



CHARLES RIVER BASIN PEDESTRIAN AND BICYCLE STUDY



NON-MOTORIZED BRIDGE & PATHWAY USER COUNTS

JANUARY 2015



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CHARLES RIVER BASIN 5-YEAR, NON-MOTORIZED USER COUNT SUMMARY

OVERVIEW

Beginning in the fall of 2009, the Massachusetts Department of Transportation (MassDOT) and Department of Conservation and Recreation (DCR) conducted bi-annual, non-motorized user counts at up to 25 locations within the Charles River Basin. MassDOT and DCR's primary goal was to develop a baseline of walking, jogging and bicycling activity at key locations, helping to inform planning decisions for bridge and path improvement projects in the future. More detailed objectives for the five-year, ten-count program include:

- Understanding the overall use of the Charles River Basin by pedestrians, bicyclists, joggers and skaters, and whether demand has increased or decreased
- Knowing where the highest demand for walking and bicycling facilities resides
- Capturing the proportion of modes relative to the aggregate count (% of all non-motorized users who walk, jog, bike, skate or use a wheelchair)
- Understanding the impact of existing and newly-developed pedestrian and bike facilities have on access to the Basin from adjacent neighborhoods and for travel along the Basin's pathway system.



Member of Halvorson Team counting pathway traffic in the Lower Basin

To meet MassDOT's and DCR's goal and objectives, the two agencies contracted the Halvorson Design Partnership team to oversee the user counts. The effort was funded through MassDOT's Accelerated Bridge Program (ABP) and was completed in conjunction with the Charles River Basin Connectivity Study. Completed in December 2014, the Study includes a wide array of recommendations for infrastructure improvements to enhance pedestrian, bicycle and ADA access to the park land and path system within the Basin.

KEY FINDINGS

Overall, non-motorized use of the Charles River Basin for both commuting and recreation is significant. The total number of users during the typical two-hour count periods ranged from 10,800 during a windy afternoon with intermittent showers to over 23,000 on a beautiful weekend afternoon (fluctuations in total volumes were due primarily to weather conditions—counts were only postponed due to steady/heavy rain—and the number of large-scale events and fundraisers that occur along the Basin mid-spring and early fall.) Typically, total volumes ranged from 14,000 to 17,000 users within the two-hour period, with the average being 16,025 during the five weekday counts and 14,315 for the five weekend counts. The level of pathway use increased as one moves downriver, with typically twice as many users in the Middle Basin and six times as many in the Lower Basin compared with the Upper Basin. This can be easily attributed to the much higher population densities and number of destinations that flank the river as one moves downstream.

Pedestrians represented the largest proportion of users, nearly half, with both joggers and bicyclists representing approximately 25% of the overall total. The proportion of both bicyclists and joggers is slightly higher during the weekday commuter peak however (see pie charts and graphics on the following pages). Other key findings of the five-year, ten-count effort include:



- Overall, use by ALL modes increased slightly over the five year period, with a 16% increase in the number of joggers, 10% more pedestrians and 7% more bicyclists
- Many locations showed a stagnant or even slight downward trend in demand from all modes. Significant increases in use (>10%) occurred primarily on bridges during the weekdays, and along the path network by bicyclists during weekdays and by joggers during weekends. This is in contrast to large increases in bicycle ridership in adjacent communities. In the City of Boston, bicycling has nearly doubled in the same five-year period according to counts from the Boston Bikes program. Additional improvements to the bicycling network immediately adjacent to the Basin, especially the bridge intersections, will likely attract more bicyclists, pedestrians and joggers to the Basin's pathway system.
- Counts at bridges that are part of MassDOT's Accelerated Bridge Program have seen increases in use by pedestrians and bicyclists, especially during the weekday commute period. Since the completion of the BU Bridge at the end of 2012, for instance, the number of walkers and bicyclists during weekday peak increased roughly 50% each in the subsequent counts. Counts at other bridges during construction, or those still under construction today, remained relatively steady.
- The ratio of male to female bicyclists held constant at roughly 2:1 throughout the five-year period. (This ratio is more balanced than the proportion of bicyclists in nearby cities and nationally however, an imbalance frequently attributed to men's higher tolerance for bicycling within the mixed traffic conditions that exist outside of the Basin.)
- Use of the Basin's paths and bridges by Hubway bike share users was significant and increased for four consecutive counts since the fall of 2012. At the six locations where Hubway counts were made, the proportion of Hubway to all other bicyclists rose from 4%-6% during weekdays and from 10%-16% during the weekend count period.

NEXT STEPS AND RECOMMENDATIONS

A non-motorized user count of this magnitude has produced a significant amount of valuable data. Counting twice a year over a five-year period resulted in some key findings that will hopefully inform some of MassDOT's and DCR's decisions related to implementing recommendations from the Charles River Basin Connectivity Study and other planning efforts. It is also expected to help inform infrastructure improvements by adjacent municipalities. However, some conclusions are difficult to draw upon due to the ongoing Accelerative Bridge Program project improvements, continued enhancements by DCR to the linear path system, and new projects slated for the next few years. The latter includes changes to Greenough Blvd., the Charlesgate Green park project, new bike lanes on the Craigie Dam and Bridges after the completion of the Longfellow Bridge project and others.

It is recommended that the Commonwealth continue the bi-annual, non-motorized count program in order to capture a more complete picture of use trends and how on-going infrastructure changes in the Basin impact people's decision about transportation and recreation. For consistency of data, the twice yearly count times should remain the same. The full array of 25 count locations may not be necessary to understand the use trends within the Basin however. Concentrating future counts on the bridges and the key path locations would be enough to achieve the long-term understanding of the use of the Basin by non-motorized modes. A next step would be to understand not just raw numbers, but travel patterns as well. This would involve a more-through analysis of the on-going data, as well as user surveys—both intercept surveys in the Basin, along with web-based—to understand the primary origins and destinations and the preferred routes between them.

APPROACH TO NON-MOTORIZED COUNTS

COUNT LOCATIONS

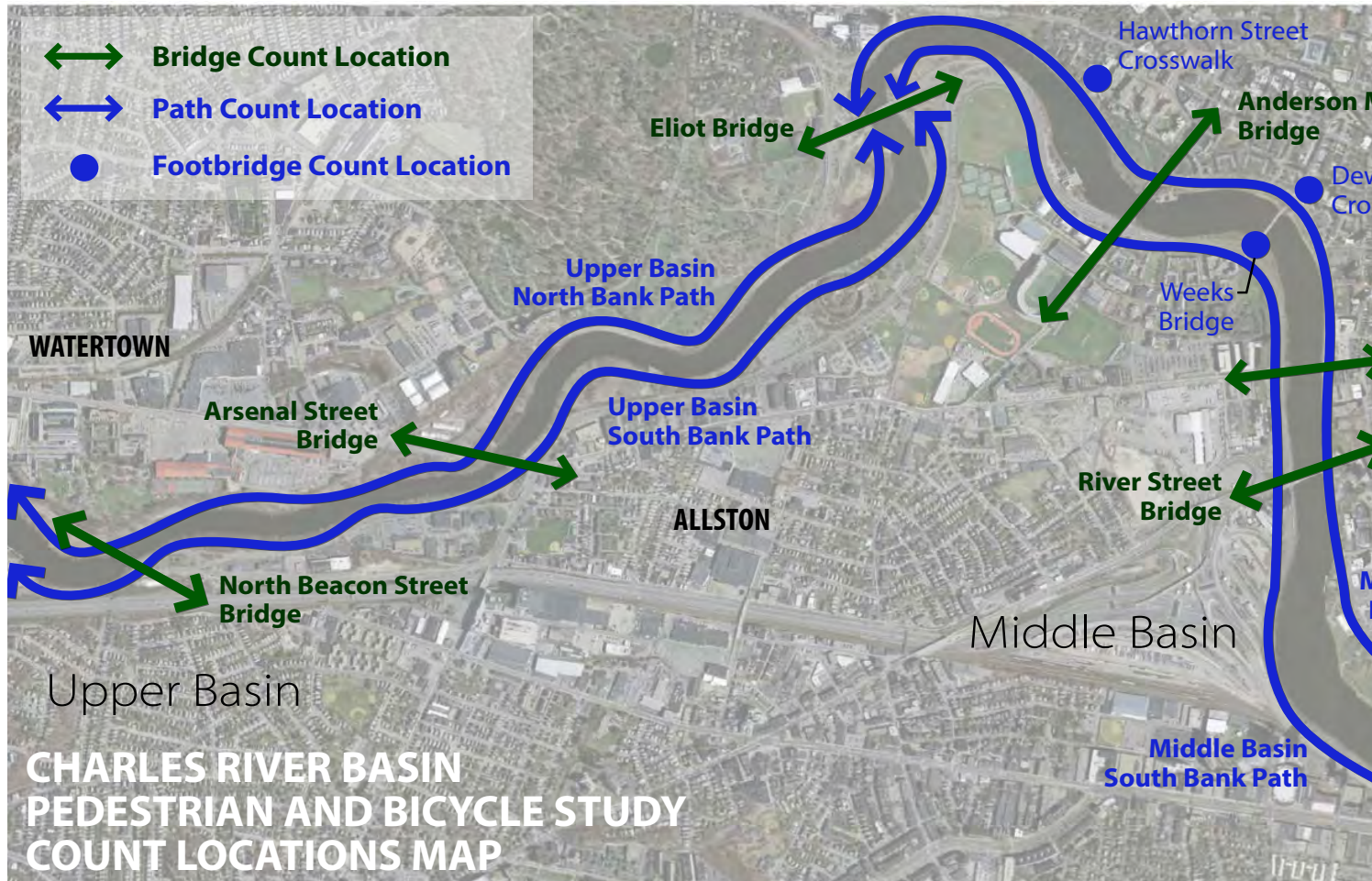
Counts took place in three types of locations between the North Beacon Bridge in Watertown and the Craigie Dam and Bridges in Cambridge: 1) all Charles River bridges, 2) each bank of the linear path system in the upper, middle and lower portions of the Basin, and 3) key connections to the path system, primarily Memorial Drive crosswalks and Storrow Drive overpasses. Some minor adjustments were made in the count locations during the five-year period and two were added during the interim years.

In the two-year period prior to the start of the Longfellow Bridge reconstruction project, detailed

turning movement counts were made at the entry and egress points of the bridge at Charles Circle. MassDOT used these turn-movement counts to inform design decisions related to temporary access for pedestrians and bicyclists during construction (eg. helping to solidify the decision for a two-way bike lane on the north side of the bridge, for instance).

METHODOLOGY

One purpose of the counts was to understand peak use of the Charles River Basin's bridges and path network by non-motorized users: pedestrians, bicyclists, joggers, skaters and those with mobility devices. As such, bi-annual counts were conducted during





peak-use months—mid-May and mid-September—when student populations were present. May counts were always completed before or after the annual Massachusetts Bike Week, however, to minimize an inflation of bicyclists within the Basin. The two-hour counts were conducted in 23-25 locations during the weekday commuter peak (4:30 – 6:30 pm) and mid-day during the weekend (noon – 2:00 pm).

Professional staff from the Halvorson team performed the manual counts, with cameras used in some locations prior to the Boston Marathon bombing, after which security measures precluded their use. After each count, an interim memorandum was completed that summarized the findings of the weekday and weekend

counts performed during the spring or fall. Memoranda were provided throughout the five-year process on MassDOT’s ABP web site. It is important to note that the resulting number of bridge and path users are not a literal representation of the number of people using the Basin within the pair of two-hour count periods. This effort incorporated “screen-line” counts made independently at all locations and did not take into account turn movements. Therefore, some individuals may have been counted more than once if they traveled from path-to-bridge or vice versa during their single trip along, across or through the Basin.

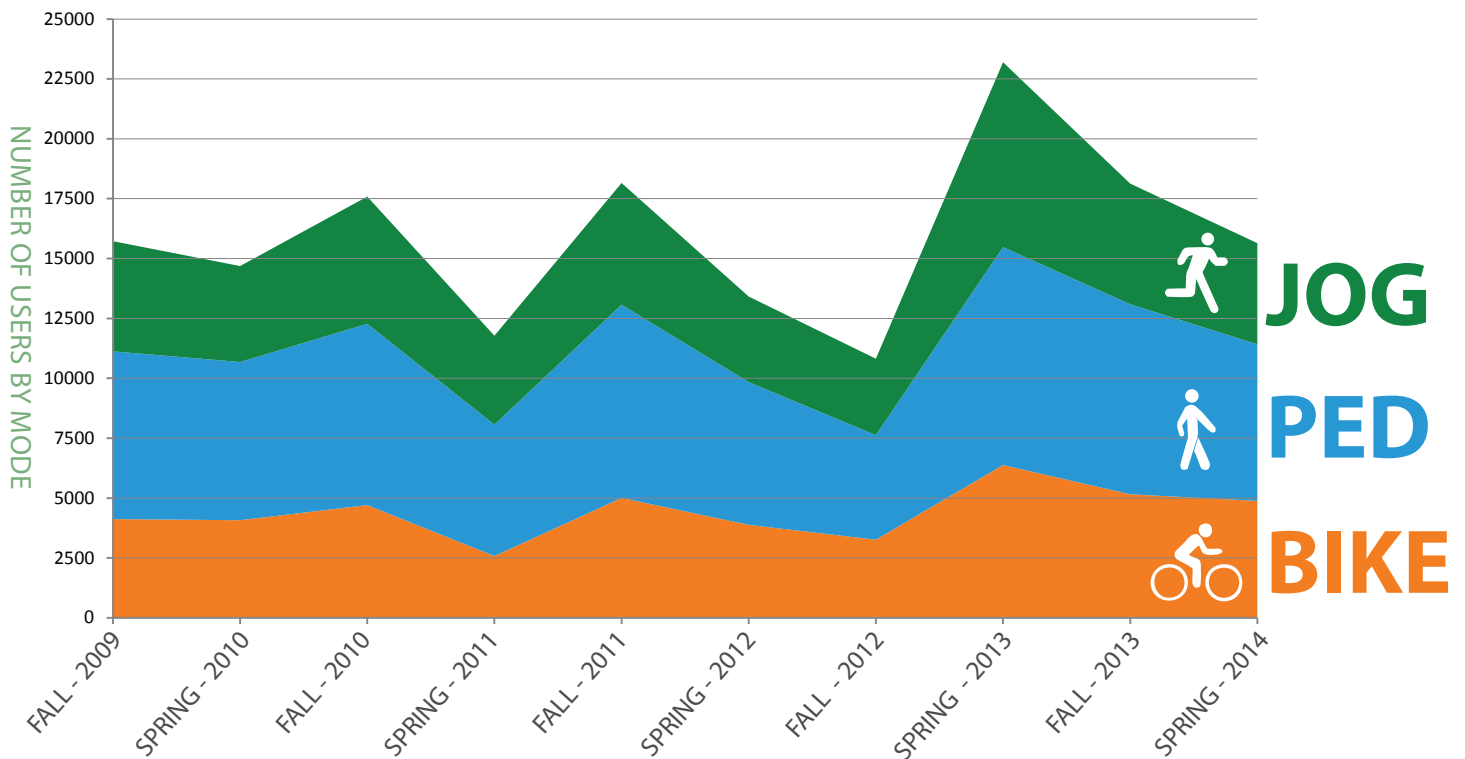
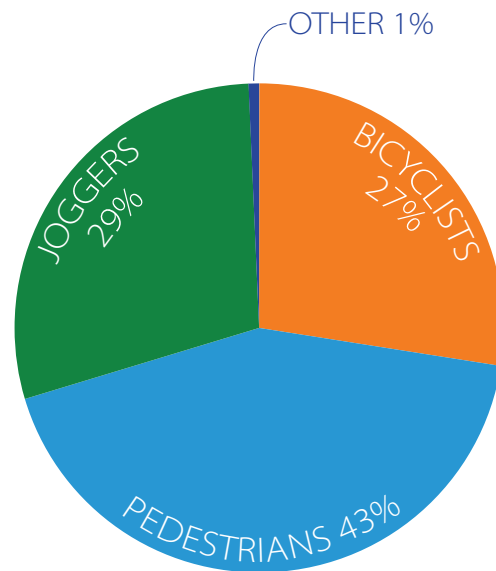


WEEKDAY COUNT SUMMARY

KEY FINDINGS

The average total weekday volume for the 10 counts was 16,025. The pie chart to the right indicates that pedestrians comprised the largest percentage of non-motorized users during the weekday counts, representing 43% of users counted. This finding is consistent with the weekend count data. Joggers comprised the second largest user group at 29%, though only a slightly larger percentage than bicyclists, which represented 27% of users.

There were fluctuations in the total volumes counted per mode over the 5-year count period, though the proportion of users by mode stayed relatively consistent, as can be seen in the chart below. The lowest weekday volumes were recorded in the Fall of 2012, while the highest weekday volumes were recorded in Spring 2013. Weather had a significant impact on the volumes. The lowest weekday volumes (Fall of 2012) were recorded on a day when the temperature was in the low





+200%

Upper Basin South Bank
Largest **bike** mode percentage increase of all weekday sites

+48%

Hawthorn St Crosswalk
Largest **walk** mode percentage increase of all weekday sites

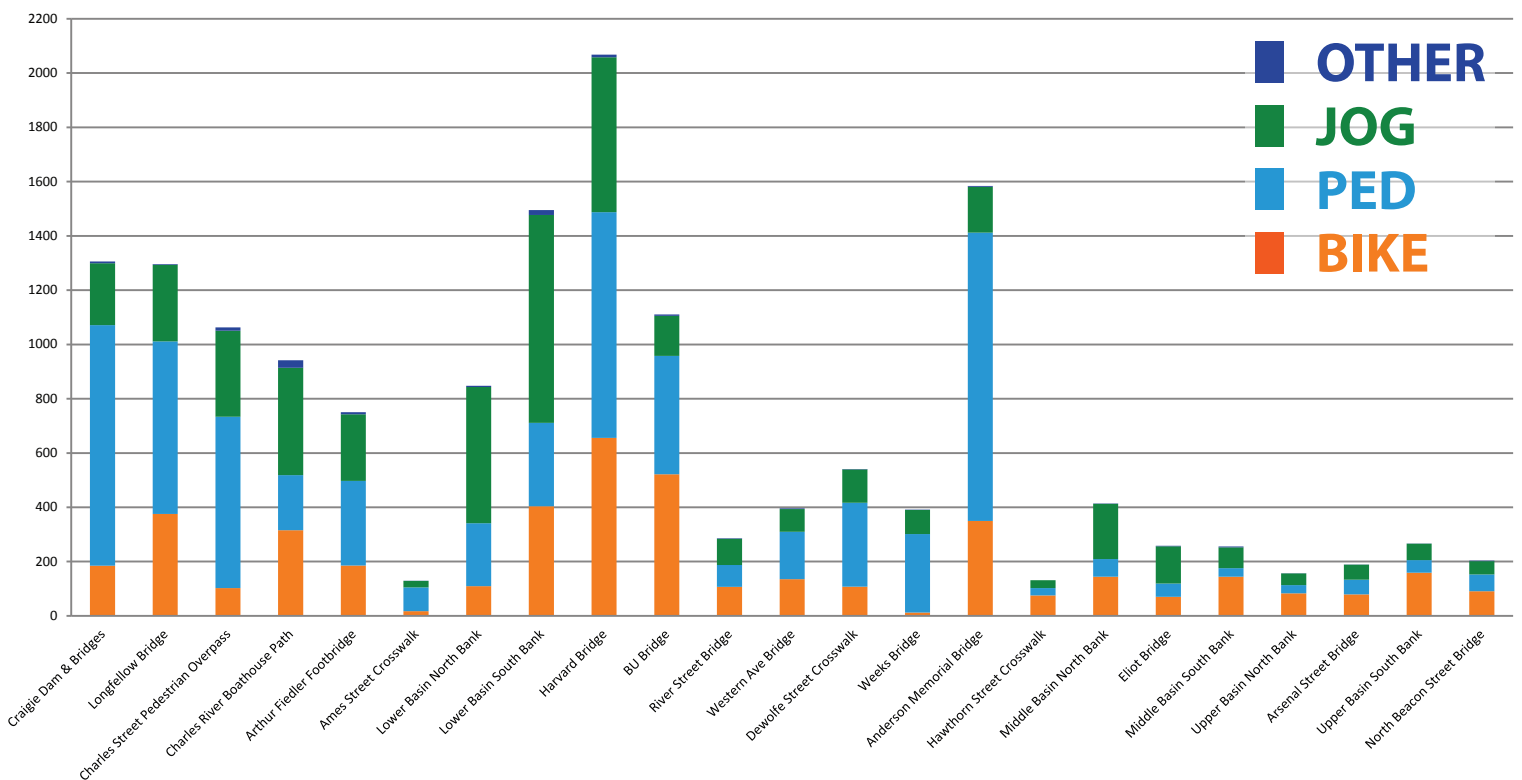
+174%

Upper Basin South Bank
Largest **jog** mode percentage increase of all weekday sites

70s with cloudy skies, intermittent showers, and strong wind gusts, while the highest weekday volumes (Spring 2013) were recorded on a day when the temperature was in the mid 70s with sunny skies.

Volumes at the individual count locations fluctuated greatly, indicating that users had a preference in where they chose to access the Basin. The bridge with the heaviest traffic was the Harvard Bridge, where just over 2000 users were recorded. The path with the heaviest traffic was the Lower Basin South Bank path. The heaviest bicycle volume was recorded on the Harvard Bridge, followed by the BU Bridge. The heaviest pedestrian volume was recorded at the Anderson Memorial Bridge, followed by the Craigie Dam & Bridges. The heaviest jogger volume was recorded at the Lower Basin South Bank path, followed by the Harvard Bridge.

Weekday volumes were heaviest in the lower basin, and decreased as one traveled west towards the upper basin.

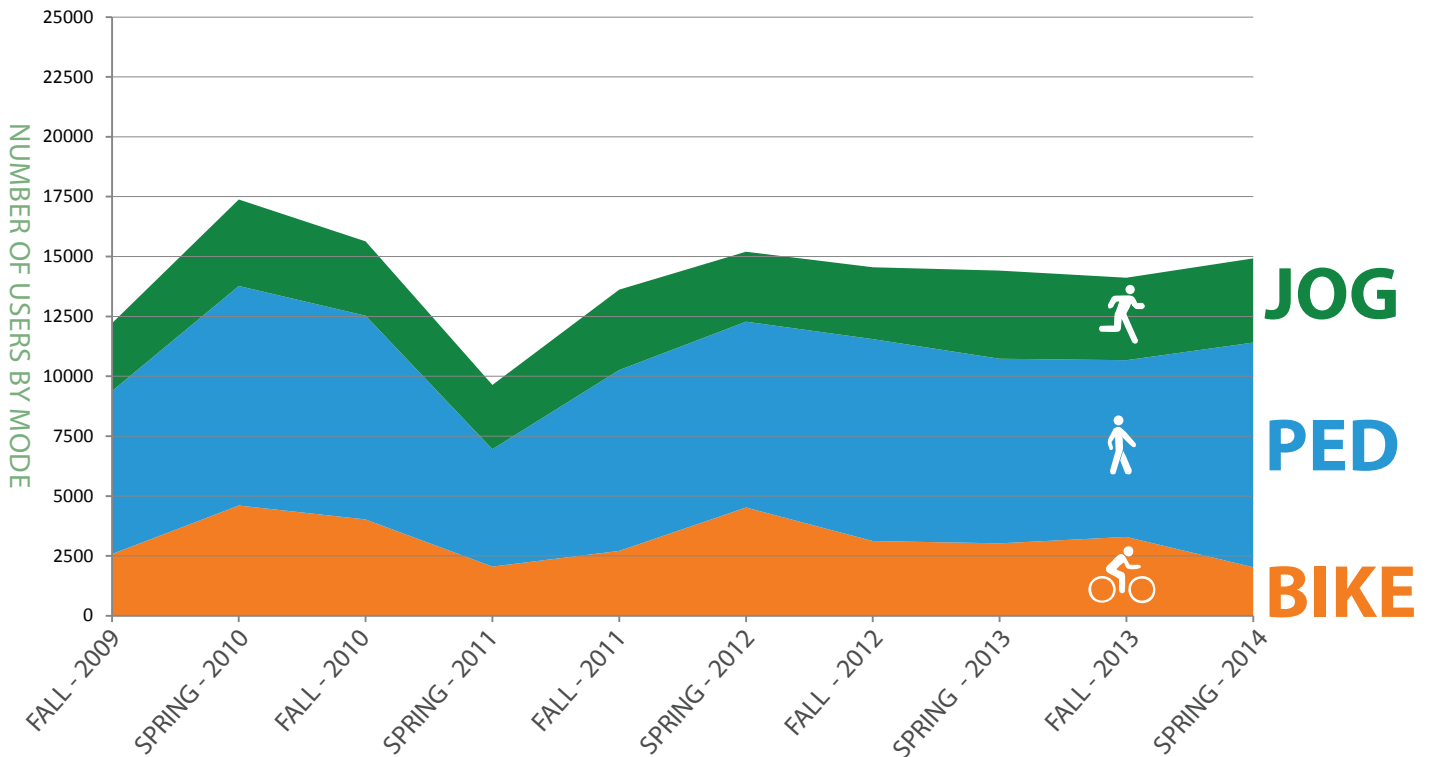
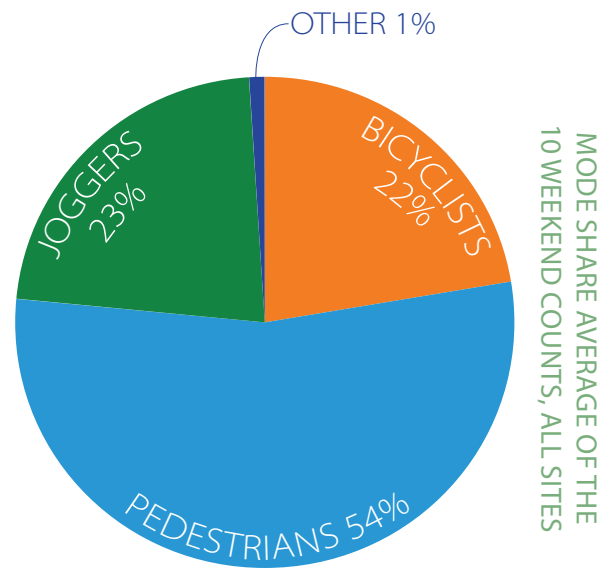


WEEKEND COUNT SUMMARY

KEY FINDINGS

The average total weekday volume for the 10 counts was 14,315. The pie chart to the right indicates that pedestrians comprised the majority of non-motorized users during the weekday counts, representing 54% of users counted. Joggers comprised the second largest user group at 23%, only a slightly larger percentage than bicyclists, which represented 22% of users.

