# Bellevue Bike Share Pilot: TRAC Research Queries and Results

**DRAFT – February 6, 2020**

This report presents all the evaluation questions that the Bellevue Transportation Department, with support from researchers at the University of Washington, posed and answered during the 2018–19 bike share pilot.

This evaluation uses the mobility data provided from Lime, the only permitted operator, according to the Pilot Permit Special Conditions. Mobility data is collected from the GPS units affixed to each shared bicycle in the deployed fleet, providing time and location information when trips start, end, and when the device pings the operator's network along the way (i.e., waypoints); unique IDs for each bike and user; and information about when the operator interacts with a bike, such as for rebalancing or maintenance. This data was provided by Lime under agreement to the Transportation Data Collaborative's (TDC) data repository, anonymized, queried, and reported to the City by the Washington State Transportation Center (TRAC) in the form of aggregate totals, averages, percentages, and other data products.

This report summarizes all mobility data collected from July 31, 2018 through May 22, 2019. The report is organized by topic area as shown below, presenting the results for each topic followed by the queries that led to the creation of those data products.

**4. Demonstration Bikeway Assessment**

4A. Trips – General
4B. Trip Attributes
4C. Users
4D. Routes – Corridors
4E. Routes – Geographic Areas
4F. Transit

# 1. Permit Condition Compliance Data

*These questions are intended to measure operator compliance with Bellevue's Bike Share Pilot Permit Special Conditions. Data reflects all bikes deployed in Bellevue from July 31, 2018 through May 22, 2019.*

## 1A. Right-of-Way Use

**Results:**

- Over the course of 296 days of service (7/31/18 – 5/22/19), there were 35,087 trips completed with destinations in Bellevue. More than half of those (53% or 18,764 bikes) logged GPS locations outside of the right-of-way.
  - See Table 4A-1 for the number and percentage of user trips ended outside of the ROW.
- During the same period, Lime deployed or rebalanced bikes 5,538 times in Bellevue. Of those, 3,001 bikes (54%) logged GPS locations outside of the right-of-way (including a 20-foot buffer to attempt to account for GPS error).
- GPS data precision makes these calculations very unreliable. While the magnitude of the results suggests that bikes were sometimes—and perhaps even often—parked outside of the right-of-way, the size of the Lime deployment/rebalancing result suggests that the GPS error plays a major role in this statistic.

**TABLE 1A-1 – User-Parked Bikes Outside of the ROW**

| Neighborhood Area | Trip Destinations | Parked Outside ROW | |
|---|---|---|---|
| BelRed | 2,032 | 1,269 | 62% |
| Bridle Trails | 361 | 202 | 56% |
| Cougar Mountain / Lakemont | 38 | 14 | 37% |
| Crossroads | 784 | 426 | 54% |
| Downtown | 18,358 | 8,967 | 49% |
| Eastgate | 528 | 270 | 51% |
| Factoria | 805 | 459 | 57% |
| Lake Hills | 1,533 | 826 | 54% |
| Newport | 384 | 159 | 41% |
| Northeast Bellevue | 319 | 86 | 27% |
| Northwest Bellevue | 3,675 | 1,420 | 39% |
| Somerset | 69 | 20 | 29% |
| West Bellevue | 3,944 | 1,892 | 48% |
| West Lake Sammamish | 89 | 41 | 46% |
| Wilburton | 1,825 | 1,171 | 64% |
| Woodridge | 343 | 139 | 41% |
| **Total** | **35,087** | **17,361** | **49%** |

## Research Queries:

1.1 *Have companies deployed bikes within Bellevue outside of the Public Right-of-Way? If so, where, when, how frequently, and which company? (Requirement PI-1)*

1.2 *How frequently are bikes parked by users outside of the Public Right-of-Way? Where, when, and how frequently? (Requirement PI-1)*

## 1B. Fleet Size

**Results:**

- The number of bikes available in Bellevue varied significantly during the pilot. In general, the available fleet grew from July through November, declined from December through March, then increased nominally through May.
- Lime achieved and exceeded the minimum required fleet (100 bikes) on the seventh day of service (August 6, 2018).
- Lime maintained the minimum required fleet until the 26th week of service (January 22, 2019), after which they remained below the minimum until the 37th week of service (April 8, 2019). The weekly average available fleet fell below 100 bikes again in the 42nd week (May 13, 2019).
- The last day reflected in the data currently available (May 22, 2019) was the day with the fewest bikes available in Bellevue: 36 bikes citywide.
- Lime never met or exceeded the maximum allowed fleet. The maximum number of bikes deployed was 302 on November 11, 2018.
- See Tables 1B-1 through 1B-4 and Charts 1B-1 through 1B-5 below for summaries of the available fleet in Bellevue by day, week, month, trimester (1–3), and season (Q3 2018–Q2 2019).
- Data provided by Lime did not specify whether a bike was an e-bike or a manual pedal bike, so it is not known whether any manual pedal bikes occasionally found in Bellevue during the first few months of the pilot were deployed by Lime or brought to Bellevue from neighboring jurisdictions by users. Lime phased out manual pedal bikes from their service in Seattle and other regional markets in March 2019.

**CHART 1B-1 – Available Fleet by Day**

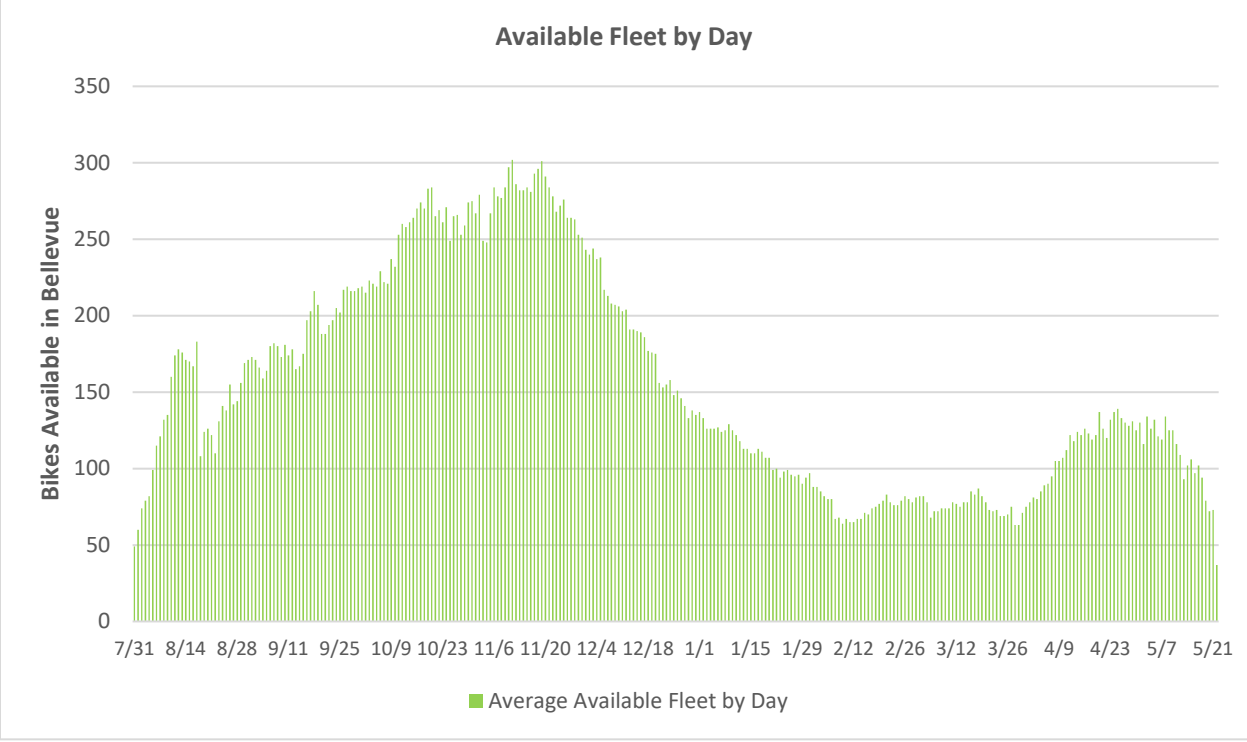


**TABLE 1B-1 – Summary of Daily Average Available Fleet by Week**

| Week | Date Range | Min Fleet | Max Fleet | Average Fleet |
|---|---|---|---|---|
| **1** | 07/31/18 – 08/05/18 | 48 | 99 | 73 |
| **2** | 08/06/18 – 08/12/18 | 115 | 178 | 145 |
| **3** | 08/13/18 – 08/19/18 | 104 | 179 | 155 |
| **4** | 08/20/18 – 08/26/18 | 110 | 153 | 131 |
| **5** | 08/27/18 – 09/02/18 | 143 | 174 | 162 |
| **6** | 09/03/18 – 09/09/18 | 158 | 180 | 170 |
| **7** | 09/10/18 – 09/16/18 | 161 | 193 | 175 |
| **8** | 09/17/18 – 09/23/18 | 187 | 211 | 197 |
| **9** | 09/24/18 – 09/30/18 | 198 | 219 | 211 |
| **10** | 10/01/18 – 10/07/18 | 215 | 226 | 220 |
| **11** | 10/08/18 – 10/14/18 | 219 | 259 | 242 |
| **12** | 10/15/18 – 10/21/18 | 261 | 283 | 271 |
| **13** | 10/22/18 – 10/28/18 | 248 | 270 | 260 |
| **14** | 10/29/18 – 11/04/18 | 248 | 276 | 263 |
| **15** | 11/05/18 – 11/11/18 | 264 | 302 | 282 |
| **16** | 11/12/18 – 11/18/18 | 278 | 296 | 284 |
| **17** | 11/19/18 – 11/25/18 | 267 | 299 | 281 |
| **18** | 11/26/18 – 12/02/18 | 239 | 263 | 253 |
| **19** | 12/03/18 – 12/09/18 | 206 | 243 | 223 |
| **20** | 12/10/18 – 12/16/18 | 189 | 205 | 196 |
| **21** | 12/17/18 – 12/23/18 | 152 | 186 | 168 |
| **22** | 12/24/18 – 12/30/18 | 133 | 158 | 145 |
| **23** | 12/31/18 – 01/06/19 | 126 | 135 | 130 |
| **24** | 01/07/19 – 01/13/19 | 112 | 128 | 122 |
| **25** | 01/14/19 – 01/20/19 | 107 | 113 | 110 |
| **26** | 01/21/19 – 01/27/19 | 93 | 100 | 97 |
| **27** | 01/28/19 – 02/03/19 | 84 | 96 | 90 |
| **28** | 02/04/19 – 02/10/19 | 64 | 82 | 72 |
| **29** | 02/11/19 – 02/17/19 | 65 | 72 | 67 |
| **30** | 02/18/19 – 02/24/19 | 73 | 81 | 76 |
| **31** | 02/25/19 – 03/03/19 | 76 | 82 | 79 |
| **32** | 03/04/19 – 03/10/19 | 67 | 78 | 71 |
| **33** | 03/11/19 – 03/17/19 | 73 | 85 | 78 |
| **34** | 03/18/19 – 03/24/19 | 65 | 82 | 74 |
| **35** | 03/25/19 – 03/31/19 | 62 | 74 | 67 |
| **36** | 04/01/19 – 04/07/19 | 73 | 94 | 81 |
| **37** | 04/08/19 – 04/14/19 | 100 | 119 | 110 |
| **38** | 04/15/19 – 04/21/19 | 116 | 130 | 121 |
| **39** | 04/22/19 – 04/28/19 | 118 | 133 | 127 |
| **40** | 04/29/19 – 05/05/19 | 112 | 130 | 122 |
| **41** | 05/06/19 – 05/12/19 | 102 | 123 | 116 |
| **42** | 05/13/19 – 05/19/19 | 75 | 97 | 91 |
| **43** | 05/20/19 – 05/22/19 | 36 | 68 | 54 |
| **Overall** | **07/31/18 – 05/22/19** | **36** | **302** | **152** |

**CHART 1B-2 – Average Available Fleet by Week**

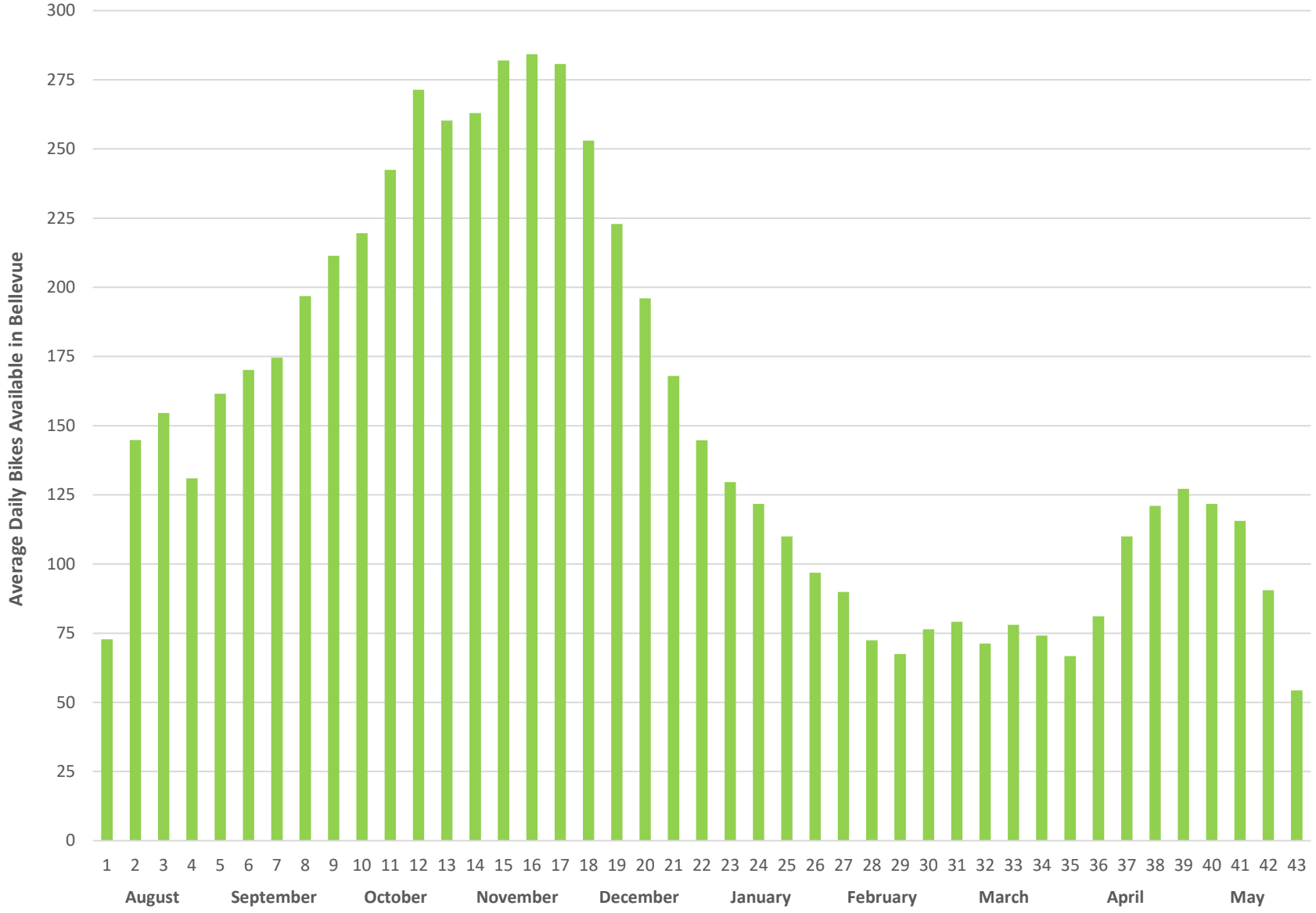


**TABLE 1B-2 – Summary of Daily Average Available by Month**

| Month | Minimum Fleet | Maximum Fleet | Average Fleet |
|---|---|---|---|
| July* | 48 | 48 | 48 |
| August | 57 | 179 | 135 |
| September | 158 | 219 | 187 |
| October | 215 | 283 | 250 |
| November | 248 | 302 | 275 |
| December | 133 | 243 | 185 |
| January | 90 | 135 | 111 |
| February | 64 | 87 | 75 |
| March | 62 | 85 | 73 |
| April | 73 | 133 | 111 |
| May** | 36 | 130 | 101 |
| **Overall** | **36** | **302** | **152** |

**Includes only one day, July 31, 2018—the day of system launch*
***Does not reflect the full month; only includes 5/1–5/22.*

**CHART 1B-3 – Summary of Daily Average Available by Month**

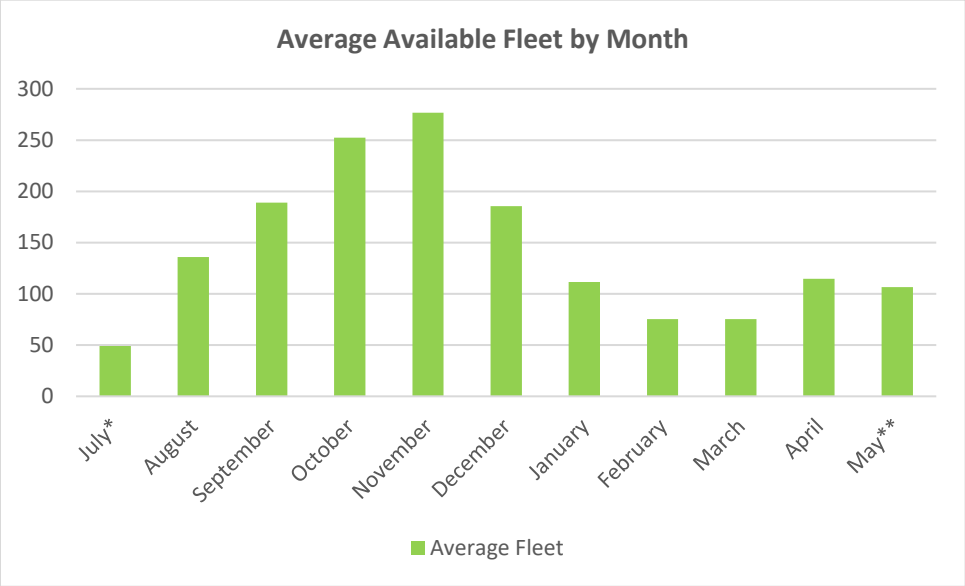


**TABLE 1B-2 – Summary of Daily Average Available by Trimester**

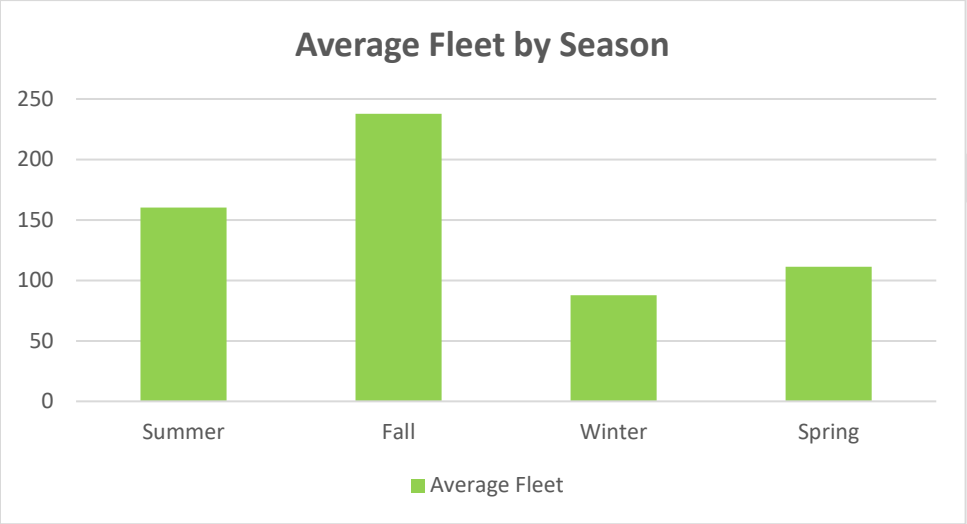
| Trimester | Weeks | Date Range | Min Fleet | Max Fleet | Average Fleet |
|---|---|---|---|---|---|
| 1 | 1–15 | 07/31/18 – 11/11/18 | 48 | 302 | 198 |
| 2 | 16–29 | 11/12/18 – 02/17/19 | 64 | 299 | 160 |
| 3 | 30–43 | 02/18/19 – 05/22/19 | 36 | 133 | 92 |
| **Overall** | **1–43** | **07/31/18 – 05/22/19** | **36** | **302** | **152** |

**CHART 1B-4 – Summary of Daily Average Available by Trimester**

**TABLE 1B-3 – Summary of Daily Average Available by Season**

| Season | Quarter | Min Fleet | Max Fleet | Average Fleet |
|---|---|---|---|---|
| Summer | Q3 2018 | 48 | 219 | 159 |
| Fall | Q4 2018 | 133 | 302 | 236 |
| Winter | Q1 2019 | 62 | 135 | 87 |
| Spring | Q2 2019 | 36 | 133 | 106 |
| **Overall** | | **36** | **302** | **152** |

**CHART 1B-5 – Summary of Daily Average Available by Month**




## Research Queries:

1.3 *How many bike share bicycles are in service in Bellevue on each day including permitted and non-permitted bicycles? (Requirements PI-13, PI-16, PI-18, EN-8)*

1.4 *Did any company's count of in service bikes exceed their permitted fleet cap at any time? If so, when and by how much? (Requirement PI-13, PI-18)*

1.5 *Did any company's count of in service manual pedal bikes exceed their permitted fleet cap at any time? If so, when and by how much? (Requirement QU-1)*

1.6 *Did any company deploy manual pedal bikes in Bellevue exceeding their permitted fleet cap at any time? If so, when and by how much? (Requirement QU-1)*

1.7 *Did any company's count of bikes in their active fleet, whether in service or not, exceed its fleet cap at any time? (Requirement PI-13, PI-18)*

## Data Notes:

- No data was provided for any non-permitted bikes—neither pedal bikes operated by Lime nor any bike operated by other companies operating in the region (i.e., Spin, ofo, JUMP).

## 1C. Service Areas and Distribution

### Results:

- Table 1C-1 provides a sample of how the distribution scheme defined in the Pilot Permit Special Conditions was expected to be implemented.
- Table 1C-2 presents the actual average weekly fleet distribution and the number of non-compliant weeks for each of the area-based targets. This indicates that—relative to the established targets—Activity Centers in aggregate were undersupplied, Downtown was oversupplied relative to the other Activity Centers, and nearly twice as many bikes were deployed in both the FTN and Neighborhood geographic areas as were required.
  - There were 5 weeks when the minimum target for Activity Centers—at least 50% of the citywide fleet +/- 10%—was not achieved. These instances were non-consecutive.
  - There were 34 weeks when the maximum target for Downtown—no more than 50% of the fleet allocated to Activity Centers +/- 10%—was exceeded, including the first twelve and last seventeen weeks of the evaluation period. This maximum target was exceeded by more than 25% for 11 of these 34 weeks.
- Table 1C-3 presents the actual average fleet distribution data for each week and flags instances where targets were not met.
- Table 1C-4 summarizes average fleet distribution compliance from month-to-month.
  - This shows mostly consistent distribution patterns from September through November 2018, with too many bikes deployed to Downtown relative to other Activity Centers, and more bikes deployed in Neighborhoods than in FTN stop areas.
  - Wilburton is the only other Activity Center with at least 10% of the fleet allocated to Activity Centers. All other Activity Centers were undersupplied for the entire pilot. Because the total fleet deployed was small, there were usually fewer than 10 and often fewer than 5 bikes deployed to all Activity Centers other than Downtown and Wilburton.
- If few bikes are available in a given neighborhood, it follows that few trips can be expected to begin there. However, taking Eastgate as an example, trip data (see section 3D) shows that less than 0.4% of trips taken in Bellevue go to Eastgate from outside the neighborhood, and less than 0.2% of all trips are taken internal to Eastgate. This may suggest that Eastgate does not currently have strong demand for bike share trips—at very least, it was not a common destination during the pilot.
  - It is possible that more trips could be realized if the bikes were located in different places within the neighborhood. However, when bikes remain idle, they are both financially unproductive and non-compliant with conditions to relocate idle bikes.

