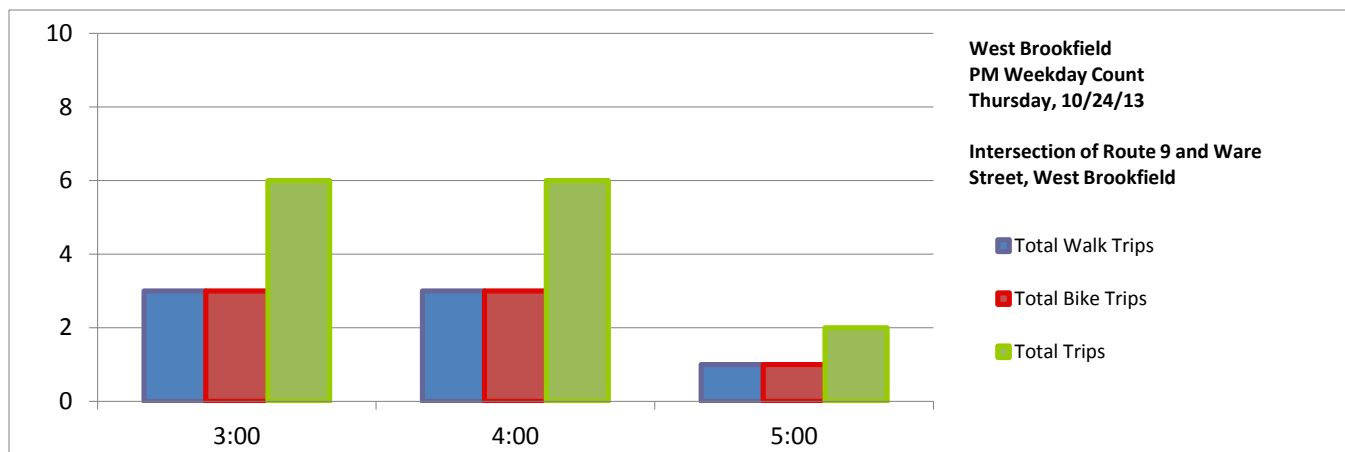
As this was the first year conducting a bicycle lane count at the Water Street location, the table below highlights the details from each count.

Direction	Weekday	Saturday	Sunday	Total
Northbound	19	4	6	29
Southbound	15	4	2	21



2013 ADDITIONAL COUNTS

Route 9 (West Main Street) at the intersection of Ware Street, West Brookfield



As requested by the MassDOT District #2 office of Northampton, CMRPC staff performed a bicycle and pedestrian count at the intersection of Route 9 (West Main Street) and Ware Street for the Town of West Brookfield. The count area is located in a mixed-use of residential, commercial, and industrial sites.

The count at this location shows the same amount of bicyclists (7) and pedestrians (7) traveling along Route 9. For pedestrian activity, 5 of the 7 observed traveled eastbound on Route 9 towards West Brookfield Center and the remaining 2 traveled westbound on Route 9 towards Routes 19 and 67. For bicycle activity, 4 of the 7 observed traveled eastbound on Route 9 towards West Brookfield Center and the remaining 3 traveled westbound on Route 9 towards Routes 19 and 67.



SUMMARY

Regional Trail Use:

To determine an increase or decrease in overall regional trail use, the two count locations in which data was collected from in both 2012 and 2013, were the Blackstone River Greenway in Millbury and the Mass Central Rail Trail in Holden. In 2012, at both count locations, there were a total of 905 trail users. In 2013, at both count locations, there were a total of 791 trail users. This is a decrease of 13% of trail users between both years. A possible factor could be the weather conditions at the time of the count. Weather data was collected only in 2013 data collection season.

Mass Central Rail Trail in Rutland and the Southern New England Trunkline Trail in Douglas and Millville were left out of the summary, due to only having been counted in the 2013 season. But compared to similar counts and locations completed in 2011 and 2012, the data shows a drastic difference in trail users depending on the location. Please see the table located on Page 23 highlighting each trail count by year and total amount of users.

Bicycle Lane Use:

The only location in which data was collected from in both 2012 and 2013, was the bicycle lanes located on Lake Avenue in the City of Worcester. In 2012, there were 49 bicyclists observed versus the 44 bicyclists observed in 2013. This is a decrease of 10% of bicyclists.

All other bicycle lanes were left out of the summary, due to only having been counts in the 2013 season. Please see the table located on Page 24 highlighting each bicycle lane count by year and total amount of users.

Overall:

The Regional Trail and Bicycle Lane count program is still in its infancy. As the program matures and expands, the data will become more valuable to the planning program.



REGIONAL TRAIL SUMMARY TABLE

BY YEAR, LOCATION, AND TOTAL USERS

TRAIL AND COUNT LOCATION	2011	2012	2013
Blackstone Valley Greenway, <i>North Millbury St. – Worcester</i>	298	295	
Blackstone Valley Greenway, <i>South Millbury St. – Worcester</i>	492	318	
Blackstone Valley Greenway, <i>Main Street – Millbury</i>		409	237
Mass Central Rail Trail <i>West Boylston</i>	1177	1117	
Mass Central Rail Trail <i>Holden</i>		496	554
Mass Central Rail Trail <i>Rutland</i>			96
Southern New England Trunkline Trail – <i>Douglas</i>			8
Southern New England Trunkline Trail - <i>Millville</i>			13



BICYCLE LANE SUMMARY TABLE

BY YEAR, LOCATION, AND TOTAL USERS

ON-ROAD LANE AND COUNT LOCATION	2012	2013
Lake Avenue @ Hamilton Street	49	44
Green Street @ Winter Street		66
Water Street @ Harrison Street		50
Millbury Street @ Lafayette Street		36



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