There were some fluctuations in the total volumes counted per mode over the 5-year count period. Overall, the weekend count data fluctuated less than the weekday data. The proportion of users by mode stayed relatively consistent, as can be seen in the chart below. The lowest weekend volumes were recorded in the Spring of 2011, while the highest weekend volumes were recorded in Spring of 2010. Weather had a significant impact on the volumes. The lowest weekday volumes (Spring of 2011) were recorded on a day when the temperature was in the high 40s with overcast, rainy





+43%

Charles Street Pedestrian Overpass
Largest **bike** mode percentage increase of all weekday sites

+154%

Arthur Fiedler Footbridge
Largest **walk** mode percentage increase of all weekday sites

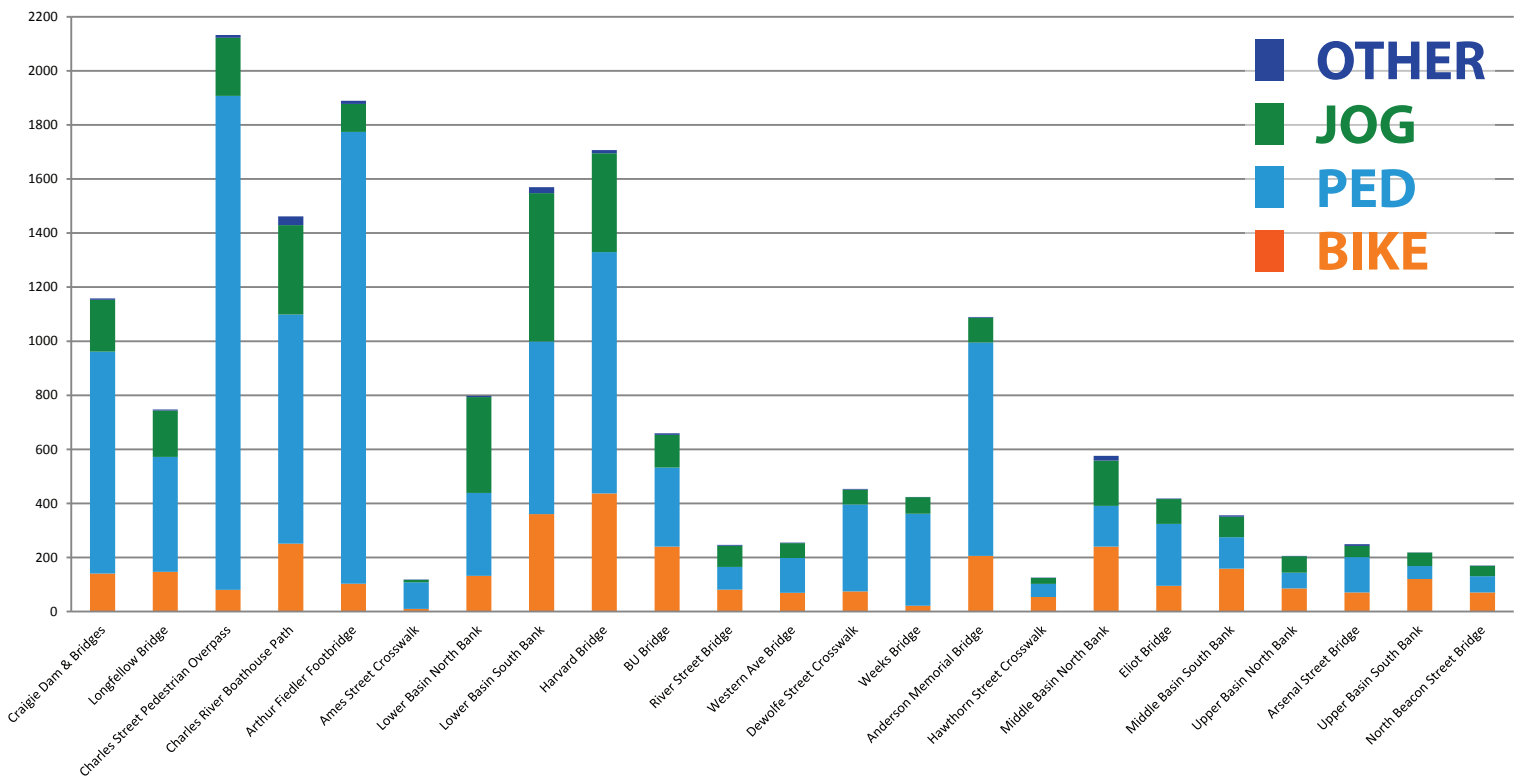
+235%

Hawthorn Street Crosswalk
Largest **jog** mode percentage increase of all weekday sites

weather before and during the counts, while the highest weekday volumes (Spring 2010) were recorded on a day when the temperature was in the 70s with sunny skies.

Volumes at the individual count locations fluctuated greatly, indicating that users have a preference in where they chose to access and travel along the Basin. The bridge with the heaviest traffic was the Harvard Bridge, where nearly 1,700 users were recorded. The path with the heaviest volume was the Charles Street Pedestrian Overpass, where nearly 2,200 users were recorded. The largest bicycle volume was recorded on the Harvard Bridge, followed by the Lower Basin South Bank Path. The heaviest pedestrian volume was recorded at the Charles Street Pedestrian Overpass, followed by the Arthur Fiedler Footbridge. The heaviest jogger volume was recorded at the Lower Basin South Bank path, followed by the Harvard Bridge.

Weekend volumes were heaviest in the lower basin, and decreased as one traveled west towards the upper basin.

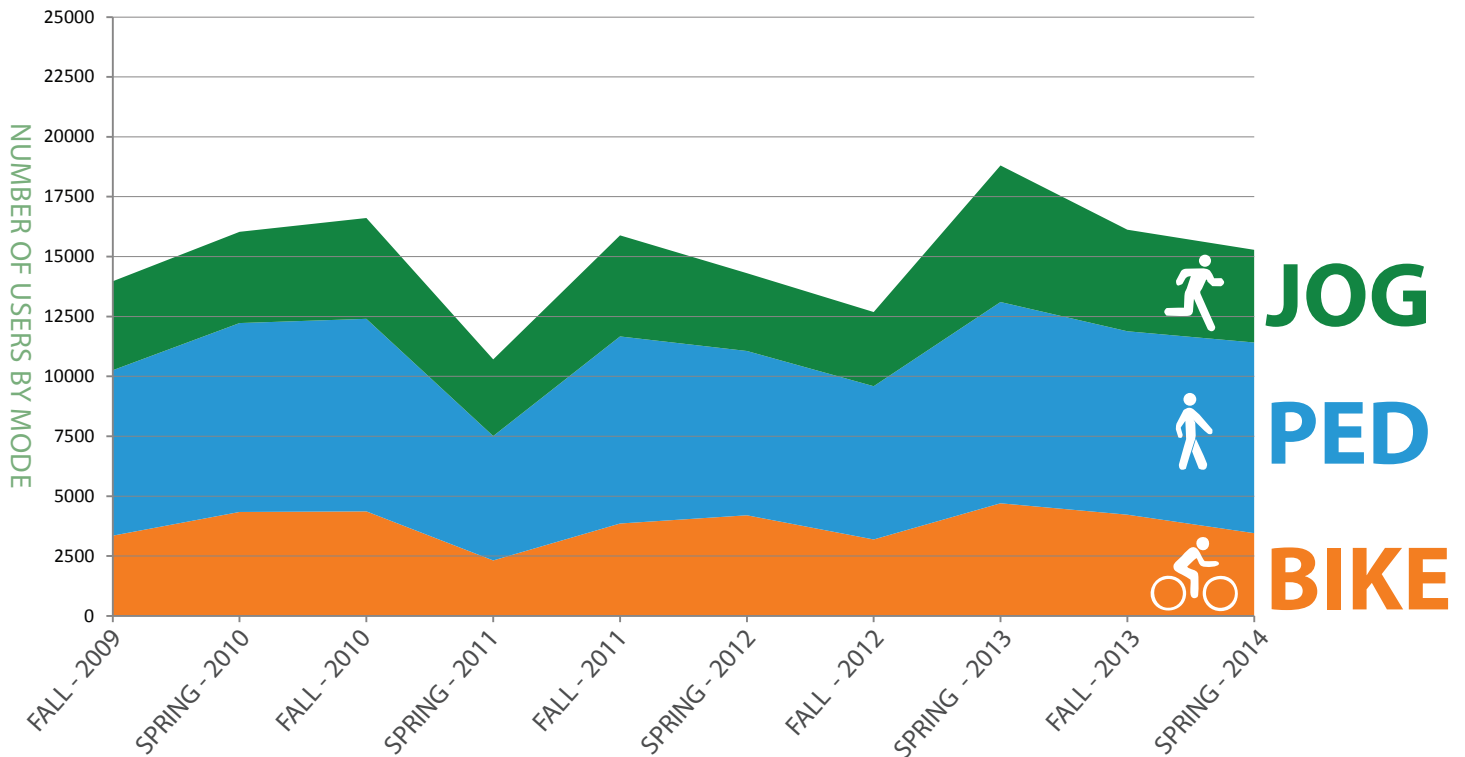
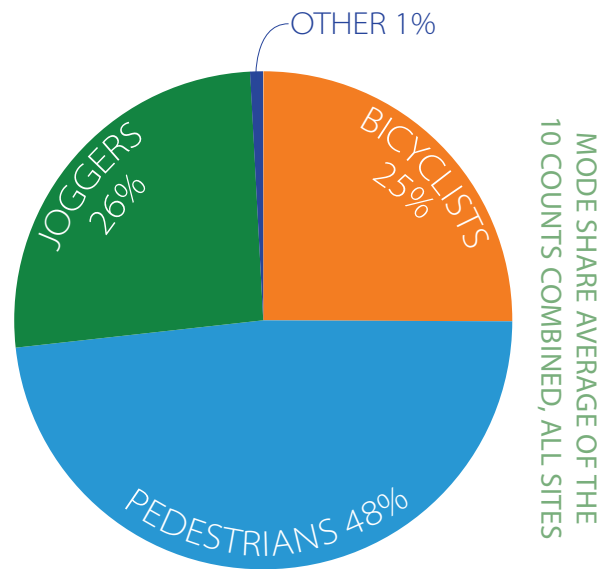


WEEKDAY + WEEKEND COMBINED COUNT FINDINGS

KEY FINDINGS

The average total weekday volume for the 10 counts was 15,170. Recorded volumes were 12% greater during the weekday counts (16,025) than the weekend counts (14,315). The pie chart to the right indicates that pedestrians comprised the greatest percentage of non-motorized users during the counts, representing 48% of users counted. Joggers comprised the second largest user group at 26%, representing only a slightly larger percentage than bicyclists at 25% of users.

There were some fluctuations in the total volumes counted per mode over the 5-year count period, but overall the proportion of users by mode stayed relatively consistent, as can be seen in the chart below. The lowest overall volumes were recorded in the Spring of 2011, while the highest overall volumes were recorded in Spring of 2013.



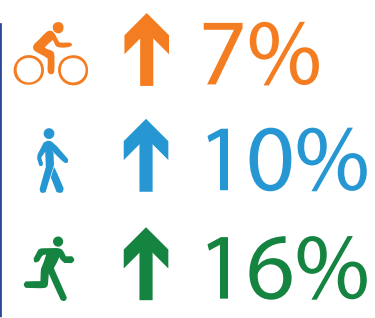


Gender Breakdown of Bicyclists + Pedestrians/Joggers
 Over the 5-year count period, the ratio of male to female cyclists remained 2:1. The ratio of male to female pedestrians/joggers remained 1:1

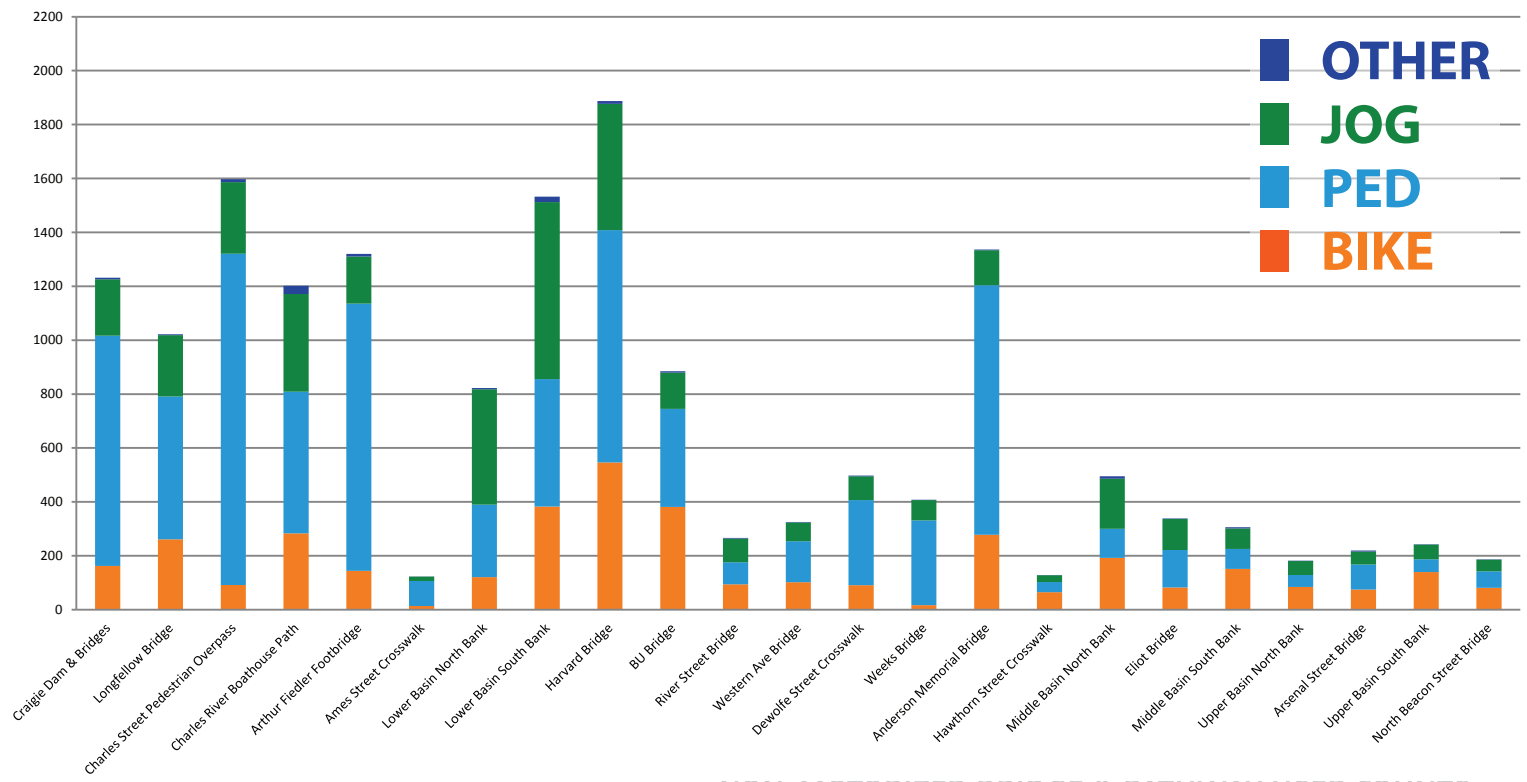
As can be seen on the left, there is more gender parity among joggers and pedestrians than there is among bicyclists in the Basin. The 2:1 male to female bicyclist ratio is not unique to Greater Boston; similar ratios are recorded in most North American cities.

The chart below displays the average of the weekday and weekend counts by mode at each count location. The bridge with the heaviest traffic was the Harvard Bridge, where nearly 1,900 users were recorded on average. The path with the heaviest volume was the Charles Street Pedestrian Overpass, where nearly 1,600 users were recorded on average.

Basin Wide Growth by Mode
 Over the 5 years, each mode of travel increased, as shown by the percentages on the right. Joggers increased by the largest percentage.



UNDERSTANDING CHANGE
 Over the 5-year count period, the mode split at count locations fluctuated. The maps on pages 1-12 to 1-15 display the percent change per mode that was recorded at each count location over the 5-years, for the weekday and weekend counts. The thickness of each line corresponds to the average volume recorded at the site.

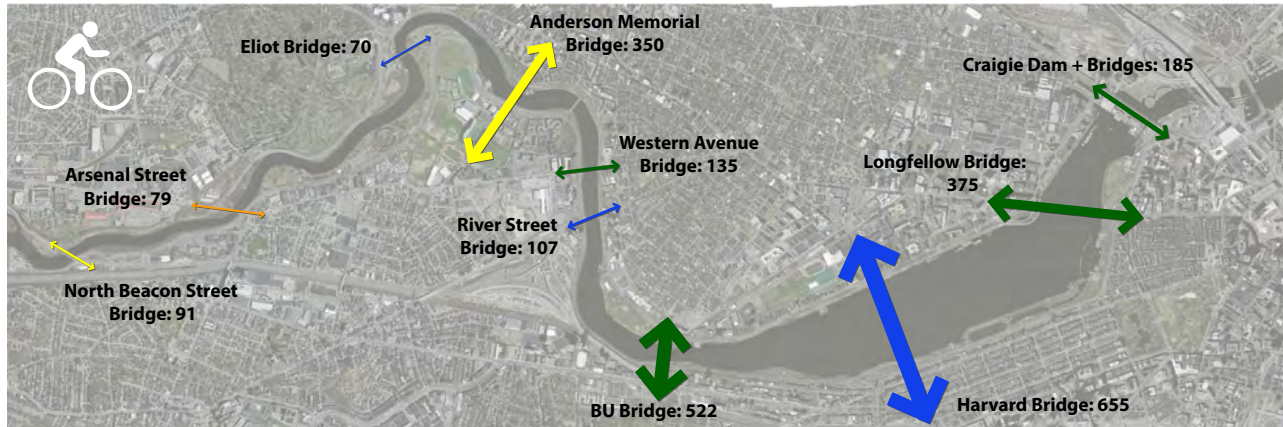


WEEKDAY COUNT VOLUME AND PERCENT CHANGE

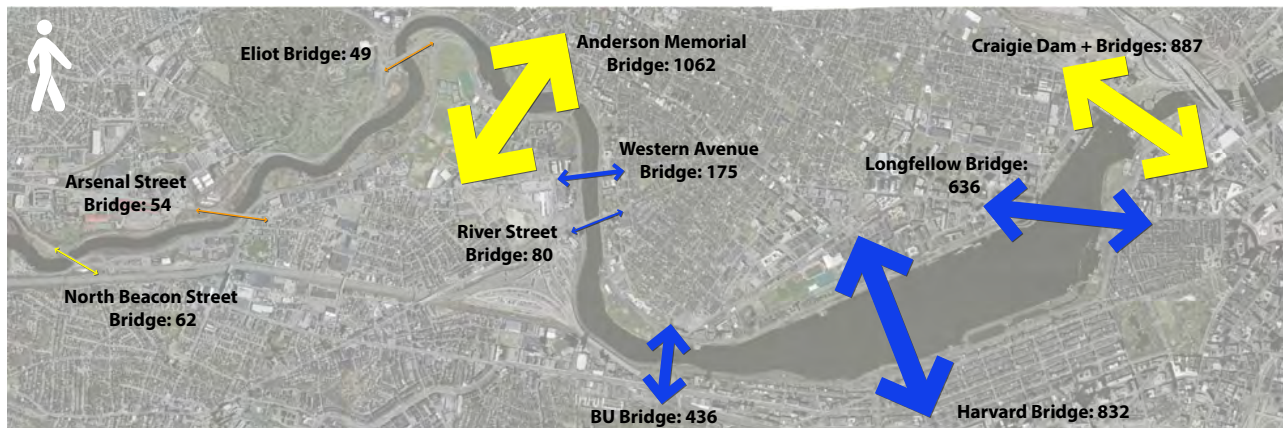
- ↔ Decrease
- ↔ 10 - 50% Increase
- ↔ 0 - 10% Increase
- ↔ >50% Increase

BRIDGES

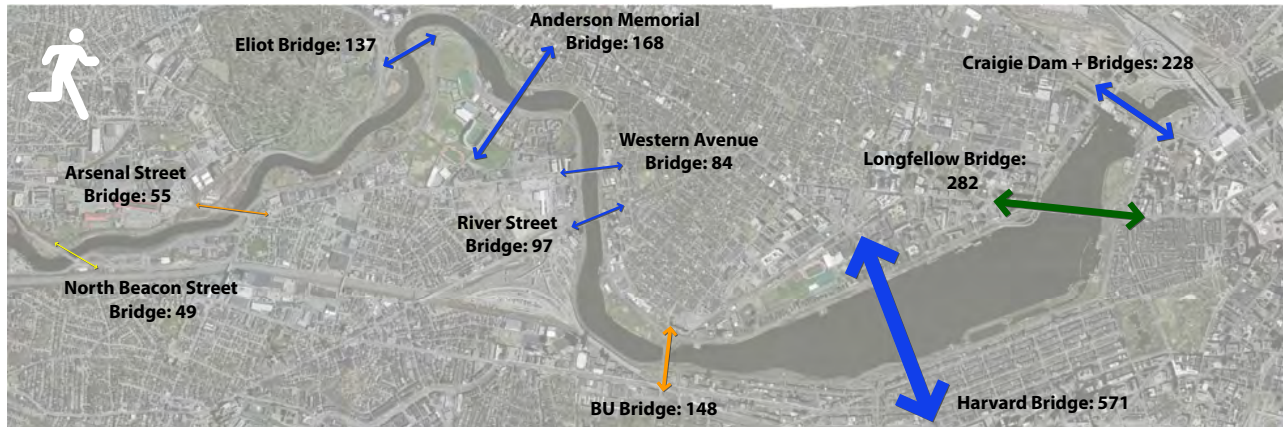
BICYCLISTS



PEDESTRIANS



JOGGERS



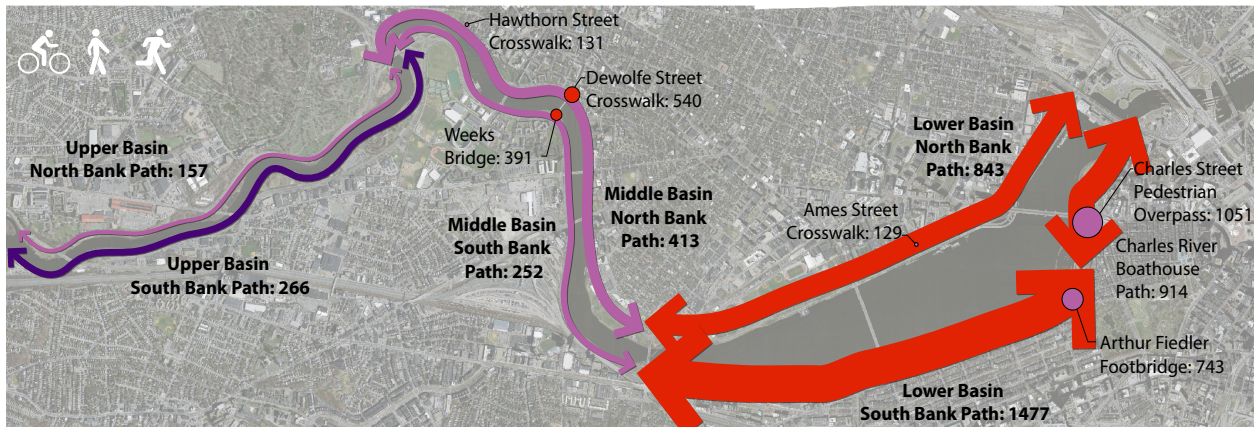
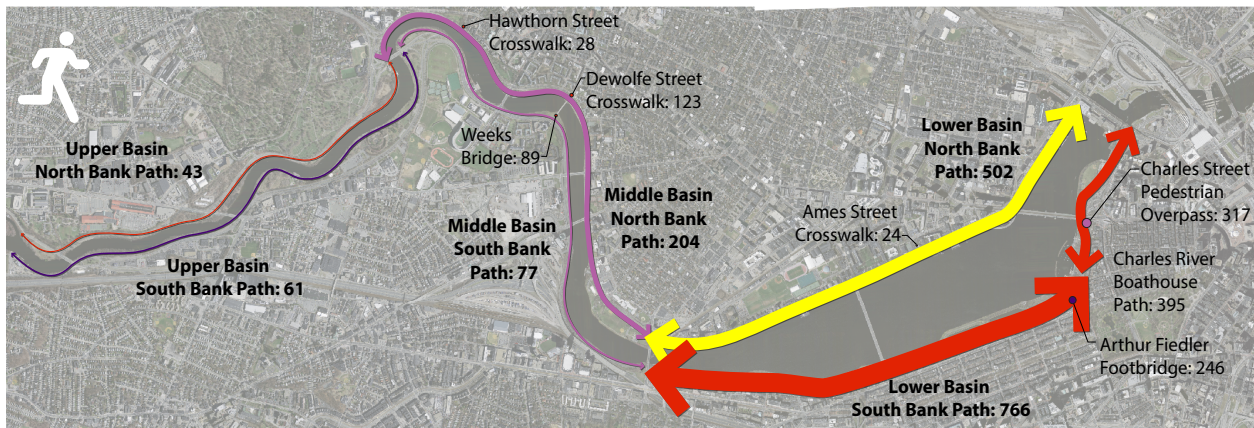
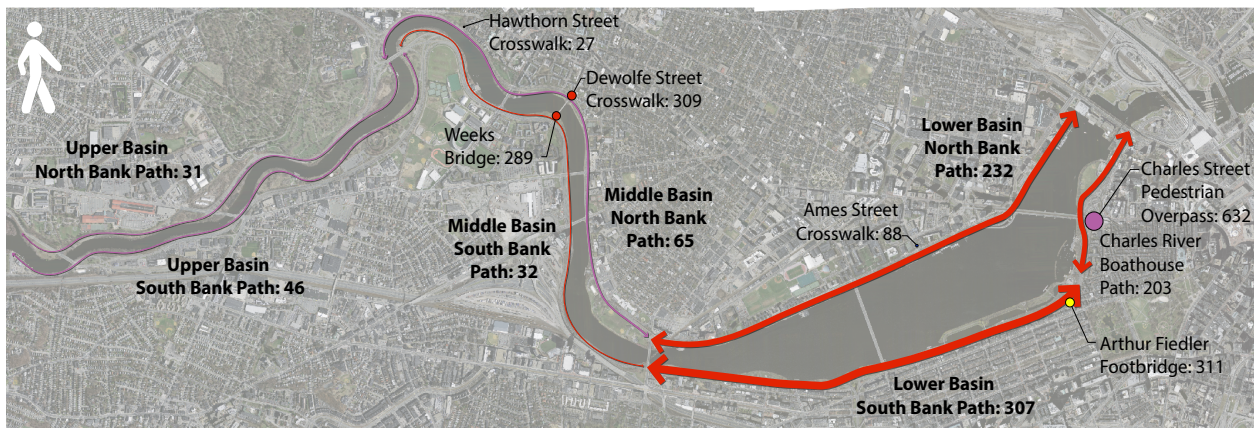
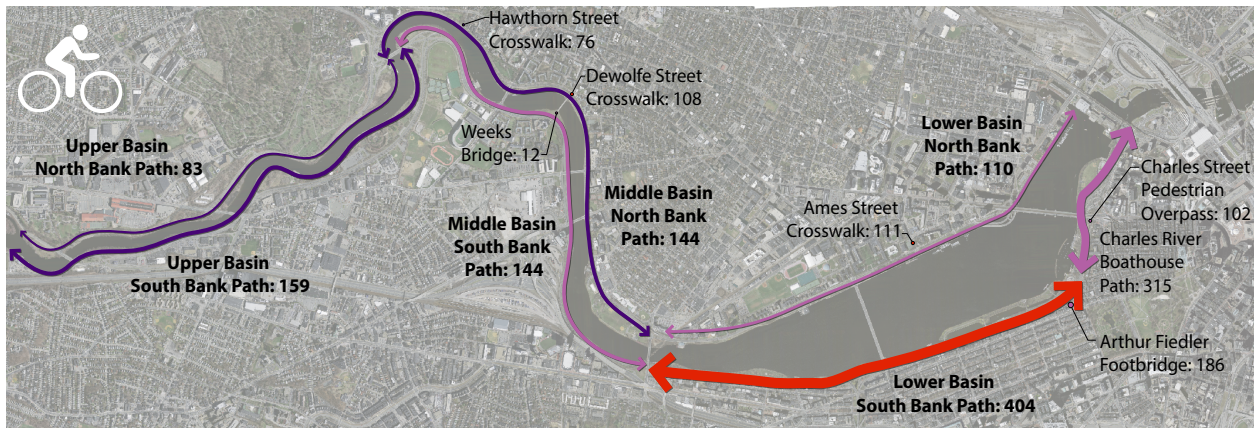
ALL MODES