### Research Queries:

1.8 *What percentage of permitted operators' active fleet is located in each of the following areas daily at 7:00 AM? (Requirements OP-13, OP-14)*
  - *Priority Activity Center – Downtown*
  - *Other Activity Centers – BelRed, Crossroads, Eastgate, Factoria, Wilburton/Hospital*
  - *FTN Bus Stops – Quarter-mile radii*
  - *Neighborhoods – All other residential and neighborhood commercial areas*

**TABLE 1C-1 – Sample of Target Fleet Distribution with 400-Bike Fleet**

| Geographic Areas | Target Weekly Average % of Fleet | | Sample Distribution | |
|---|---|---|---|---|
| | Min | Max | % of Fleet | Number of Bikes |
| Activity Centers | 50% of Total | - | 55% | 220 |
| *Downtown* | *25% of AC* | *50% of AC* | *45% of AC* | *99* |
| *BelRed* | *10% of AC* | - | *10% of AC* | *22* |
| *Crossroads* | *10% of AC* | - | *15% of AC* | *33* |
| *Eastgate* | *10% of AC* | - | *10% of AC* | *22* |
| *Factoria* | *10% of AC* | - | *10% of AC* | *22* |
| *Wilburton* | *10% of AC* | - | *10% of AC* | *22* |
| FTN | 10% of Total | - | 20% | 80 |
| Neighborhoods | 15% of Total | - | 25% | 100 |
| **Total** | | | | **400** |

**TABLE 1C-2 – Actual Lime Overall Average Weekly Fleet Distribution**

| Geographic Areas | Target Weekly Average % of Fleet | | Actual Average | Weeks |
|---|---|---|---|---|
| | Min | Max | % of Fleet | Non-Compliant |
| Activity Centers | 50% of Total | - | 47% of Total | 5 |
| *Downtown* | *25% of AC* | *50% of AC* | *68% of AC* | 34 |
| *BelRed* | *10% of AC* | - | *5% of AC* | - |
| *Crossroads* | *10% of AC* | - | *5% of AC* | - |
| *Eastgate* | *10% of AC* | - | *2% of AC* | - |
| *Factoria* | *10% of AC* | - | *9% of AC* | - |
| *Wilburton* | *10% of AC* | - | *11% of AC* | - |
| FTN | 10% of Total | - | 25% of Total | - |
| Neighborhoods | 15% of Total | - | 28% of Total | - |
| **Total** | | | **47%** | **5** |

**TABLE 1C-3a – Percentage of Available Bikes by Geographic Area – First Trimester** (Weeks 1–15)

| Week | Average Fleet Size | Activity Centers | | | | | | | | | | | | | | | | | | FTN Areas | | Neighborhood Areas | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Activity Centers Overall | | | Downtown | | | | | BelRed | | Crossroads | | Eastgate | | Factoria | | Wilburton | | | | | |
| | | *Target Min: 50%* | | | | *Target Min: 25%* | | *Target Max: 50%* | | *Target Min: 10% Each of Fleet Allocated to Activity Centers* | | | | | | | | | | *Target Min: 10%* | | *Target Min: 10%* | |
| | | *Actual* | *Non-Compliant* | | *Actual* | *Non-Compliant* | | | | *Actual* | *% Diff* | *Actual* | *% Diff* | *Actual* | *% Diff* | *Actual* | *% Diff* | *Actual* | *% Diff* | *Actual* | *% Diff* | *Actual* | *% Diff* |
| | | | Y/N | % | | Y/N | % | Y/N | % | | | | | | | | | | | | | | |
| **Overall** | **151** | **47%** | **N** | **-** | **68%** | **N** | **-** | **Y** | **18%** | **5%** | **-5%** | **5%** | **-5%** | **2%** | **-8%** | **9%** | **-1%** | **11%** | **1%** | **25%** | **15%** | **28%** | **18%** |
| 1 | 69 | 55% | N | - | 77% | N | - | Y | 27% | 3% | -7% | 1% | -9% | 3% | -7% | 11% | 1% | 6% | -4% | 27% | 17% | 18% | 8% |
| 2 | 133 | 48% | N | - | 68% | N | - | Y | 18% | 4% | -6% | 4% | -6% | 1% | -9% | 9% | -1% | 13% | 3% | 29% | 19% | 23% | 13% |
| 3 | 164 | 53% | N | - | 81% | N | - | Y | 31% | 5% | -5% | 3% | -7% | 0% | -10% | 2% | -8% | 9% | -1% | 27% | 17% | 20% | 10% |
| 4 | 127 | 45% | N | - | 75% | N | - | Y | 25% | 3% | -7% | 5% | -5% | 1% | -9% | 5% | -5% | 11% | 1% | 29% | 19% | 26% | 16% |
| 5 | 159 | 48% | N | - | 80% | N | - | Y | 30% | 4% | -6% | 2% | -8% | 1% | -9% | 2% | -8% | 12% | 2% | 26% | 16% | 27% | 17% |
| 6 | 171 | 41% | N | - | 72% | N | - | Y | 22% | 8% | -2% | 1% | -9% | 3% | -7% | 4% | -6% | 12% | 2% | 23% | 13% | 36% | 26% |
| 7 | 173 | 45% | N | - | 80% | N | - | Y | 30% | 6% | -4% | 1% | -9% | 2% | -8% | 3% | -7% | 9% | -1% | 26% | 16% | 29% | 19% |
| 8 | 199 | 51% | N | - | 79% | N | - | Y | 29% | 5% | -5% | 1% | -9% | 3% | -7% | 3% | -7% | 10% | 0% | 22% | 12% | 26% | 16% |
| 9 | 210 | 50% | N | - | 77% | N | - | Y | 27% | 4% | -6% | 0% | -10% | 3% | -7% | 4% | -6% | 11% | 1% | 23% | 13% | 27% | 17% |
| 10 | 221 | 45% | N | - | 69% | N | - | Y | 19% | 4% | -6% | 1% | -9% | 5% | -5% | 9% | -1% | 12% | 2% | 25% | 15% | 31% | 21% |
| 11 | 240 | 45% | N | - | 72% | N | - | Y | 22% | 5% | -5% | 2% | -8% | 4% | -6% | 8% | -2% | 9% | -1% | 20% | 10% | 35% | 25% |
| 12 | 272 | 45% | N | - | 75% | N | - | Y | 25% | 4% | -6% | 2% | -8% | 1% | -9% | 8% | -2% | 11% | 1% | 22% | 12% | 33% | 23% |
| 13 | 263 | 42% | N | - | 73% | N | - | Y | 23% | 4% | -6% | 4% | -6% | 0% | -10% | 6% | -4% | 13% | 3% | 23% | 13% | 35% | 25% |
| 14 | 264 | 47% | N | - | 76% | N | - | Y | 26% | 5% | -5% | 1% | -9% | 0% | -10% | 9% | -1% | 9% | -1% | 22% | 12% | 31% | 21% |
| 15 | 276 | 48% | N | - | 81% | N | - | Y | 31% | 2% | -8% | 2% | -8% | 1% | -9% | 6% | -4% | 8% | -2% | 21% | 11% | 31% | 21% |

***Note:*** *Activity Center figures are relative to the % allocated to Activity Centers (min. 50% of total)*
***Note:*** *Cells highlighted in red were sufficiently non-compliant to have been eligible for enforcement action; cells with red text alone are lower than target but are within the compliance threshold.*

**TABLE 1C-3b – Percentage of Available Bikes by Geographic Area – Second Trimester** (Weeks 16–29)

| Week | Average Fleet Size | Activity Centers | | | | | | | | | | | | | | | | | | FTN Areas | | Neighborhood Areas | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Activity Centers Overall | | | Downtown | | | | | BelRed | | Crossroads | | Eastgate | | Factoria | | Wilburton | | | | | |
| | | *Target Min: 50%* | | | | *Target Min: 25%* | | *Target Max: 50%* | | *Target Min: 10% Each of Fleet Allocated to Activity Centers* | | | | | | | | | | *Target Min: 10%* | | *Target Min: 10%* | |
| | | *Actual* | *Non-Compliant* | | *Actual* | *Non-Compliant* | | | | *Actual* | *% Diff* | *Actual* | *% Diff* | *Actual* | *% Diff* | *Actual* | *% Diff* | *Actual* | *% Diff* | *Actual* | *% Diff* | *Actual* | *% Diff* |
| | | | Y/N | % | | Y/N | % | Y/N | % | | | | | | | | | | | | | | |
| **Overall** | **151** | **47%** | **N** | **-** | **68%** | **N** | **-** | **Y** | **18%** | **5%** | **-5%** | **5%** | **-5%** | **2%** | **-8%** | **9%** | **-1%** | **11%** | **1%** | **25%** | **15%** | **28%** | **18%** |
| 16 | 287 | 53% | N | - | 76% | N | - | Y | 26% | 3% | -7% | 3% | -7% | 1% | -9% | 10% | 0% | 8% | -2% | 22% | 12% | 25% | 15% |
| 17 | 279 | 50% | N | - | 64% | N | - | Y | 14% | 5% | -5% | 5% | -5% | 1% | -9% | 16% | 6% | 9% | -1% | 20% | 10% | 30% | 20% |
| 18 | 253 | 52% | N | - | 59% | N | - | N | - | 5% | -5% | 6% | -4% | 2% | -8% | 19% | 9% | 9% | -1% | 18% | 8% | 30% | 20% |
| 19 | 218 | 42% | N | - | 52% | N | - | N | - | 8% | -2% | 8% | -2% | 3% | -7% | 20% | 10% | 9% | -1% | 26% | 16% | 32% | 22% |
| 20 | 190 | 36% | Y | 14% | 45% | N | - | N | - | 13% | 3% | 14% | 4% | 1% | -9% | 18% | 8% | 8% | -2% | 27% | 17% | 36% | 26% |
| 21 | 164 | 46% | N | - | 50% | N | - | N | - | 3% | -7% | 17% | 7% | 1% | -9% | 22% | 12% | 7% | -3% | 29% | 19% | 25% | 15% |
| 22 | 138 | 52% | N | - | 51% | N | - | N | - | 3% | -7% | 15% | 5% | 3% | -7% | 20% | 10% | 8% | -2% | 27% | 17% | 21% | 11% |
| 23 | 122 | 47% | N | - | 54% | N | - | N | - | 2% | -8% | 15% | 5% | 3% | -7% | 18% | 8% | 9% | -1% | 25% | 15% | 28% | 18% |
| 24 | 113 | 42% | N | - | 37% | N | - | N | - | 7% | -3% | 22% | 12% | 2% | -8% | 17% | 7% | 14% | 4% | 24% | 14% | 34% | 24% |
| 25 | 90 | 41% | N | - | 37% | N | - | N | - | 10% | 0% | 23% | 13% | 4% | -6% | 21% | 11% | 4% | -6% | 33% | 23% | 26% | 16% |
| 26 | 72 | 31% | Y | 19% | 44% | N | - | N | - | 20% | 10% | 11% | 1% | 2% | -8% | 14% | 4% | 10% | 0% | 49% | 39% | 20% | 10% |
| 27 | 91 | 44% | N | - | 61% | N | - | Y | 11% | 7% | -3% | 3% | -7% | 0% | -10% | 18% | 8% | 11% | 1% | 24% | 14% | 32% | 22% |
| 28 | 75 | 52% | N | - | 74% | N | - | Y | 24% | 6% | -4% | 3% | -7% | 0% | -10% | 2% | -8% | 16% | 6% | 22% | 12% | 26% | 16% |
| 29 | 67 | 58% | N | - | 76% | N | - | Y | 26% | 3% | -7% | 1% | -9% | 0% | -10% | 0% | -10% | 20% | 10% | 23% | 13% | 19% | 9% |

***Note:*** *Activity Center figures are relative to the % allocated to Activity Centers (min. 50% of total)*

***Note:*** *Cells highlighted in red were sufficiently non-compliant to have been eligible for enforcement action; cells with red text alone are lower than target but are within the compliance threshold.*

**TABLE 1C-3c – Percentage of Available Bikes by Geographic Area – Third Trimester** (Weeks 30–43)

| Week | Average Fleet Size | Activity Centers | | | | | | | | | | | | | | | | | | FTN Areas | | Neighborhood Areas | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Activity Centers Overall | | | Downtown | | | | | BelRed | | Crossroads | | Eastgate | | Factoria | | Wilburton | | | | | |
| | | *Target Min: 50%* | | | | *Target Min: 25%* | | *Target Max: 50%* | | *Target Min: 10% Each of Fleet Allocated to Activity Centers* | | | | | | | | | | *Target Min: 10%* | | *Target Min: 10%* | |
| | | *Actual* | *Non-Compliant* | | *Actual* | *Non-Compliant* | | | | *Actual* | *% Diff* | *Actual* | *% Diff* | *Actual* | *% Diff* | *Actual* | *% Diff* | *Actual* | *% Diff* | *Actual* | *% Diff* | *Actual* | *% Diff* |
| | | | Y/N | % | | Y/N | % | Y/N | % | | | | | | | | | | | | | | |
| **Overall** | **151** | **47%** | **N** | **-** | **68%** | **N** | **-** | **Y** | **18%** | **5%** | **-5%** | **5%** | **-5%** | **2%** | **-8%** | **9%** | **-1%** | **11%** | **1%** | **25%** | **15%** | **28%** | **18%** |
| 30 | 77 | 63% | N | - | 81% | N | - | Y | 31% | 3% | -7% | 0% | -10% | 0% | -10% | 1% | -9% | 15% | 5% | 18% | 8% | 20% | 10% |
| 31 | 80 | 57% | N | - | 78% | N | - | Y | 28% | 4% | -6% | 0% | -10% | 1% | -9% | 5% | -5% | 12% | 2% | 19% | 9% | 24% | 14% |
| 32 | 74 | 56% | N | - | 74% | N | - | Y | 24% | 11% | 1% | 1% | -9% | 0% | -10% | 4% | -6% | 10% | 0% | 18% | 8% | 26% | 16% |
| 33 | 77 | 47% | N | - | 70% | N | - | Y | 20% | 6% | -4% | 0% | -10% | 0% | -10% | 11% | 1% | 12% | 2% | 24% | 14% | 29% | 19% |
| 34 | 78 | 44% | N | - | 70% | N | - | Y | 20% | 4% | -6% | 3% | -7% | 6% | -4% | 7% | -3% | 10% | 0% | 27% | 17% | 29% | 19% |
| 35 | 67 | 39% | Y | 11% | 67% | N | - | Y | 17% | 7% | -3% | 8% | -2% | 10% | 0% | 1% | -9% | 7% | -3% | 26% | 16% | 35% | 25% |
| 36 | 81 | 46% | N | - | 70% | N | - | Y | 20% | 3% | -7% | 2% | -8% | 8% | -2% | 9% | -1% | 8% | -2% | 25% | 15% | 29% | 19% |
| 37 | 109 | 54% | N | - | 83% | N | - | Y | 33% | 1% | -9% | 1% | -9% | 0% | -10% | 6% | -4% | 9% | -1% | 26% | 16% | 20% | 10% |
| 38 | 125 | 47% | N | - | 67% | N | - | Y | 17% | 5% | -5% | 3% | -7% | 0% | -10% | 8% | -2% | 17% | 7% | 22% | 12% | 30% | 20% |
| 39 | 131 | 47% | N | - | 71% | N | - | Y | 21% | 4% | -6% | 1% | -9% | 0% | -10% | 13% | 3% | 11% | 1% | 22% | 12% | 31% | 21% |
| 40 | 127 | 38% | Y | 12% | 70% | N | - | Y | 20% | 1% | -9% | 2% | -8% | 1% | -9% | 6% | -4% | 19% | 9% | 26% | 16% | 36% | 26% |
| 41 | 125 | 40% | N | - | 64% | N | - | Y | 14% | 5% | -5% | 10% | 0% | 0% | -10% | 4% | -6% | 17% | 7% | 33% | 23% | 26% | 16% |
| 42 | 100 | 36% | Y | 14% | 71% | N | - | Y | 21% | 3% | -7% | 6% | -4% | 0% | -10% | 7% | -3% | 13% | 3% | 29% | 19% | 35% | 25% |
| 43 | 65 | 49% | N | - | 68% | N | - | Y | 18% | 5% | -5% | 3% | -7% | 1% | -9% | 9% | -1% | 14% | 4% | 21% | 11% | 29% | 19% |

***Note:*** *Activity Center figures are relative to the % allocated to Activity Centers (min. 50% of total)*
***Note:*** *Cells highlighted in red were sufficiently non-compliant to have been eligible for enforcement action; cells with red text alone are lower than target but are within the compliance threshold.*

**TABLE 4C-4 – Average Daily Fleet Distribution at 7am by Month**

| Geographic Areas | August 2018 | | September 2018 | | October 2018 | | November 2018 | | December 2018 | | January 2019 | | February 2019 | | March 2019 | | April 2019 | | May 2019 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | Bikes | % | Bikes | % | Bikes | % | Bikes | % | Bikes | % | Bikes | % | Bikes | % | Bikes | % | Bikes | % | Bikes |
| Activity Centers | 49% | 67 | 47% | 89 | 45% | 113 | 50% | 138 | 44% | 77 | 41% | 39 | 57% | 43 | 47% | 35 | 47% | 54 | 40% | 42 |
| *Downtown* | *78%* | *52* | *77%* | *68* | *73%* | *82* | *71%* | *98* | *51%* | *39* | *43%* | *17* | *78%* | *33* | *71%* | *25* | *73%* | *40* | *68%* | *29* |
| *BelRed* | *4%* | *2* | *5%* | *5* | *4%* | *5* | *4%* | *5* | *7%* | *5* | *8%* | *3* | *4%* | *2* | *7%* | *2* | *3%* | *2* | *4%* | *2* |
| *Crossroads* | *3%* | *2* | *1%* | *1* | *2%* | *2* | *4%* | *5* | *13%* | *10* | *17%* | *6* | *1%* | *0* | *3%* | *1* | *2%* | *1* | *6%* | *3* |
| *Eastgate* | *1%* | *1* | *3%* | *2* | *2%* | *2* | *1%* | *2* | *2%* | *2* | *2%* | *1* | *0%* | *0* | *3%* | *1* | *1%* | *1* | *0%* | *0* |
| *Factoria* | *4%* | *3* | *3%* | *3* | *8%* | *9* | *12%* | *16* | *20%* | *16* | *19%* | *8* | *2%* | *1* | *6%* | *2* | *9%* | *5* | *6%* | *2* |
| *Wilburton* | *10%* | *7* | *11%* | *10* | *11%* | *13* | *8%* | *11* | *8%* | *6* | *10%* | *4* | *15%* | *7* | *10%* | *4* | *12%* | *7* | *16%* | *7* |
| FTN | 28% | 38 | 24% | 44 | 22% | 55 | 20% | 56 | 27% | 47 | 30% | 29 | 21% | 16 | 23% | 17 | 24% | 27 | 29% | 31 |
| Neighborhoods | 23% | 31 | 29% | 55 | 33% | 84 | 29% | 81 | 29% | 51 | 29% | 28 | 22% | 17 | 29% | 22 | 29% | 33 | 31% | 33 |
| **Citywide** | | **135** | | **189** | | **252** | | **274** | | **176** | | **96** | | **75** | | **74** | | **114** | | **107** |

***Note:*** *All italicized percentages in grey are relative to the fleet deployed to Activity Centers, not to the total citywide active fleet.*

## 1D. Parking Areas

**Results:**

- Only a small percentage of all bikes available in Bellevue were located at or near designated preferred parking areas, called "bike hubs," daily at 7am. On average, only 4 bikes (2.5% of the citywide fleet) registered GPS coordinates within 25 feet of the designated hub location, and only 9 bikes (6.1% of the citywide fleet) were within 50 feet. See Table 1D-1.
  - During the first trimester, an average of 13 bikes (6.4%) were within 50 feet of a bike hub each week. The highest weekly figures during this period were 22 bikes, or 7.8 percent of the citywide available fleet.
- Data for the number of bikes available at bike hubs daily at 7am was not provided by geographic area, so it is not possible to accurately assess compliance with the established target (50% with a +/- 25% threshold given uncertainty about GPS accuracy and the target's feasibility). However, compliance can be estimated from the data available by considering the following: If all the bikes located at/near bike hubs were located at hubs in Downtown, there would only have been 1 week when the target was achieved and 7 additional weeks when the number of bikes at hubs was within the +/- 25 percent compliance threshold. The weekly average over the pilot period would be 20.5% of the fleet available in Downtown. These figures apply for the 50-foot buffer only; there were no days when more than 17 percent of bikes registered GPS coordinates within 25 feet of bike hubs. See Table 1D-2.
- Over 296 days of service (7/31/18 – 5/22/19), there were only 8 days (3%) when there were zero bikes in No Parking Areas during the daily 7am count.
  - On average, about 5 bikes were parked in No Parking Areas at 7am daily.
  - The maximum number of bikes parked in No Parking Areas at 7am daily was 12.
  - See Table 1D-3 (by week) and 1D-4 (by month) for the average number of bikes in No Parking Areas at 7am daily.
  - See Table 1D-5 for the count of the number of days by the number of bikes in No Parking Areas at 7am daily.
- Most bikes (87%) parked in No Parking Areas during the daily 7am count were left there for more than 24 hours.
  - There were only 17 days (6%) when there were zero bikes in No Parking Areas for more than 24 hours during the daily 7am count.
  - See Table 1D-3 (by week) and 1D-4 (by month) for average number of bikes idle for >24 hours in No Parking Areas at 7am daily.
  - See Table 1D-5 for the count of the number of days by the number of bikes in No Parking Areas at 7am daily.

**TABLE 1D-1 – Average Daily Bikes Available At/Near Hubs at 7am by Week**

| Week | Date Range | Average Fleet Citywide | Bikes Available At/Near Hubs | | | |
|---|---|---|---|---|---|---|
| | | | 25-ft Buffer | | 50-ft Buffer | |
| | | | # | % | # | % |
| **Overall** | **07/31/18 – 05/22/19** | **152** | **4** | **2.5%** | **9** | **6.1%** |
| **1** | 07/31/18 – 08/05/18 | 73 | 3 | 4.2% | 6 | 7.8% |
| **2** | 08/06/18 – 08/12/18 | 145 | 5 | 3.5% | 8 | 5.5% |
| **3** | 08/13/18 – 08/19/18 | 155 | 2 | 1.5% | 8 | 5.0% |
| **4** | 08/20/18 – 08/26/18 | 131 | 3 | 2.2% | 7 | 5.6% |
| **5** | 08/27/18 – 09/02/18 | 162 | 4 | 2.3% | 11 | 6.9% |
| **6** | 09/03/18 – 09/09/18 | 170 | 4 | 2.3% | 8 | 4.6% |
| **7** | 09/10/18 – 09/16/18 | 175 | 5 | 2.9% | 12 | 6.6% |
| **8** | 09/17/18 – 09/23/18 | 197 | 7 | 3.3% | 15 | 7.6% |
| **9** | 09/24/18 – 09/30/18 | 211 | 7 | 3.1% | 14 | 6.6% |
| **10** | 10/01/18 – 10/07/18 | 220 | 8 | 3.5% | 16 | 7.2% |
| **11** | 10/08/18 – 10/14/18 | 242 | 5 | 2.1% | 15 | 6.3% |
| **12** | 10/15/18 – 10/21/18 | 271 | 7 | 2.7% | 19 | 7.2% |
| **13** | 10/22/18 – 10/28/18 | 260 | 4 | 1.5% | 12 | 4.7% |
| **14** | 10/29/18 – 11/04/18 | 263 | 6 | 2.2% | 19 | 7.2% |
| **15** | 11/05/18 – 11/11/18 | 282 | 8 | 2.7% | 22 | 7.8% |
| **16** | 11/12/18 – 11/18/18 | 284 | 11 | 3.9% | 21 | 7.6% |
| **17** | 11/19/18 – 11/25/18 | 281 | 10 | 3.6% | 18 | 6.5% |
| **18** | 11/26/18 – 12/02/18 | 253 | 11 | 4.2% | 19 | 7.4% |
| **19** | 12/03/18 – 12/09/18 | 223 | 5 | 2.2% | 12 | 5.2% |
| **20** | 12/10/18 – 12/16/18 | 196 | 4 | 2.1% | 9 | 4.6% |
| **21** | 12/17/18 – 12/23/18 | 168 | 7 | 4.0% | 10 | 5.8% |
| **22** | 12/24/18 – 12/30/18 | 145 | 6 | 4.2% | 11 | 7.4% |
| **23** | 12/31/18 – 01/06/19 | 130 | 3 | 2.5% | 5 | 4.1% |
| **24** | 01/07/19 – 01/13/19 | 122 | 3 | 2.1% | 6 | 5.3% |
| **25** | 01/14/19 – 01/20/19 | 110 | 1 | 0.5% | 5 | 4.1% |
| **26** | 01/21/19 – 01/27/19 | 97 | 2 | 1.6% | 6 | 6.6% |
| **27** | 01/28/19 – 02/03/19 | 90 | 2 | 2.7% | 6 | 6.9% |
| **28** | 02/04/19 – 02/10/19 | 72 | 2 | 3.1% | 5 | 6.2% |
| **29** | 02/11/19 – 02/17/19 | 67 | 1 | 0.8% | 2 | 3.6% |
| **30** | 02/18/19 – 02/24/19 | 76 | 1 | 1.3% | 3 | 4.1% |
| **31** | 02/25/19 – 03/03/19 | 79 | 3 | 3.8% | 8 | 9.6% |
| **32** | 03/04/19 – 03/10/19 | 71 | 1 | 1.4% | 3 | 4.7% |
| **33** | 03/11/19 – 03/17/19 | 78 | 2 | 2.8% | 3 | 3.6% |
| **34** | 03/18/19 – 03/24/19 | 74 | 0 | 0.6% | 2 | 2.9% |
| **35** | 03/25/19 – 03/31/19 | 67 | 3 | 4.5% | 6 | 8.8% |
| **36** | 04/01/19 – 04/07/19 | 81 | 2 | 2.2% | 5 | 5.6% |
| **37** | 04/08/19 – 04/14/19 | 110 | 2 | 1.4% | 7 | 6.7% |
| **38** | 04/15/19 – 04/21/19 | 121 | 2 | 1.8% | 8 | 6.6% |
| **39** | 04/22/19 – 04/28/19 | 127 | 4 | 2.8% | 9 | 7.4% |
| **40** | 04/29/19 – 05/05/19 | 122 | 2 | 2.0% | 7 | 5.4% |
| **41** | 05/06/19 – 05/12/19 | 116 | 2 | 1.5% | 7 | 5.7% |
| **42** | 05/13/19 – 05/19/19 | 91 | 1 | 1.5% | 6 | 6.5% |
| **43** | 05/20/19 – 05/22/19 | 54 | 1 | 2.2% | 4 | 8.6% |