WEEKDAY COUNT VOLUME AND PERCENT CHANGE

- ↔ Decrease
- ↔ 10 - 50% Increase
- ↔ 0 - 10% Increase
- ↔ >50% Increase

PATHS



BICYCLISTS

PEDESTRIANS

JOGGERS

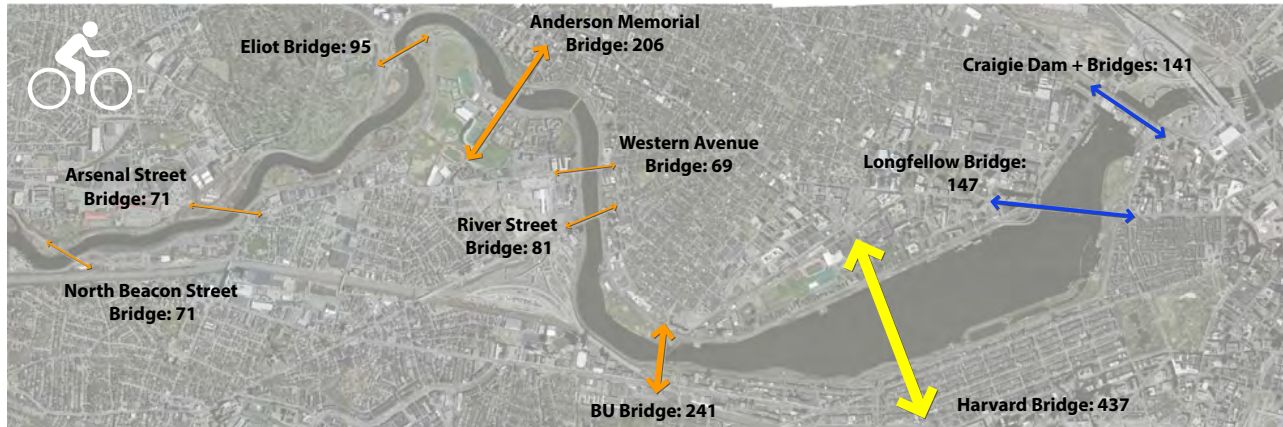
ALL MODES

WEEKEND COUNT VOLUME AND PERCENT CHANGE

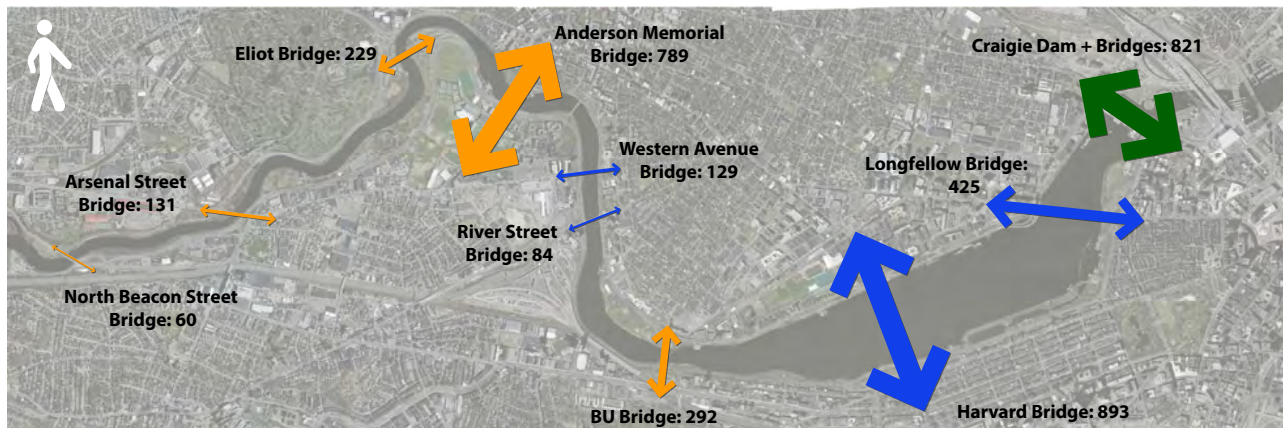
- ↔ Decrease
- ↔ 10 - 50% Increase
- ↔ 0 - 10% Increase
- ↔ >50% Increase

BRIDGES

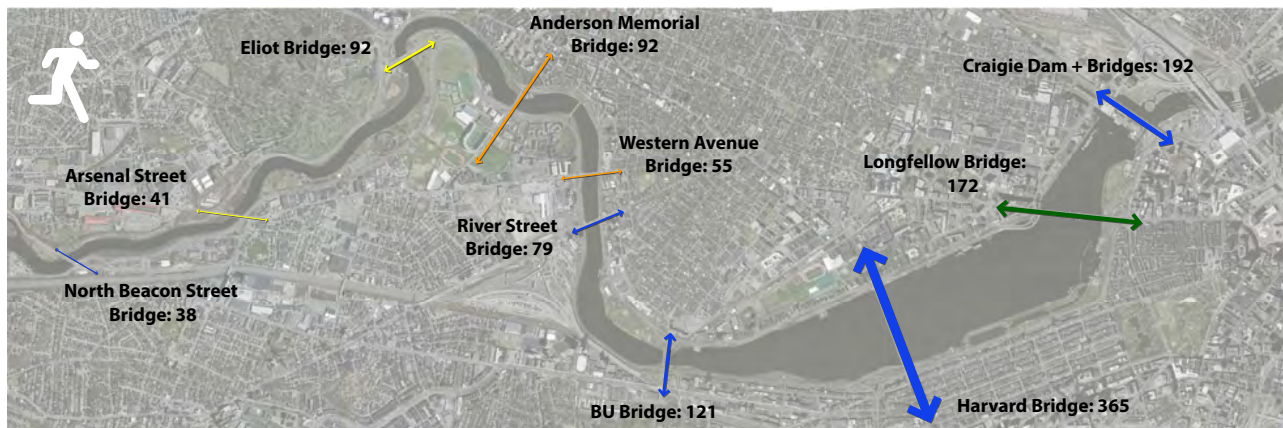
BICYCLISTS



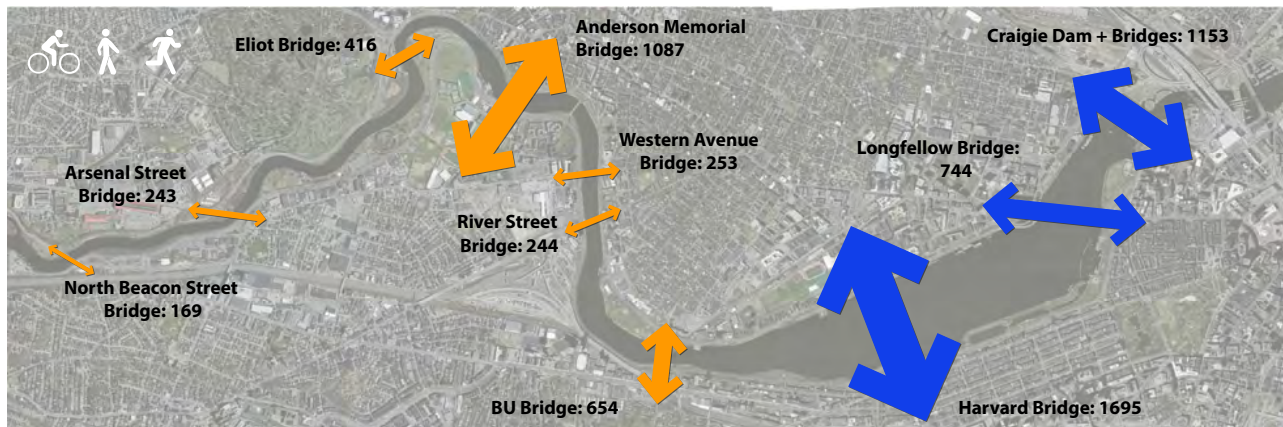
PEDESTRIANS



JOGGERS



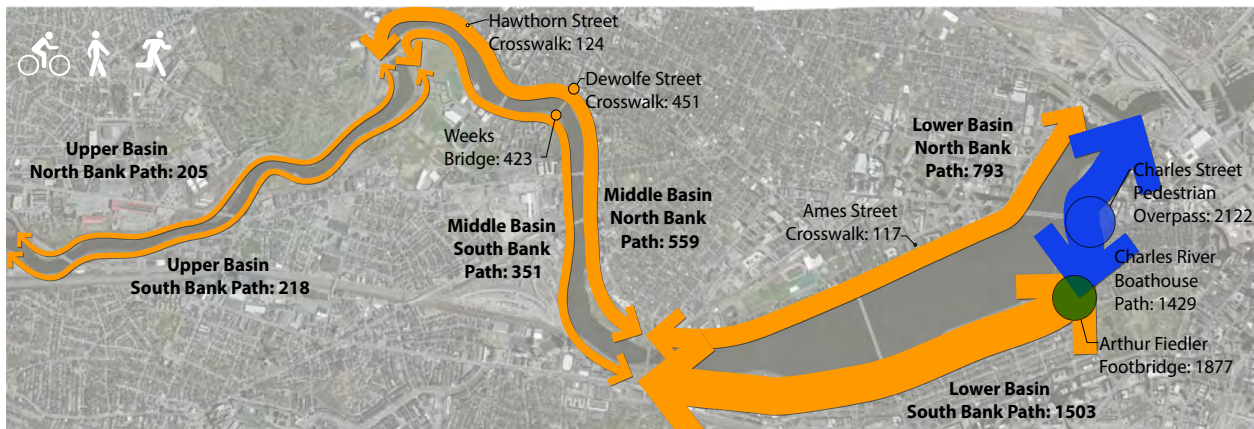
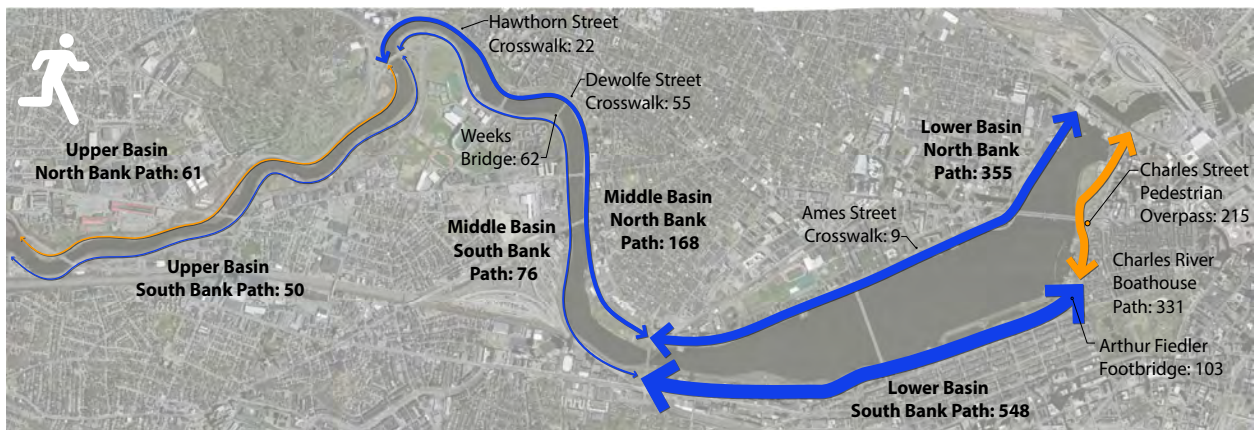
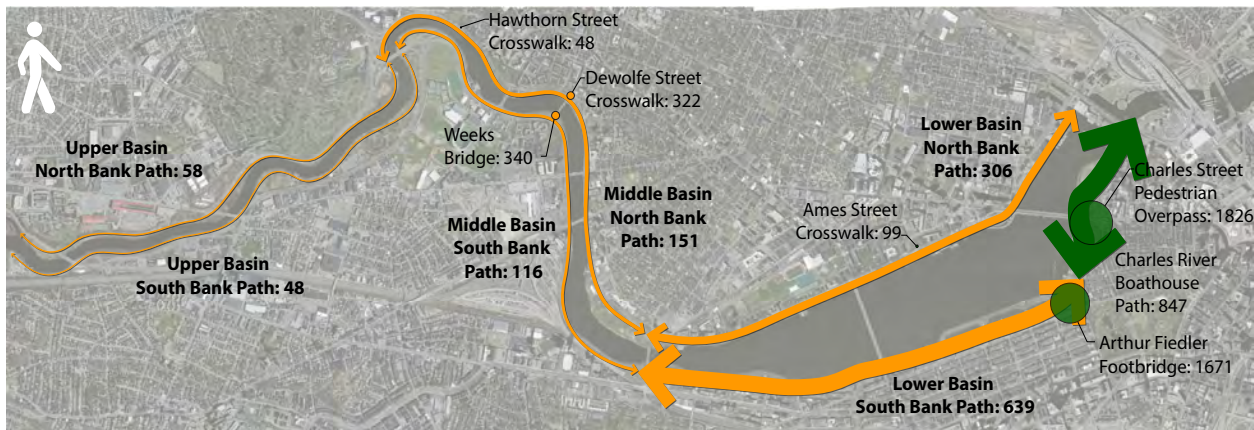
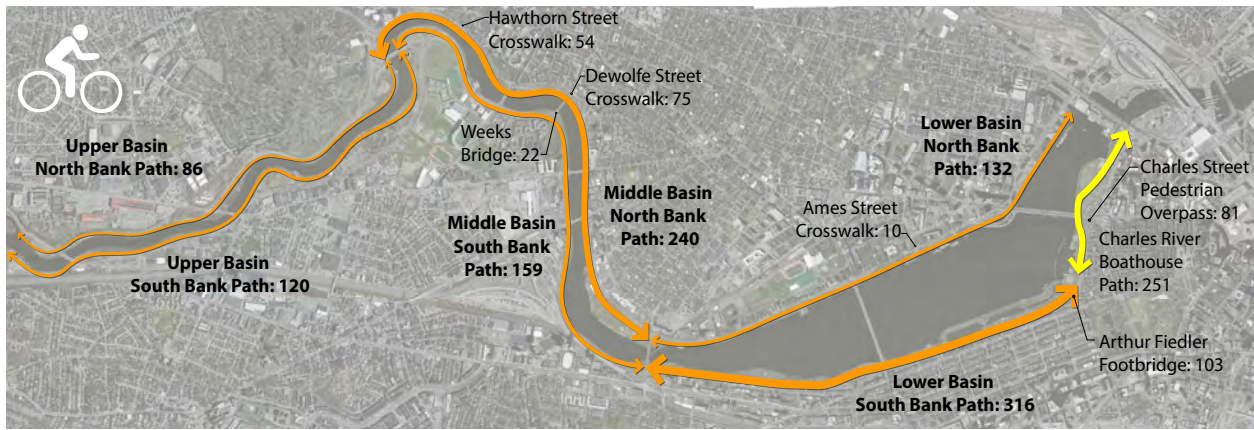
ALL MODES



WEEKEND COUNT VOLUME AND PERCENT CHANGE

- ↔ Decrease
- ↔ 10 - 50% Increase
- ↔ 0 - 10% Increase
- ↔ >50% Increase

PATHS



CHAPTER 2

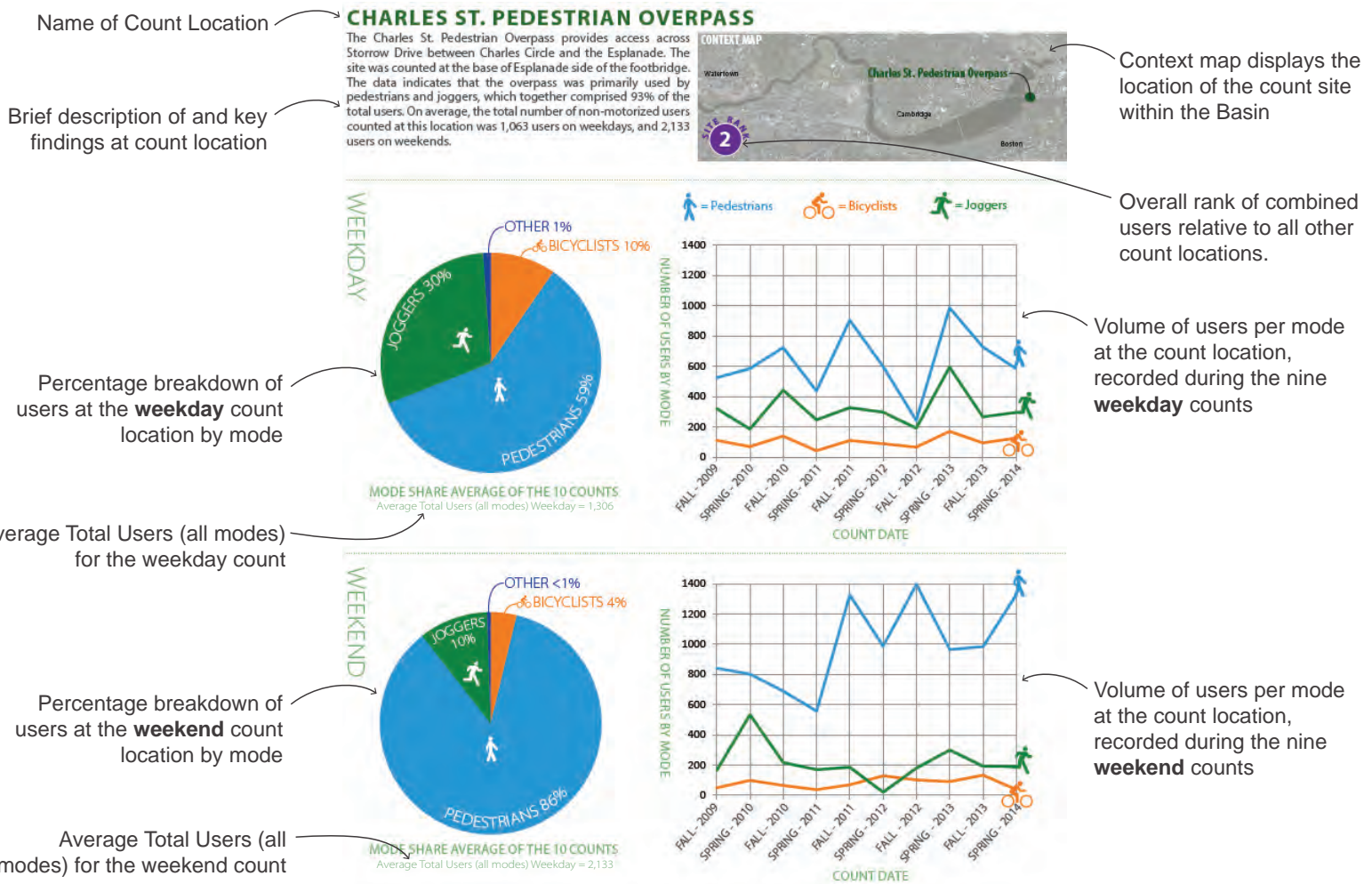


DATA AND ANALYSIS FOR INDIVIDUAL COUNT LOCATIONS

The following pages include data, analysis, tables, charts and graphics related to the findings at each individual count location along the Basin. Each count location--whether bridge, path or crosswalk location--is shown from east to west, starting with the Craigie Dam and Bridges and ending with the North Beacon Street Bridge.

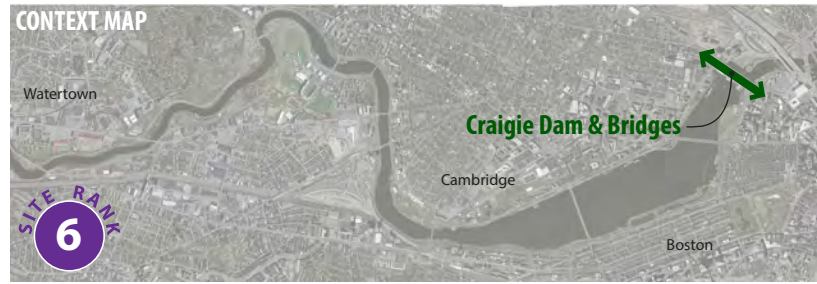
Each page shows the volumes of pedestrians, bicyclists and joggers at the respective location for each of the ten counts performed from fall of 2009 to spring of 2014. A pie chart combines the data from all ten counts to provide the mode share averages as a percentage of the overall volume of non-motorized users. All line graphs and pie charts are broken into weekday and weekend periods so the reader is able to understand how use of the particular facility changed depending on when the count was conducted. Finally, included with the context map at upper right is an indication of the overall rank of combined users relative to all other count locations.

The graphic below displays the information provided on each of the individual count location sheets.

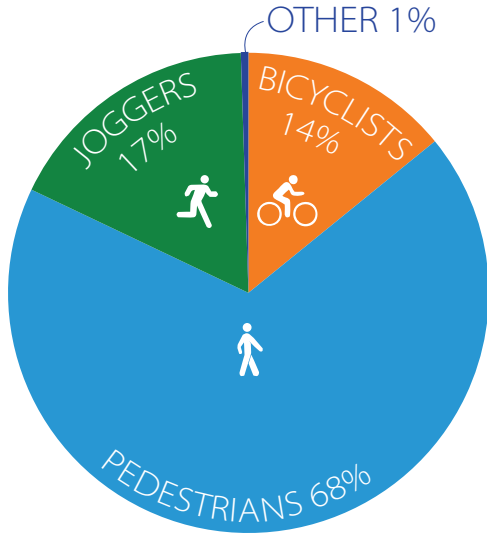


CRAIGIE DAM & BRIDGES

The Craigie Dam and Bridges connects the North End to East Cambridge. The site was counted between the drawbridge and the Museum of Science. At 70% on average, pedestrians represented the great majority of non-motorized users at this location, followed by joggers and then bicyclists. On average, the total number of non-motorized users counted at this location was 1,306 users on weekdays, and 1,144 users on weekends.



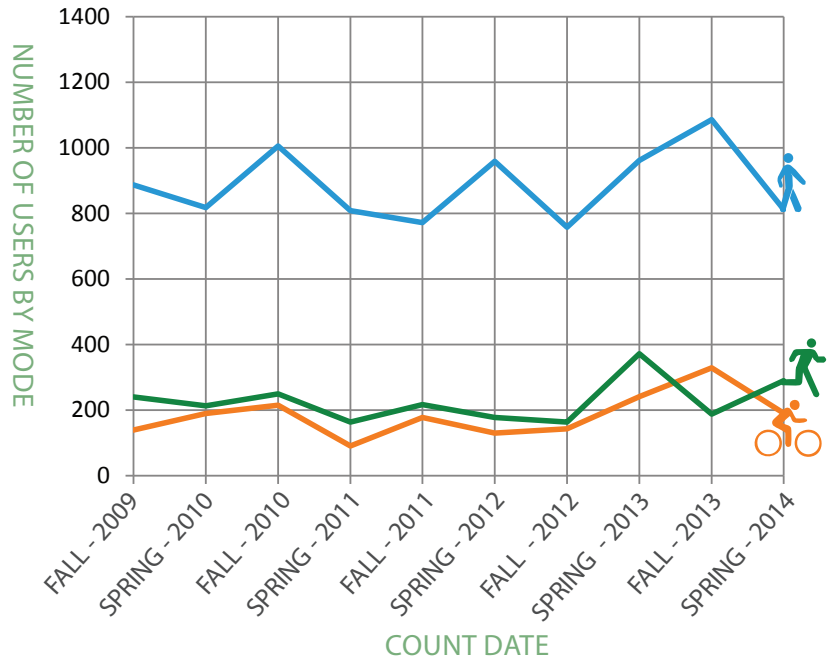
WEEKDAY



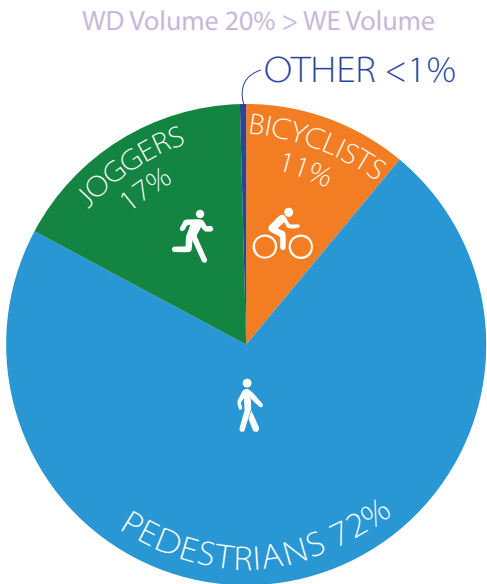
MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 1,306

= Pedestrians = Bicyclists = Joggers

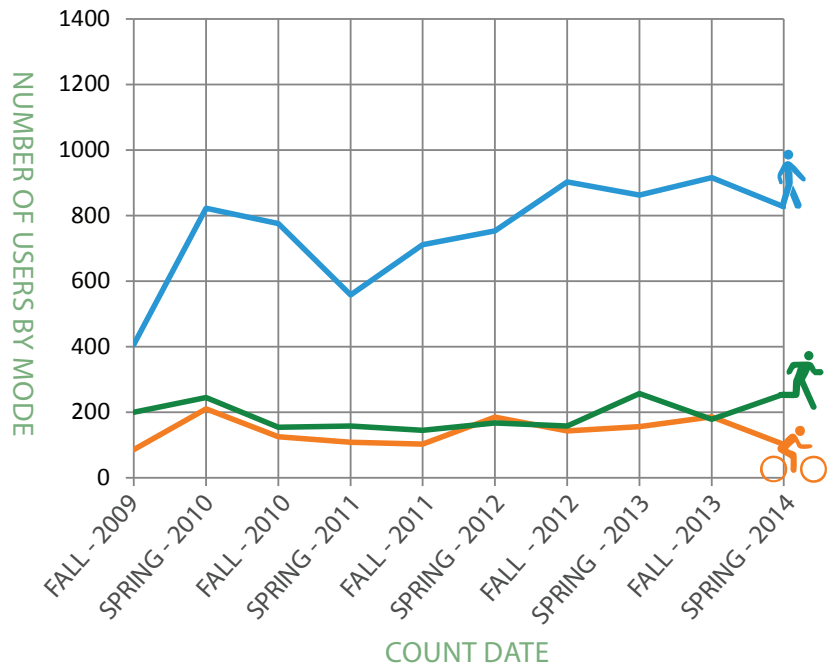


WEEKEND



MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 1,144

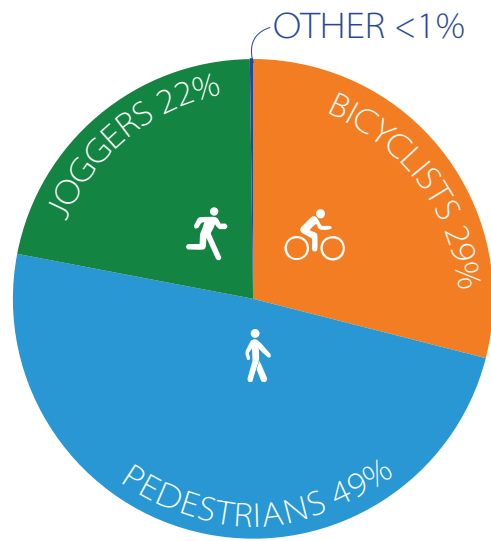
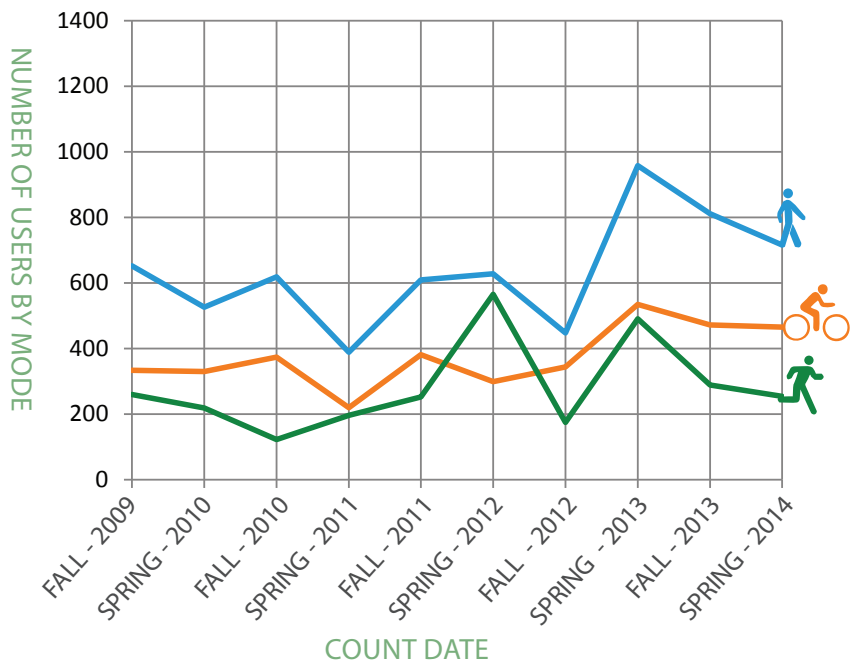