**TABLE 1D-2 – Estimation of Bike Hub Target Compliance Based on Downtown Hubs**

| Week | Date Range | Average Fleet Citywide | Bikes Available At/Near Hubs | | | | Estimated Compliant |
|---|---|---|---|---|---|---|---|
| | | | 25-ft Buffer | | 50-ft Buffer | | |
| | | | # | % | # | % | |
| **Overall** | **07/31/18 – 05/22/19** | **152** | **4** | **8.2%** | **9** | **20.5%** | **8** |
| **1** | 07/31/18 – 08/05/18 | 73 | 3 | 9.8% | 6 | 18.0% | |
| **2** | 08/06/18 – 08/12/18 | 145 | 5 | 10.0% | 8 | 16.2% | |
| **3** | 08/13/18 – 08/19/18 | 155 | 2 | 3.6% | 8 | 11.8% | |
| **4** | 08/20/18 – 08/26/18 | 131 | 3 | 6.4% | 7 | 16.6% | |
| **5** | 08/27/18 – 09/02/18 | 162 | 4 | 6.3% | 11 | 18.3% | |
| **6** | 09/03/18 – 09/09/18 | 170 | 4 | 7.9% | 8 | 16.1% | |
| **7** | 09/10/18 – 09/16/18 | 175 | 5 | 8.2% | 12 | 18.5% | |
| **8** | 09/17/18 – 09/23/18 | 197 | 7 | 8.2% | 15 | 18.8% | |
| **9** | 09/24/18 – 09/30/18 | 211 | 7 | 8.2% | 14 | 17.5% | |
| **10** | 10/01/18 – 10/07/18 | 220 | 8 | 11.5% | 16 | 23.4% | |
| **11** | 10/08/18 – 10/14/18 | 242 | 5 | 6.2% | 15 | 18.9% | |
| **12** | 10/15/18 – 10/21/18 | 271 | 7 | 7.8% | 19 | 20.8% | |
| **13** | 10/22/18 – 10/28/18 | 260 | 4 | 5.0% | 12 | 15.3% | |
| **14** | 10/29/18 – 11/04/18 | 263 | 6 | 6.2% | 19 | 19.9% | |
| **15** | 11/05/18 – 11/11/18 | 282 | 8 | 7.0% | 22 | 20.2% | |
| **16** | 11/12/18 – 11/18/18 | 284 | 11 | 10.1% | 21 | 19.6% | |
| **17** | 11/19/18 – 11/25/18 | 281 | 10 | 11.4% | 18 | 20.4% | |
| **18** | 11/26/18 – 12/02/18 | 253 | 11 | 14.1% | 19 | 25.0% | Y |
| **19** | 12/03/18 – 12/09/18 | 223 | 5 | 10.3% | 12 | 24.2% | |
| **20** | 12/10/18 – 12/16/18 | 196 | 4 | 11.8% | 9 | 26.5% | Y |
| **21** | 12/17/18 – 12/23/18 | 168 | 7 | 15.9% | 10 | 23.1% | |
| **22** | 12/24/18 – 12/30/18 | 145 | 6 | 15.4% | 11 | 26.9% | Y |
| **23** | 12/31/18 – 01/06/19 | 130 | 3 | 10.4% | 5 | 16.7% | |
| **24** | 01/07/19 – 01/13/19 | 122 | 3 | 13.6% | 6 | 34.1% | Y |
| **25** | 01/14/19 – 01/20/19 | 110 | 1 | 3.9% | 5 | 31.1% | Y |
| **26** | 01/21/19 – 01/27/19 | 97 | 2 | 12.8% | 6 | 52.3% | Y |
| **27** | 01/28/19 – 02/03/19 | 90 | 2 | 9.2% | 6 | 23.9% | |
| **28** | 02/04/19 – 02/10/19 | 72 | 2 | 8.1% | 5 | 16.2% | |
| **29** | 02/11/19 – 02/17/19 | 67 | 1 | 1.8% | 2 | 7.8% | |
| **30** | 02/18/19 – 02/24/19 | 76 | 1 | 2.8% | 3 | 8.7% | |
| **31** | 02/25/19 – 03/03/19 | 79 | 3 | 8.4% | 8 | 21.2% | |
| **32** | 03/04/19 – 03/10/19 | 71 | 1 | 3.4% | 3 | 11.3% | |
| **33** | 03/11/19 – 03/17/19 | 78 | 2 | 8.1% | 3 | 10.8% | |
| **34** | 03/18/19 – 03/24/19 | 74 | 0 | 2.1% | 2 | 10.4% | |
| **35** | 03/25/19 – 03/31/19 | 67 | 3 | 16.8% | 6 | 32.8% | Y |
| **36** | 04/01/19 – 04/07/19 | 81 | 2 | 6.3% | 5 | 15.5% | |
| **37** | 04/08/19 – 04/14/19 | 110 | 2 | 3.3% | 7 | 15.5% | |
| **38** | 04/15/19 – 04/21/19 | 121 | 2 | 5.8% | 8 | 21.7% | |
| **39** | 04/22/19 – 04/28/19 | 127 | 4 | 8.8% | 9 | 23.2% | |
| **40** | 04/29/19 – 05/05/19 | 122 | 2 | 7.5% | 7 | 20.3% | |
| **41** | 05/06/19 – 05/12/19 | 116 | 2 | 6.2% | 7 | 23.6% | |
| **42** | 05/13/19 – 05/19/19 | 91 | 1 | 6.1% | 6 | 25.8% | Y |
| **43** | 05/20/19 – 05/22/19 | 54 | 1 | 7.3% | 4 | 23.6% | |

**TABLE 1D-3 – Average Daily Number of Bikes in No Parking Areas at 7am by Week**

| Week | Average Fleet Citywide | Average Number of Bikes in No Parking Areas at 7am | | Average Number of Bikes Idle for >24 hrs in No Parking Areas at 7am | |
|---|---|---|---|---|---|
| | | # | *% of fleet* | # | *% of all bikes in NPAs* |
| **Overall** | **152** | **5** | **4%** | 4 | 88% |
| **1** | 73 | 4 | 5% | 3 | 82% |
| **2** | 145 | 5 | 4% | 4 | 71% |
| **3** | 155 | 3 | 2% | 2 | 85% |
| **4** | 131 | 5 | 4% | 4 | 79% |
| **5** | 162 | 8 | 5% | 6 | 79% |
| **6** | 170 | 9 | 5% | 8 | 88% |
| **7** | 175 | 8 | 4% | 7 | 91% |
| **8** | 197 | 9 | 4% | 8 | 92% |
| **9** | 211 | 8 | 4% | 7 | 84% |
| **10** | 220 | 5 | 2% | 4 | 89% |
| **11** | 242 | 8 | 3% | 7 | 89% |
| **12** | 271 | 9 | 3% | 7 | 82% |
| **13** | 260 | 6 | 2% | 6 | 89% |
| **14** | 263 | 7 | 3% | 6 | 89% |
| **15** | 282 | 7 | 3% | 6 | 87% |
| **16** | 284 | 7 | 2% | 6 | 81% |
| **17** | 281 | 8 | 3% | 7 | 87% |
| **18** | 253 | 4 | 1% | 3 | 96% |
| **19** | 223 | 5 | 2% | 5 | 100% |
| **20** | 196 | 5 | 3% | 5 | 100% |
| **21** | 168 | 5 | 3% | 5 | 94% |
| **22** | 145 | 7 | 5% | 7 | 98% |
| **23** | 130 | 9 | 7% | 9 | 100% |
| **24** | 122 | 7 | 6% | 7 | 96% |
| **25** | 110 | 2 | 2% | 2 | 92% |
| **26** | 97 | 3 | 3% | 3 | 95% |
| **27** | 90 | 5 | 6% | 5 | 97% |
| **28** | 72 | 3 | 4% | 3 | 95% |
| **29** | 67 | 3 | 4% | 2 | 89% |
| **30** | 76 | 2 | 3% | 2 | 100% |
| **31** | 79 | 1 | 1% | 0 | 50% |
| **32** | 71 | 1 | 1% | 1 | 71% |
| **33** | 78 | 2 | 3% | 2 | 71% |
| **34** | 74 | 2 | 3% | 2 | 94% |
| **35** | 67 | 2 | 4% | 2 | 65% |
| **36** | 81 | 3 | 4% | 2 | 85% |
| **37** | 110 | 8 | 7% | 7 | 93% |
| **38** | 121 | 5 | 4% | 4 | 81% |
| **39** | 127 | 5 | 4% | 4 | 79% |
| **40** | 122 | 4 | 4% | 4 | 94% |
| **41** | 116 | 1 | 1% | 1 | 50% |
| **42** | 91 | 4 | 4% | 3 | 82% |
| **43** | 54 | 3 | 5% | 2 | 75% |

**TABLE 1D-4 – Average Daily Number of Bikes in No Parking Areas at 7am by Month**

| Month | Average Fleet Citywide | Average Number of Bikes in No Parking Areas at 7am | | Average Number of Bikes Idle for >24 hrs in No Parking Areas at 7am | |
|---|---|---|---|---|---|
| | | # | *% of fleet* | # | *% of all bikes in NPAs* |
| **Overall** | **152** | **5** | **4%** | **4** | **88%** |
| 7 | 48 | 2 | 4% | 2 | 100% |
| 8 | 135 | 5 | 4% | 4 | 78% |
| 9 | 187 | 8 | 4% | 7 | 88% |
| 10 | 250 | 7 | 3% | 6 | 87% |
| 11 | 275 | 7 | 2% | 6 | 86% |
| 12 | 185 | 5 | 3% | 5 | 98% |
| 1 | 111 | 5 | 5% | 5 | 98% |
| 2 | 75 | 3 | 4% | 3 | 95% |
| 3 | 73 | 2 | 3% | 1 | 74% |
| 4 | 111 | 5 | 5% | 4 | 86% |
| 5 | 101 | 3 | 3% | 2 | 81% |

**TABLE 1D-5 – Number of Days with X Bikes in No Parking Areas at 7am Daily**

| Number of Bikes in No Parking Areas at 7am | Average Daily Count | | Idle >24 Hours | |
|---|---|---|---|---|
| | Number of Days | | Number of Days | |
| | # | *% of days* | # | *%* |
| 0 | 8 | 3% | 17 | 6% |
| 1 | 24 | 8% | 18 | 6% |
| 2 | 28 | 9% | 39 | 13% |
| 3 | 40 | 14% | 45 | 15% |
| 4 | 30 | 10% | 33 | 11% |
| 5 | 43 | 15% | 42 | 14% |
| 6 | 31 | 10% | 37 | 13% |
| 7 | 26 | 9% | 28 | 9% |
| 8 | 32 | 11% | 17 | 6% |
| 9 | 11 | 4% | 12 | 4% |
| 10 | 15 | 5% | 6 | 2% |
| 11 | 5 | 2% | 1 | 0.3% |
| 12 | 3 | 1% | 1 | 0.3% |

## Research Queries:

1.9 *What percentage of permitted operators' active fleet is located within 25 feet and 50 feet of bike hubs (i.e., designated preferred parking areas) daily at 7:00 AM? (Requirements OP-15, OP-16)*

1.10 *What percentage of permitted operators' active fleet is located within designated No Parking Areas daily at 7:00 AM? (Requirement PA-11)*

1.11 *How often are permitted operators' bikes sitting idle (i.e., without being rented or rebalanced) for 24 hours or longer within designated No Parking Areas? (Requirement PA-11)*

## Data Notes:

- This data does not consider the date when individual bike hubs were installed when evaluating bike proximity to those designated locations. Fifteen bike hubs were designated on the day of system launch; additional hubs were installed through the summer and fall, with the last of the 50 hubs installed during week 16 of the pilot (November 12–18, 2018). Data prior to week 16 may count some bikes near the locations of future hubs that had not yet been installed.

## 1E. Idle Bikes

**Results:**

- During every week of the pilot, there were always at least a few bikes, and sometimes more than 100, that remained idle for more than 7 consecutive days. See Table 1E-1.
  - To the extent that these were located at/near bike hubs, they are not problematic regarding permit compliance. However, those outside bike hubs within areas where bike hubs were available should have been relocated to those hubs by or before the seventh consecutive idle day. This does not apply for most neighborhood areas, but it does for bikes in the Downtown, BelRed, Crossroads, and Factoria Activity Centers—and there are many >7-day idle bikes that were counted in those areas.
- The percentage of bikes in the city that were idle for >7 days was significantly higher during the second trimester, averaging 41% of all unique bikes observed and 48% of the average available fleet at 7am, compared to only 15% and 20% respectively in the first trimester, and 19% and 26% in the third trimester.
  - The number of bikes left idle for more than 7 days remained at 35 or less for the first nine weeks of the pilot (average = 24), even as the average fleet grew from about 70 to more than 200 bikes. Over the next ten weeks, the average fleet fluctuated modestly between 220 and 287 bikes, while the weekly average number of bikes left idle for more than 7 days increased significantly, from 50 in week 10 (late September) to 127 in week 18 (late November), with the average over that time (87) more than tripling.
  - As the fleet was reduced from mid-November (average = 287 bikes) through mid-February (average = 67 bikes), the average number of bikes idle for more than 7 days increased (from 96 to 127) before it decreased to 44, and throughout that period, those idle bikes typically represented about half of the deployed fleet. By comparison, >7-day idle bikes represented only about 15% of the deployed fleet during the first nine weeks and about 30% for the next nine.
  - The number of >7-day idle bikes was not again consistently less than 30% of the weekly average fleet—and 35 bikes or less—until week 34 (mid-March), when then fleet had averaged less than 100 bikes for the previous eight consecutive weeks.
- Charts 1E-1a and 1E-1b compare the number of bikes remaining idle for more than 7 days, counted each week, with (a) the number of unique bikes counted in Bellevue weekly and (b) the weekly average available fleet at 7am. Charts 1E-2a and 1E-2b depict the relationship between the number of bikes remaining idle for more than 7 days, measured each week, and (a) the number of unique bikes counted in Bellevue weekly and (b) the weekly average available fleet at 7am.
  - The first two charts reflect change over the evaluation period, while the latter two compare the variables directly and estimate their correlation. These show that the number of >7-day idle bikes tended to increase and decrease with the number of bikes in the city.
- Chart 1E-5 compares the number of bikes remaining idle for more than 7 days, counted each week, with the average daily rides taken each week. These were compared to test the notion that more rides might result in more bikes dispersed to locations where they were not useful to other potential users. However, these variables have a very weak relationship, suggesting that other factors may be the cause for increasingly idle fleets, perhaps including reduced rebalancing activity by Lime during the winter months.

- Table 1E-2 summarizes the daily average number of bikes idle for >7 days by week and compares that to the weekly average daily available fleet at 7am. These totals are segmented by the number of bikes at/near and outside of bike hubs.
  - Unlike Table 1E-1, this table counts each bike each day, not each unique Bike ID only once each week. These weekly totals are therefore generally lower, as idle bikes are eventually used, rebalanced, or removed from service and not counted day after day, week after week. Still, it shows that an average of 18 percent of the bikes available in Bellevue daily had been idle for more than 7 days, and that rose to 30 percent of daily bikes available during the second trimester.
  - Although the weekly average number of bikes located at/near bike hubs daily was small—ranging from 2 to 22 and averaging 9 over the evaluation period (see section 1D)—the number of >7-day idle bikes within 50 feet of bike hubs is notably lower than the number of >7-day idle bikes not near bike hubs: less than 1 (7%) compared with 26 (18%), respectively.
- Chart 1E-6 compares the number of bikes remaining idle for more than 7 days, counted daily, with the weekly average available fleet at 7am, visually representing the total data of Table 1E-2.
- Table 1E-3 and Table 1E-4 depict this comparison between bikes at/near and outside of bike hubs another way. Rather than calculating weekly averages, these tables count the number of days when a given number of >7-day idle bikes were observed in Bellevue.
  - Table 1E-3 shows that there were 176 days (59%) with zero >7-day idle bikes at/near bike hubs and 81 days (27%) when just 1 bike at/near a bike hub was idle for >7 days.
  - By contrast, there was just 1 day with zero >7-day idle bikes at locations not at/near hubs. More than half of all days in the evaluation period had 1–10 or 11–20 >7-day idle bikes at locations not at/near hubs—roughly one-quarter each.
  - This suggests that bikes parked in locations distant from where bike hubs were designated—that is, away from strategically selected locations in the densest, most active parts of Bellevue—tends to result in bikes that remain idle for longer more frequently.
- Table 1E-5 depicts the number suggests that this imbalance is influenced by the lack of bike hubs in most areas of the city; however, even in areas where hubs do exist (e.g. Downtown, Crossroads, Factoria), the number of bikes idle for more than 7 days outside of hubs is several times greater than for those at hubs.

**TABLE 1E-1a – Unique Bikes Remaining Idle for >7 Days Counted Each Week** (Weeks 1–22)

| Week | Date Range | Unique Bikes Remaining Idle for >7 Days Counted Each Week | | | Total Unique Bike IDs Observed Weekly | Weekly Average Available Fleet at 7am | Average Daily Trips |
|---|---|---|---|---|---|---|---|
| | | Total | % per Unique Bike | % per Average Fleet | | | |
| **1** | 07/31/18 – 08/05/18 | **11** | 8% | 15% | 140 | 73 | 115 |
| **2** | 08/06/18 – 08/12/18 | **16** | 7% | 11% | 231 | 145 | 198 |
| **3** | 08/13/18 – 08/19/18 | **35** | 16% | 23% | 222 | 155 | 205 |
| **4** | 08/20/18 – 08/26/18 | **8** | 4% | 6% | 190 | 131 | 191 |
| **5** | 08/27/18 – 09/02/18 | **19** | 9% | 12% | 213 | 162 | 238 |
| **6** | 09/03/18 – 09/09/18 | **33** | 15% | 19% | 216 | 170 | 209 |
| **7** | 09/10/18 – 09/16/18 | **35** | 15% | 20% | 240 | 175 | 197 |
| **8** | 09/17/18 – 09/23/18 | **31** | 12% | 16% | 256 | 197 | 240 |
| **9** | 09/24/18 – 09/30/18 | **24** | 9% | 11% | 270 | 211 | 262 |
| **10** | 10/01/18 – 10/07/18 | **50** | 19% | 23% | 262 | 220 | 174 |
| **11** | 10/08/18 – 10/14/18 | **66** | 21% | 27% | 317 | 242 | 239 |
| **12** | 10/15/18 – 10/21/18 | **53** | 16% | 20% | 326 | 271 | 226 |
| **13** | 10/22/18 – 10/28/18 | **83** | 27% | 32% | 313 | 260 | 165 |
| **14** | 10/29/18 – 11/04/18 | **83** | 25% | 32% | 332 | 263 | 184 |
| **15** | 11/05/18 – 11/11/18 | **87** | 26% | 31% | 338 | 282 | 166 |
| **16** | 11/12/18 – 11/18/18 | **96** | 28% | 34% | 349 | 284 | 188 |
| **17** | 11/19/18 – 11/25/18 | **107** | 33% | 38% | 327 | 281 | 138 |
| **18** | 11/26/18 – 12/02/18 | **127** | 42% | 50% | 306 | 253 | 103 |
| **19** | 12/03/18 – 12/09/18 | **118** | 47% | 53% | 252 | 223 | 103 |
| **20** | 12/10/18 – 12/16/18 | **110** | 49% | 56% | 224 | 196 | 86 |
| **21** | 12/17/18 – 12/23/18 | **88** | 46% | 52% | 193 | 168 | 77 |
| **22** | 12/24/18 – 12/30/18 | **77** | 46% | 53% | 167 | 145 | 60 |

**TABLE 1E-1b – Unique Bikes Remaining Idle for >7 Days Counted Each Week** (Weeks 23–43)

| Week | Date Range | Unique Bikes Remaining Idle for >7 Days Counted Each Week | | | Total Unique Bike IDs Observed Weekly | Weekly Average Available Fleet at 7am | Average Daily Trips |
|---|---|---|---|---|---|---|---|
| | | Total | % per Unique Bike | % per Average Fleet | | | |
| **23** | 12/31/18 – 01/06/19 | **62** | 42% | 48% | 146 | 130 | 59 |
| **24** | 01/07/19 – 01/13/19 | **62** | 42% | 51% | 146 | 122 | 67 |
| **25** | 01/14/19 – 01/20/19 | **44** | 36% | 40% | 121 | 110 | 52 |
| **26** | 01/21/19 – 01/27/19 | **52** | 45% | 54% | 116 | 97 | 55 |
| **27** | 01/28/19 – 02/03/19 | **28** | 26% | 31% | 109 | 90 | 61 |
| **28** | 02/04/19 – 02/10/19 | **38** | 43% | 52% | 88 | 72 | 14 |
| **29** | 02/11/19 – 02/17/19 | **44** | 49% | 65% | 90 | 67 | 24 |
| **30** | 02/18/19 – 02/24/19 | **32** | 34% | 42% | 94 | 76 | 37 |
| **31** | 02/25/19 – 03/03/19 | **31** | 30% | 39% | 103 | 79 | 70 |
| **32** | 03/04/19 – 03/10/19 | **28** | 27% | 39% | 104 | 71 | 64 |
| **33** | 03/11/19 – 03/17/19 | **36** | 34% | 46% | 107 | 78 | 69 |
| **34** | 03/18/19 – 03/24/19 | **18** | 16% | 24% | 112 | 74 | 86 |
| **35** | 03/25/19 – 03/31/19 | **12** | 10% | 18% | 125 | 67 | 89 |
| **36** | 04/01/19 – 04/07/19 | **12** | 9% | 15% | 132 | 81 | 89 |
| **37** | 04/08/19 – 04/14/19 | **23** | 15% | 21% | 154 | 110 | 98 |
| **38** | 04/15/19 – 04/21/19 | **35** | 21% | 29% | 168 | 121 | 116 |
| **39** | 04/22/19 – 04/28/19 | **31** | 17% | 24% | 178 | 127 | 141 |
| **40** | 04/29/19 – 05/05/19 | **26** | 14% | 21% | 181 | 122 | 163 |
| **41** | 05/06/19 – 05/12/19 | **25** | 14% | 22% | 179 | 116 | 162 |
| **42** | 05/13/19 – 05/19/19 | **17** | 12% | 19% | 143 | 91 | 158 |
| **43** | 05/20/19 – 05/22/19 | **6** | 8% | 11% | 71 | 54 | 118 |

**Chart 1E-1 – Unique Bikes Remaining Idle for >7 Days Compared to Weekly Average Fleet**

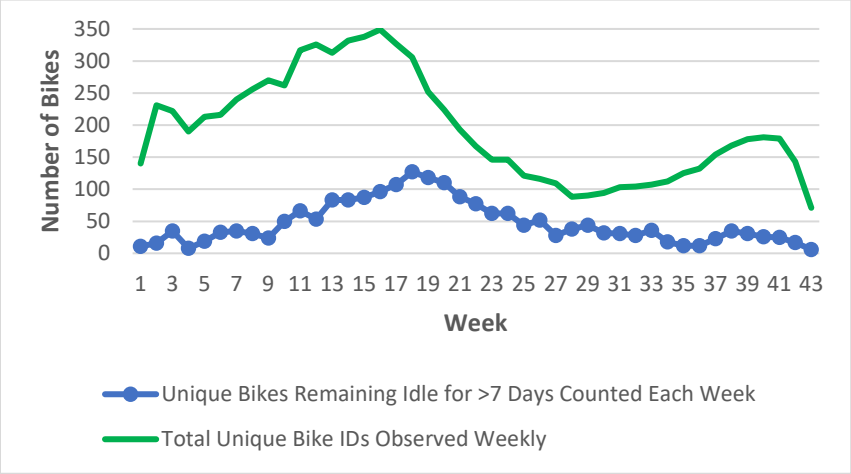



**Chart 1E-2 – Unique Bikes Remaining Idle for >7 Days Compared to Weekly Average Fleet**

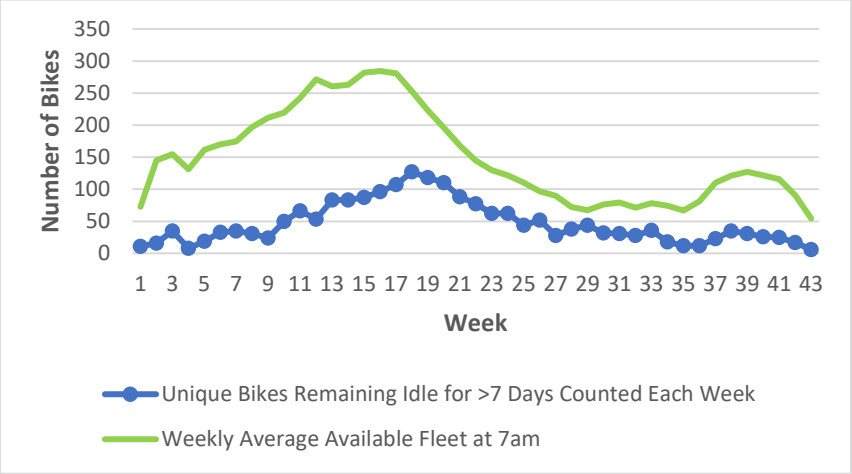



**Chart 1E-3 – Unique Bikes Remaining Idle for >7 Days Compared to Unique Bikes Observed**

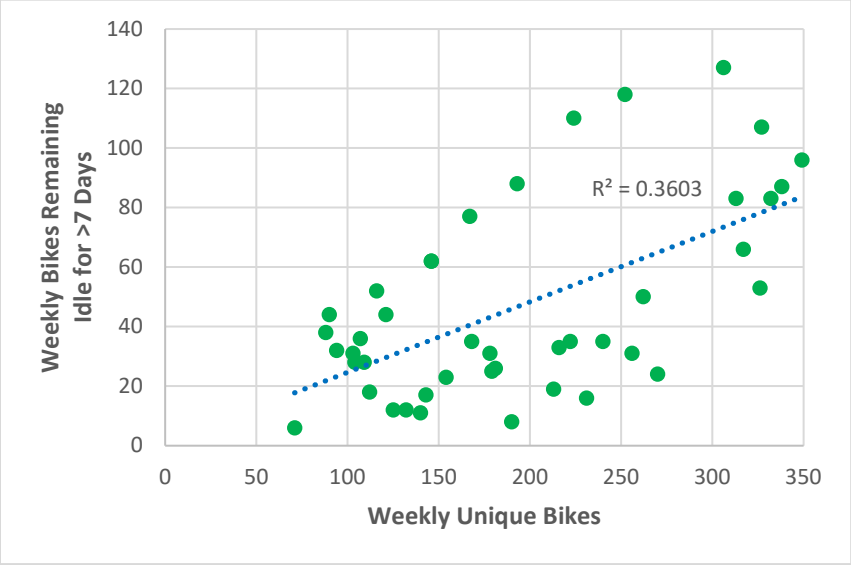



**Chart 1E-4 – Unique Bikes Remaining Idle for >7 Days Compared to Weekly Average Fleet**

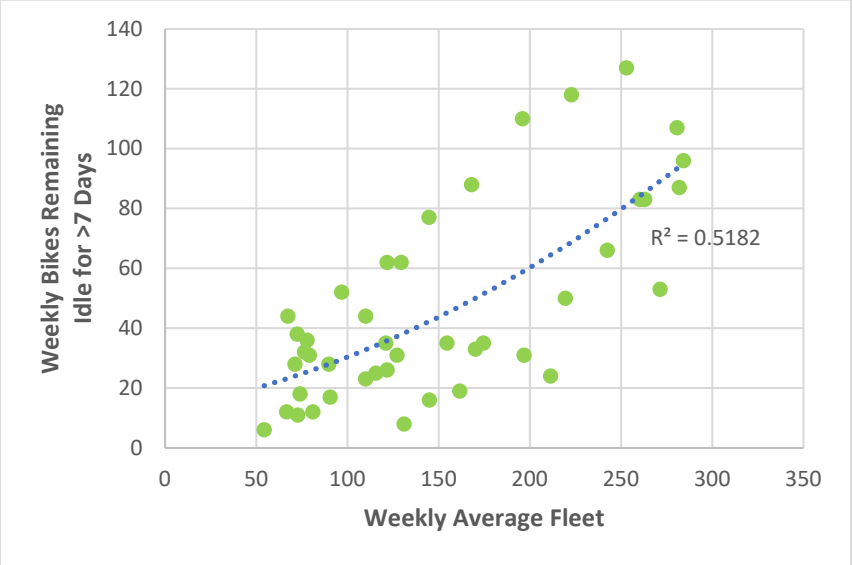


**Chart 1E-5 – Bikes Remaining Idle for >7 Days Compared to Average Daily Trips**

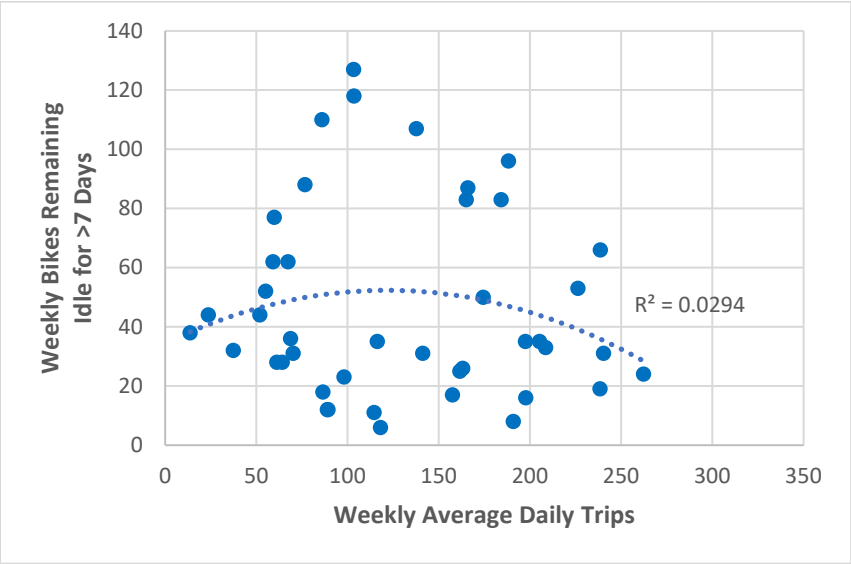



**Chart 1E-6 – Average Number of Bikes Idle for >7 Days Counted Daily Compared to Weekly Average Fleet**

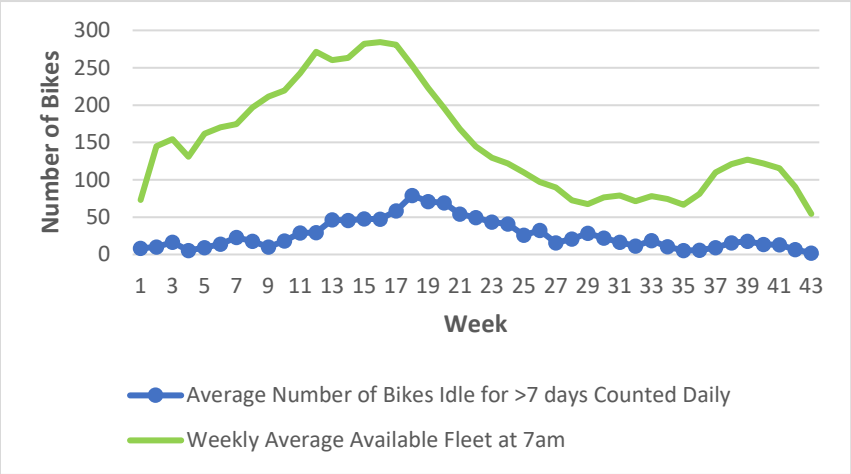


**TABLE 1E-2a – Average Number of Bikes Idle for >7 days Counted Daily** (Weeks 1–22)

| Week | Date Range | Average Number of Bikes Idle for >7 days Counted Daily | | | | | | Weekly Average Available Fleet at 7am | |
|---|---|---|---|---|---|---|---|---|---|
| | | Total | | At/Near Bike Hubs (within 50 ft) | | Bikes Out of Hubs (beyond 50 ft) | | | |
| | | # | % of Average Available Fleet | # | % of Bikes At/Near Bike Hubs | # | % of Bikes Out of Hubs | Total | At/Near Bike Hubs (within 50 ft) |
| **Overall** | **07/31/18 – 05/22/19** | **27** | **18%** | **0.6** | **7%** | **26** | **18%** | **152** | **9** |
| **1** | 07/31/18 – 08/05/18 | **8** | **11%** | 0.0 | 0% | 8 | 12% | **73** | 6 |
| **2** | 08/06/18 – 08/12/18 | **10** | **7%** | 0.6 | 7% | 9 | 7% | **145** | 8 |
| **3** | 08/13/18 – 08/19/18 | **17** | **11%** | 1.0 | 13% | 15 | 10% | **155** | 8 |
| **4** | 08/20/18 – 08/26/18 | **5** | **4%** | 1.0 | 13% | 4 | 3% | **131** | 7 |
| **5** | 08/27/18 – 09/02/18 | **9** | **6%** | 1.0 | 9% | 8 | 5% | **162** | 11 |
| **6** | 09/03/18 – 09/09/18 | **14** | **8%** | 1.4 | 18% | 12 | 8% | **170** | 8 |
| **7** | 09/10/18 – 09/16/18 | **23** | **13%** | 1.4 | 12% | 21 | 13% | **175** | 12 |
| **8** | 09/17/18 – 09/23/18 | **18** | **9%** | 1.0 | 7% | 17 | 9% | **197** | 15 |
| **9** | 09/24/18 – 09/30/18 | **10** | **5%** | 1.3 | 9% | 9 | 4% | **211** | 14 |
| **10** | 10/01/18 – 10/07/18 | **18** | **8%** | 1.0 | 6% | 17 | 8% | **220** | 16 |
| **11** | 10/08/18 – 10/14/18 | **29** | **12%** | 1.0 | 7% | 28 | 12% | **242** | 15 |
| **12** | 10/15/18 – 10/21/18 | **29** | **11%** | 0.0 | 0% | 29 | 12% | **271** | 19 |
| **13** | 10/22/18 – 10/28/18 | **46** | **18%** | 0.6 | 5% | 46 | 18% | **260** | 12 |
| **14** | 10/29/18 – 11/04/18 | **45** | **17%** | 0.4 | 2% | 45 | 18% | **263** | 19 |
| **15** | 11/05/18 – 11/11/18 | **48** | **17%** | 0.0 | 0% | 48 | 18% | **282** | 22 |
| **16** | 11/12/18 – 11/18/18 | **47** | **17%** | 1.9 | 9% | 45 | 17% | **284** | 21 |
| **17** | 11/19/18 – 11/25/18 | **58** | **21%** | 3.1 | 17% | 55 | 21% | **281** | 18 |
| **18** | 11/26/18 – 12/02/18 | **79** | **31%** | 3.4 | 18% | 76 | 32% | **253** | 19 |
| **19** | 12/03/18 – 12/09/18 | **71** | **32%** | 1.1 | 10% | 69 | 33% | **223** | 12 |
| **20** | 12/10/18 – 12/16/18 | **69** | **35%** | 0.1 | 2% | 69 | 37% | **196** | 9 |
| **21** | 12/17/18 – 12/23/18 | **54** | **32%** | 0.6 | 6% | 53 | 34% | **168** | 10 |
| **22** | 12/24/18 – 12/30/18 | **50** | **34%** | 2.4 | 23% | 47 | 35% | **145** | 11 |

**TABLE 1E-2b – Average Number of Bikes Idle for >7 days Counted Daily** (Weeks 23–43)

| Week | Date Range | Average Number of Bikes Idle for >7 days Counted Daily | | | | | | Weekly Average Available Fleet at 7am | |
|---|---|---|---|---|---|---|---|---|---|
| | | Total | | At/Near Bike Hubs (within 50 ft) | | Bikes Out of Hubs (beyond 50 ft) | | | |
| | | # | % of Average Available Fleet | # | % of Bikes At/Near Bike Hubs | # | % of Bikes Out of Hubs | Total | At/Near Bike Hubs (within 50 ft) |
| **Overall** | **07/31/18 – 05/22/19** | **27** | **18%** | **0.6** | **7%** | **26** | **18%** | **152** | **9** |
| **23** | 12/31/18 – 01/06/19 | **44** | **34%** | 0.6 | 11% | 43 | 34% | **130** | 5 |
| **24** | 01/07/19 – 01/13/19 | **41** | **33%** | 0.9 | 13% | 40 | 34% | **122** | 6 |
| **25** | 01/14/19 – 01/20/19 | **26** | **23%** | 0.0 | 0% | 26 | 24% | **110** | 5 |
| **26** | 01/21/19 – 01/27/19 | **32** | **33%** | 0.0 | 0% | 32 | 36% | **97** | 6 |
| **27** | 01/28/19 – 02/03/19 | **16** | **17%** | 0.0 | 0% | 16 | 19% | **90** | 6 |
| **28** | 02/04/19 – 02/10/19 | **21** | **28%** | 0.0 | 0% | 21 | 30% | **72** | 5 |
| **29** | 02/11/19 – 02/17/19 | **28** | **42%** | 0.3 | 12% | 28 | 43% | **67** | 2 |
| **30** | 02/18/19 – 02/24/19 | **22** | **29%** | 0.0 | 0% | 22 | 30% | **76** | 3 |
| **31** | 02/25/19 – 03/03/19 | **17** | **21%** | 0.0 | 0% | 17 | 23% | **79** | 8 |
| **32** | 03/04/19 – 03/10/19 | **11** | **16%** | 0.0 | 0% | 11 | 17% | **71** | 3 |
| **33** | 03/11/19 – 03/17/19 | **18** | **24%** | 0.0 | 0% | 18 | 25% | **78** | 3 |
| **34** | 03/18/19 – 03/24/19 | **10** | **14%** | 0.0 | 0% | 10 | 14% | **74** | 2 |
| **35** | 03/25/19 – 03/31/19 | **5** | **8%** | 0.3 | 5% | 5 | 8% | **67** | 6 |
| **36** | 04/01/19 – 04/07/19 | **6** | **7%** | 0.0 | 0% | 6 | 8% | **81** | 5 |
| **37** | 04/08/19 – 04/14/19 | **9** | **8%** | 0.0 | 0% | 9 | 9% | **110** | 7 |
| **38** | 04/15/19 – 04/21/19 | **15** | **13%** | 0.0 | 0% | 15 | 14% | **121** | 8 |
| **39** | 04/22/19 – 04/28/19 | **18** | **14%** | 0.0 | 0% | 18 | 15% | **127** | 9 |
| **40** | 04/29/19 – 05/05/19 | **13** | **11%** | 0.0 | 0% | 13 | 12% | **122** | 7 |
| **41** | 05/06/19 – 05/12/19 | **13** | **11%** | 0.0 | 0% | 13 | 12% | **116** | 7 |
| **42** | 05/13/19 – 05/19/19 | **6** | **7%** | 0.0 | 0% | 6 | 8% | **91** | 6 |
| **43** | 05/20/19 – 05/22/19 | **2** | **4%** | 0.0 | 0% | 2 | 4% | **54** | 4 |

**TABLE 1E-3 – Bikes Idle for >7 days At/Near Bike Hubs Daily at 7am**

| Number of Bikes | Number of Days | |
|---|---|---|
| | # | % |
| 0 | 176 | 59% |
| 1 | 81 | 27% |
| 2 | 17 | 6% |
| 3 | 19 | 6% |
| 4 | 2 | 1% |
| 5 | 1 | 0% |
| **Total** | **296** | |

**TABLE 1E-4 – Bikes Idle for >7 days Out of Hubs Daily at 7am**

| Number of Bikes | Number of Days | |
|---|---|---|
| | # | % |
| 0 | 1 | 0% |
| 1–10 | 73 | 25% |
| 11–20 | 80 | 27% |
| 21–30 | 44 | 15% |
| 31–40 | 24 | 8% |
| 41–50 | 42 | 14% |
| 51–60 | 7 | 2% |
| 61–70 | 15 | 5% |
| 71–80 | 8 | 3% |
| **Total** | **296** | |

**TABLE 1E-5 – Unique Bikes Remaining Idle for >7 Days by Neighborhood**

| Neighborhood | Bikes Remaining Idle for >7 Days | | | | | |
|---|---|---|---|---|---|---|
| | At/Near Hub (within 50 ft)* | | Out of Hub (beyond 50ft) | | Total | |
| BelRed | - | - | 162 | 100% | 162 | 7% |
| Bridle Trails | - | - | 43 | 100% | 43 | 2% |
| Cougar Mountain / Lakemont | - | - | 9 | 100% | 9 | 0% |
| Crossroads | 6 | 6% | 91 | 94% | 97 | 4% |
| Downtown | 68 | 14% | 427 | 86% | 495 | 23% |
| Eastgate | - | - | 60 | 100% | 60 | 3% |
| Factoria | 20 | 15% | 110 | 85% | 130 | 6% |
| Lake Hills | 2 | 1% | 139 | 99% | 141 | 7% |
| Newport | - | - | 75 | 100% | 75 | 3% |
| Northeast Bellevue | - | - | 65 | 100% | 65 | 3% |
| Northwest Bellevue | - | - | 250 | 100% | 250 | 12% |
| Somerset | 2 | 12% | 15 | 88% | 17 | 1% |
| West Bellevue | 2 | 1% | 388 | 99% | 390 | 18% |
| West Lake Sammamish | - | - | 28 | 100% | 28 | 1% |
| Wilburton | - | - | 155 | 100% | 155 | 7% |
| Woodridge | - | - | 51 | 100% | 51 | 2% |
| **Overall** | **100** | **5%** | **2,068** | **95%** | | |

** Data for all months includes all bike hub locations including all "mini hub" locations in Downtown (i.e., public bike racks)*

## Research Queries:

1.12 *How often are permitted operators' bikes sitting idle for 7 days or longer at bike hubs without being rented? (Requirement OP-17)*

1.13 *How often are permitted operators' bikes sitting for 7 days or longer outside of bike hubs without being rented or rebalanced? (Requirement OP-17)*

## Data Notes:

- The monthly data provided for idle bikes relative to bike hub locations does not account for the fact that bike hubs were installed over time—not all hubs were designated at system launch. Therefore, it is possible that some bikes counted as "at/near hub" from July through November were in the locations of hubs that had not yet been installed. Additionally, the locations considered "at/near hubs" in these analyses include all "mini hub" locations in Downtown (i.e., public bike racks), which were not identified in the Lime app but are regarded as de facto appropriate parking locations by the City.

## 2. Bike Availability and Equity

*These questions helped evaluate the efficacy of geographic distribution targets, helped inform equity targets in the 2020 permit, and provided context for where bike share trips were and were not taken. In the following queries, "geographic areas" refers to established Neighborhood Areas* (see Comprehensive Plan)*, Bike Share Service Areas* (see Permit Special Conditions Attachment C), and *Census Block Groups.*

### 2A. Fleet Distribution

**Results:**

- Tables 2A-1 and 2A-2 depict the average daily available fleet distribution to each Neighborhood Area at 7am by month.
- Tables 2A-3 and 2A-4 depict the average daily deployed fleet distribution to each Bike Share Service Area by month, with percentages relative to the whole fleet. This represents how much of the fleet was deployed to the areas anticipated to attract the highest ridership (i.e., each of the centers).
  - It shows the number of bikes deployed to Downtown declining in December—in absolute and relative terms. Though a rebalancing of bikes from FTN Areas and Neighborhoods to Downtown took place in February, during the remaining months the fleet was relatively equally distributed between the three service area categories.
  - Given that Downtown was the largest generator of trips, this low level of deployment to Downtown, the small fleet overall, and virtually no bike availability in other Activity Centers helps to explain the significant decline in ridership in the winter and spring (see section 3).
- Chart 2A-1 depicts average daily fleet distribution by Neighborhood Area at 7am by week in absolute terms. This provides a visual representation of the rise and fall of the fleet over the course of the pilot.
  - Colors reflect broad geographic areas as follows: blue = west Bellevue, red/orange = central Bellevue, yellow = east Bellevue, green = outlying residential neighborhoods.
  - The chart helps convey the significant decline in the Downtown fleet in the second trimester, which fell from just over 100 bikes to less than 25 over several weeks.
- Chart 2A-2 depicts average daily fleet distribution by Neighborhood Area at 7am by week in relative terms out of 100 percent.
  - Compared with Chart 2A-1, this chart helps to visualize: (1) the robust deployment to Downtown, West, and Northwest Bellevue in the first trimester, its decline in the second, and its stabilization in the third; (2) deployment to central and east Bellevue accounted for most of the remaining fleet.
- Tables 2A-5 and 2A-6 are the evening (7pm) counterparts to Tables 2A-1 and 2A-2, depicting the average daily deployed fleet distribution to each Neighborhood Area at 7pm by month.
- Table 2A-7 reflects the change in average daily fleet distribution from 7am to 7pm. This shows that even as the available fleet was growing from August through October, there were fewer bikes available in the evening than in the morning, particularly in Downtown and West Bellevue, perhaps reflecting trips with destinations outside of Bellevue.
  - From November through January, the elevated declines reflect the removal of bikes from service by Lime, which impacted the Downtown fleet most significantly.

- Table 2A-8 and 2A-9 convey bike share availability by a different metric—the cumulative number of hours all bikes are available in each neighborhood area daily. Whereas the previous tables present bike availability as a snapshot at a moment in time, bike-hours reflects availability throughout the day.

**Research Queries:**

2.1 *On an average day, how many bikes are available in each Bellevue geographic area at 7:00 AM and 7:00 PM? How has this changed over time?*

2.2 *On an average day, how many bikes are available at/near (within 25 feet and 50 feet) each preferred parking area at 7:00 AM and 7:00 PM?*

2.3 *What are the average available bike-minutes (sum of the lengths of time each available bike has been idle at time of measurement) in each geographic area?*

2.4 *Are bike availability and available bike-minutes disproportionately dependent on user trip ends (rather than operator rebalancing) in any geographic areas?*

**TABLE 2A-1 – Average Daily Fleet Distribution at 7am by Month by Neighborhood Areas**

| Neighborhood Areas | Average Daily Available Fleet at 7am by Month | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Overall | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May |
| BelRed | 10 | 10 | 11 | 17 | 18 | 13 | 9 | 5 | 5 | 5 | 6 |
| Bridle Trails | 2 | 2 | 5 | 5 | 4 | 2 | 1 | 1 | 0 | 1 | 2 |
| Cougar Mountain / Lakemont | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |
| Crossroads | 5 | 5 | 1 | 3 | 10 | 18 | 9 | 1 | 1 | 2 | 4 |
| Downtown | 49 | 52 | 67 | 82 | 98 | 42 | 19 | 33 | 24 | 38 | 26 |
| Eastgate | 3 | 2 | 5 | 6 | 5 | 4 | 2 | 0 | 2 | 2 | 1 |
| Factoria | 7 | 3 | 3 | 8 | 18 | 15 | 11 | 1 | 2 | 5 | 2 |
| Lake Hills | 8 | 7 | 9 | 16 | 10 | 14 | 9 | 2 | 2 | 3 | 4 |
| Newport | 4 | 1 | 3 | 8 | 6 | 5 | 5 | 2 | 2 | 7 | 2 |
| Northeast Bellevue | 3 | 1 | 2 | 5 | 4 | 8 | 3 | 0 | 2 | 0 | 4 |
| Northwest Bellevue | 18 | 15 | 25 | 26 | 32 | 17 | 14 | 5 | 11 | 19 | 17 |
| Somerset | 1 | 0 | 0 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 1 |
| West Bellevue | 26 | 21 | 35 | 45 | 40 | 28 | 17 | 17 | 16 | 18 | 22 |
| West Lake Sammamish | 1 | 1 | 5 | 4 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| Wilburton | 10 | 10 | 12 | 16 | 18 | 10 | 6 | 4 | 5 | 8 | 8 |
| Woodridge | 4 | 3 | 3 | 7 | 9 | 4 | 3 | 2 | 2 | 2 | 2 |
| Citywide Average | 152 | 135 | 187 | 250 | 275 | 185 | 111 | 75 | 73 | 111 | 101 |

***Note:*** *Cells highlighted in green had an average of at least 20 bikes daily; cells highlighted in yellow had an average of at least 10 bikes daily.*

**TABLE 2A-2 – Percent of Average Daily Fleet at 7am by Month by Neighborhood Area**

| Neighborhood Areas | Percent of Average Daily Available Fleet at 7am by Month | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Overall | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May |
| **BelRed** | **7%** | 7% | 6% | 7% | 6% | 7% | 8% | 7% | 6% | 4% | 6% |
| **Bridle Trails** | **2%** | 2% | 3% | 2% | 2% | 1% | 1% | 2% | 0% | 1% | 2% |
| **Cougar Mountain / Lakemont** | **0%** | 1% | 0% | 0% | 0% | 0% | 0% | 1% | 1% | 0% | 0% |
| **Crossroads** | **4%** | 3% | 1% | 1% | 4% | 10% | 8% | 1% | 1% | 2% | 4% |
| **Downtown** | **32%** | 38% | 36% | 33% | 36% | 23% | 17% | 44% | 33% | 34% | 26% |
| **Eastgate** | **2%** | 2% | 3% | 3% | 2% | 2% | 2% | 1% | 2% | 2% | 1% |
| **Factoria** | **5%** | 2% | 1% | 3% | 6% | 8% | 10% | 1% | 3% | 5% | 2% |
| **Lake Hills** | **5%** | 5% | 5% | 6% | 4% | 8% | 8% | 3% | 2% | 3% | 4% |
| **Newport** | **3%** | 1% | 1% | 3% | 2% | 3% | 5% | 3% | 2% | 6% | 1% |
| **Northeast Bellevue** | **2%** | 1% | 1% | 2% | 1% | 4% | 3% | 0% | 2% | 0% | 4% |
| **Northwest Bellevue** | **12%** | 11% | 13% | 10% | 12% | 9% | 13% | 7% | 15% | 17% | 17% |
| **Somerset** | **1%** | 0% | 0% | 1% | 1% | 2% | 0% | 0% | 0% | 0% | 1% |
| **West Bellevue** | **17%** | 16% | 19% | 18% | 15% | 15% | 16% | 22% | 22% | 17% | 22% |
| **West Lake Sammamish** | **1%** | 1% | 3% | 2% | 0% | 1% | 0% | 1% | 0% | 0% | 0% |
| **Wilburton** | **6%** | 7% | 7% | 6% | 6% | 6% | 6% | 6% | 6% | 7% | 7% |
| **Woodridge** | **2%** | 2% | 1% | 3% | 3% | 2% | 3% | 2% | 2% | 2% | 2% |