LONGFELLOW BRIDGE

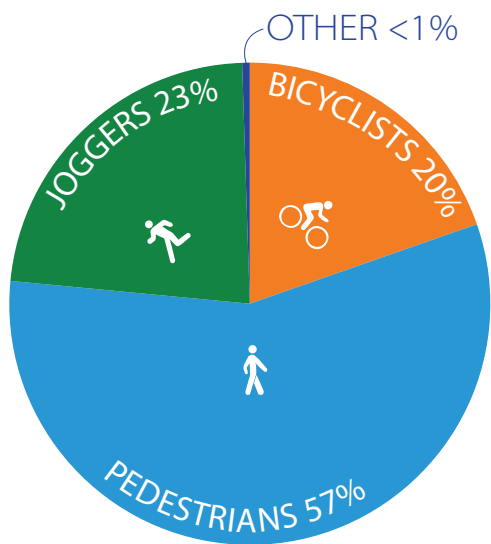
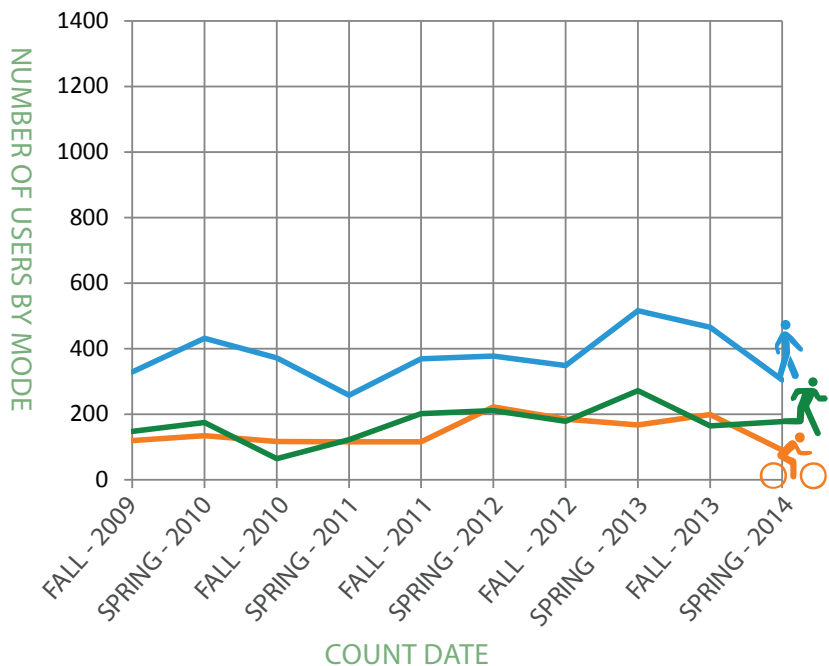
The Longfellow Bridge connects Charles Circle in Boston to Kendall Square in Cambridge. The site was counted mid-span on the north/downstream side of the bridge. Bicyclists comprised 9% more of the total users during the weekday count, indicating an increased bike commute mode share during the weekdays. On average, the total number of non-motorized users counted at this location was 1,296 users on weekdays, and 748 users on weekends.¹

= Pedestrians = Bicyclists = Joggers



MODE SHARE AVERAGE OF THE 10 COUNTS
Average Total Users (all modes) Weekday = 1,296

WEEKDAY



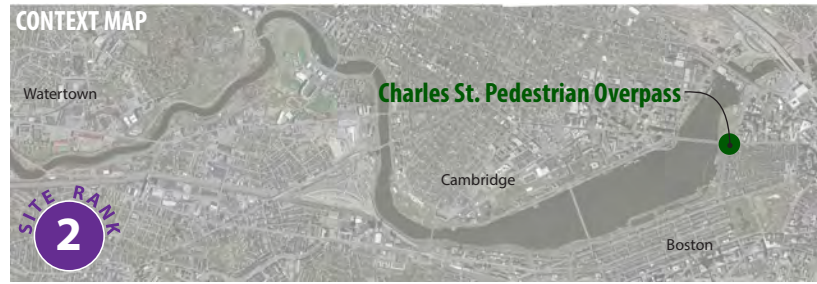
MODE SHARE AVERAGE OF THE 10 COUNTS
Average Total Users (all modes) Weekend = 748

WEEKEND

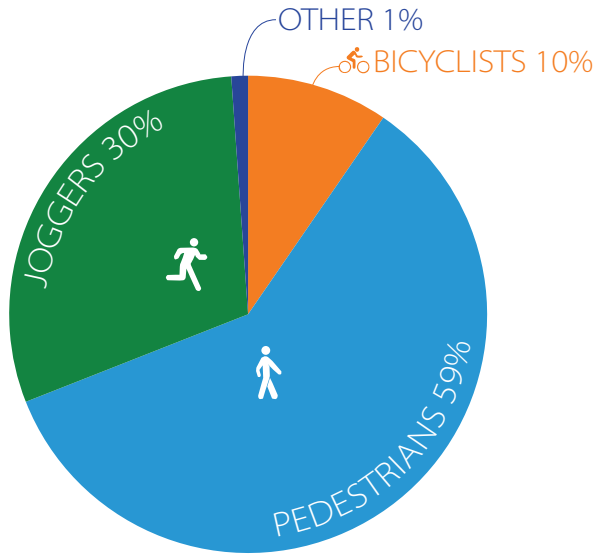
¹ In the fall of 2013, the multi-year renovation of the bridge commenced, closing the south roadway and sidewalk for all users and impacting the fall 2013 and spring 2014 counts.

CHARLES ST. PEDESTRIAN OVERPASS

The Charles St. Pedestrian Overpass provides access across Storrow Drive between Charles Circle and the Esplanade. The site was counted at the base of Esplanade side of the footbridge. The data indicates that the overpass was primarily used by pedestrians and joggers, which together comprised 93% of the total users. On average, the total number of non-motorized users counted at this location was 1,063 users on weekdays, and 2,133 users on weekends.

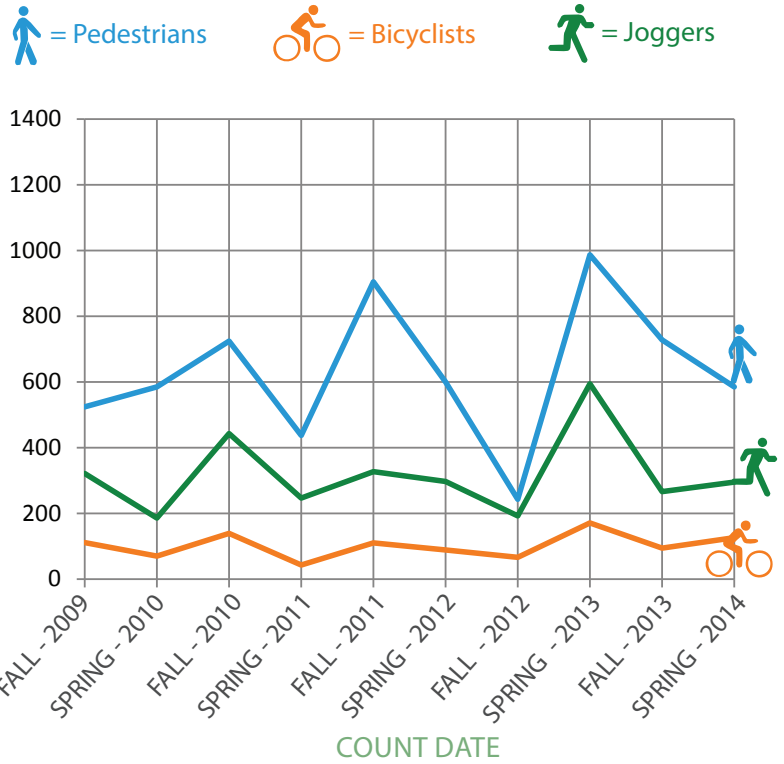


WEEKDAY

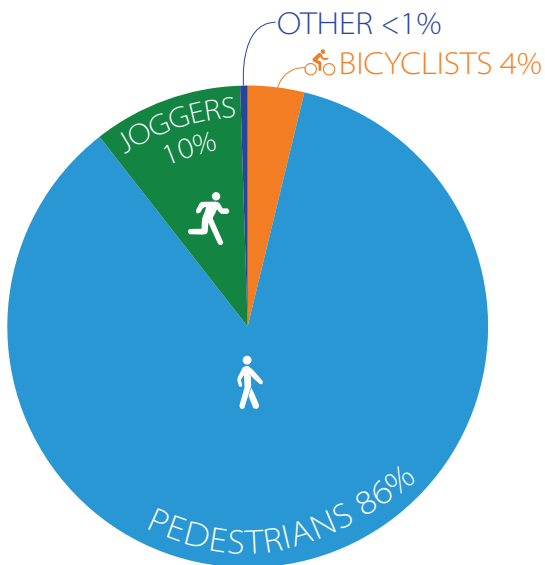


MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 1,063

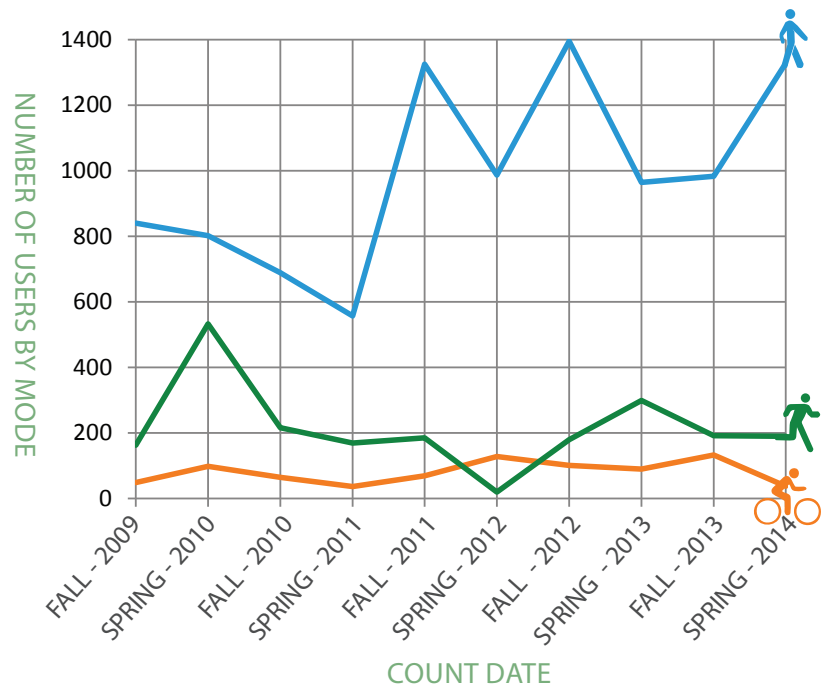


WEEKEND

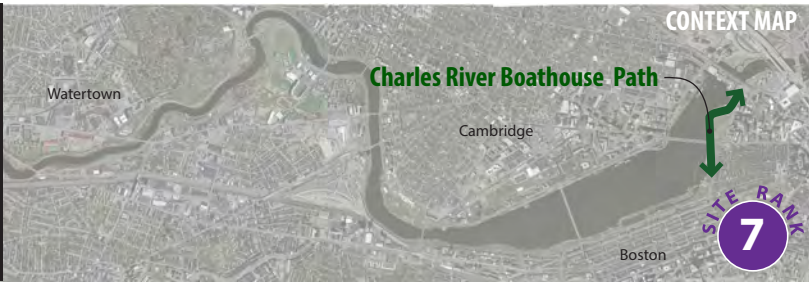


MODE SHARE AVERAGE OF THE 10 COUNTS

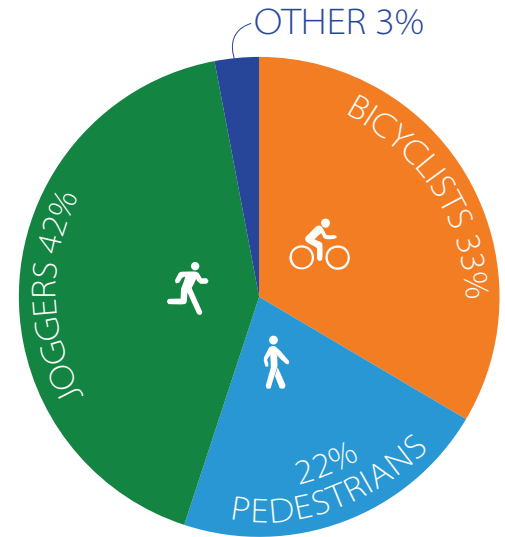
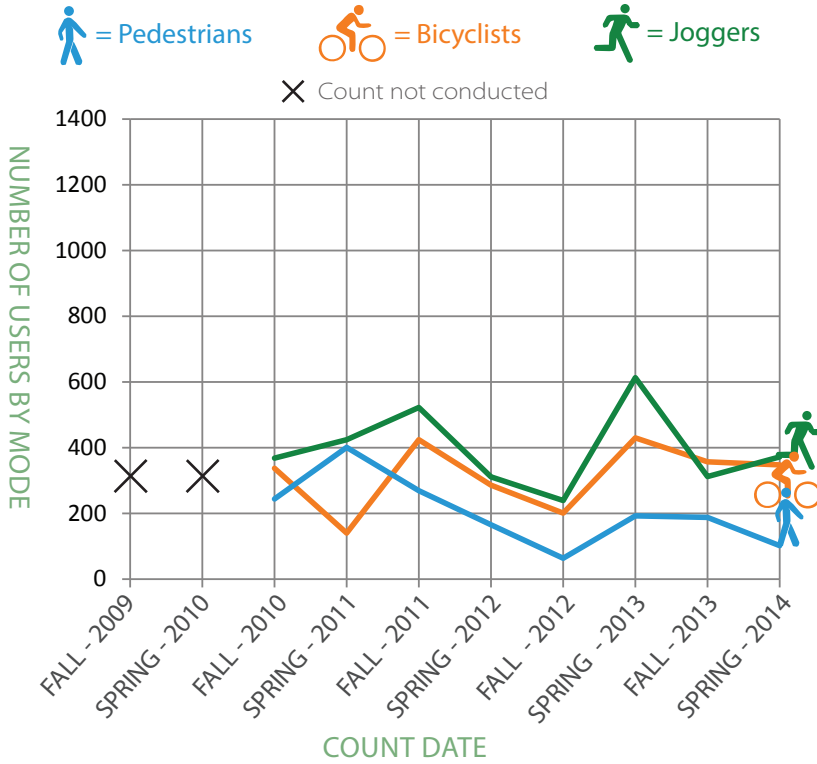
Average Total Users (all modes) Weekday = 2,133



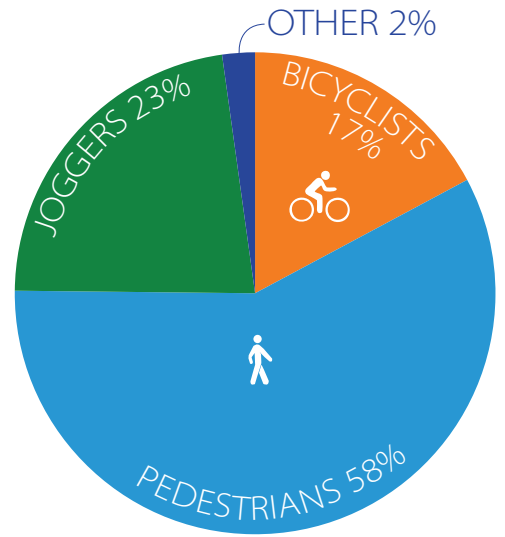
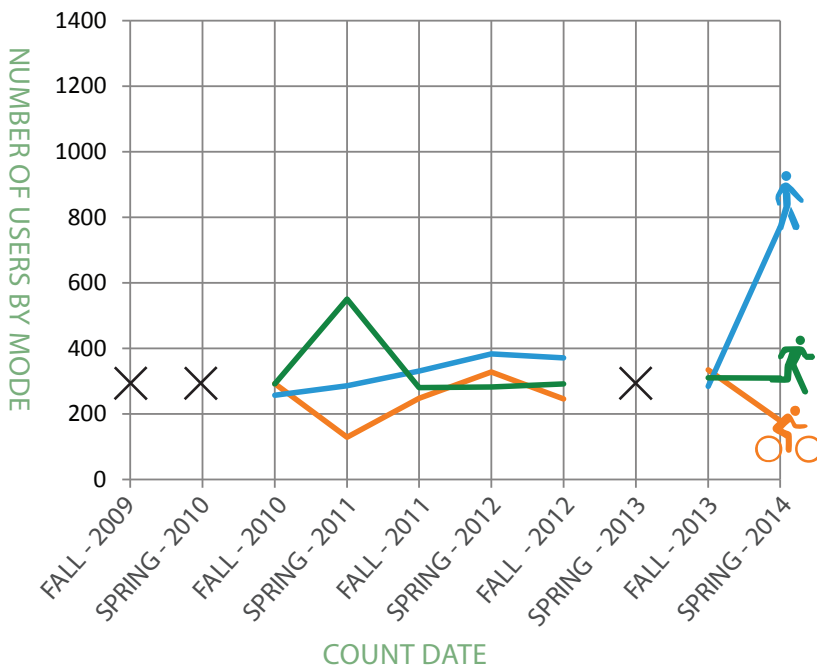
CHARLES RIVER BOATHOUSE PATH



The Charles River Boathouse Path travels along the southeast bank of the basin. The site was counted at the base of the Charles Street Overpass. Bicyclists comprised 16% more of the total users during the weekday count, indicating an increased bike commute mode share during the weekdays. On average, the total number of non-motorized users counted at this location was 942 users on weekdays and 1,461 users on weekends. The higher weekend volumes indicate the path is a popular recreation route.



MODE SHARE AVERAGE OF THE 10 COUNTS
 Average Total Users (all modes) Weekday = 942



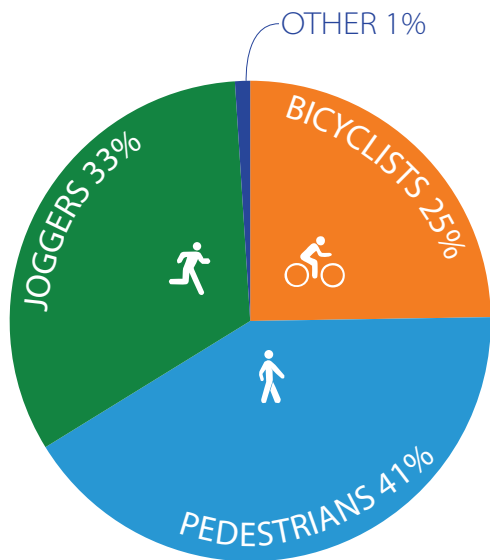
MODE SHARE AVERAGE OF THE 10 COUNTS
 Average Total Users (all modes) Weekend = 1,461

ARTHUR FIEDLER FOOTBRIDGE

The Arthur Fiedler Footbridge provides access across Storrow Drive between Beacon St and the Esplanade. The site was counted at the base of Esplanade side of the footbridge. On the weekends, the bridge was heavily used by pedestrians. In fact, the total average pedestrian volumes on the weekends (1,671) was greater than the total weekday volumes for all modes at the site. On average, the total number of non-motorized users counted at this location was 751 users on weekdays and 1,889 users on weekends.

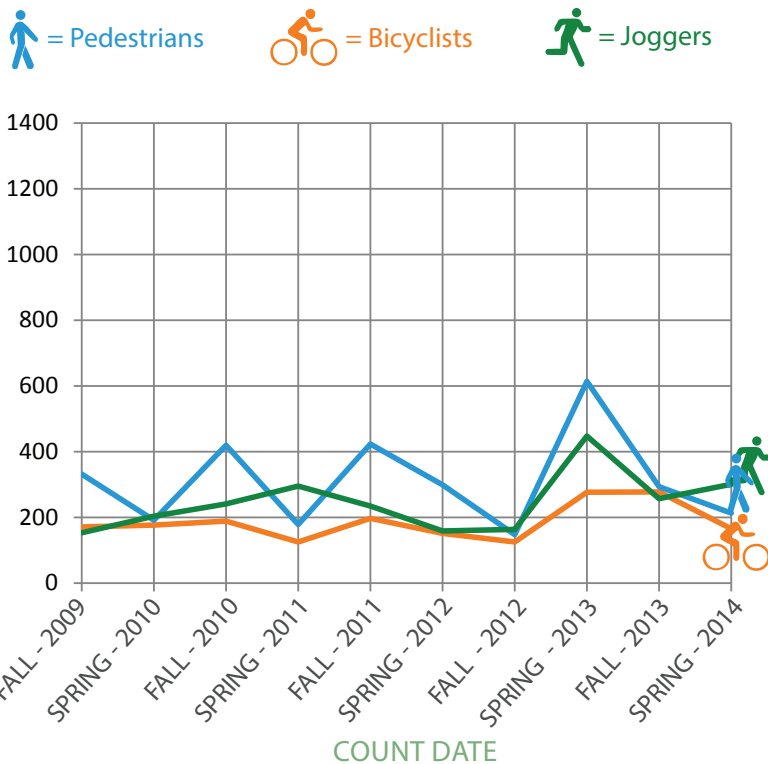


WEEKDAY

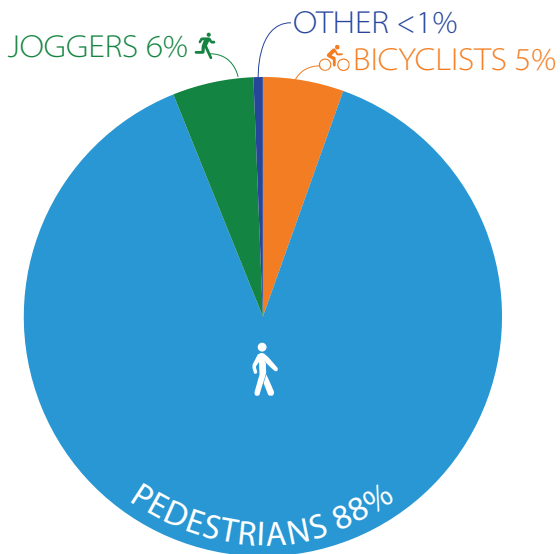


MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 751

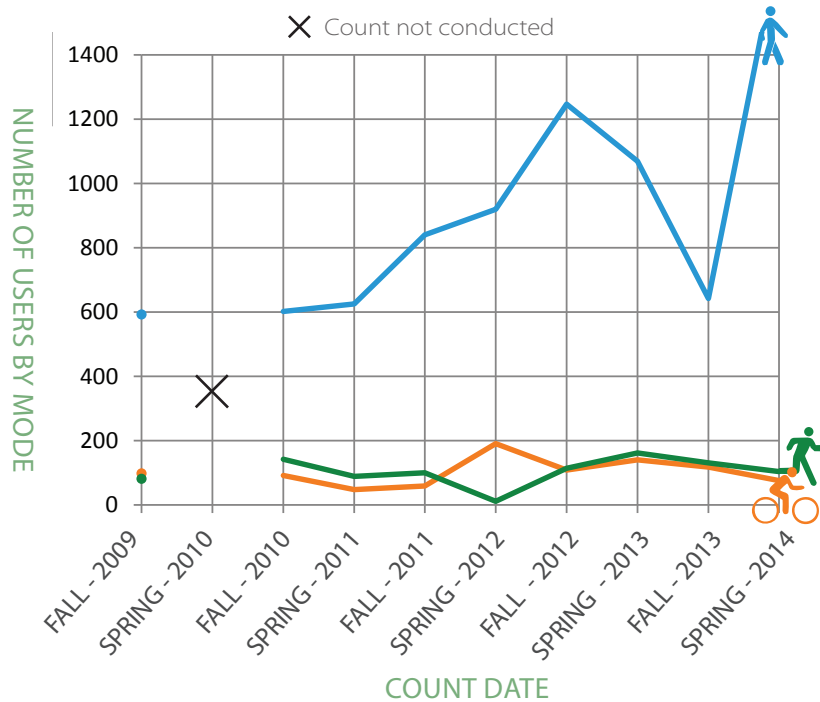


WEEKEND



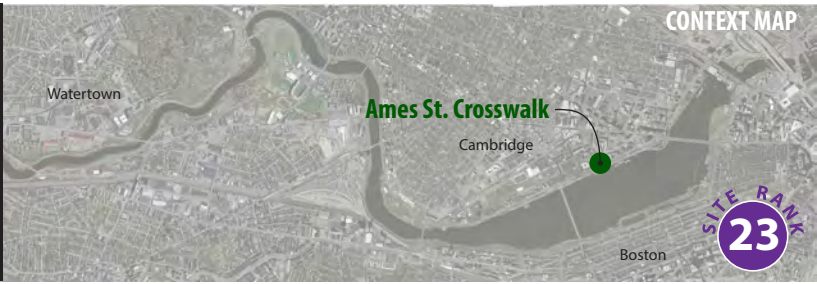
MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 1,889

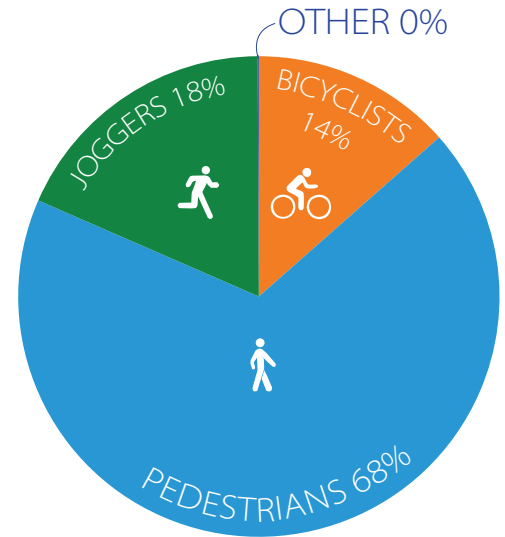
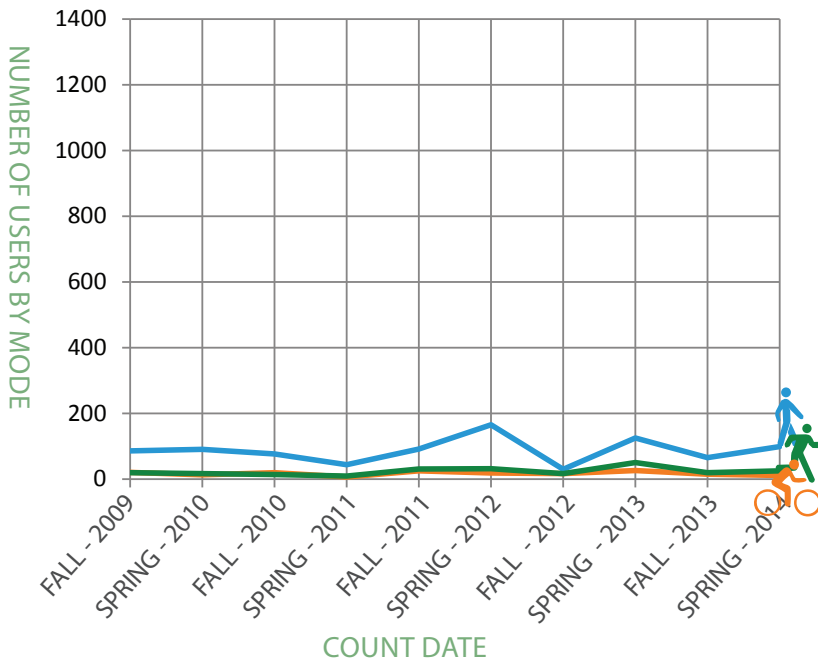


AMES ST. CROSSWALK

The Ames St Crosswalk provides a direct connection from Ames St across Memorial Drive. The site was counted on the basin side of the crosswalk south of Memorial Drive. Overall count volumes at this location were low, indicating a preference to access the basin at other bridges/crossings. On average, the total number of non-motorized users counted at this location was 129 users on weekdays and 119 users on weekends.