***Note:*** *Cells highlighted in green had the largest share of available bikes; cells highlighted in yellow had the second largest share; cells highlighted in pale yellow had the third largest share.*

**TABLE 2A-3 – Average Daily Fleet Distribution at 7am by Month by Bike Share Service Areas**

| Neighborhood Areas | Average Daily Available Fleet at 7am by Month | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Overall | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May |
| **Activity Centers** | **71** | 67 | 88 | 112 | 138 | 82 | 49 | 43 | 34 | 52 | 38 |
| ***Downtown*** | ***49*** | *52* | *67* | *81* | *99* | *43* | *20* | *33* | *24* | *38* | *26* |
| ***BelRed*** | ***3*** | *2* | *5* | *5* | *5* | *6* | *4* | *2* | *2* | *2* | *1* |
| ***Crossroads*** | ***3*** | *2* | *1* | *2* | *5* | *10* | *8* | *0* | *1* | *1* | *2* |
| ***Eastgate*** | ***1*** | *1* | *2* | *2* | *2* | *2* | *1* | *0* | *1* | *1* | *0* |
| ***Factoria*** | ***7*** | *3* | *3* | *9* | *16* | *16* | *11* | *1* | *2* | *5* | *2* |
| ***Wilburton*** | ***7*** | *7* | *10* | *12* | *11* | *6* | *5* | *7* | *4* | *6* | *6* |
| **FTN Areas** | **30** | 28 | 37 | 45 | 50 | 37 | 18 | 15 | 15 | 25 | 28 |
| **Neighborhoods** | **51** | 40 | 63 | 93 | 87 | 66 | 45 | 17 | 24 | 34 | 34 |
| **Citywide Average** | **152** | **135** | **187** | **250** | **275** | **185** | **111** | **75** | **73** | **111** | **101** |

***Note:*** *Cells highlighted in green had an average of at least 20 bikes daily; cells highlighted in yellow had an average of at least 10 bikes daily.*

**TABLE 2A-4 – Percent of Average Daily Fleet at 7am by Month by Bike Share Service Areas**

| Neighborhood Areas | Percent of Average Daily Available Fleet at 7am by Month | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Overall | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May |
| **Activity Centers** | **47%** | 49% | 47% | 45% | 50% | 44% | 44% | 57% | 47% | 47% | 38% |
| ***Downtown*** | ***32%*** | *38%* | *36%* | *32%* | *36%* | *23%* | *18%* | *44%* | *33%* | *34%* | *26%* |
| ***BelRed*** | ***2%*** | *2%* | *3%* | *2%* | *2%* | *3%* | *3%* | *2%* | *3%* | *1%* | *1%* |
| ***Crossroads*** | ***2%*** | *2%* | *0%* | *1%* | *2%* | *5%* | *7%* | *1%* | *1%* | *1%* | *2%* |
| ***Eastgate*** | ***1%*** | *0%* | *1%* | *1%* | *1%* | *1%* | *1%* | *0%* | *1%* | *0%* | *0%* |
| ***Factoria*** | ***5%*** | *2%* | *2%* | *3%* | *6%* | *9%* | *10%* | *1%* | *3%* | *4%* | *2%* |
| ***Wilburton*** | ***5%*** | *5%* | *5%* | *5%* | *4%* | *3%* | *4%* | *9%* | *5%* | *6%* | *6%* |
| **FTN Areas** | **20%** | 21% | 20% | 18% | 18% | 20% | 16% | 20% | 20% | 23% | 28% |
| **Neighborhoods** | **34%** | 30% | 34% | 37% | 32% | 36% | 40% | 23% | 33% | 31% | 34% |

***Note:*** *Cells highlighted in green had the largest share of available bikes; cells highlighted in yellow had the second largest share; cells highlighted in pale yellow had the third largest share.*

**Chart 2A-1 – Average Daily Fleet Distribution at 7am by Week**

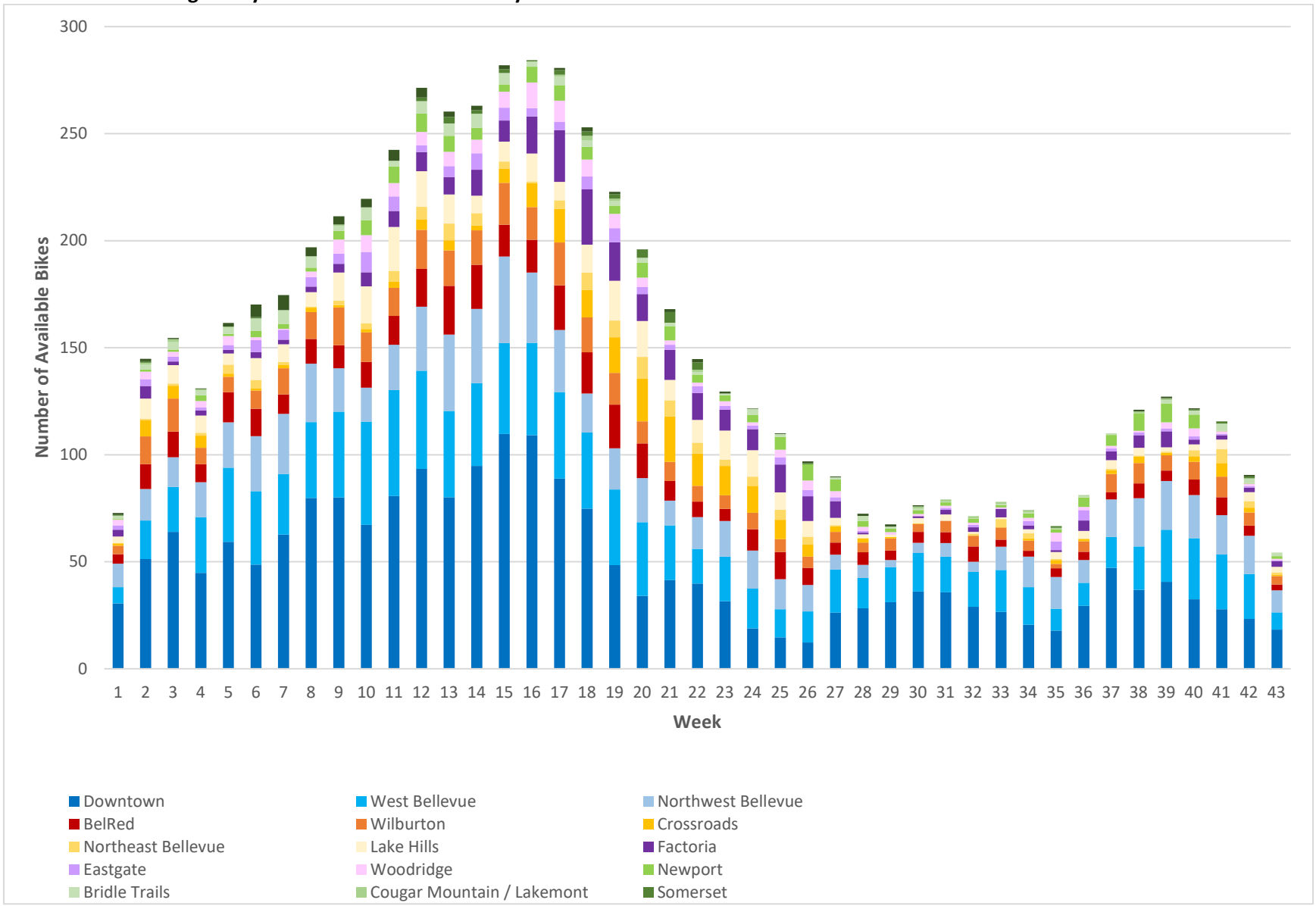


**Chart 2A-2 – Percent of Average Daily Fleet Distribution at 7am by Week**

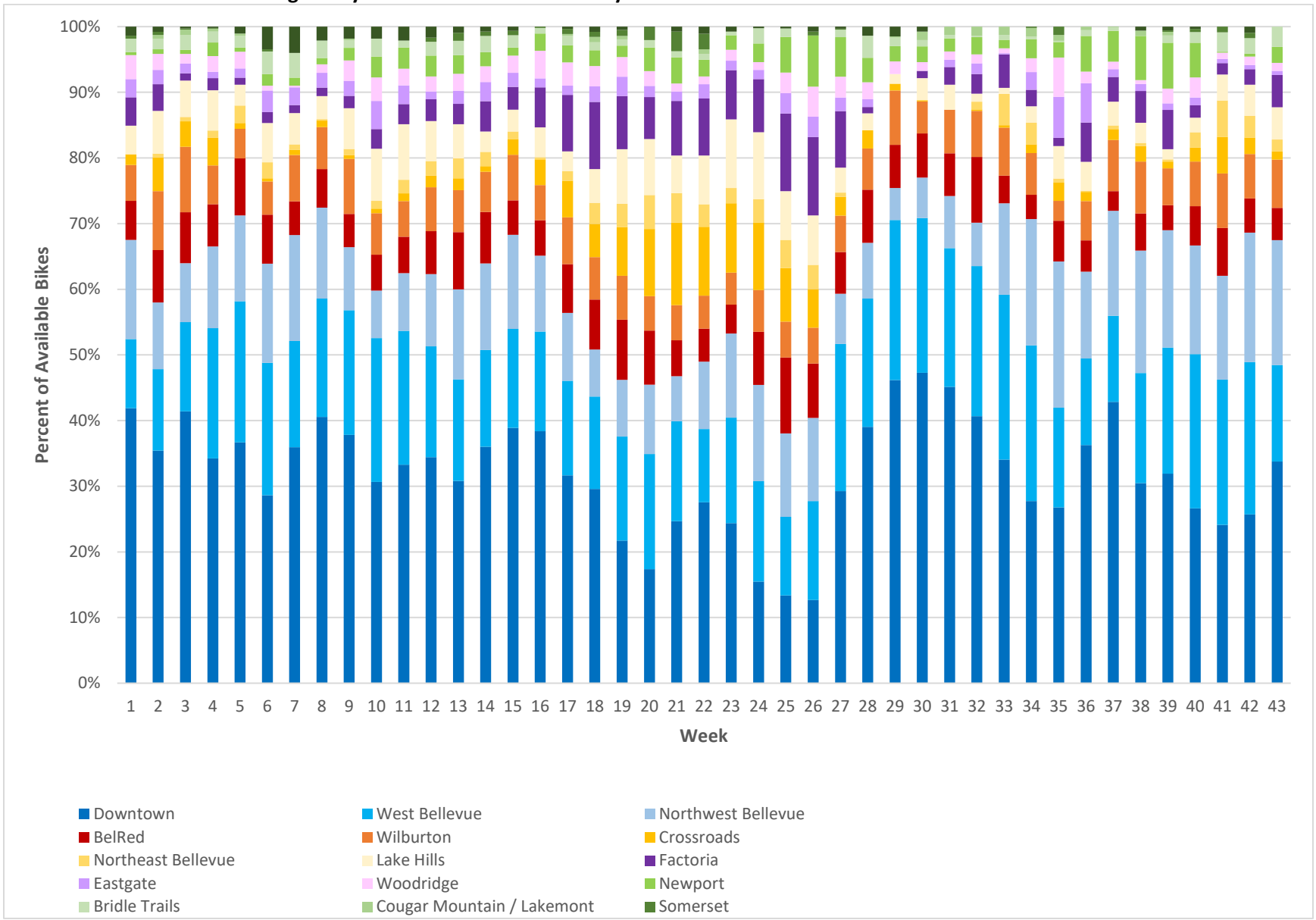


**TABLE 2A-5 – Average Daily Fleet Distribution at 7pm by Month by Neighborhood Areas**

| Neighborhood Areas | Average Daily Available Fleet at 7pm by Month | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Overall | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May |
| BelRed | 10 | 10 | 11 | 17 | 18 | 12 | 8 | 5 | 5 | 5 | 7 |
| Bridle Trails | 2 | 2 | 5 | 5 | 3 | 1 | 1 | 1 | 0 | 1 | 2 |
| Cougar Mountain / Lakemont | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |
| Crossroads | 5 | 4 | 1 | 3 | 10 | 17 | 6 | 1 | 1 | 2 | 4 |
| Downtown | 46 | 47 | 66 | 80 | 94 | 39 | 16 | 32 | 23 | 36 | 24 |
| Eastgate | 3 | 2 | 5 | 6 | 5 | 4 | 2 | 1 | 2 | 2 | 1 |
| Factoria | 7 | 3 | 3 | 8 | 18 | 14 | 7 | 1 | 2 | 6 | 2 |
| Lake Hills | 8 | 7 | 9 | 15 | 10 | 14 | 8 | 2 | 2 | 4 | 4 |
| Newport | 4 | 1 | 3 | 7 | 6 | 4 | 3 | 2 | 2 | 7 | 1 |
| Northeast Bellevue | 3 | 1 | 2 | 5 | 4 | 7 | 4 | 0 | 2 | 0 | 4 |
| Northwest Bellevue | 18 | 15 | 23 | 26 | 31 | 16 | 13 | 5 | 11 | 18 | 17 |
| Somerset | 1 | 0 | 0 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 1 |
| West Bellevue | 25 | 20 | 32 | 44 | 39 | 26 | 15 | 16 | 16 | 18 | 20 |
| West Lake Sammamish | 1 | 1 | 5 | 4 | 1 | 1 | 0 | 1 | 0 | 0 | 0 |
| Wilburton | 9 | 10 | 12 | 16 | 17 | 9 | 6 | 5 | 5 | 7 | 7 |
| Woodridge | 3 | 3 | 3 | 7 | 9 | 3 | 1 | 2 | 2 | 2 | 1 |
| **Citywide Average** | **145** | **128** | **180** | **246** | **268** | **171** | **91** | **75** | **72** | **109** | **96** |

***Note:*** *Cells highlighted in green had an average of at least 20 bikes daily; cells highlighted in yellow had an average of at least 10 bikes daily.*

**TABLE 2A-6 – Average Daily Fleet Distribution at 7pm by Month by Neighborhood Areas**

| Neighborhood Areas | Average Daily Available Fleet at 7pm by Month | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Overall | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May |
| BelRed | 7% | 8% | 6% | 7% | 7% | 7% | 8% | 7% | 6% | 5% | 8% |
| Bridle Trails | 2% | 2% | 3% | 2% | 1% | 1% | 1% | 2% | 0% | 1% | 2% |
| Cougar Mountain / Lakemont | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 1% | 1% | 0% | 0% |
| Crossroads | 3% | 3% | 1% | 1% | 4% | 10% | 7% | 1% | 1% | 2% | 4% |
| Downtown | 32% | 37% | 36% | 33% | 35% | 22% | 18% | 43% | 32% | 33% | 24% |
| Eastgate | 2% | 2% | 3% | 3% | 2% | 2% | 2% | 1% | 2% | 2% | 1% |
| Factoria | 5% | 2% | 2% | 3% | 7% | 8% | 8% | 1% | 3% | 5% | 2% |
| Lake Hills | 5% | 5% | 5% | 6% | 4% | 8% | 9% | 3% | 3% | 3% | 4% |
| Newport | 3% | 1% | 2% | 3% | 2% | 2% | 4% | 3% | 2% | 7% | 1% |
| Northeast Bellevue | 2% | 1% | 1% | 2% | 1% | 4% | 4% | 0% | 2% | 0% | 4% |
| Northwest Bellevue | 12% | 12% | 13% | 11% | 12% | 9% | 14% | 7% | 15% | 17% | 17% |
| Somerset | 1% | 0% | 0% | 0% | 1% | 2% | 0% | 0% | 0% | 0% | 1% |
| West Bellevue | 17% | 15% | 18% | 18% | 14% | 15% | 17% | 22% | 22% | 17% | 21% |
| West Lake Sammamish | 1% | 1% | 3% | 2% | 0% | 1% | 0% | 1% | 0% | 0% | 0% |
| Wilburton | 6% | 8% | 7% | 6% | 6% | 5% | 6% | 6% | 6% | 7% | 8% |
| Woodridge | 2% | 3% | 2% | 3% | 3% | 2% | 2% | 2% | 2% | 2% | 1% |

***Note:*** *Cells highlighted in green had the largest share of available bikes; cells highlighted in yellow had the second largest share; cells highlighted in pale yellow had the third largest share.*

**TABLE 2A-7 – Change in Average Daily Fleet Distribution from 7am to 7pm by Month by Neighborhood Areas**

| Neighborhood Areas | Average Daily Change in Available Fleet | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Overall | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May |
| BelRed | **-0.1** | 0.1 | -0.2 | -0.1 | 0.0 | -0.9 | -1.1 | 0.1 | 0.0 | 0.5 | 1.0 |
| Bridle Trails | **-0.2** | -0.1 | -0.3 | 0.0 | -0.8 | -0.5 | 0.0 | 0.0 | 0.1 | 0.0 | -0.2 |
| Cougar Mountain / Lakemont | **0.0** | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Crossroads | **-0.5** | -0.7 | -0.1 | -0.4 | -0.1 | -0.3 | -3.2 | -0.1 | 0.1 | 0.0 | 0.0 |
| Downtown | **-2.3** | -4.5 | -1.3 | -1.6 | -3.4 | -3.7 | -2.7 | -0.3 | -1.7 | -2.1 | -2.6 |
| Eastgate | **0.0** | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.4 | 0.1 | -0.2 | -0.2 | 0.3 |
| Factoria | **-0.5** | -0.1 | 0.0 | 0.0 | 0.2 | -0.7 | -4.3 | 0.0 | 0.1 | 0.1 | 0.1 |
| Lake Hills | **-0.2** | -0.2 | -0.4 | -1.0 | 0.0 | -0.2 | -1.0 | 0.0 | 0.0 | 0.3 | 0.5 |
| Newport | **-0.3** | 0.1 | 0.1 | -0.4 | 0.1 | -1.3 | -1.8 | 0.1 | 0.1 | 0.3 | -0.3 |
| Northeast Bellevue | **-0.1** | 0.0 | -0.2 | -0.1 | 0.0 | -0.5 | 0.1 | 0.0 | 0.1 | -0.1 | 0.0 |
| Northwest Bellevue | **-0.5** | 0.1 | -1.7 | 0.3 | -0.9 | -0.8 | -1.1 | 0.0 | 0.3 | -0.5 | -0.8 |
| Somerset | **0.0** | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| West Bellevue | **-1.2** | -1.3 | -2.9 | -1.0 | -1.3 | -1.7 | -2.0 | -0.2 | -0.3 | 0.0 | -1.8 |
| West Lake Sammamish | **0.0** | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | 0.1 | 0.0 | 0.1 | 0.0 |
| Wilburton | **-0.4** | -0.1 | 0.0 | 0.1 | -0.7 | -2.0 | -0.6 | 0.2 | -0.1 | -0.3 | -0.1 |
| Woodridge | **-0.3** | 0.0 | 0.0 | 0.0 | -0.2 | -0.9 | -1.5 | 0.0 | 0.0 | 0.0 | -0.3 |

***Note:*** *Cells highlighted in green had the largest share of available bikes; cells highlighted in yellow had the second largest share; cells highlighted in pale yellow had the third largest share.*

**TABLE 2A-8 – Average Daily Available Bike-Hours by Month by Neighborhood Areas**

| Neighborhood Areas | Average Daily Available Bike-Hours | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Overall | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May |
| BelRed | 237 | 241 | 265 | 407 | 421 | 303 | 183 | 121 | 110 | 124 | 168 |
| Bridle Trails | 55 | 59 | 113 | 123 | 82 | 33 | 30 | 31 | 8 | 17 | 56 |
| Cougar Mountain / Lakemont | 10 | 17 | 4 | 0 | 13 | 14 | 0 | 11 | 22 | 13 | 0 |
| Crossroads | 120 | 102 | 33 | 73 | 247 | 419 | 149 | 22 | 20 | 42 | 80 |
| Downtown | 1,132 | 1,178 | 1,601 | 1,948 | 2,289 | 929 | 392 | 782 | 575 | 907 | 603 |
| Eastgate | 73 | 53 | 114 | 154 | 123 | 94 | 47 | 12 | 43 | 51 | 28 |
| Factoria | 159 | 77 | 68 | 198 | 427 | 351 | 172 | 22 | 52 | 133 | 54 |
| Lake Hills | 185 | 171 | 221 | 378 | 245 | 334 | 208 | 51 | 41 | 78 | 89 |
| Newport | 91 | 28 | 64 | 182 | 142 | 99 | 83 | 55 | 39 | 167 | 32 |
| Northeast Bellevue | 71 | 29 | 54 | 130 | 96 | 173 | 87 | 1 | 41 | 10 | 95 |
| Northwest Bellevue | 424 | 359 | 581 | 618 | 751 | 384 | 319 | 126 | 256 | 435 | 400 |
| Somerset | 18 | 8 | 3 | 27 | 38 | 80 | 1 | 0 | 5 | 1 | 17 |
| West Bellevue | 602 | 487 | 800 | 1,073 | 935 | 637 | 365 | 395 | 375 | 435 | 485 |
| West Lake Sammamish | 34 | 19 | 120 | 92 | 30 | 26 | 11 | 17 | 0 | 10 | 7 |
| Wilburton | 224 | 236 | 295 | 372 | 417 | 203 | 140 | 108 | 110 | 172 | 171 |
| Woodridge | 79 | 75 | 67 | 161 | 215 | 73 | 35 | 37 | 40 | 40 | 36 |
| Citywide Average | 3,515 | 3,140 | 4,405 | 5,938 | 6,470 | 4,153 | 2,224 | 1,789 | 1,739 | 2,634 | 2,321 |

***Note:*** *Cells highlighted in green had the largest share of available bikes; cells highlighted in yellow had the second largest share; cells highlighted in pale yellow had the third largest share.*

**TABLE 2A-9 – Percent of Average Daily Available Bike-Hours by Month by Neighborhood Area**

| Neighborhood Areas | Percent of Average Daily Available Bike-Hours | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Overall | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May |
| BelRed | 7% | 8% | 6% | 7% | 7% | 7% | 8% | 7% | 6% | 5% | 7% |
| Bridle Trails | 2% | 2% | 3% | 2% | 1% | 1% | 1% | 2% | 0% | 1% | 2% |
| Cougar Mountain / Lakemont | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 1% | 1% | 0% | 0% |
| Crossroads | 3% | 3% | 1% | 1% | 4% | 10% | 7% | 1% | 1% | 2% | 3% |
| Downtown | 32% | 38% | 36% | 33% | 35% | 22% | 18% | 44% | 33% | 34% | 26% |
| Eastgate | 2% | 2% | 3% | 3% | 2% | 2% | 2% | 1% | 2% | 2% | 1% |
| Factoria | 5% | 2% | 2% | 3% | 7% | 8% | 8% | 1% | 3% | 5% | 2% |
| Lake Hills | 5% | 5% | 5% | 6% | 4% | 8% | 9% | 3% | 2% | 3% | 4% |
| Newport | 3% | 1% | 1% | 3% | 2% | 2% | 4% | 3% | 2% | 6% | 1% |
| Northeast Bellevue | 2% | 1% | 1% | 2% | 1% | 4% | 4% | 0% | 2% | 0% | 4% |
| Northwest Bellevue | 12% | 11% | 13% | 10% | 12% | 9% | 14% | 7% | 15% | 17% | 17% |
| Somerset | 1% | 0% | 0% | 0% | 1% | 2% | 0% | 0% | 0% | 0% | 1% |
| West Bellevue | 17% | 16% | 18% | 18% | 14% | 15% | 16% | 22% | 22% | 17% | 21% |
| West Lake Sammamish | 1% | 1% | 3% | 2% | 0% | 1% | 0% | 1% | 0% | 0% | 0% |
| Wilburton | 6% | 8% | 7% | 6% | 6% | 5% | 6% | 6% | 6% | 7% | 7% |
| Woodridge | 2% | 2% | 2% | 3% | 3% | 2% | 2% | 2% | 2% | 2% | 2% |

***Note:*** *Cells highlighted in green reflect the top 10%; cells highlighted in yellow are above average.*

## 2B. Access to Bike Share

### Results:

**Bike Location Samples**

- Eighteen sample dates were selected to estimate the share of the population and employment served based on the location of dockless bikes at a given time—nine samples each at 7am and 7pm. The dates were selected as representative snapshots of how the fleet was distributed with different available fleet sizes in different seasons, with the metrics for those days—bikes available, trip counts, and trips per bike per day—reflecting a reasonable selection of the average, minimum, and maximum values.
  - For the evaluation period as a whole, the average deployed fleet size was 151 bikes at 7am and 145 bikes at 7pm. The selected sample data is a reasonable approximation, with averages of 157 for the 7am samples, 151 for the 7pm samples, and 153 overall.
  - See Maps 2B-1 through 2B-18 for the bike locations for each of these samples, including 1/8th- and 1/4-mile radial areas around the locations reflecting an approximation of 2.5- to 5-minute walking distances.