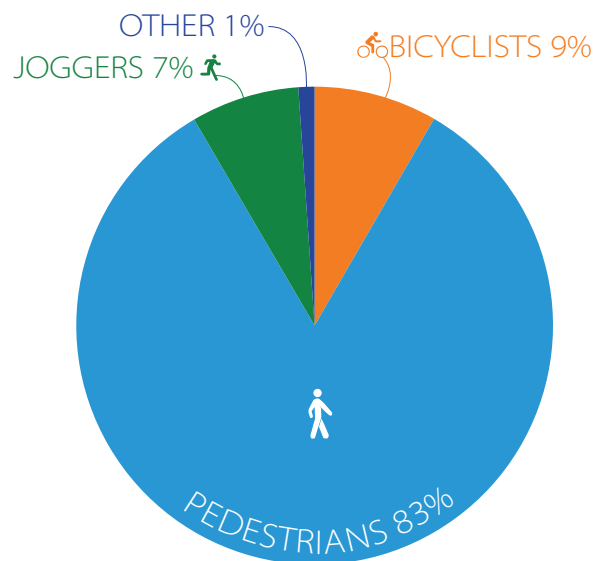
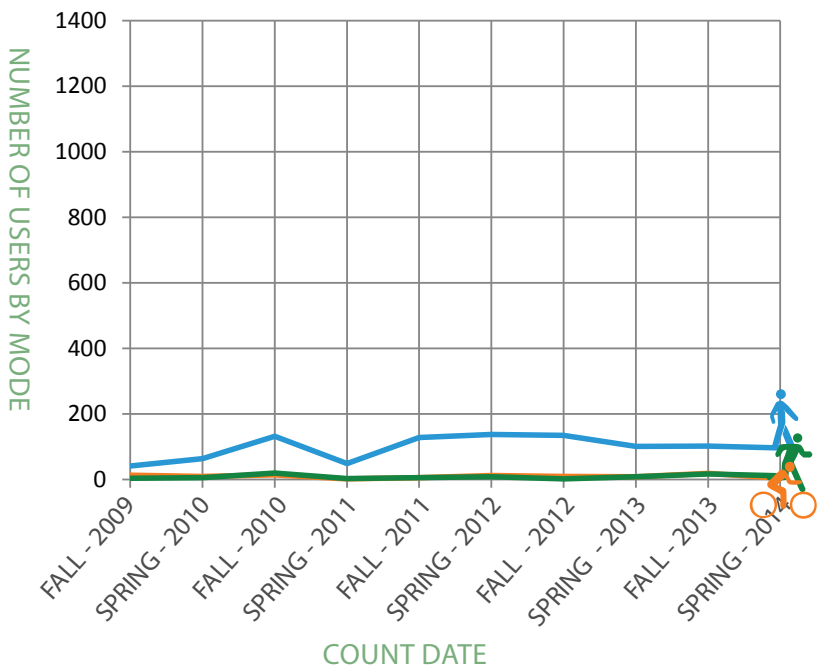


= Pedestrians = Bicyclists = Joggers



MODE SHARE AVERAGE OF THE 10 COUNTS
Average Total Users (all modes) Weekday = 129

WEEKDAY

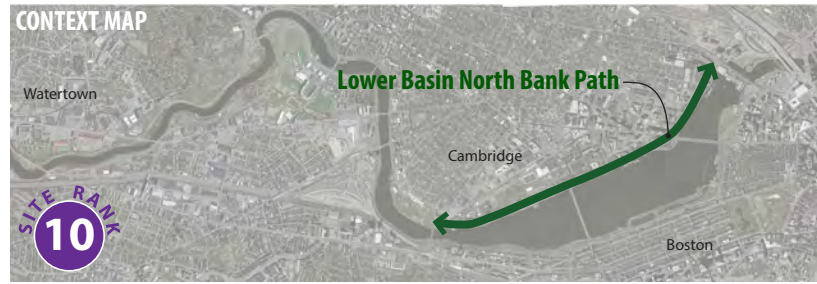


MODE SHARE AVERAGE OF THE 10 COUNTS
Average Total Users (all modes) Weekend = 119

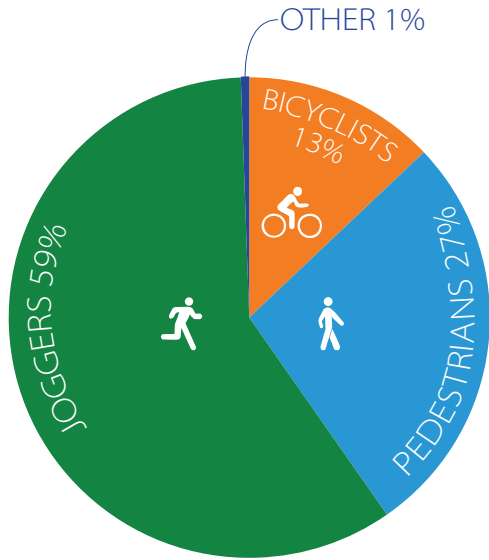
WEEKEND

LOWER BASIN NORTH BANK

The Lower Basin North Bank Path travels along the northeastern bank of the esplanade on the Cambridge side of the Charles River. The site was counted at the basin side of the Ames St crosswalk. Joggers represented about half (51%) of the users at this site when the weekday and weekend counts are combined. On average, the total number of non-motorized users counted at this location was 848 users on weekdays, and 798 users on weekends.

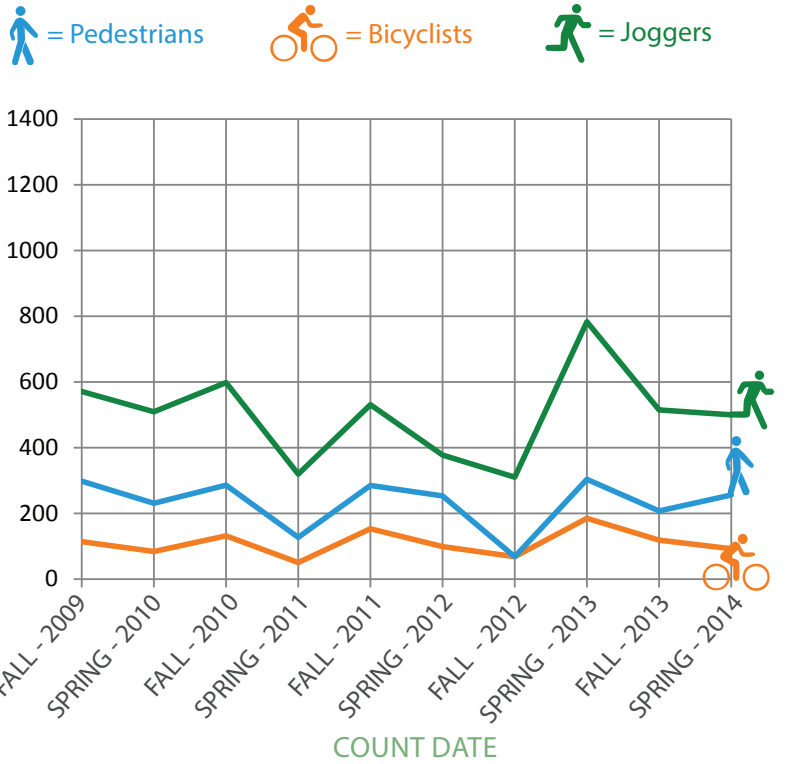


WEEKDAY

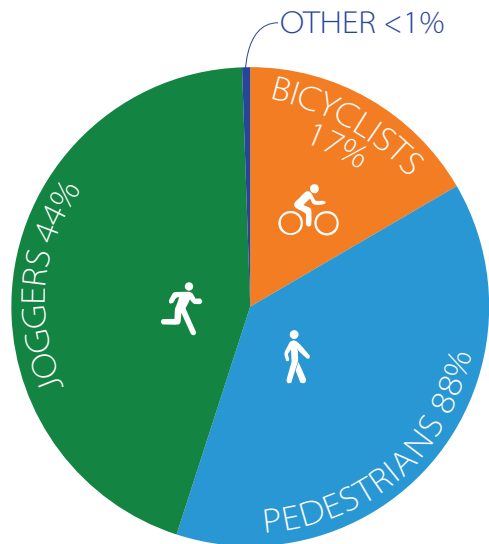


MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 848

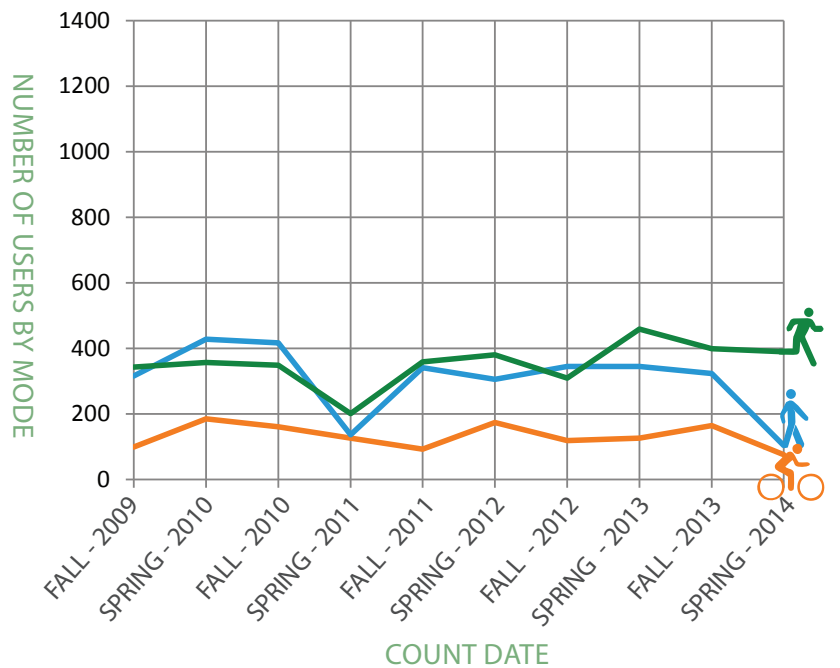


WEEKEND



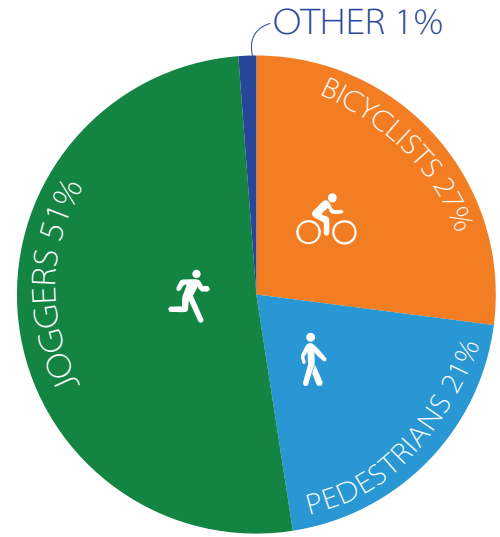
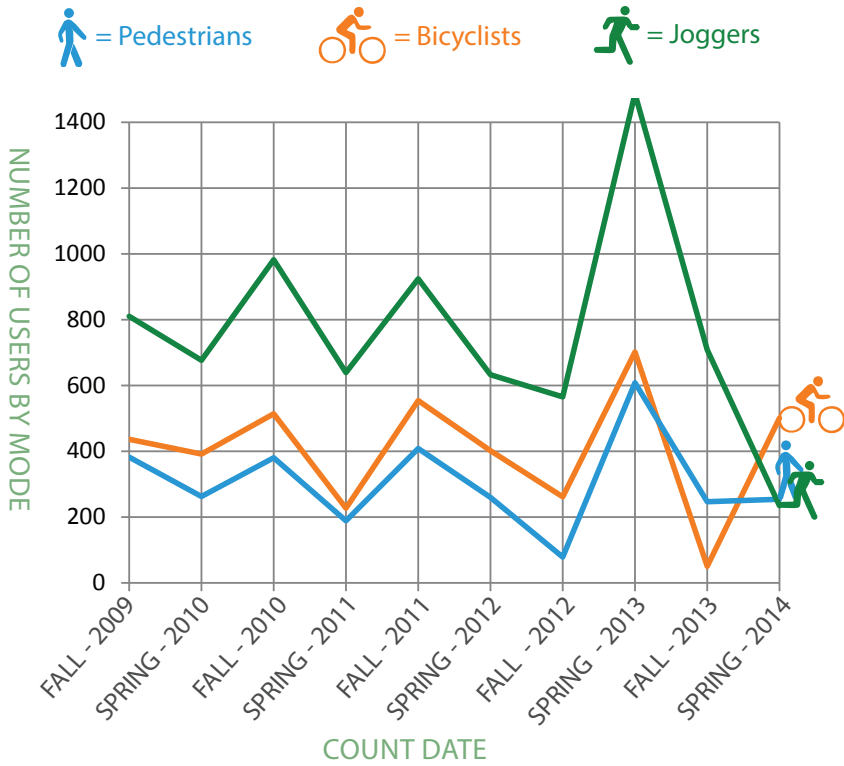
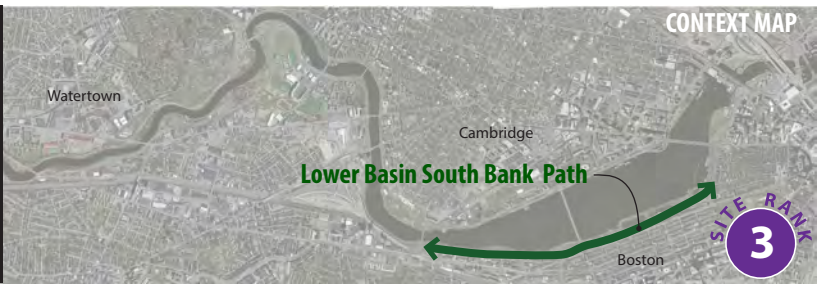
MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 798



LOWER BASIN SOUTH BANK

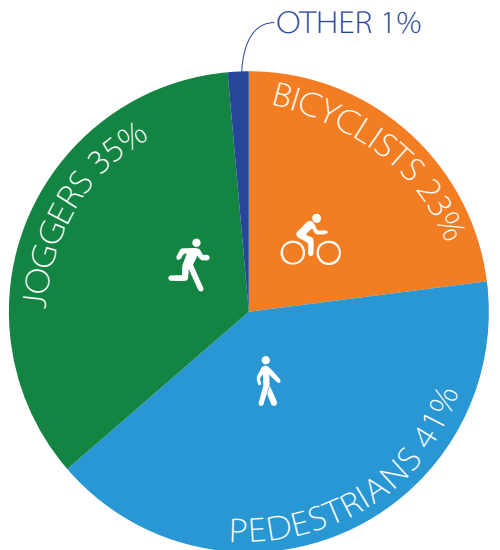
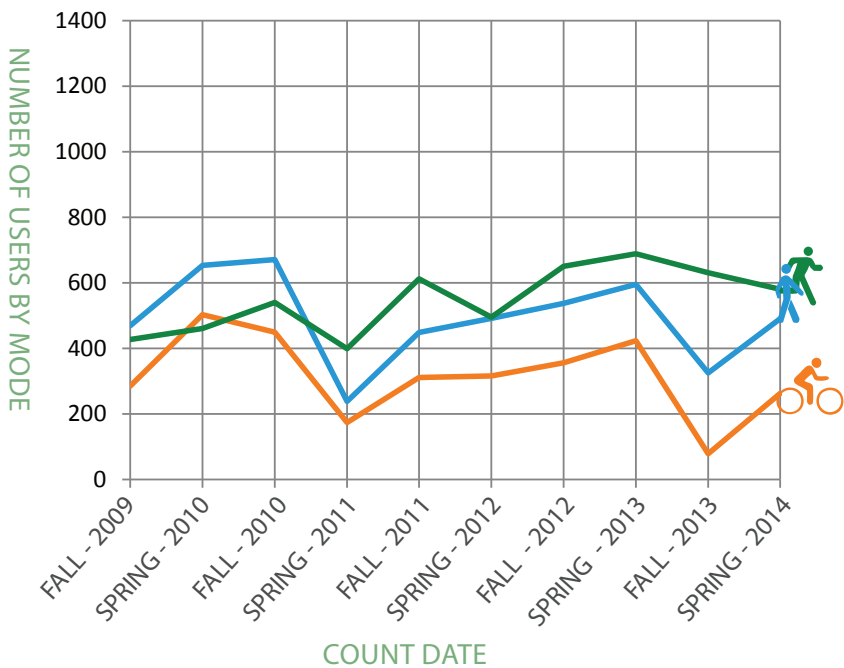
The Lower Basin South Bank Path travels along the southeastern bank of the esplanade on the Boston side of the Charles River. The site was counted on the esplanade path just east of the Harvard Bridge. Joggers represented about half (51%) of the users at this site on the weekday counts. Pedestrian volumes were considerably higher on the weekends (41%) when compared to pedestrian weekday volumes (21%). On average, the total number of non-motorized users counted at this location was 1495 users on weekdays, and 1570 users on weekends.



MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 1,495

WEEKDAY



MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekend = 1,570

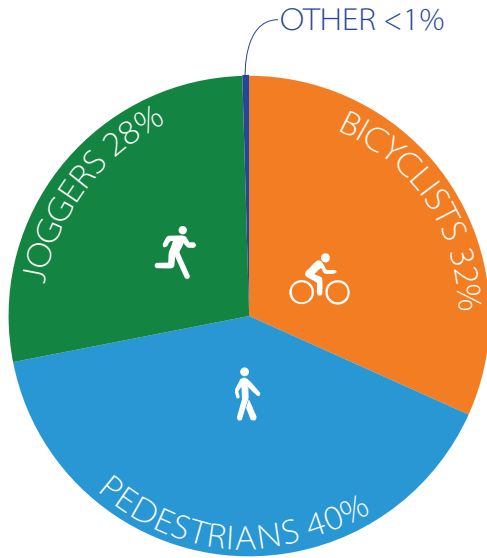
WEEKEND

HARVARD BRIDGE

The Harvard Bridge connects Boston to Cambridge via Mass Ave. The site was counted mid-span on the east/downstream side of the bridge. All modes were well represented at this count location, both on the weekdays and the weekends. Of all sites in the basin, the highest non-motorized volumes were recorded on the Harvard Bridge. On average, the total number of non-motorized users counted at this location was 2,607 users on weekdays, and 1,707 users on weekends.

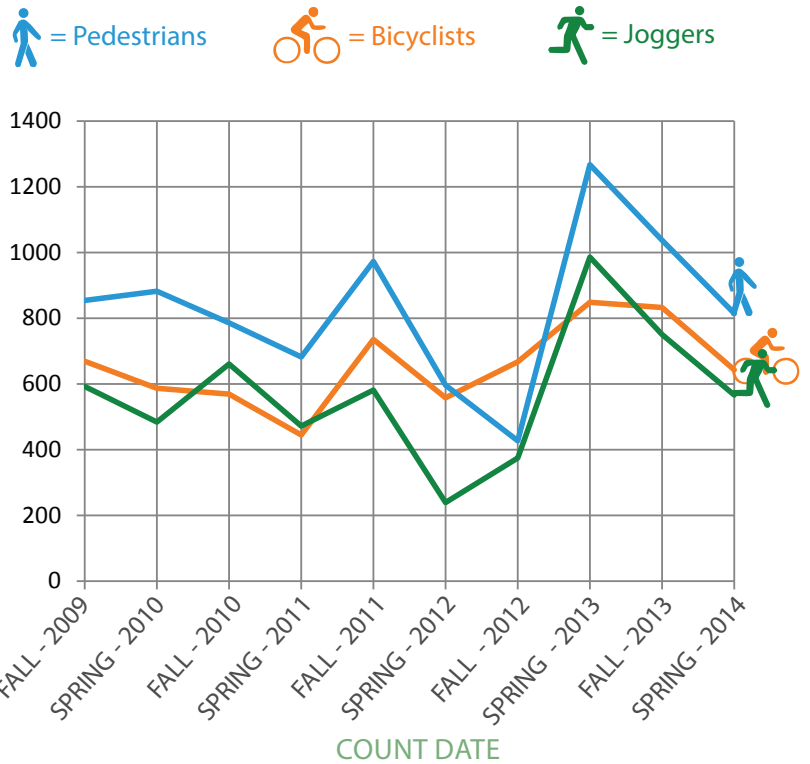


WEEKDAY

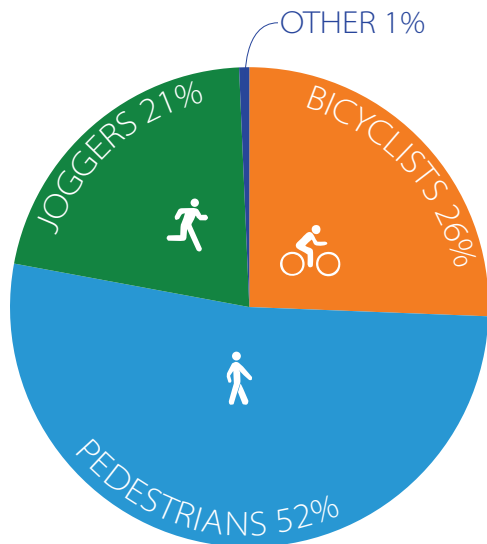


MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 2,607

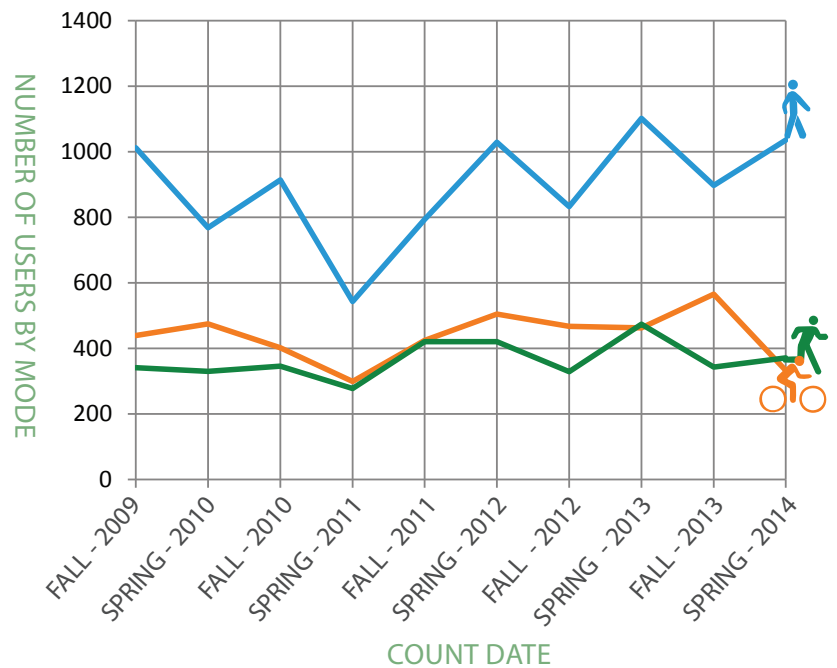


WEEKEND



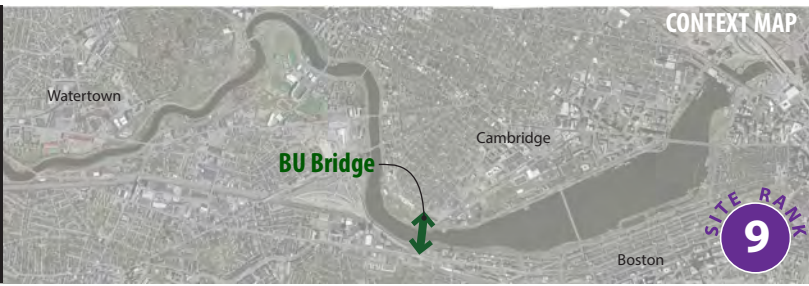
MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 1,707

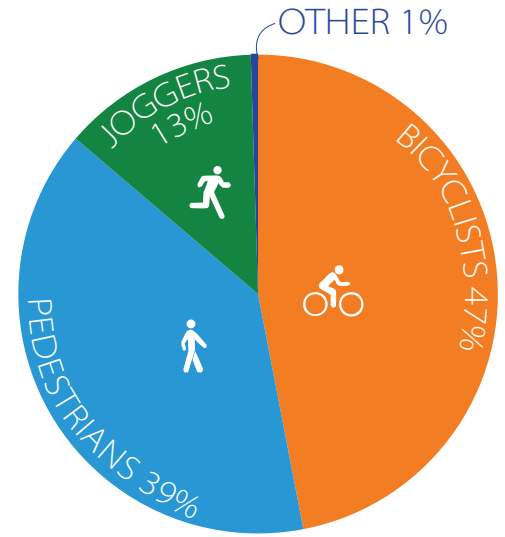
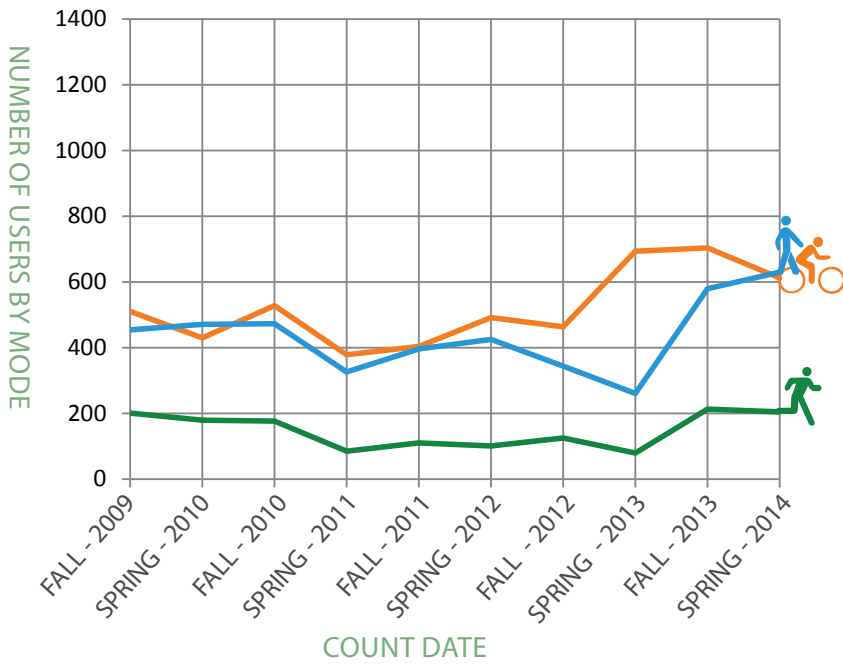


BU BRIDGE

The BU Bridge provides an important connection between the Cambridgeport neighborhood and the Fenway neighborhood, Boston University and portions of Brookline. The site was counted at the southeast corner of the Bridge near Commonwealth Ave. Bicyclists represented the largest share of users during the weekday counts at 47%, and the second largest share during the weekends at 37%.² Overall volumes on the bridge were 41% higher during the weekdays than the weekends. On average, the total number of non-motorized users counted at this location was 1,111 users on weekdays, and 659 users on weekends.