**Population Access to Bike Share**

- Table 2B-1 presents the population within 1/4-mile for each of the sample dates, along with the fleet size, daily trips taken, and trips per bike per day for each.
- Table 2B-2 presents summary metrics (average, maximum, and minimum) by trimester of the samples.
- With an average fleet of 154 bikes, an average of about 13% of Bellevue's population had access to a bike share bicycle within 1/4-mile of where they live on the days sampled.
  - Based on these eighteen samples, the population within 1/4-mile of a bike share bicycle ranges from about 8,600–32,200, with an average of about 18,900 residents. This equates to 6.1–22.6%, or an average of 13.3% of the city's population.
- On average, 133 people shared access to each bicycle deployed on the days sampled. This reflects a range of 88–191 people per bicycle, with lower ratios generally corresponding to larger fleets.
- On average, one trip was taken for every 143 residents living within 1/4-mile of a bike share bicycle on the days sampled.
- While the average fleet size declined between each consecutive trimester—beginning with fleet reductions in late November—the population served by bike share did not decline commensurately (see Table 2B-2).
  - In the first trimester, an average deployed fleet of 201 bikes served an average of 22,406 residents. In the second trimester, the average fleet declined 13% (to 175 bikes) yet the population served remained nearly constant (22,155).
  - When the average fleet declined 45% (to 95 bikes) in the third trimester, the population served declined 39% (to 13,591). While a significant decline, it is still considerably less than the decline in fleet from the first trimester's average (53%).
- Chart 2B-1 plots the relationship between the population served and the fleet size. The two are strongly correlated ($R^2$=0.86)—larger fleets serve a larger population with 1/4-mile access to bike

share. Variability is related to both fleet density, or clustering, and how the fleet is distributed across the city relative to population density.

- Chart 2B-2 plots the relationship between the number of people served per available bike and the number of bikes deployed ($R^2$=0.67)
  - Based on the bike distribution for the sample dates, more bikes deployed generally resulted in a smaller number of people sharing access to each bike, perhaps indicating clustering in population centers rather than broad dispersion across lower-density parts of the city.
- Chart 2B-3 plots the relationship between trips taken and the percent of the citywide population within 1/4-mile of a bike share bicycle. The number of trips taken generally increased as a larger population had access to bikes ($R^2$=0.53).

**Employment Access to Bike Share**

- Unlike the population analysis, employment data could not be shared with TRAC at the parcel level for privacy reasons. As such, employment data was estimated at the census block group level, offering a less geographically precise access analysis than for population. Instead of a 1/4-mile radius around bike locations, employment access is measured by counting all jobs within a census block group where at least one bike located at the sample time.
- Table 2B-3 presents employment with access to bike share for each of the sample dates, along with the fleet size, daily trips taken, and trips per bike per day for each.
- Table 2B-4 presents summary metrics (average, maximum, and minimum) by trimester of the samples.
- With an average fleet of 154 bikes, census block groups containing an average of about 81% of Bellevue's jobs were served by at least one bike share bicycle on the days sampled.
  - Based on these eighteen samples, the jobs served ranges from about 91,500–142,500 (60–93%), with an average of about 123,500 jobs.
  - It is challenging to compare this to the population statistics because they are measured differently. Still, the magnitude of difference is remarkable—13% for population, 81% for employees.
- Different from population (see Table 2B-2), each decline in average fleet corresponds to a decline in the average number of jobs served. However, even the smallest fleet sampled (75 bikes on February 18, 2019) resulted in at least one bike in census block groups with 60% of the city's jobs—nearly three times more than even the best access for population.
- On average, 961 employees shared access to each bicycle deployed on the days sampled. This reflects a range of 465–1,857 employees per bicycle, with lower ratios correlating with larger fleets.
- On average, one trip was taken for every 1,028 employees within the census block groups served by at least one bike share bicycle on the days sampled.
- Chart 2B-4 plots the relationship between the jobs in the served census block groups and the fleet size. As with population, larger fleets correlated with more jobs served, though not as strongly ($R^2$=0.64).
- Chart 2B-5 plots the relationship between the number of jobs served per available bike and the number of bikes deployed. Again, the population trend holds—more bikes deployed resulted in a

smaller number of jobs sharing access to each bike—but this is correlated much more significantly ($R^2$=0.97).

- See Chart 2B-6 for plots of the relationship between trips taken and the jobs within census block groups served by at least one bike share bicycle. Once again, the population trend holds—the number of trips taken increased as a larger number of jobs had access to bikes—and the correlation was stronger ($R^2$=0.80) than with population.
- See Chart 2B-7 for a representative example of how providing any level of service to a few high-employment block groups drives the overall employment figures, which does not necessarily equate to truly accessibly service (i.e., within 1/4-mile walk).

### Research Queries:

2.5 *On an average day, what percentage of Bellevue residents and jobs are within a one-eighth mile and one-quarter mile walk of an available bike at 7:00 AM and 7:00 PM?*

2.6 *How many bikes and bike-minutes are available per 1,000 residents in each geographic area?*

2.7 *How many bikes and bike-minutes are available per 1,000 jobs in each geographic area?*

### Data Notes:

- Using all days instead of a sample would provide a more precise analysis, but it would be a computationally demanding undertaking that was deemed excessive for this evaluation. Also, comprehensive results would also only be able to be shared with the city in aggregate, otherwise small differences in geographies between consecutive and/or similar days could potentially expose personally identifying information. The sample dates were selected to obscure any relationship between them from which one might be able to infer individual trips, using dates that are non-consecutive, from different weeks, with every day of the week represented.

**TABLE 2B-1 – Population with Access to Bike Share by Sample**

| Data Samples | | | | Population within 1/4-mile of a Bike | | Available Fleet | People per Bike | Daily Trips | People per Trip | Trips per Bike per Day |
|---|---|---|---|---|---|---|---|---|---|---|
| # | Date | Time | Day of Week | # | % | | | | | |
| **1** | 8/7/2018 | 7:00 | Tuesday | 18,809 | 13.2% | 121 | 155 | 172 | 109 | 1.4 |
| **3** | 9/10/2018 | 7:00 | Monday | 20,936 | 14.7% | 179 | 117 | 226 | 93 | 1.3 |
| **5** | 10/11/2018 | 7:00 | Thursday | 27,588 | 19.4% | 248 | 111 | 309 | 89 | 1.2 |
| **7** | 11/6/2018 | 7:00 | Tuesday | 24,897 | 17.5% | 280 | 89 | 228 | 109 | 0.8 |
| **9** | 12/17/2018 | 7:00 | Monday | 24,581 | 17.3% | 186 | 132 | 99 | 248 | 0.5 |
| **11** | 1/27/2019 | 7:00 | Sunday | 11,981 | 8.4% | 94 | 127 | 46 | 260 | 0.5 |
| **13** | 3/9/2019 | 7:00 | Saturday | 14,157 | 10.0% | 71 | 199 | 88 | 161 | 1.2 |
| **15** | 4/26/2019 | 7:00 | Friday | 17,109 | 12.0% | 127 | 135 | 219 | 78 | 1.7 |
| **17** | 5/16/2019 | 7:00 | Thursday | 12,731 | 9.0% | 95 | 134 | 146 | 87 | 1.5 |
| **2** | 8/22/2018 | 19:00 | Wednesday | 18,695 | 13.1% | 120 | 156 | 208 | 90 | 1.7 |
| **4** | 9/20/2018 | 19:00 | Thursday | 21,901 | 15.4% | 184 | 119 | 249 | 88 | 1.4 |
| **6** | 10/30/2018 | 19:00 | Tuesday | 24,019 | 16.9% | 268 | 90 | 198 | 121 | 0.7 |
| **8** | 11/17/2018 | 19:00 | Saturday | 32,171 | 22.6% | 290 | 111 | 249 | 129 | 0.9 |
| **10** | 12/24/2018 | 19:00 | Monday | 19,888 | 14.0% | 140 | 142 | 94 | 212 | 0.7 |
| **12** | 2/18/2019 | 19:00 | Monday | 11,440 | 8.0% | 75 | 153 | 31 | 369 | 0.4 |
| **14** | 3/29/2019 | 19:00 | Friday | 8,637 | 6.1% | 58 | 149 | 59 | 146 | 1.0 |
| **16** | 4/9/2019 | 19:00 | Tuesday | 15,876 | 11.2% | 105 | 151 | 135 | 118 | 1.3 |
| **18** | 5/4/2019 | 19:00 | Saturday | 15,189 | 10.7% | 120 | 127 | 214 | 71 | 1.8 |
| **Overall Average** | | | | **18,923** | **13.3%** | **153** | **133** | **165** | **143** | **1.1** |
| **Citywide Population** | | | | **142,286** | | | | | | |

**TABLE 2B-2 – Population with Access to Bike Share by Trimester of Samples**

| Trimester | Date Range | Population within 1/4-mile of a Bike | | | | | | Average Available Fleet | People per Bike | Average Daily Trips | People per Trip | Trips per Bike per Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average | | Minimum | | Maximum | | | | | | |
| | | # | % | # | % | # | % | | | | | |
| **1** | 07/31/18 – 11/11/18 | 22,406 | 15.7% | 18,695 | 13.1% | 27,588 | 19.4% | 200 | 120 | 227 | 100 | 1.2 |
| **2** | 11/12/18 – 02/17/19 | 22,155 | 15.6% | 11,981 | 8.4% | 32,171 | 22.6% | 178 | 128 | 122 | 212 | 0.6 |
| **3** | 02/18/19 – 05/22/19 | 13,591 | 9.6% | 8,637 | 6.1% | 17,109 | 12.0% | 93 | 150 | 127 | 147 | 1.3 |
| **Overall Average** | | **18,923** | **13.3%** | **8,637** | **6.1%** | **32,171** | **22.6%** | **153** | **133** | **165** | **143** | **1.1** |
| **Citywide Population** | | **142,286** | | | | | | | | | | |

**Chart 2B-1 – Relationship of Population Served to Deployed Fleet**

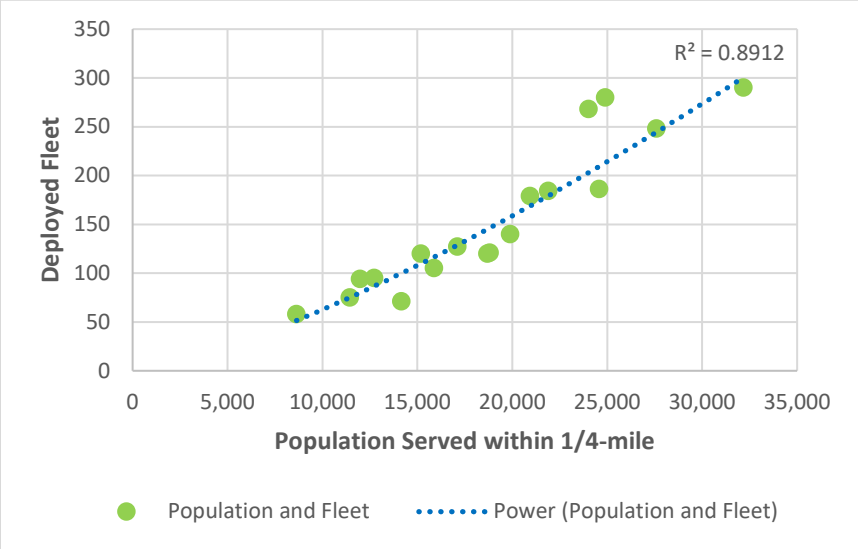



**Chart 2B-2 – Relationship of People per Bike and Deployed Fleet**

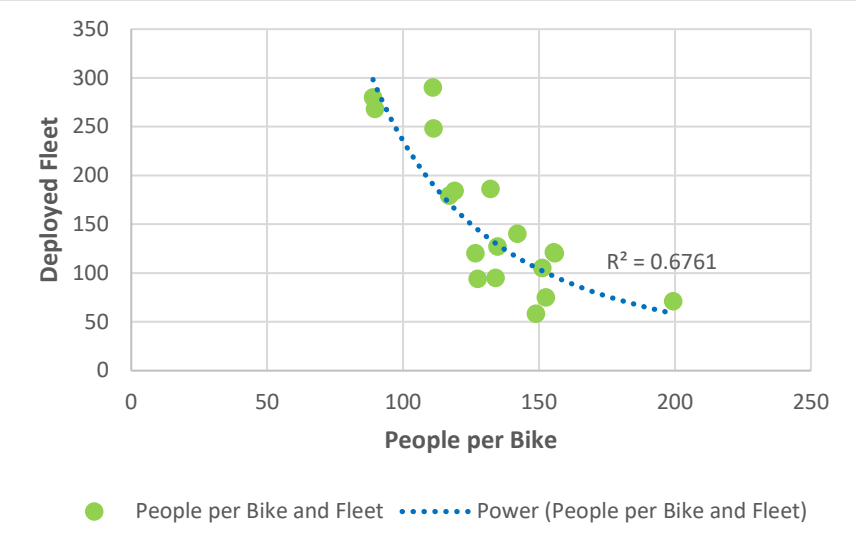



**Chart 2B-3 – Relationship of Population Served to Trips Taken**

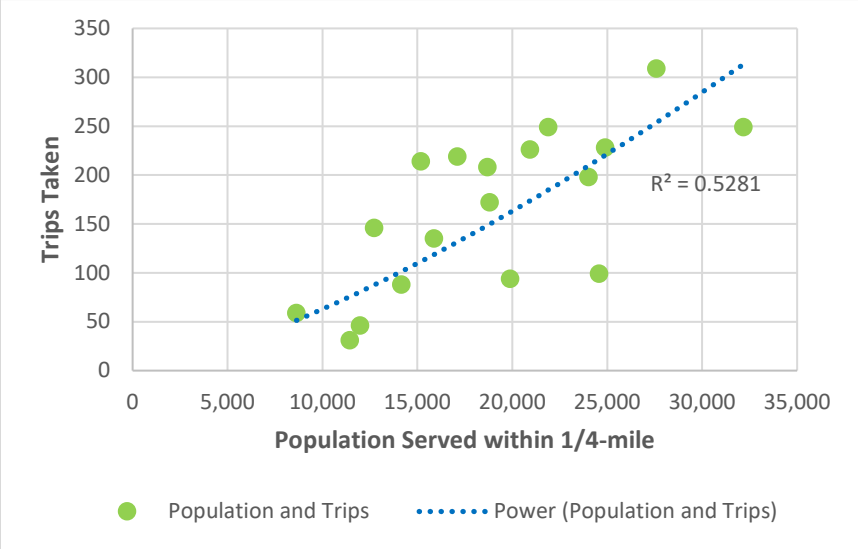


**TABLE 2B-3 – Jobs in Census Blocks with Access to Bike Share by Sample**

| Data Samples | | | | Jobs within 1/4-mile of a Bike | | Available Fleet | Jobs per Bike | Daily Trips | Jobs per Trip | Trips per Bike per Day |
|---|---|---|---|---|---|---|---|---|---|---|
| # | Date | Time | Day of Week | # | % | | | | | |
| **1** | 8/7/2018 | 7:00 | Tuesday | 131,506 | 85.8% | 121 | 1,087 | 172 | 765 | 1.4 |
| **3** | 9/10/2018 | 7:00 | Monday | 138,555 | 90.4% | 179 | 774 | 226 | 613 | 1.3 |
| **5** | 10/11/2018 | 7:00 | Thursday | 142,472 | 92.9% | 248 | 574 | 309 | 461 | 1.2 |
| **7** | 11/6/2018 | 7:00 | Tuesday | 139,798 | 91.2% | 280 | 499 | 228 | 613 | 0.8 |
| **9** | 12/17/2018 | 7:00 | Monday | 115,268 | 75.2% | 186 | 620 | 99 | 1,164 | 0.5 |
| **11** | 1/27/2019 | 7:00 | Sunday | 103,585 | 67.6% | 94 | 1,102 | 46 | 2,252 | 0.5 |
| **13** | 3/9/2019 | 7:00 | Saturday | 123,280 | 80.4% | 71 | 1,736 | 88 | 1,401 | 1.2 |
| **15** | 4/26/2019 | 7:00 | Friday | 123,222 | 80.4% | 127 | 970 | 219 | 563 | 1.7 |
| **17** | 5/16/2019 | 7:00 | Thursday | 114,005 | 74.3% | 95 | 1,200 | 146 | 781 | 1.5 |
| **2** | 8/22/2018 | 19:00 | Wednesday | 125,794 | 82.0% | 120 | 1,048 | 208 | 605 | 1.7 |
| **4** | 9/20/2018 | 19:00 | Thursday | 133,464 | 87.0% | 184 | 725 | 249 | 536 | 1.4 |
| **6** | 10/30/2018 | 19:00 | Tuesday | 136,824 | 89.2% | 268 | 511 | 198 | 691 | 0.7 |
| **8** | 11/17/2018 | 19:00 | Saturday | 134,856 | 87.9% | 290 | 465 | 249 | 542 | 0.9 |
| **10** | 12/24/2018 | 19:00 | Monday | 124,625 | 81.3% | 140 | 890 | 94 | 1,326 | 0.7 |
| **12** | 2/18/2019 | 19:00 | Monday | 91,469 | 59.6% | 75 | 1,220 | 31 | 2,951 | 0.4 |
| **14** | 3/29/2019 | 19:00 | Friday | 107,707 | 70.2% | 58 | 1,857 | 59 | 1,826 | 1.0 |
| **16** | 4/9/2019 | 19:00 | Tuesday | 115,609 | 75.4% | 105 | 1,101 | 135 | 856 | 1.3 |
| **18** | 5/4/2019 | 19:00 | Saturday | 121,417 | 79.2% | 120 | 1,012 | 214 | 567 | 1.8 |
| **Overall Average** | | | | **123,525** | **80.6%** | **153** | **966** | **165** | **1,028** | **1.1** |
| **Citywide Population** | | | | **153,345** | | | | | | |

**TABLE 2B-4 – Jobs in Census Blocks with Access to Bike Share by Trimester of Samples**

| Trimester | Date Range | Jobs within 1/4-mile of a Bike | | | | | | Average Available Fleet | Jobs per Bike | Average Daily Trips | Jobs per Trip | Trips per Bike per Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average | | Minimum | | Maximum | | | | | | |
| | | # | % | # | % | # | % | | | | | |
| **1** | 07/31/18 – 11/11/18 | 135,488 | 88.4% | 125,794 | 82.0% | 142,472 | 92.9% | 200 | 746 | 227 | 612 | 1.2 |
| **2** | 11/12/18 – 02/17/19 | 119,584 | 78.0% | 103,585 | 67.6% | 134,856 | 87.9% | 178 | 769 | 122 | 1,321 | 0.6 |
| **3** | 02/18/19 – 05/22/19 | 113,816 | 74.2% | 91,469 | 59.6% | 123,280 | 80.4% | 93 | 1,299 | 127 | 1,278 | 1.3 |
| **Overall Average** | | **123,525** | **80.6%** | **91,469** | **59.6%** | **142,472** | **92.9%** | **153** | **966** | **165** | **1,028** | **1.1** |
| **Citywide Population** | | **153,345** | | | | | | | | | | |