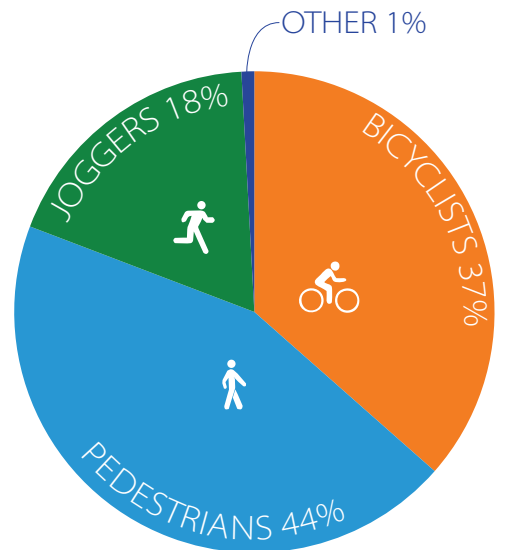
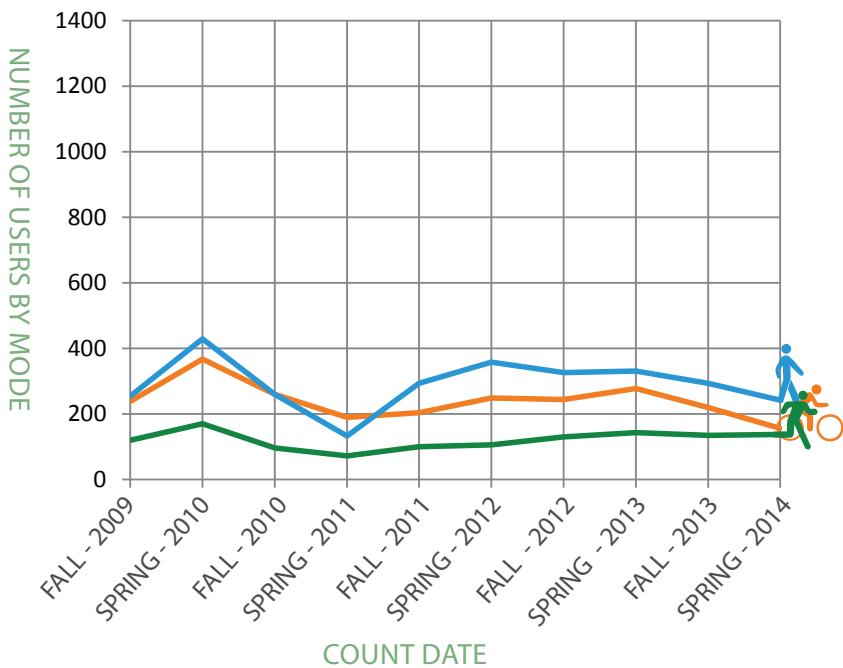


= Pedestrians = Bicyclists = Joggers



MODE SHARE AVERAGE OF THE 10 COUNTS
Average Total Users (all modes) Weekday = 1,111

WEEKDAY



MODE SHARE AVERAGE OF THE 10 COUNTS
Average Total Users (all modes) Weekend = 659

WEEKEND

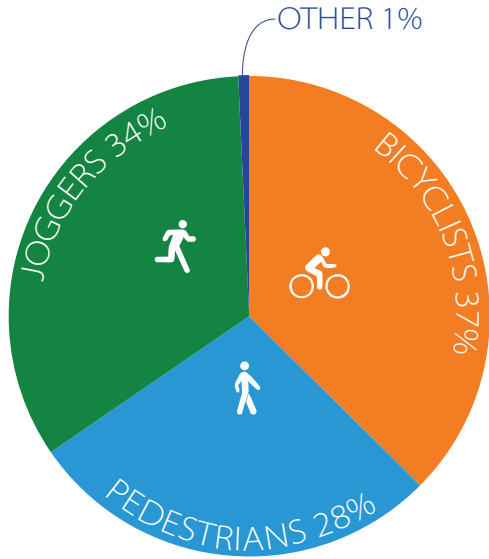
² Its important to note that prior to 2012, the bridge was under construction and did not include bike lanes. While the volume of weekday bicyclists increased after the installation of the bike lanes at the end of 2011, there was no effect on bicycle volumes over the bridge during weekends.

RIVER STREET BRIDGE

The River St Bridge connects Cambridge St in Boston to River St in Cambridge. The site was counted mid-span on the southern/downstream side of the bridge. Bicyclists represented the largest share of users during the weekday counts at 37%, and the second largest share during the weekends at 33%. On average, the total number of non-motorized users counted at this location was 286 users on weekdays, and 247 users on weekends.

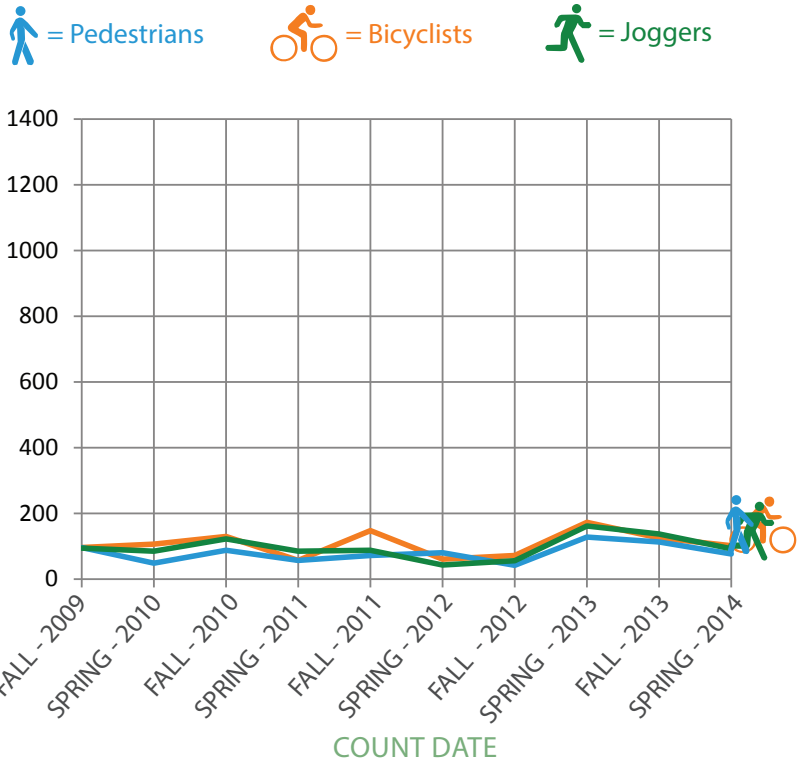


WEEKDAY

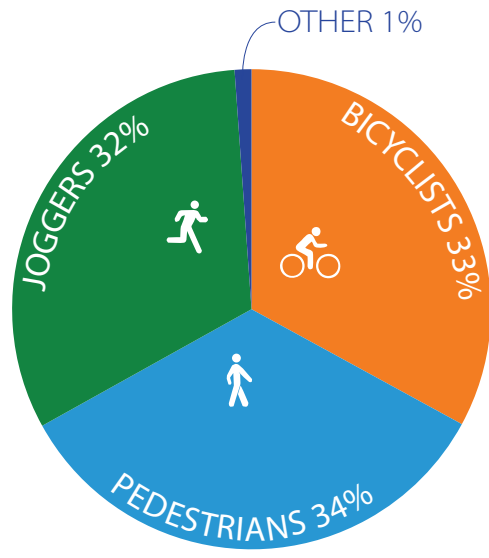


MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 286

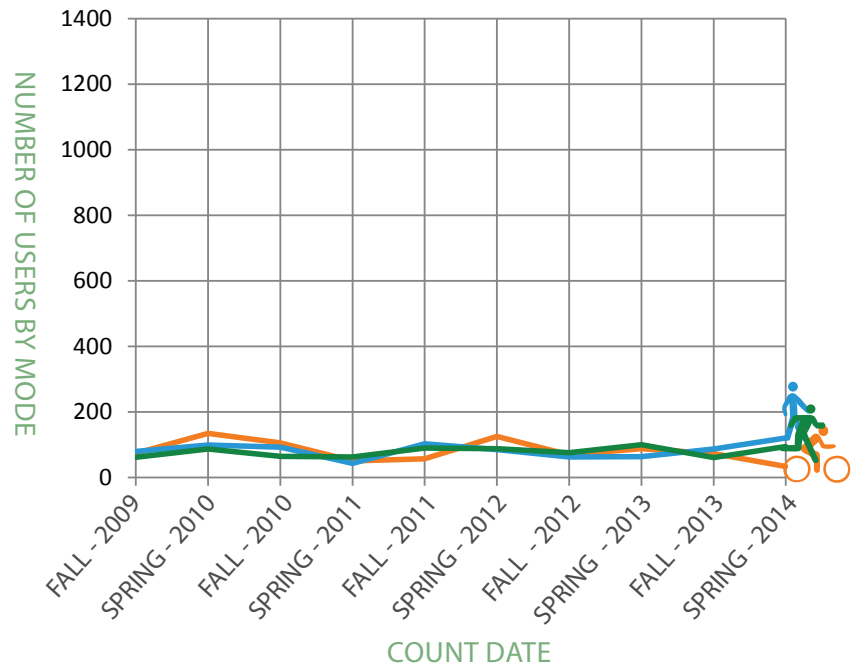


WEEKEND



MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 247

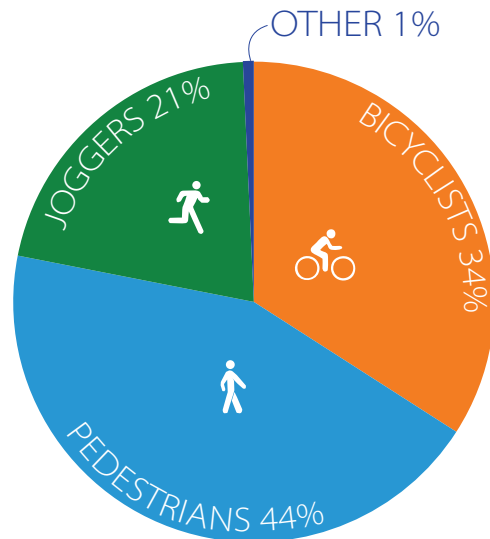
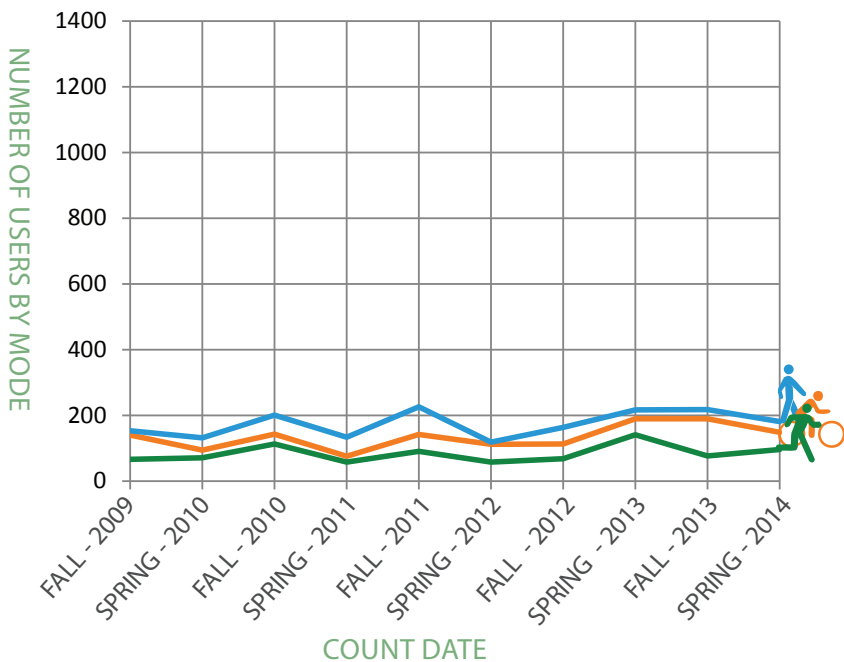


WESTERN AVE. BRIDGE

The Western Ave Bridge connects Western Ave in Boston to Western Ave in Cambridge. The site was counted mid-span on the southern/downstream side of the bridge. On average, the total number of non-motorized users counted at this location was 396 users on weekdays, and 255 users on weekends.

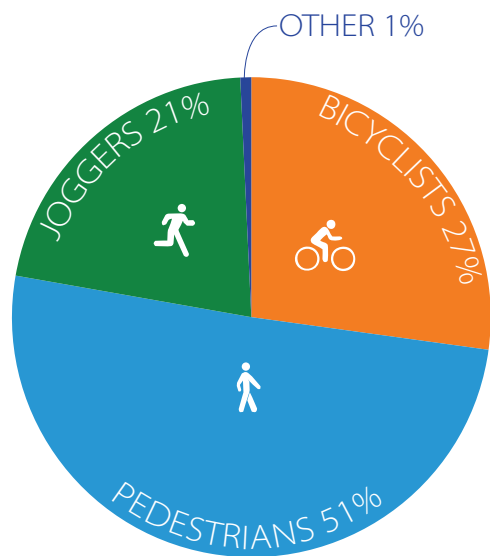
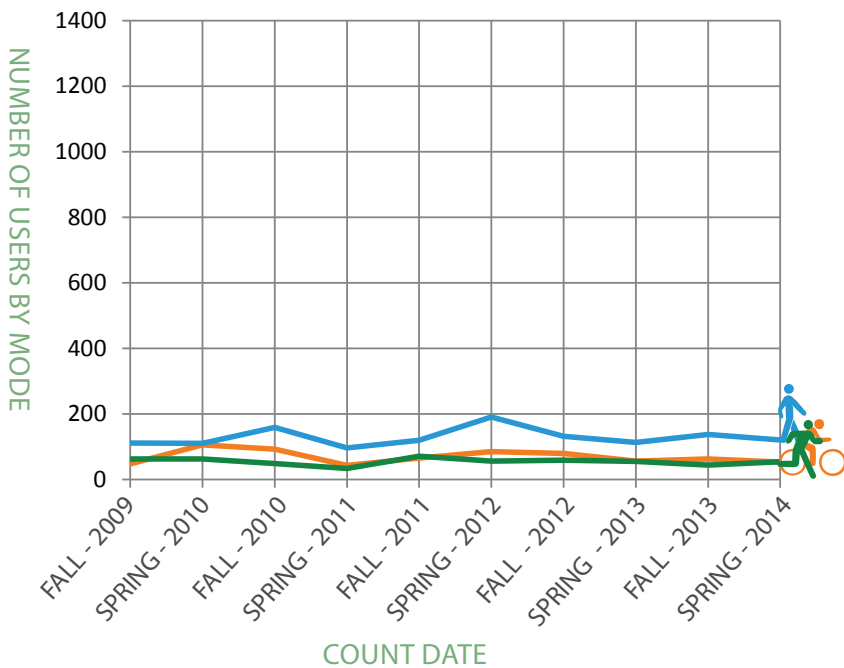


= Pedestrians = Bicyclists = Joggers



MODE SHARE AVERAGE OF THE 10 COUNTS
Average Total Users (all modes) Weekday = 396

WEEKDAY



MODE SHARE AVERAGE OF THE 10 COUNTS
Average Total Users (all modes) Weekend = 255

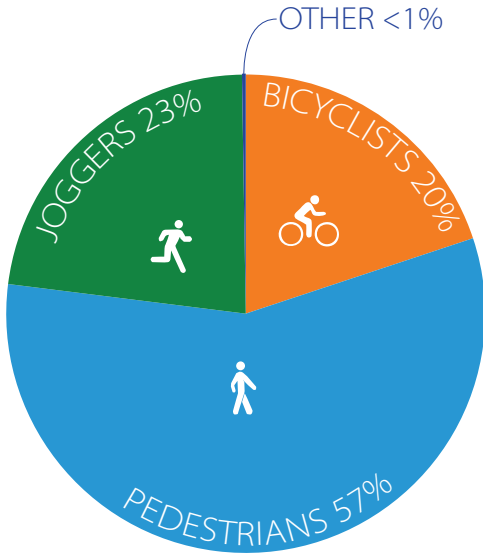
WEEKEND

DEWOLFE STREET CROSSWALK

The Dewolfe St Crosswalk provides a direct connection from Dewolfe St across Memorial Drive. The site was counted from the base of the Weeks Bridge on the Cambridge side of the basin. Pedestrians represented the majority of users on both the weekdays (57%) and weekends (71%). On average, the total number of non-motorized users counted at this location was 541 users on weekdays, and 454 users on weekends.



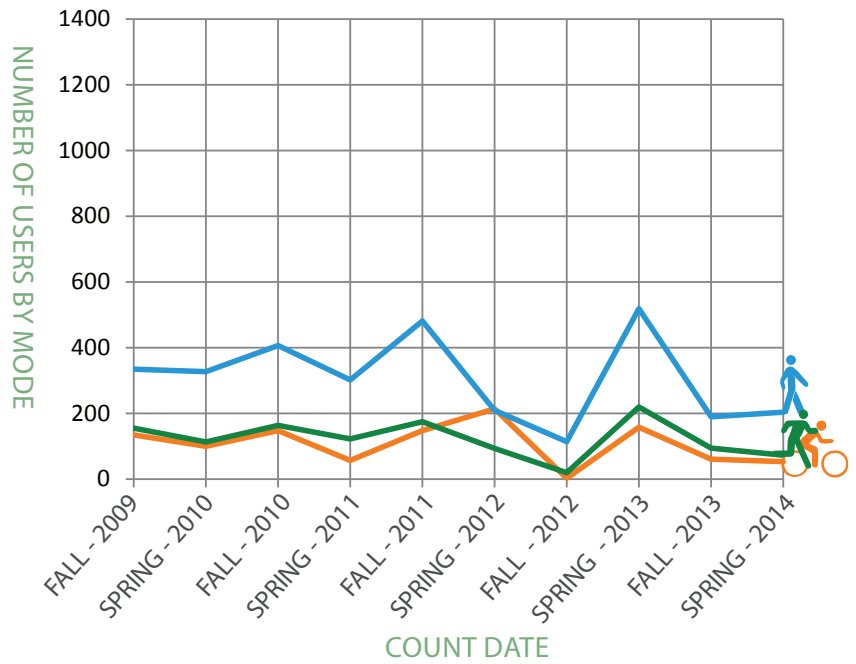
WEEKDAY



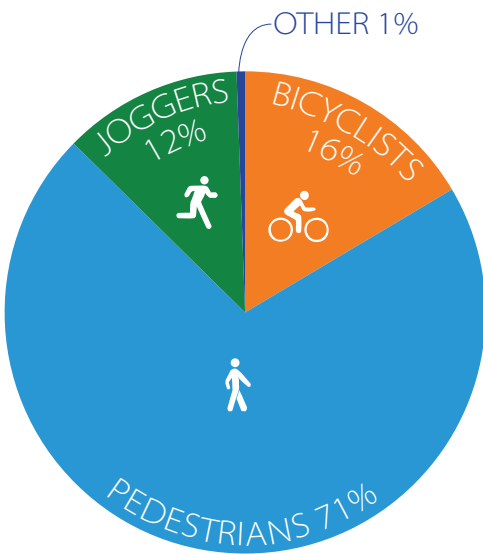
MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 541

= Pedestrians = Bicyclists = Joggers

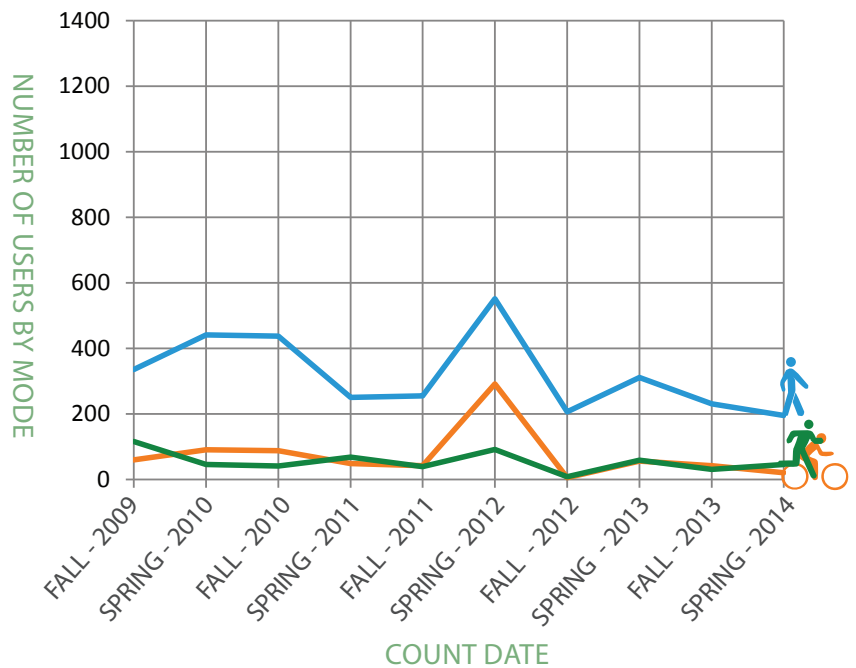


WEEKEND



MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 454

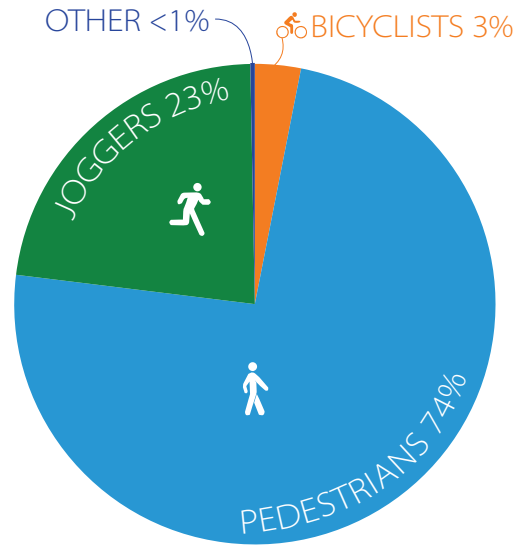
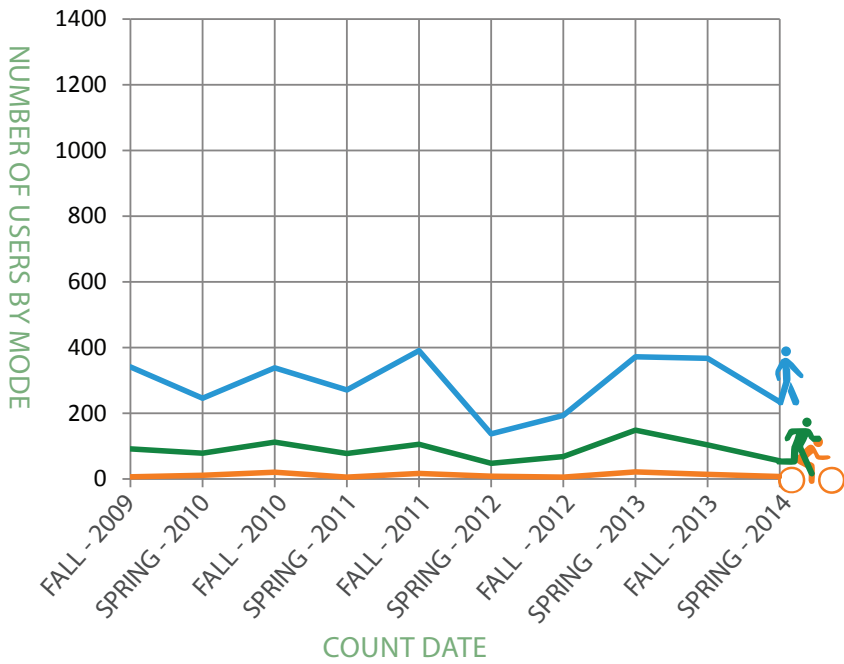


WEEKS BRIDGE

The Weeks Bridge is a historic footbridge connects the Harvard Business School in Allston with the Harvard Square, via the De Wolfe Street crosswalk. Although ADA-accessible ramp upgrades were recently made to the bridge, all of the counts were made when the bridge featured stairs at each end. Therefore, the number of bicyclists using the bridge was minimal and wheelchair access was non-existent. Pedestrians represented the great majority of users on both the weekdays (74%) and weekends (80%).

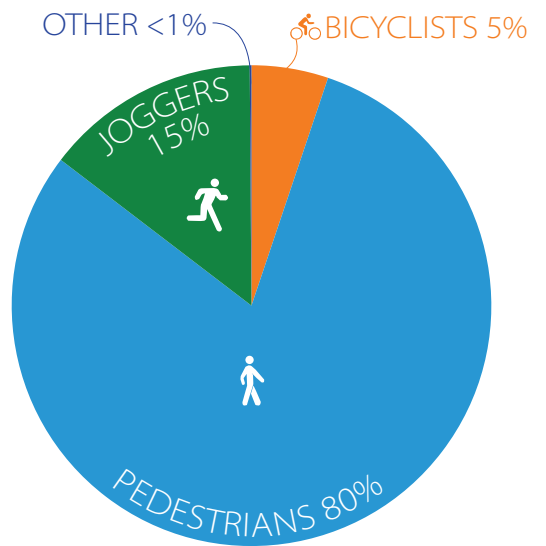
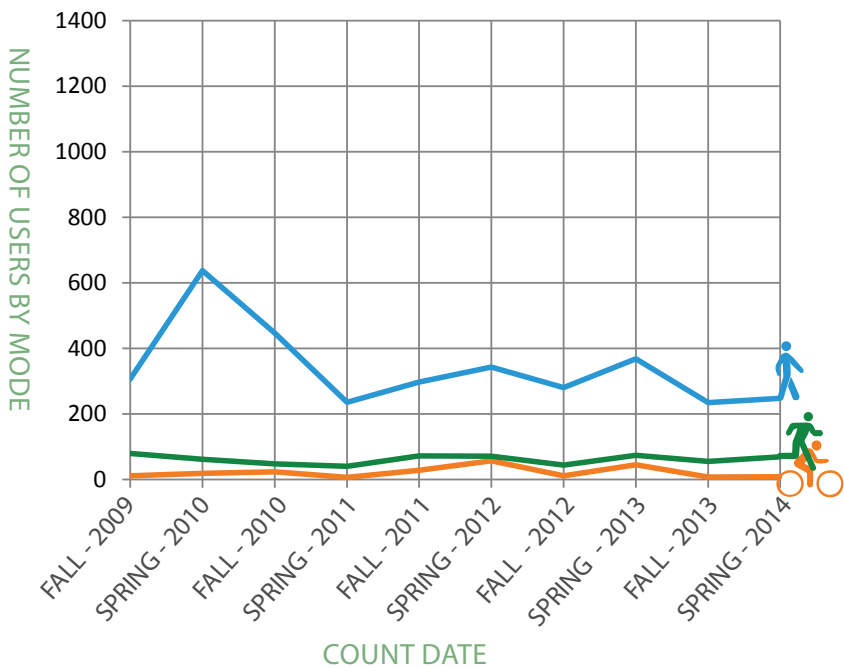


= Pedestrians = Bicyclists = Joggers



MODE SHARE AVERAGE OF THE 10 COUNTS
Average Total Users (all modes) Weekday = 392

WEEKDAY

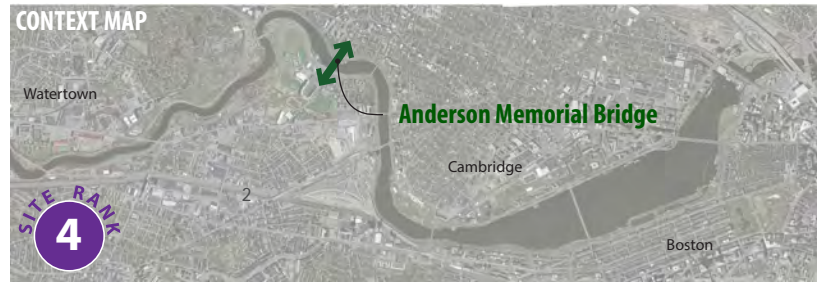


MODE SHARE AVERAGE OF THE 10 COUNTS
Average Total Users (all modes) Weekend = 424

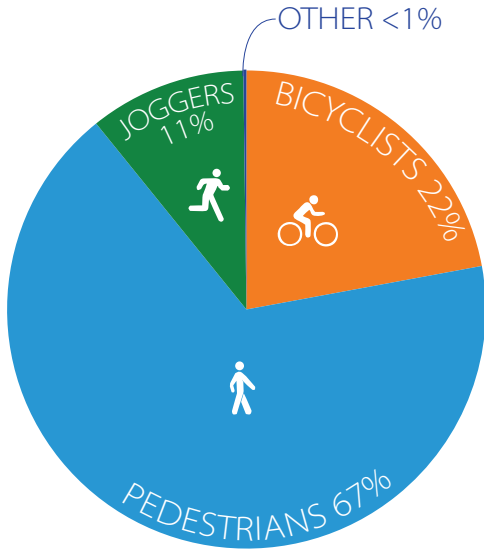
WEEKEND

ANDERSON MEMORIAL BRIDGE

The Anderson Memorial Bridge connects N Harvard St in Boston to John F Kennedy St in Cambridge. The site was counted mid-span on the southern/downstream side of the bridge. Pedestrians represented the majority of users on both the weekdays (67%) and weekends (72%). On average, the total number of non-motorized users counted at this location was 1,584 users on weekdays, and 1,090 users on weekends.

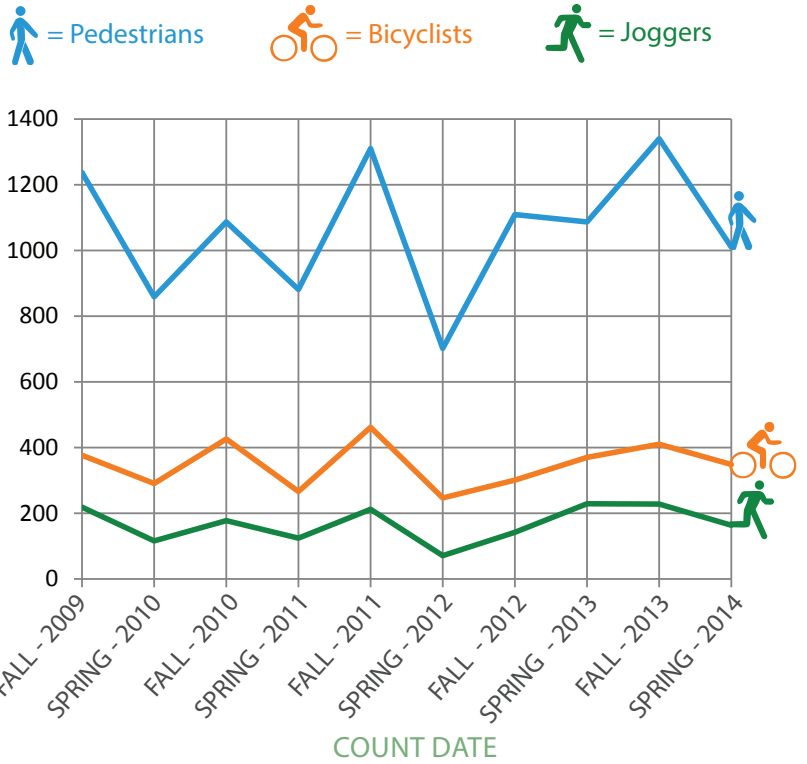


WEEKDAY

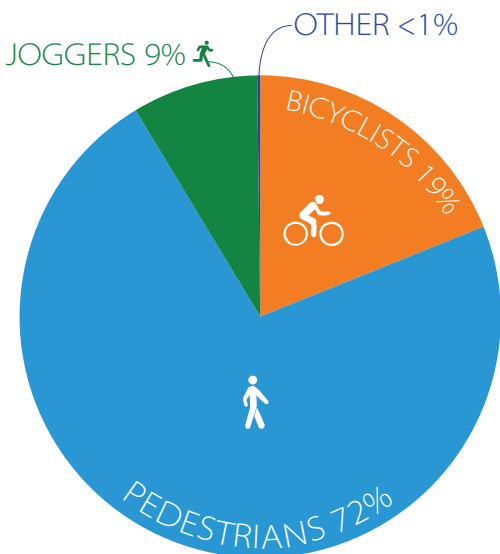


MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 1,584

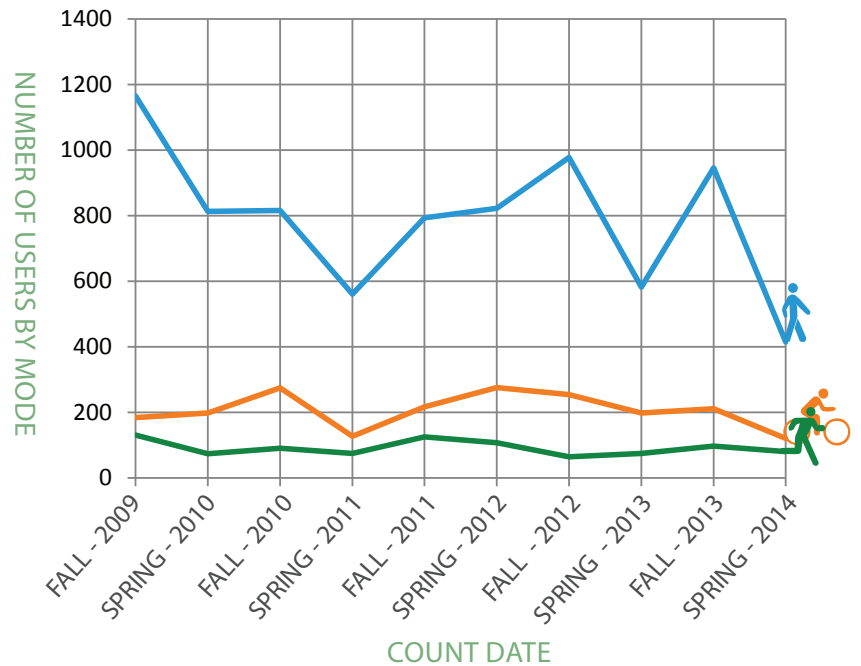


WEEKEND



MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 1,090



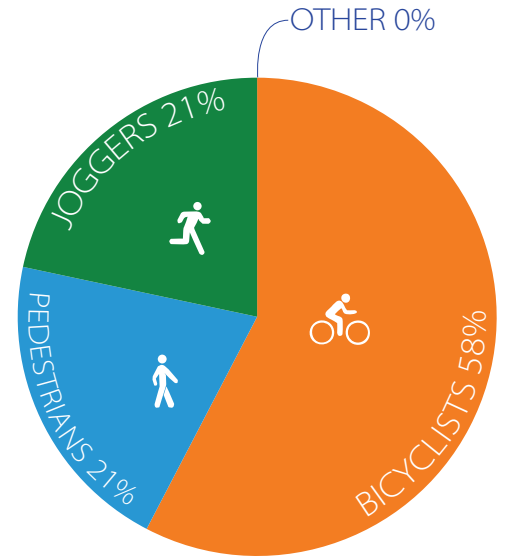
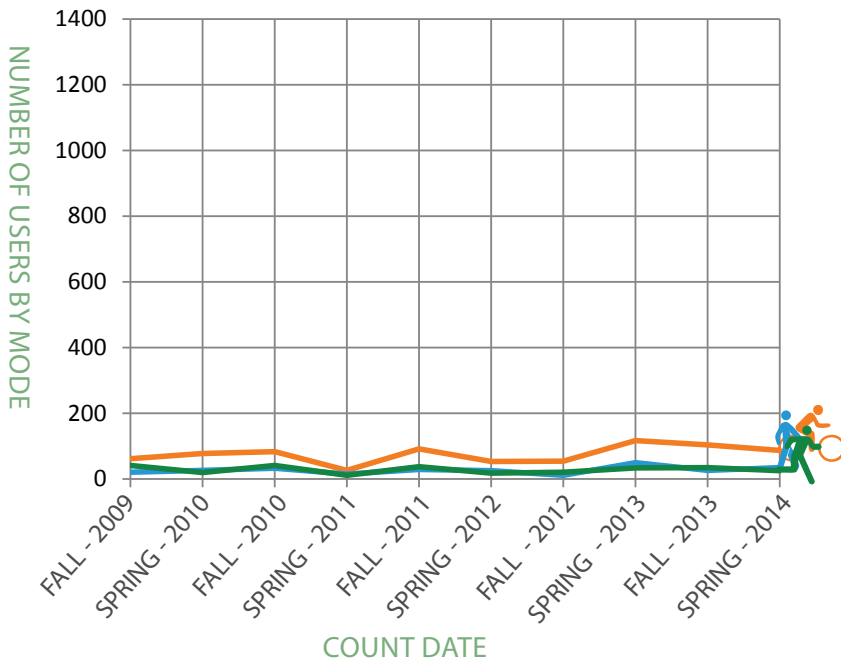
² During the last two years of counting, the bridge has been under construction with one of the two sidewalks closed to pedestrian and bicycle traffic. (It should be noted that this had a minimal effect on overall user counts however.)

HAWTHORN STREET CROSSWALK



The Hawthorn St Crosswalk provides a direct connection from Hawthorn St across Memorial Drive. The site was counted on the basin side of the crosswalk south of Memorial Drive. Bicyclists represented the majority of users on the weekdays (58%) and a large percentage of users on the weekends (43%). On average, the total number of non-motorized users counted at this location was 131 users on weekdays, and 126 users on weekends. In 2014, a traffic signal was installed at the Memorial Drive intersection but had little effect (at least temporarily) on the number of users crossing from the neighborhood to the Basin.

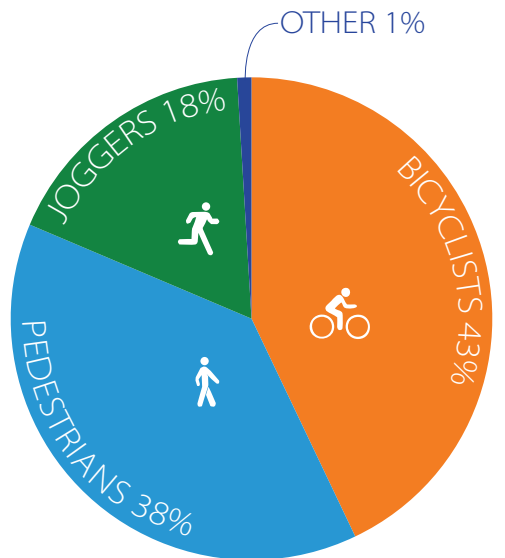
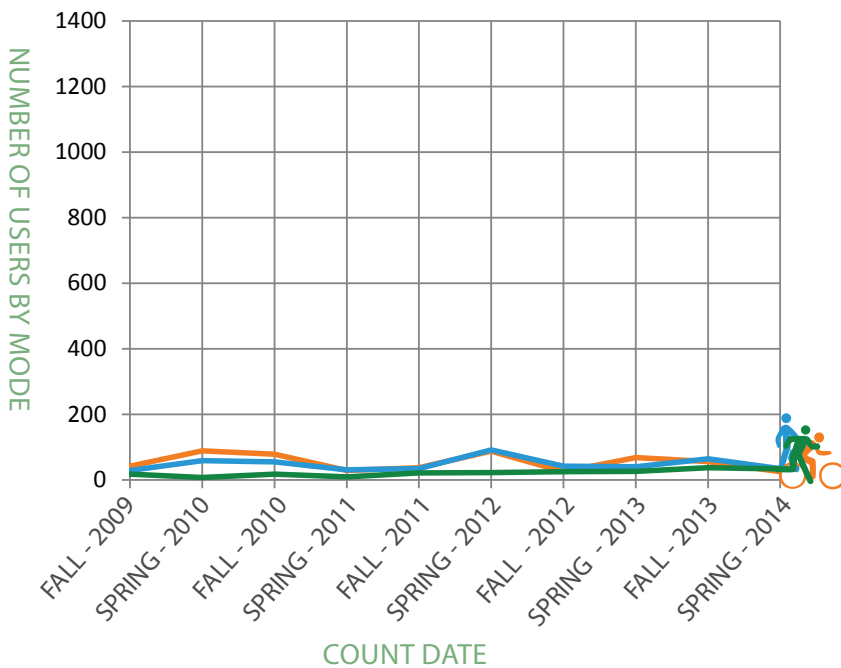
= Pedestrians = Bicyclists = Joggers



WEEKDAY

MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 131



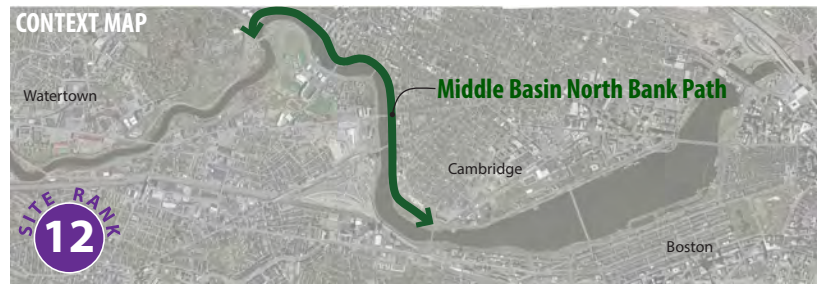
WEEKEND

MODE SHARE AVERAGE OF THE 10 COUNTS

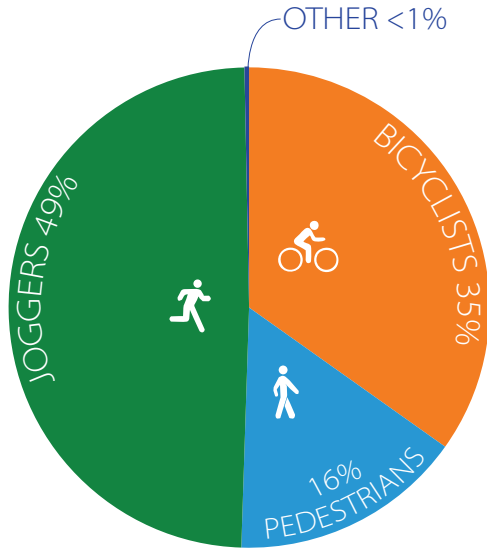
Average Total Users (all modes) Weekday = 126

MIDDLE BASIN NORTH BANK

The Middle Basin North Bank Path travels along the northern bank of the esplanade on the Cambridge side of the Charles River. The site was counted on the basin side of the Hawthorne St crosswalk south of Memorial Drive. On average, joggers represented the largest percentage of users on the weekdays (49%), while bicyclists represented the largest share of users on the weekends (42%). On average, the total number of non-motorized users counted at this location was 414 users on weekdays, and 576 users on weekends.



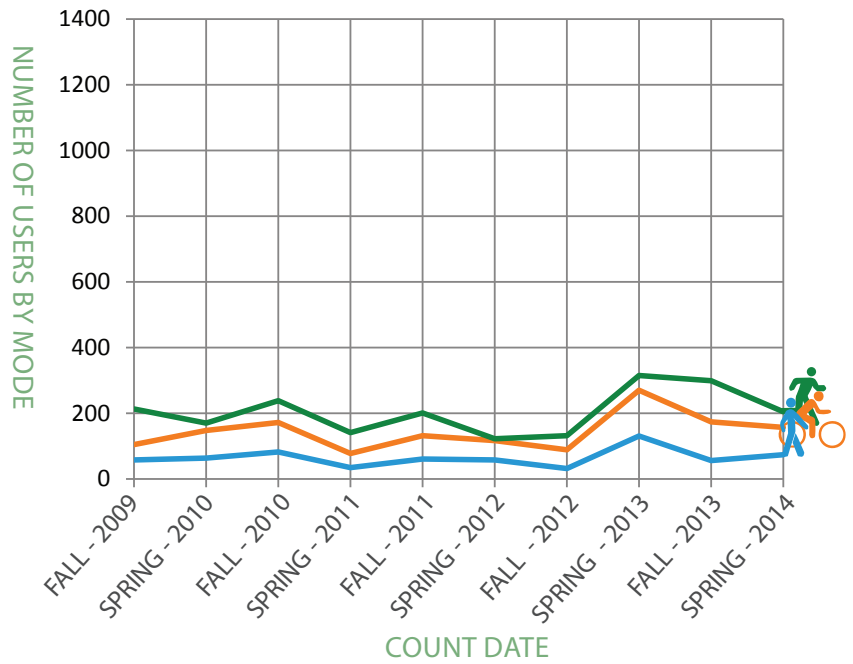
WEEKDAY



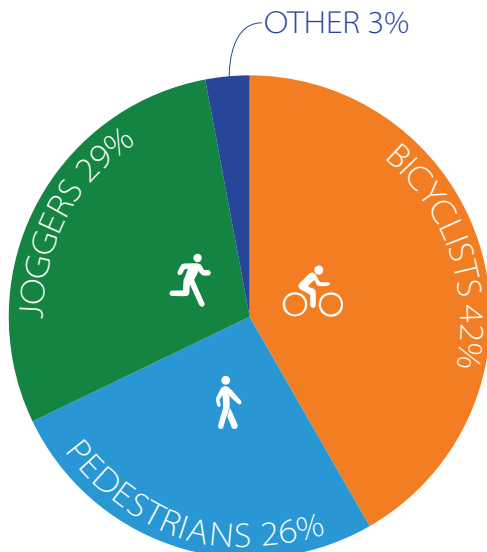
MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 414

= Pedestrians = Bicyclists = Joggers

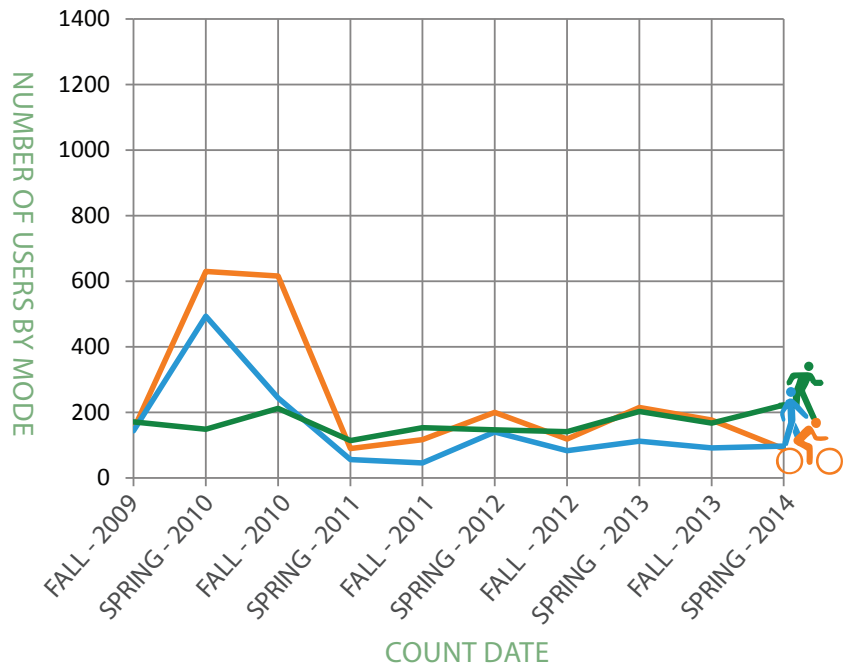


WEEKEND



MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 576

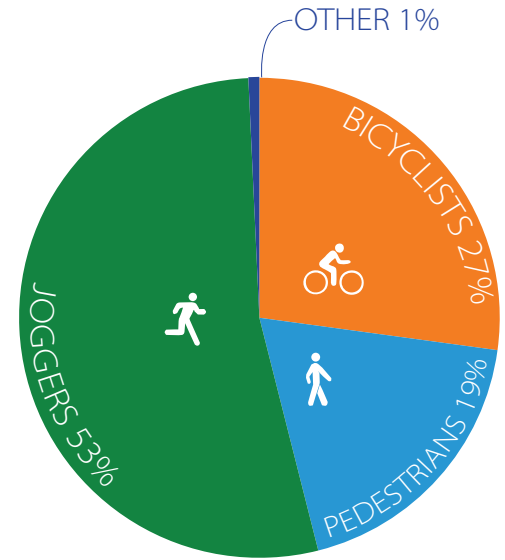
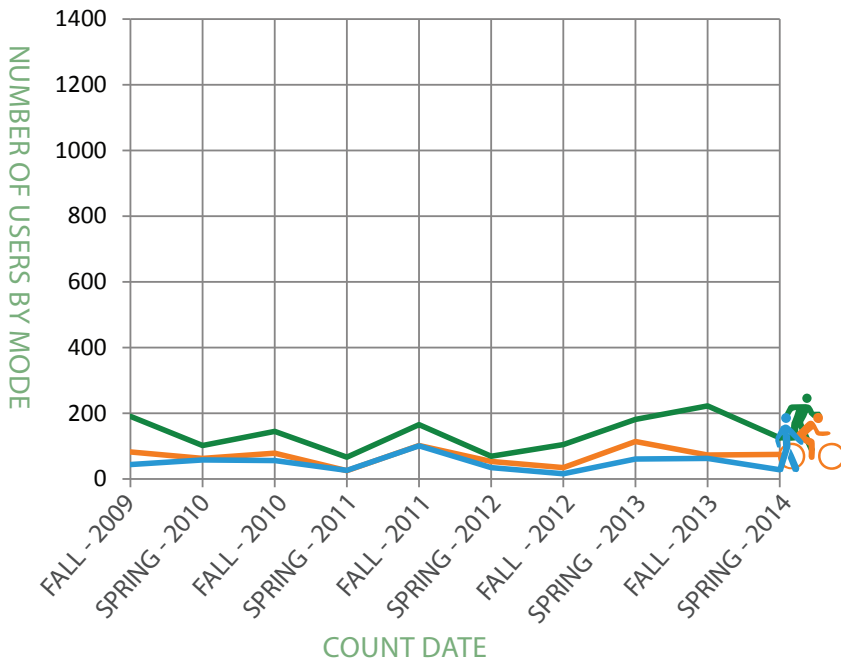


ELIOT BRIDGE

The Eliot Bridge connects Greenough Blvd in Cambridge to Soldiers Field Rd in Boston. The site was counted on the southeast, Boston side of the bridge. Joggers represented the majority of users on the weekdays (53%), and pedestrians represented the majority of users on the weekends (55%). On average, the total number of non-motorized users counted at this location was 258 users on weekdays, and 418 users on weekends.



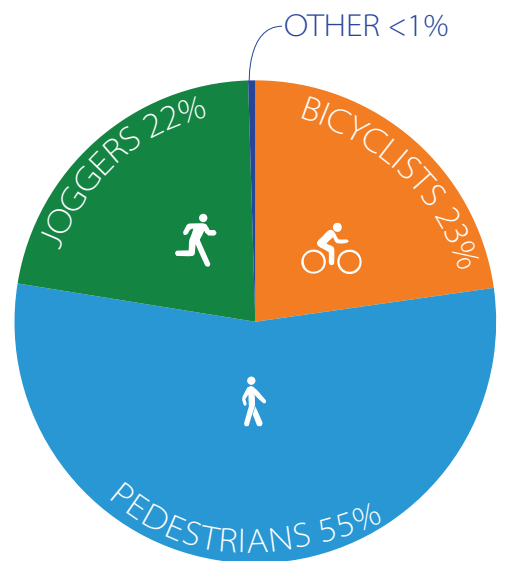
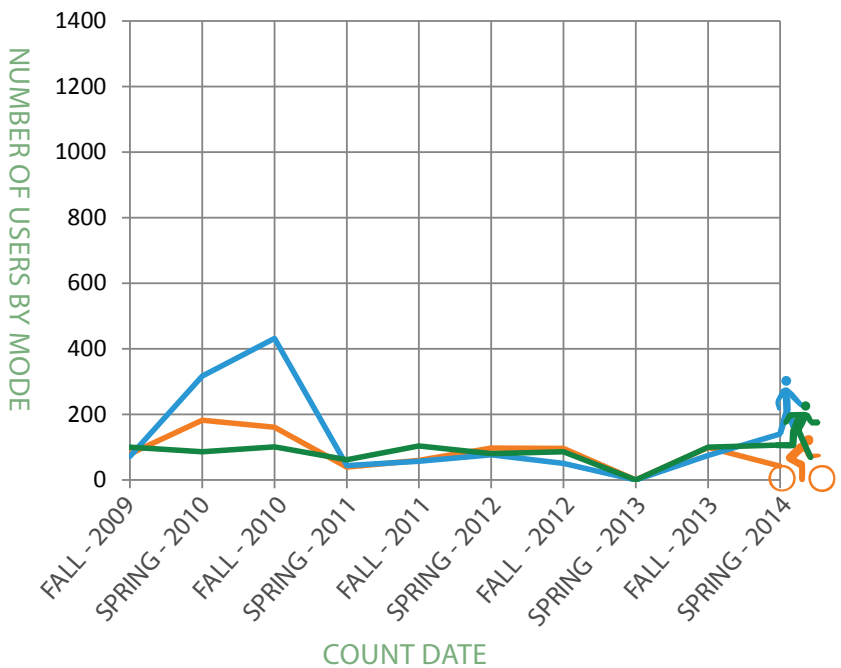
= Pedestrians = Bicyclists = Joggers



MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 258

WEEKDAY



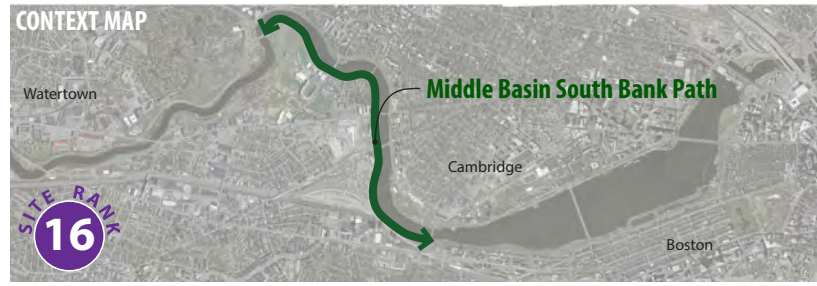
MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 418

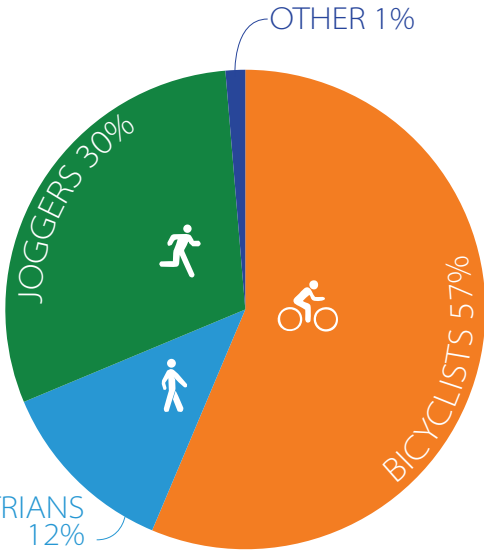
WEEKEND

MIDDLE BASIN SOUTH BANK

The Middle Basin South Bank Path travels along the southern bank of the esplanade on the Boston side of the Charles River. The site was counted on the southeast, Boston side of the Eliot Bridge. On average, bicyclists represented the majority of users on the weekdays (57%), and were the largest share of users during the weekends (45%). On average, the total number of non-motorized users counted at this location was 256 users on weekdays, and 356 users on weekends.