**Chart 2B-4 – Relationship of Jobs Served to Deployed Fleet**

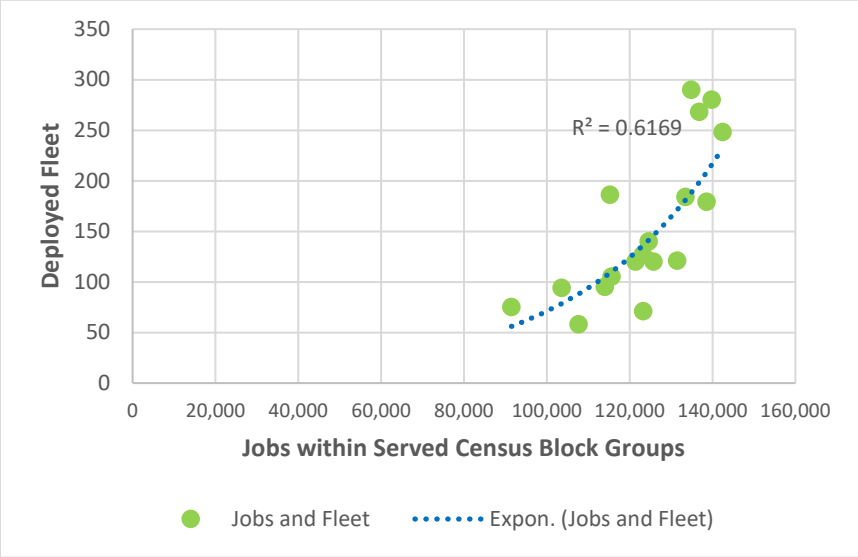



**Chart 2B-5 – Relationship of Jobs per Bike and Deployed Fleet**

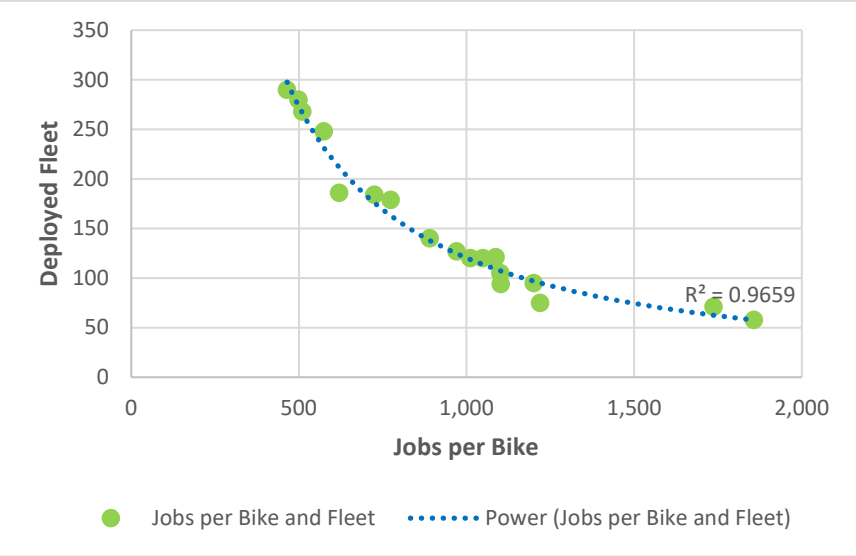



**Chart 2B-6 – Relationship of Jobs Served to Trips Taken**

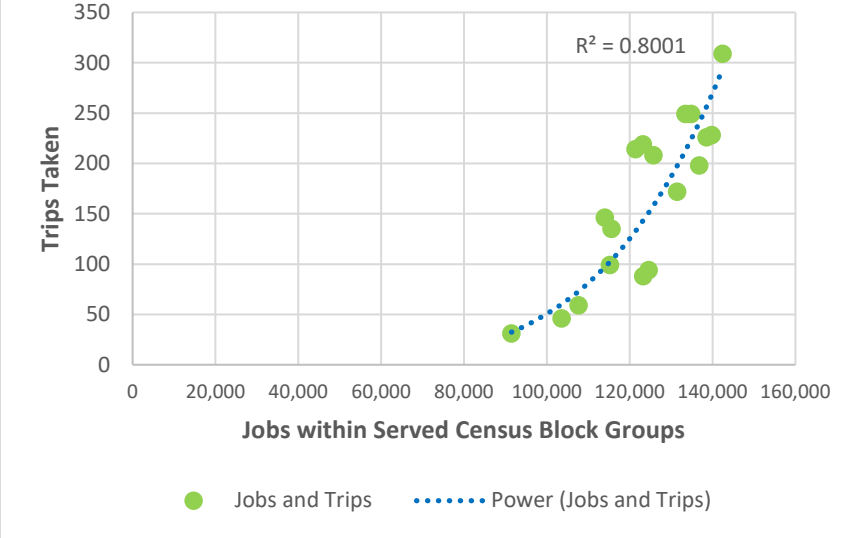
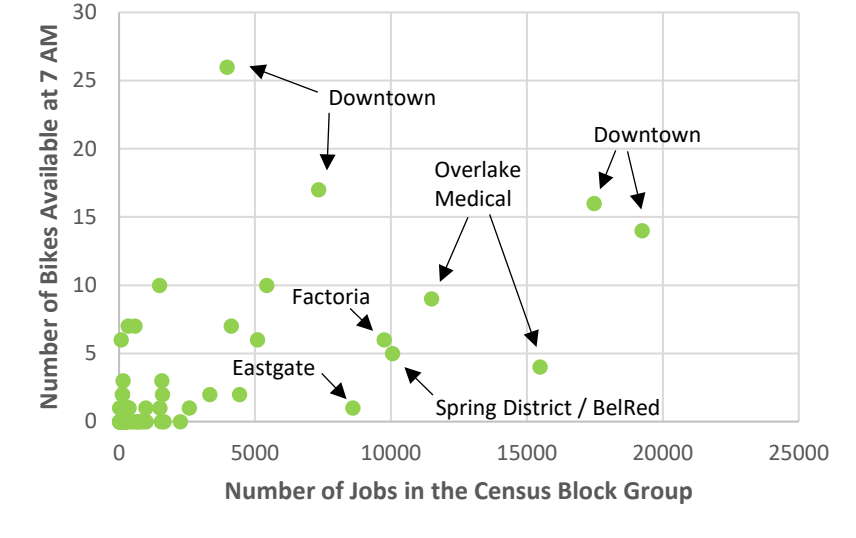
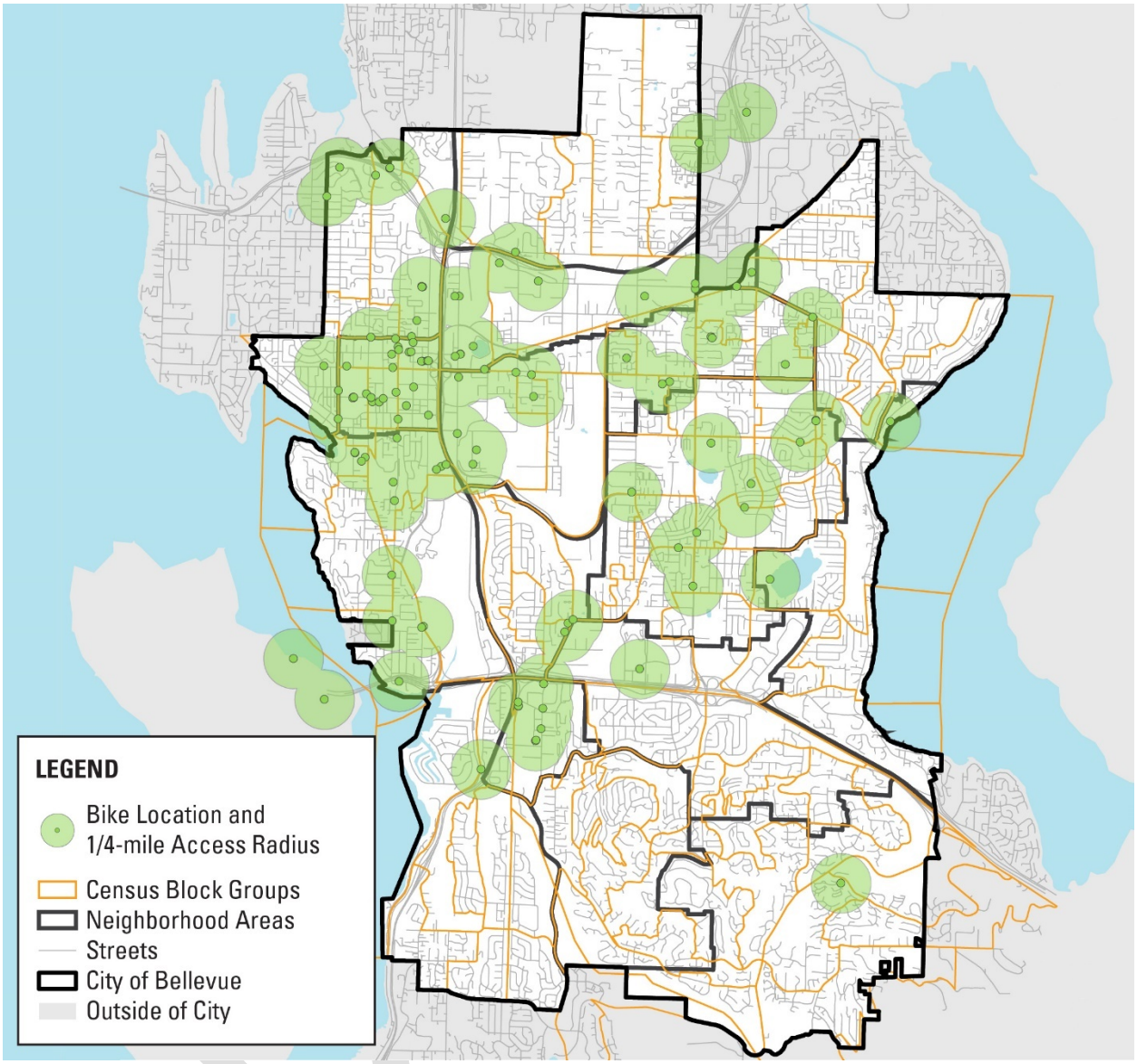


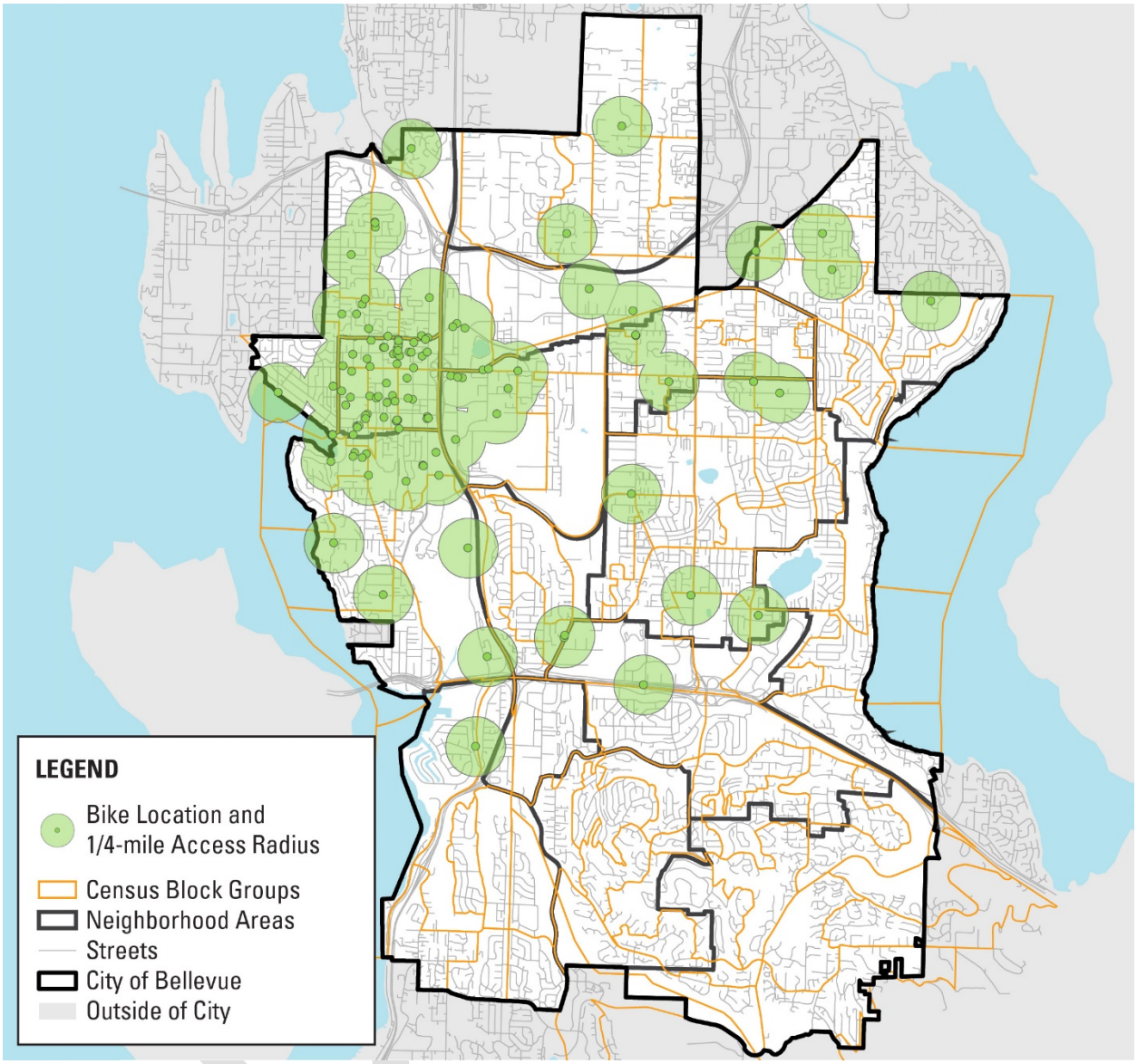

**Chart 2B-7 – Example of Bikes in Block Groups vs Jobs** (Sample #3)



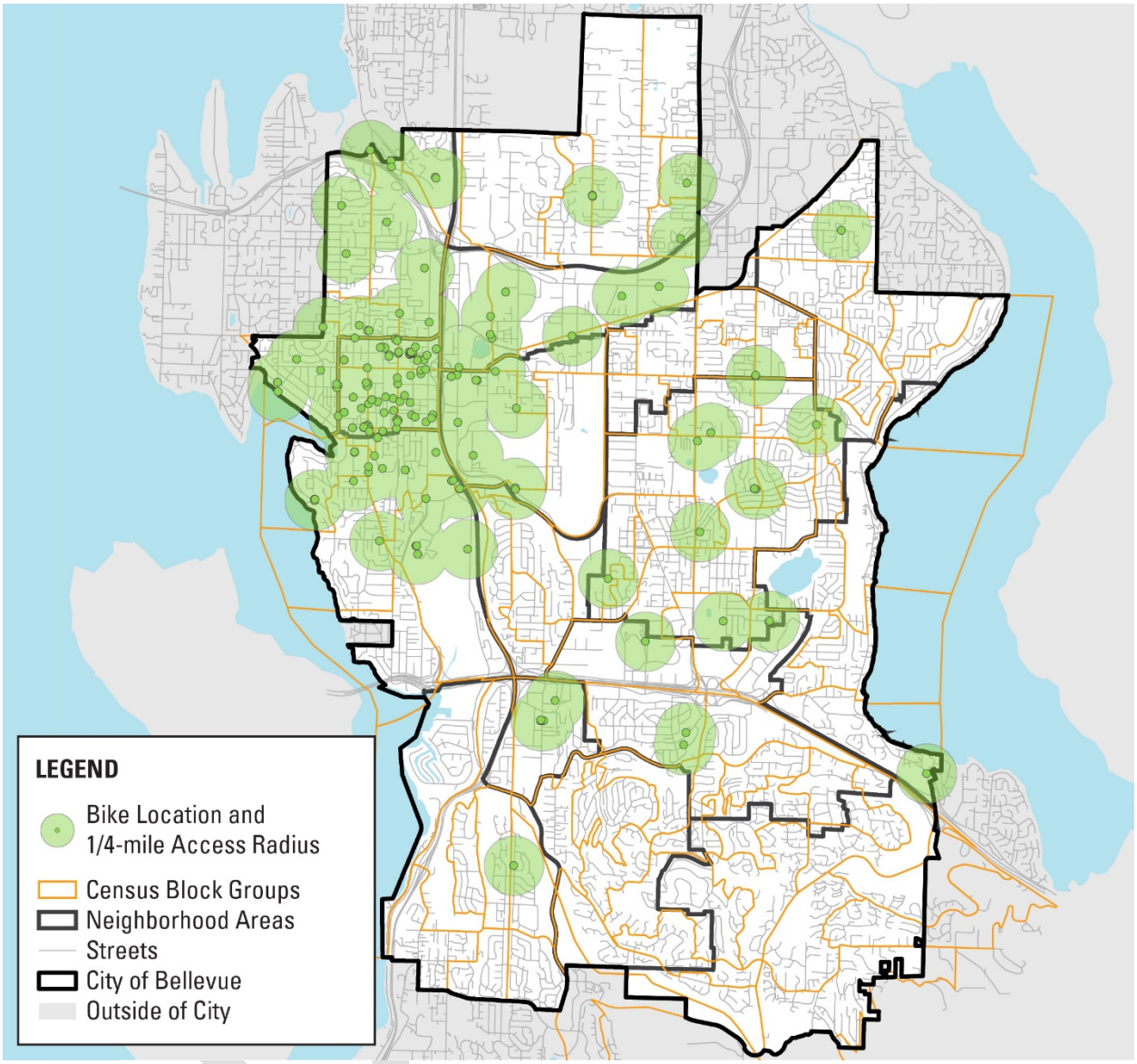
**Map 2B-1 – Bike Locations and Buffer Areas for Sample 01: 8/7/18 at 7am**



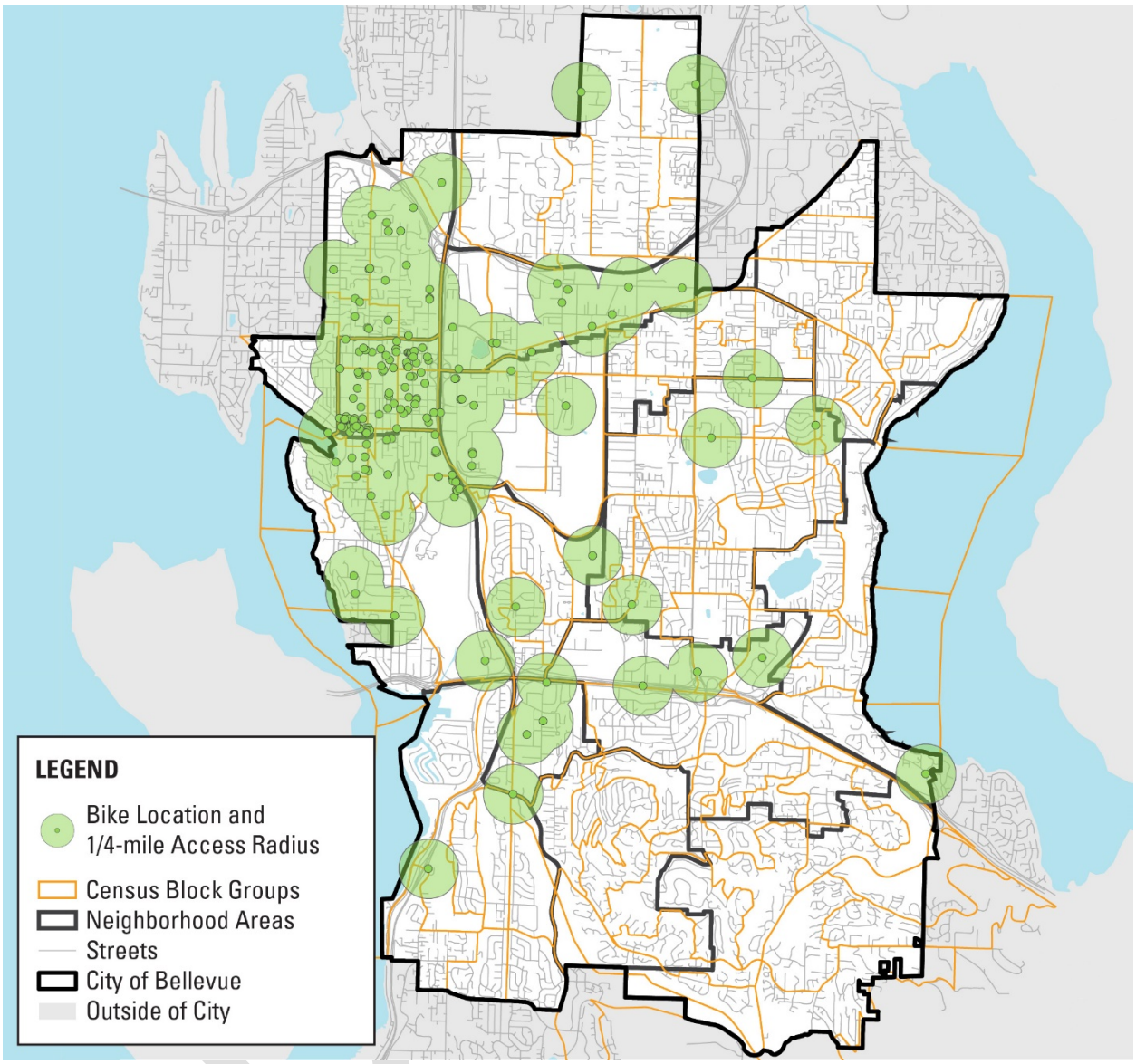
**Map 2B-2 – Bike Locations and Buffer Areas for Sample 02: 8/22/18 at 7pm**



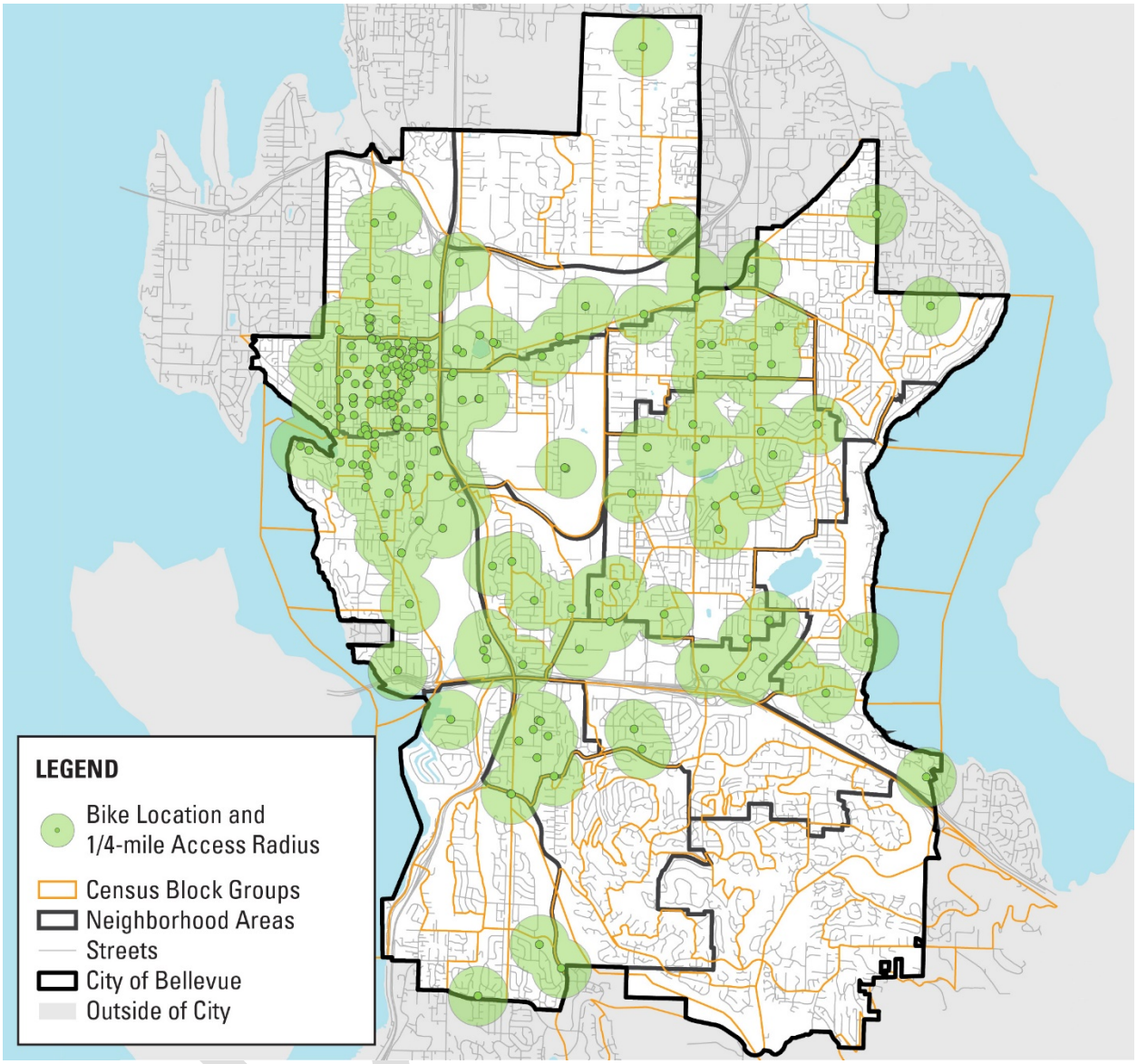
**Map 2B-3 – Bike Locations and Buffer Areas for Sample 03: 9/10/18 at 7am**



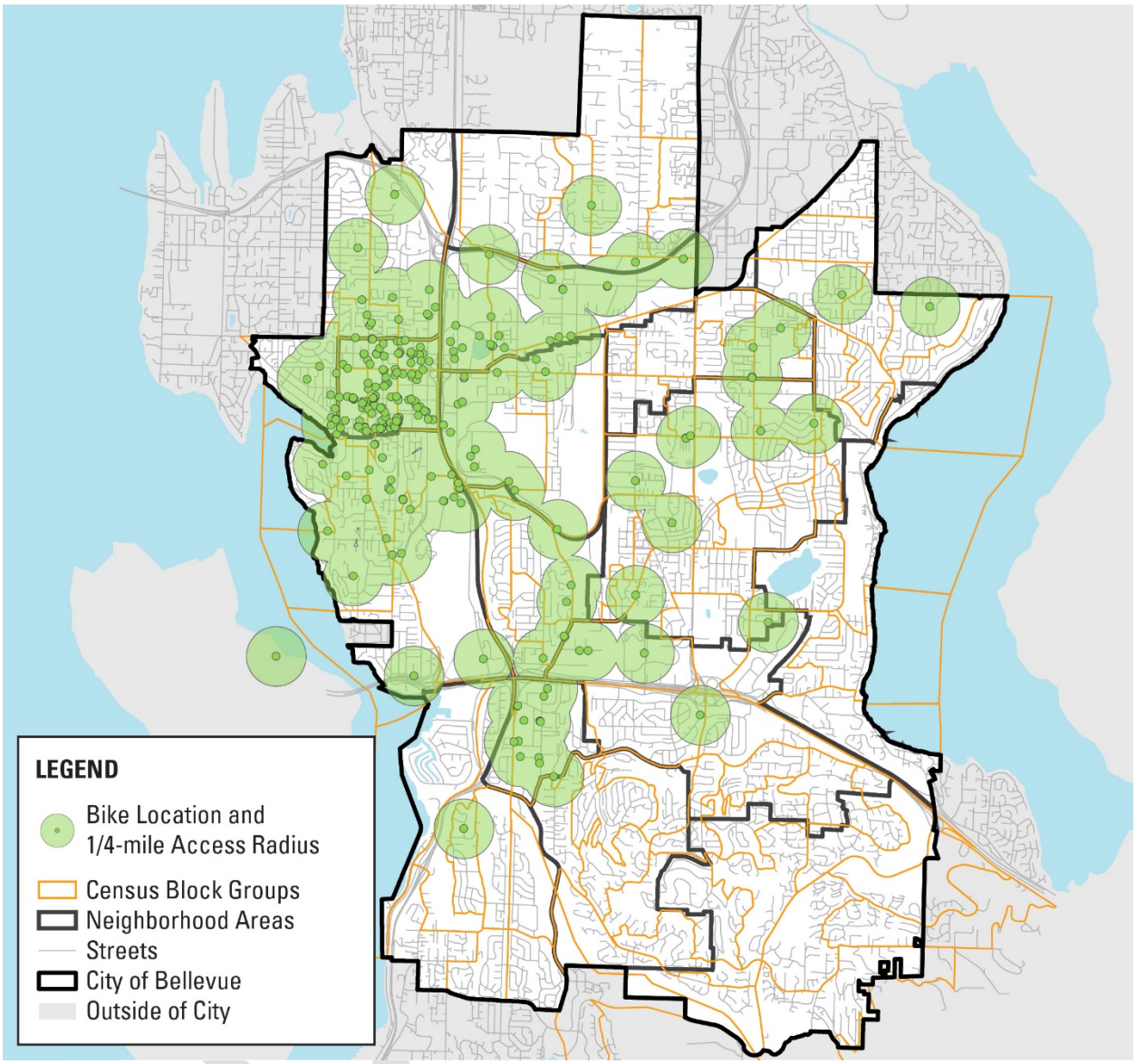
**Map 2B-4 – Bike Locations and Buffer Areas for Sample 04: 9/20/18 at 7pm**



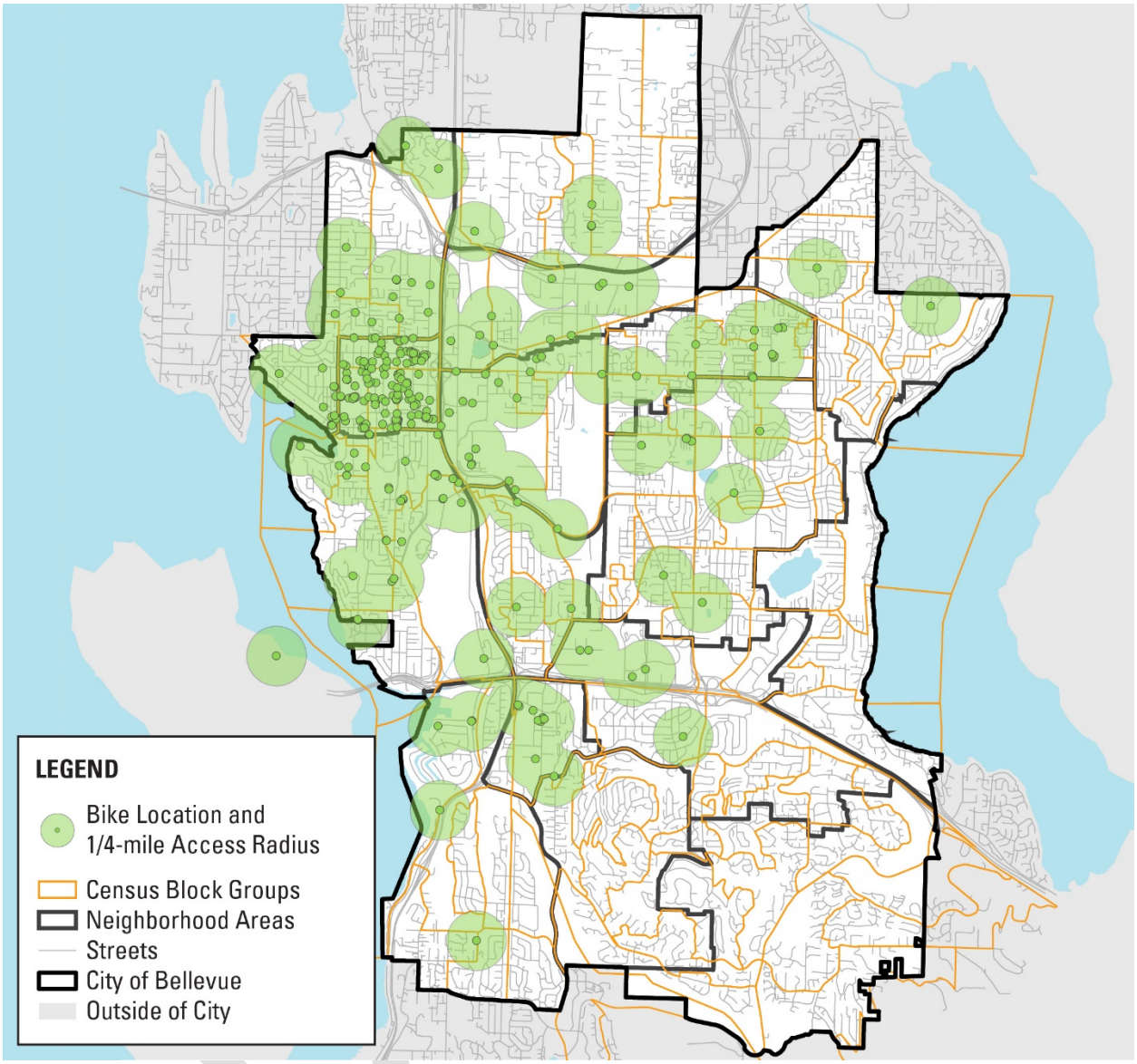
**Map 2B-5 – Bike Locations and Buffer Areas for Sample 05: 10/11/18 at 7am**