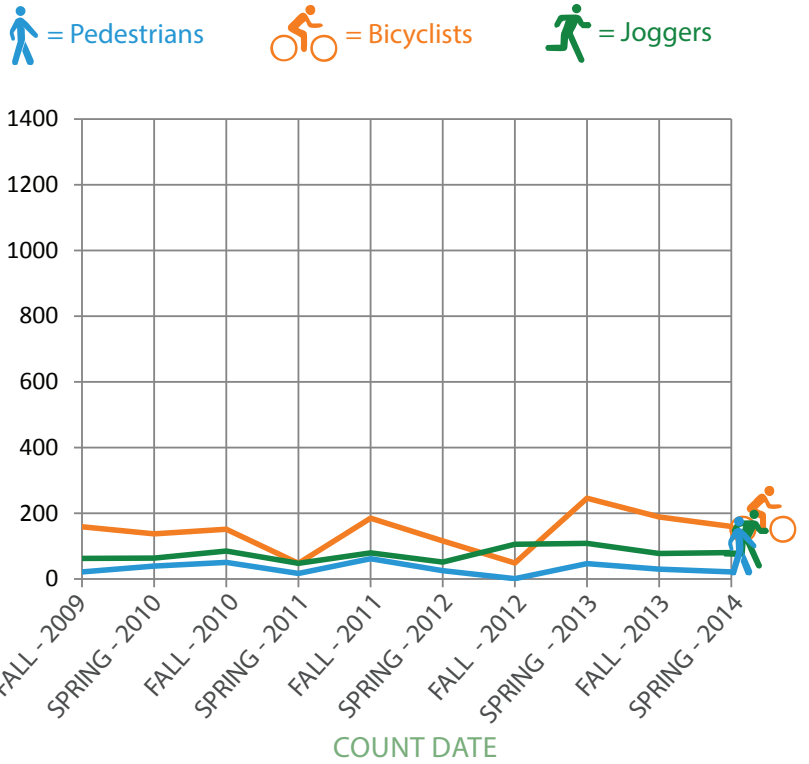


WEEKDAY

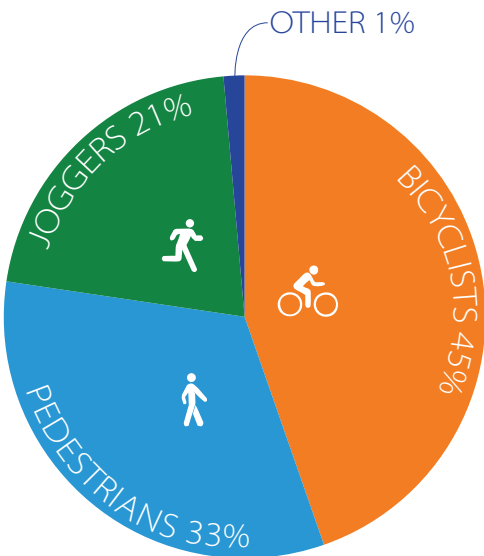


MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 256

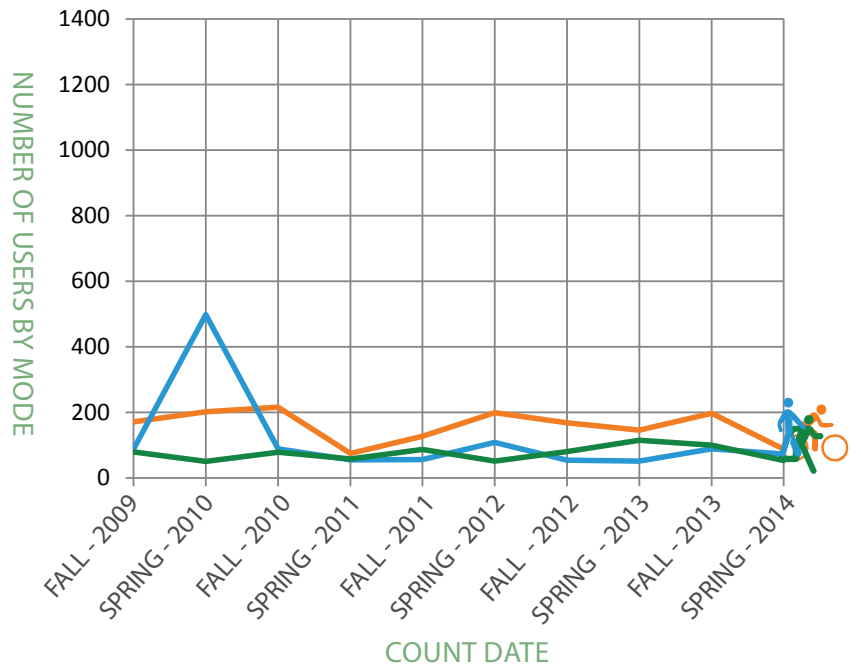


WEEKEND



MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekend = 356



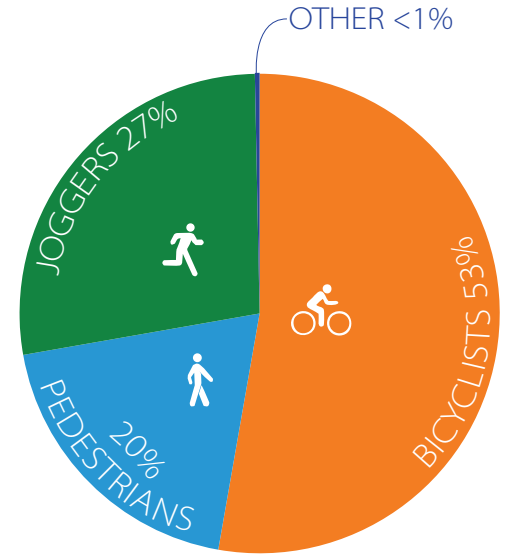
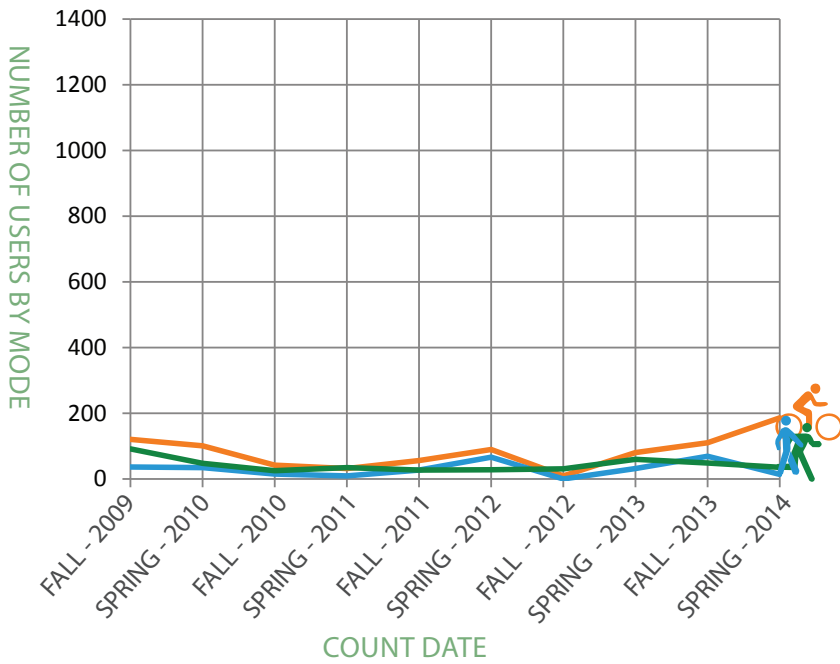
UPPER BASIN NORTH BANK

The Upper Basin North Bank Path travels along the northwestern bank of the esplanade on the Cambridge/Watertown side of the Charles River. The site was counted at the southwest corner of the Arsenal St Bridge. On average, bicyclists represented the majority of users on the weekdays (53%), and were the largest share of users during the weekends (41%). On average, the total number of non-motorized users counted at this location was 157 users on weekdays, and 206 users on weekends.



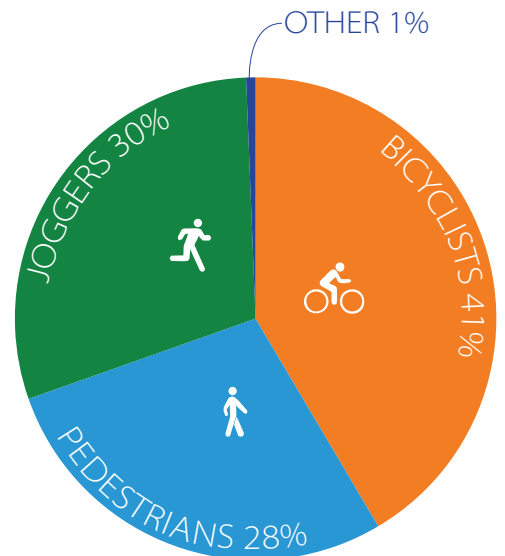
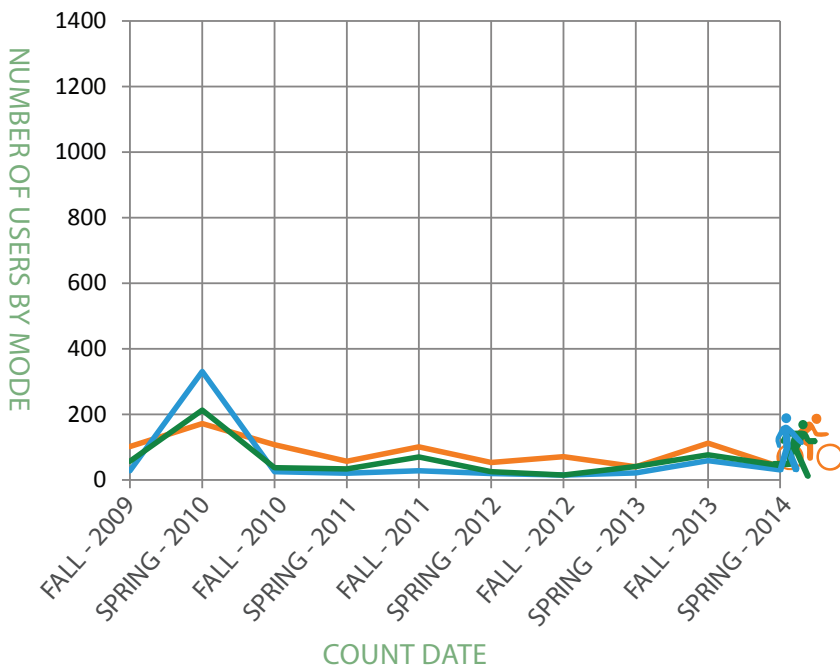
SITE RANK
21

= Pedestrians = Bicyclists = Joggers



MODE SHARE AVERAGE OF THE 10 COUNTS
Average Total Users (all modes) Weekday = 157

WEEKDAY



MODE SHARE AVERAGE OF THE 10 COUNTS
Average Total Users (all modes) Weekend = 206

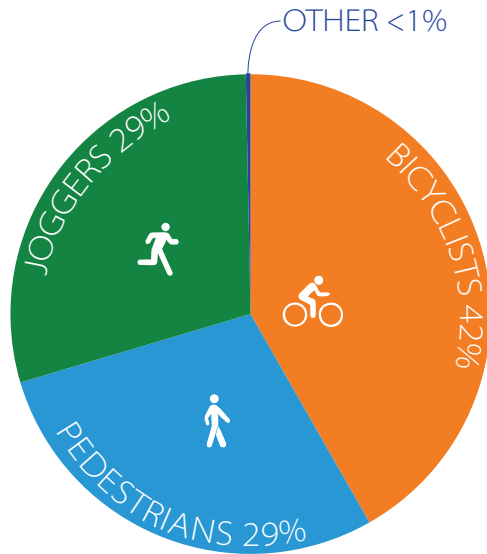
WEEKEND

ARSENAL STREET BRIDGE

The Arsenal St bridge connects Arsenal St in Watertown to Western Ave in Allston. The site was counted at the southwest corner of the Arsenal St Bridge. Bicyclists represented the largest share of users during the weekdays (42%), and pedestrians represented the majority of users on the weekends (52%). On average, the total number of non-motorized users counted at this location was 189 users on weekdays, and 249 users on weekends.

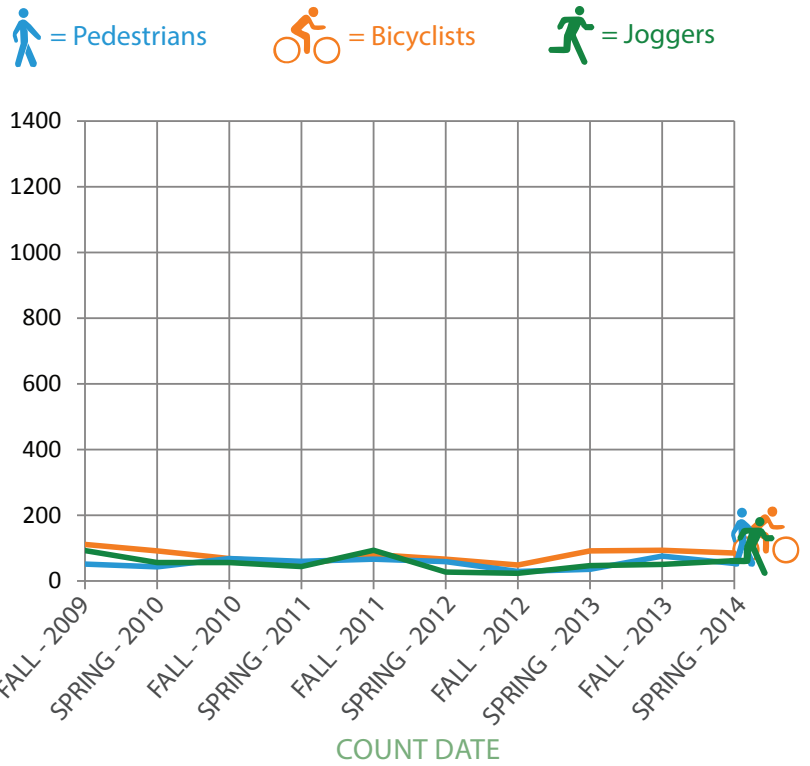


WEEKDAY

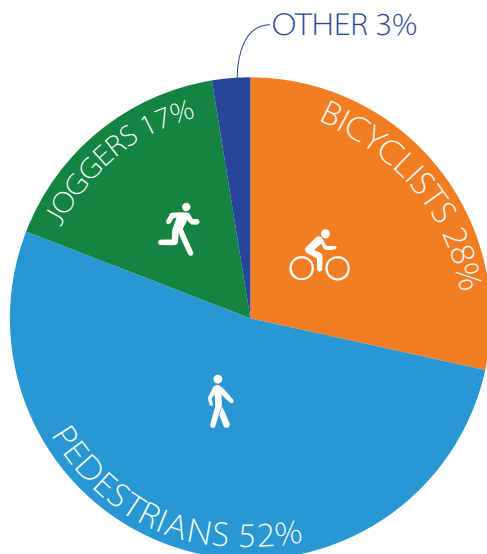


MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 189

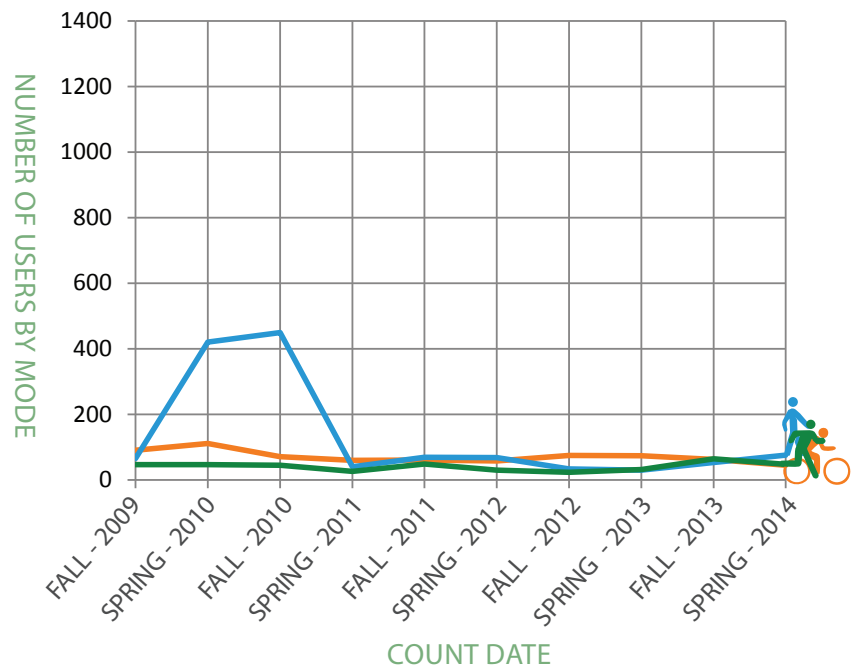


WEEKEND



MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 249



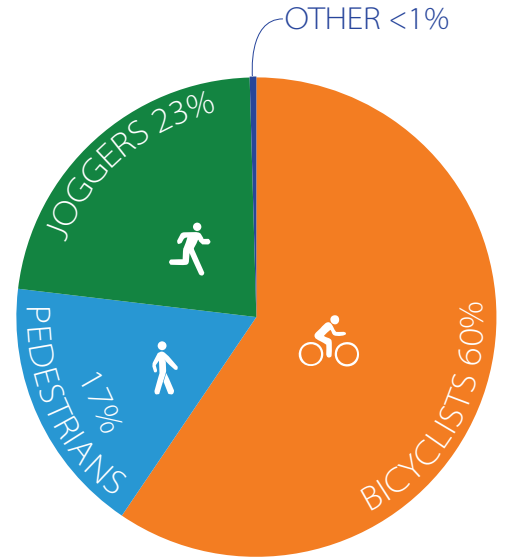
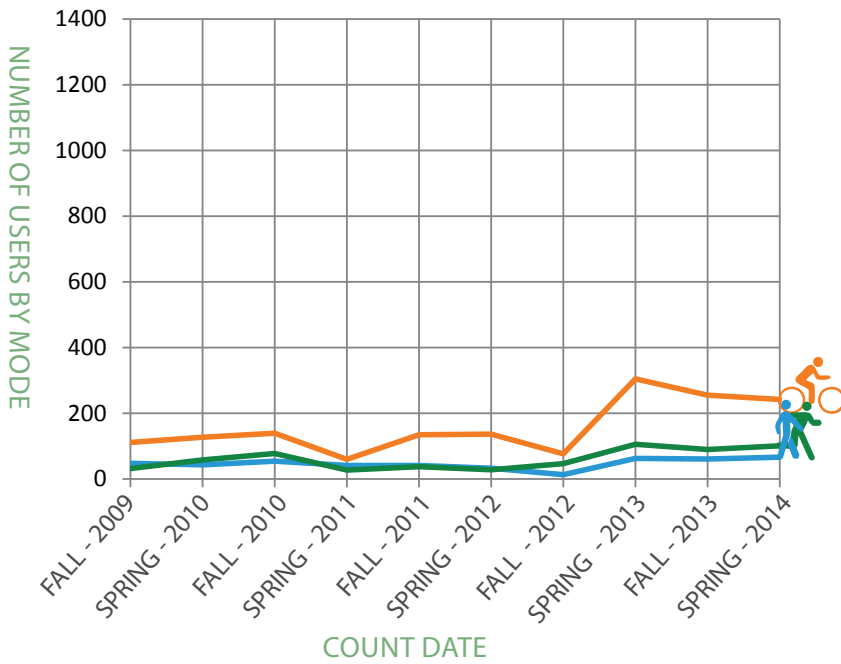
UPPER BASIN SOUTH BANK

The Upper Basin South Bank Path travels along the southwestern bank of the esplanade on the Newton and Allston side of the Charles River. The site was counted on the southeast corner of the North Beacon St Bridge. On average, bicyclists represented the majority of users on the weekdays (60%), and on the weekends (55%). On average, the total number of non-motorized users counted at this location was 267 users on weekdays, and 219 users on weekends.



SITE RANK
18

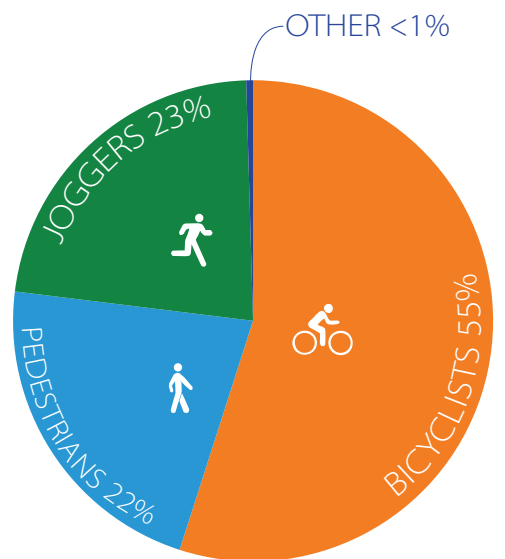
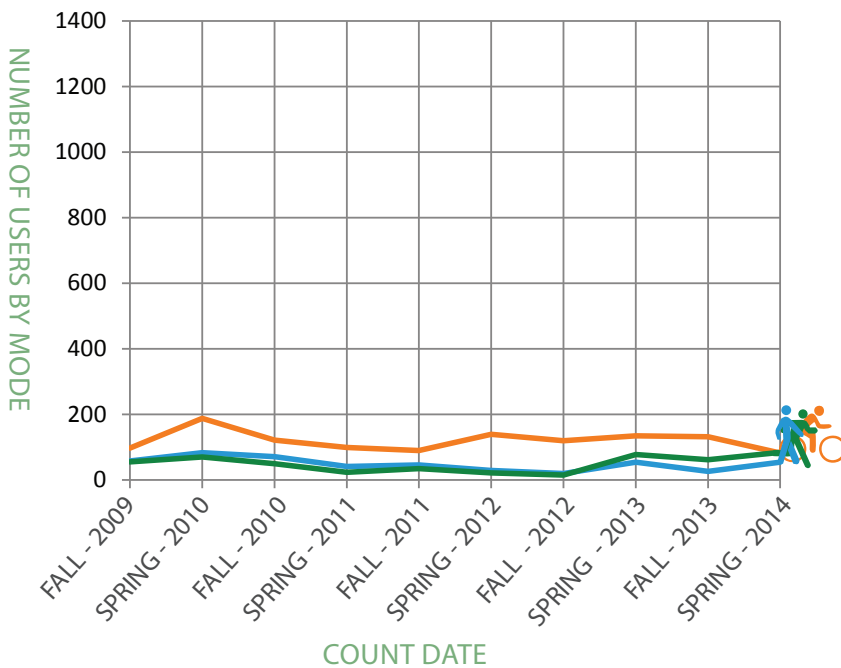
= Pedestrians = Bicyclists = Joggers



MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 267

WEEKDAY



MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 219

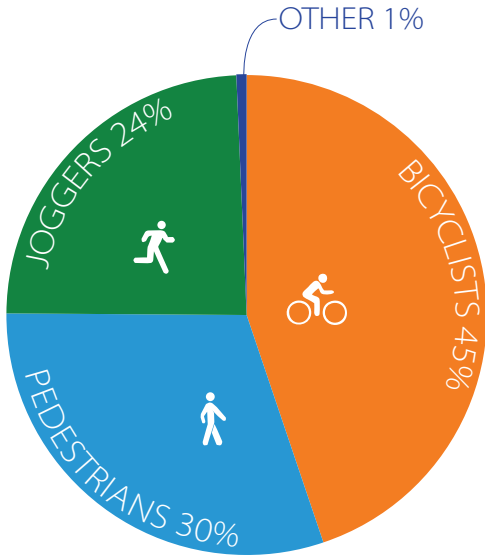
WEEKEND

NORTH BEACON ST. BRIDGE

The North Beacon St bridge connects N Beacon St in Watertown to N. Beacon St in Allston. The site was counted on the southeast corner of the bridge. On average, bicyclists represented the largest share of users during both the weekday counts (45%) and the weekend counts (42%). On average, the total number of non-motorized users counted at this location was 203 users on weekdays, and 170 users on weekends.

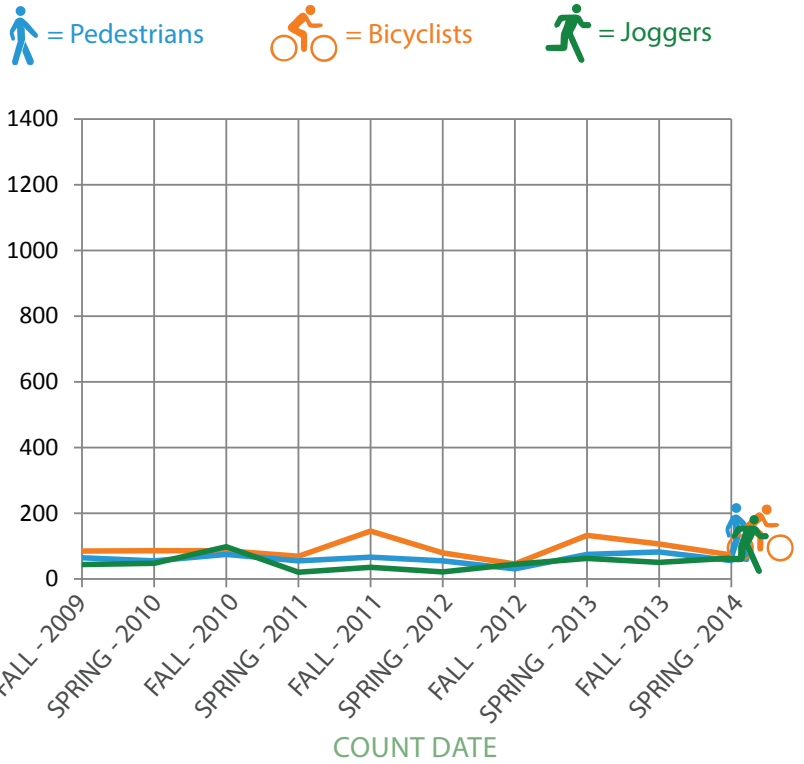


WEEKDAY

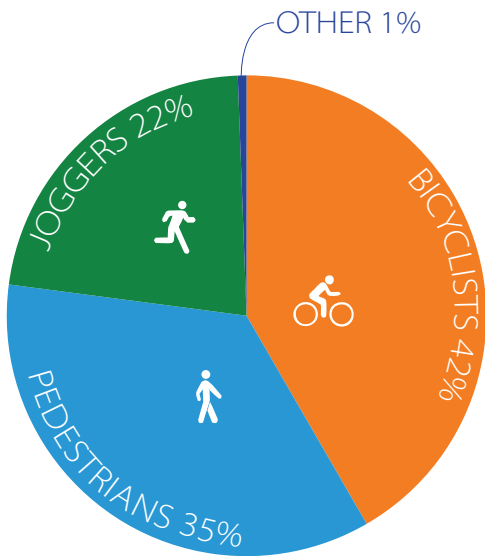


MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 203



WEEKEND



MODE SHARE AVERAGE OF THE 10 COUNTS

Average Total Users (all modes) Weekday = 170