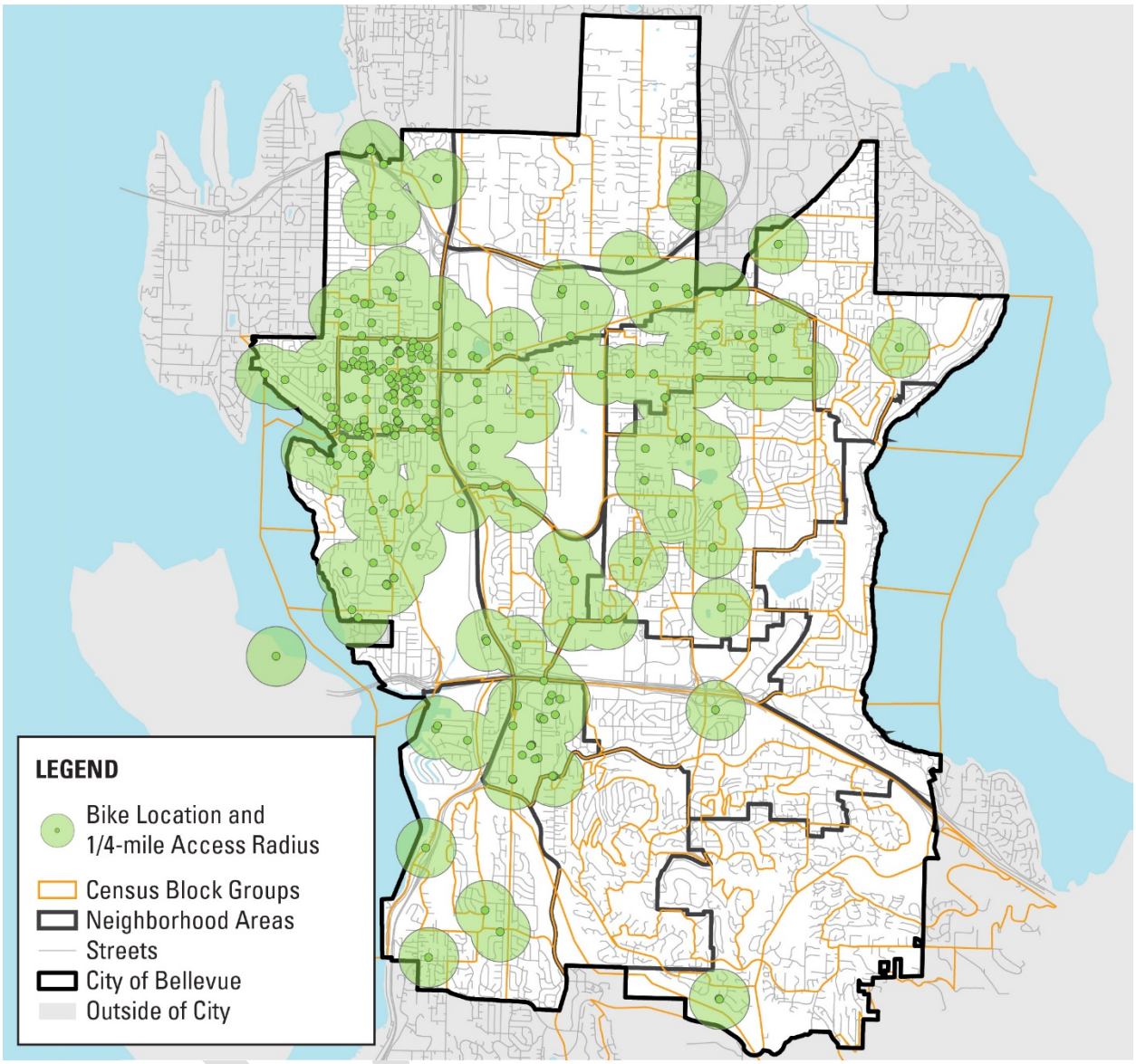
**Map 2B-6 – Bike Locations and Buffer Areas for Sample 06: 10/30/18 at 7pm**



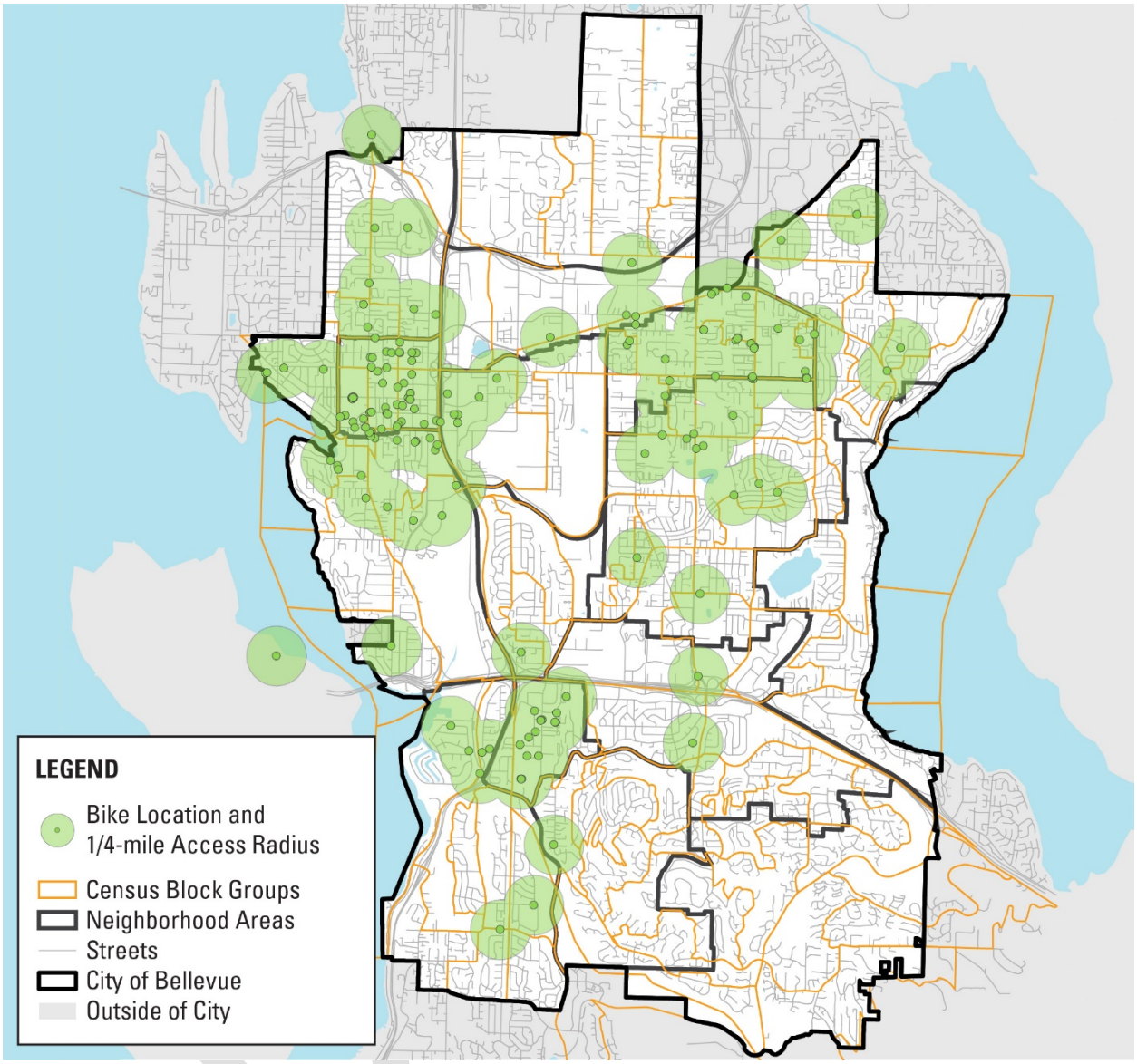
**Map 2B-7 – Bike Locations and Buffer Areas for Sample 07: 11/6/18 at 7am**



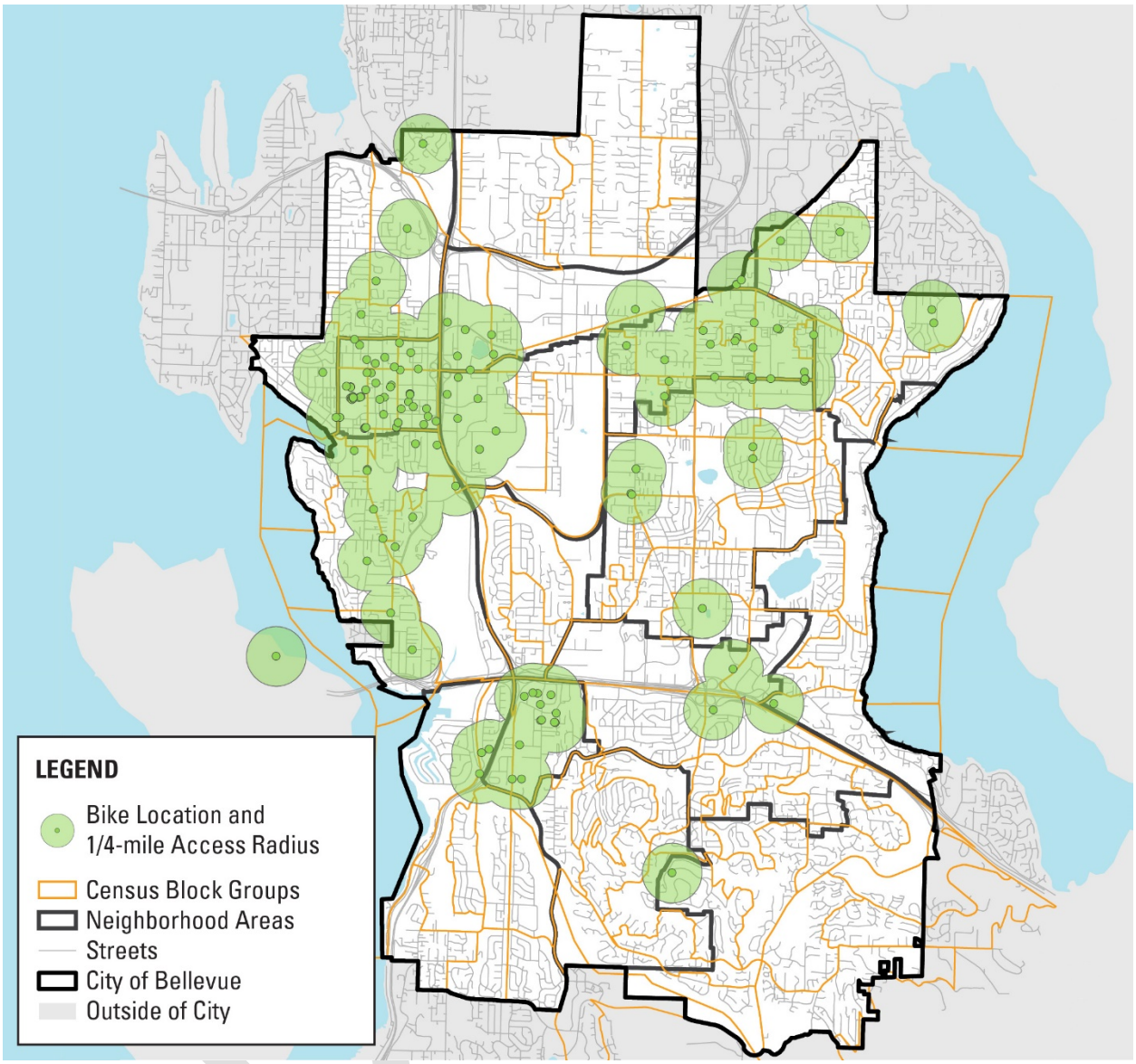
**Map 2B-8 – Bike Locations and Buffer Areas for Sample 08: 11/17/18 at 7pm**



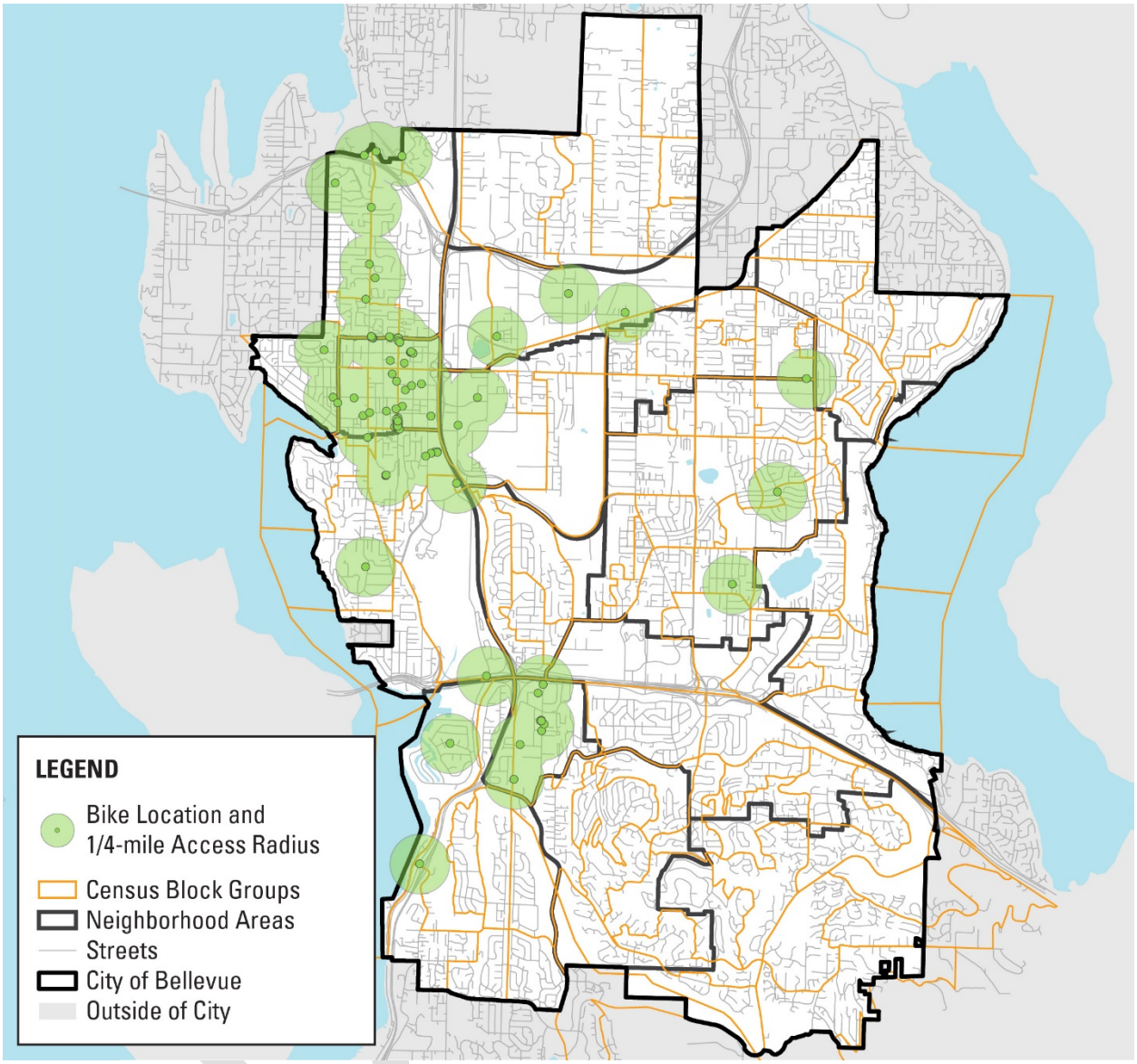
**Map 2B-9 – Bike Locations and Buffer Areas for Sample 09: 12/17/18 at 7am**



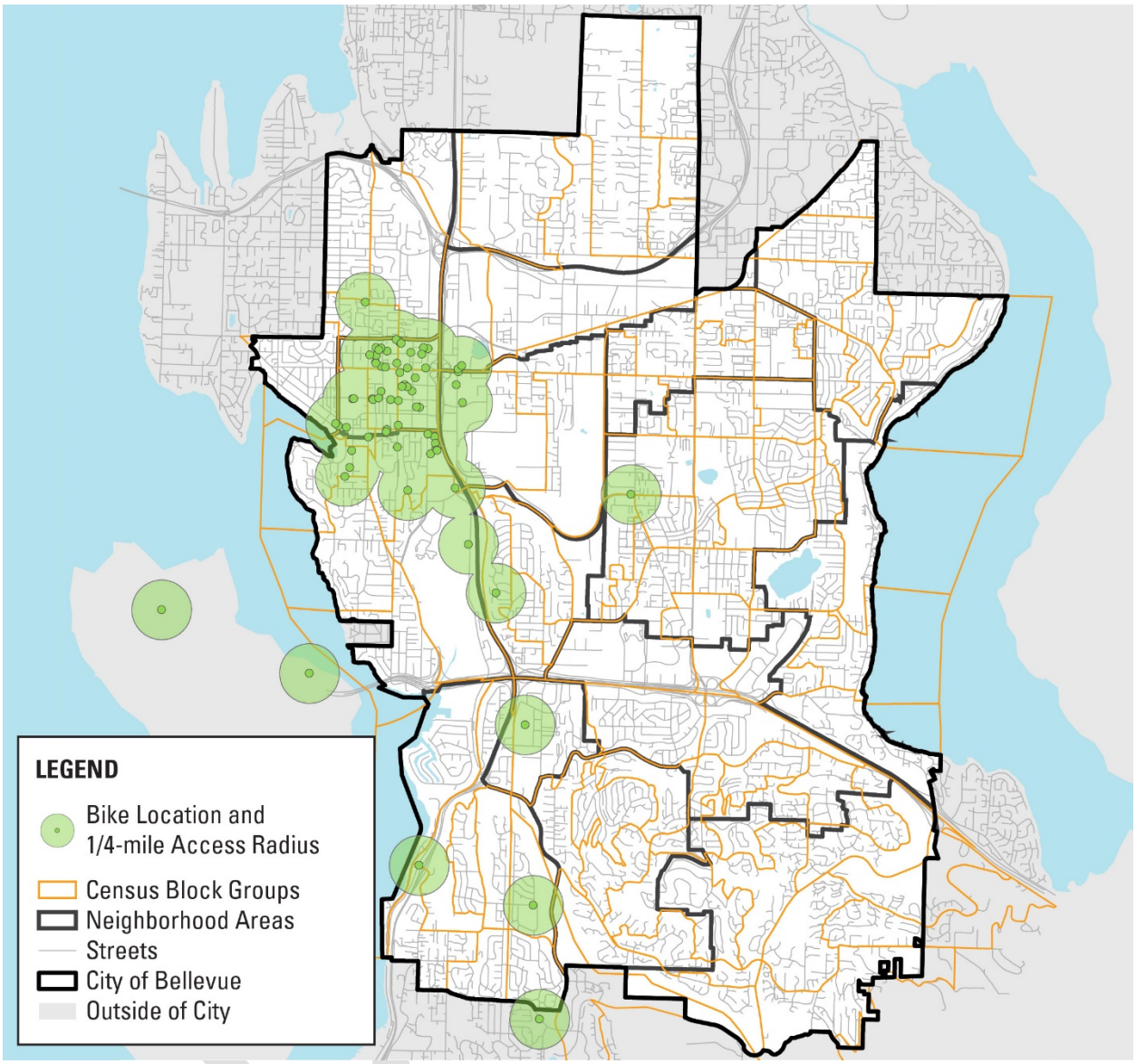
**Map 2B-10 – Bike Locations and Buffer Areas for Sample 10: 12/24/18 at 7pm**



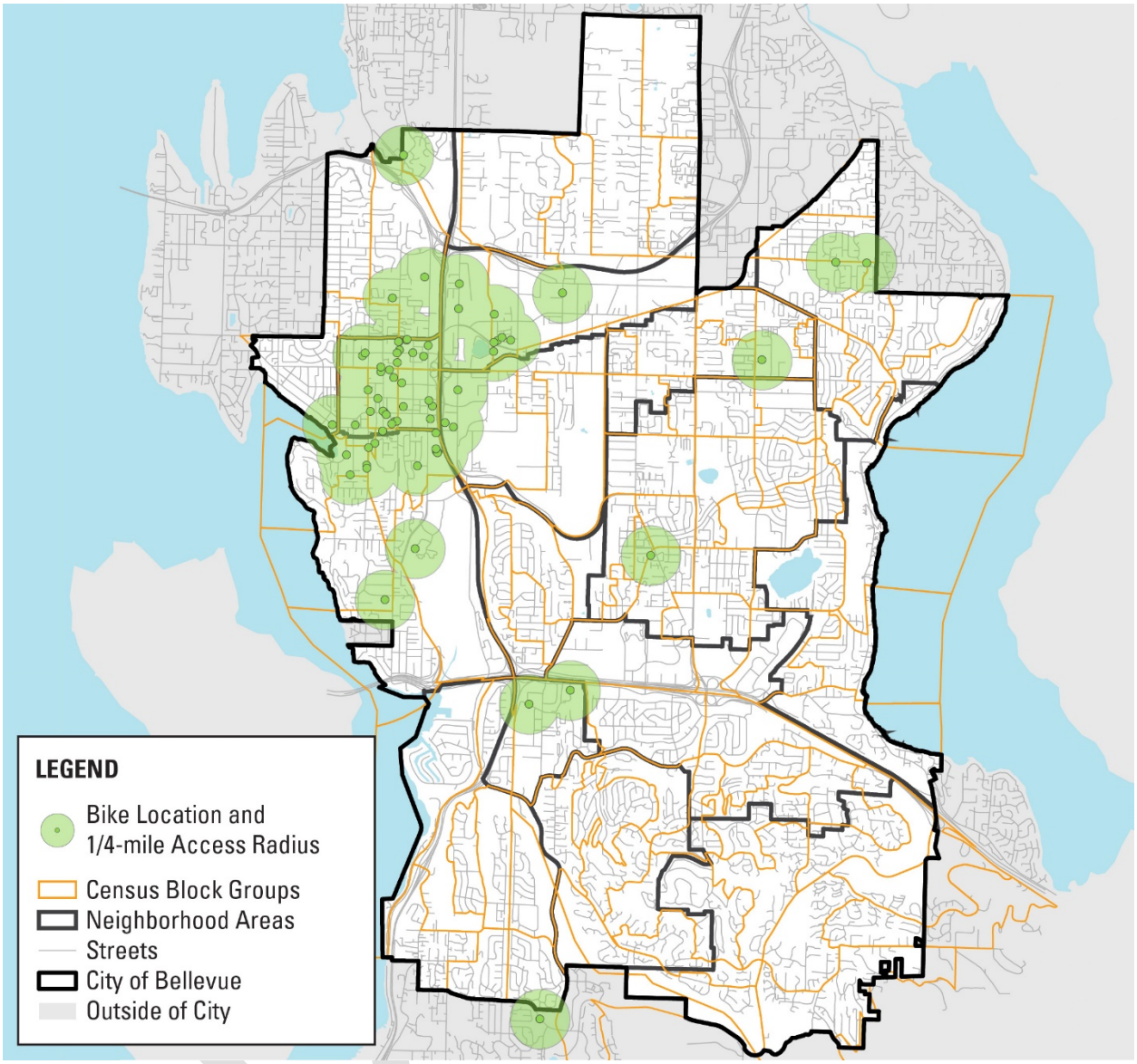
**Map 2B-11 – Bike Locations and Buffer Areas for Sample 11: 1/27/19 at 7am**



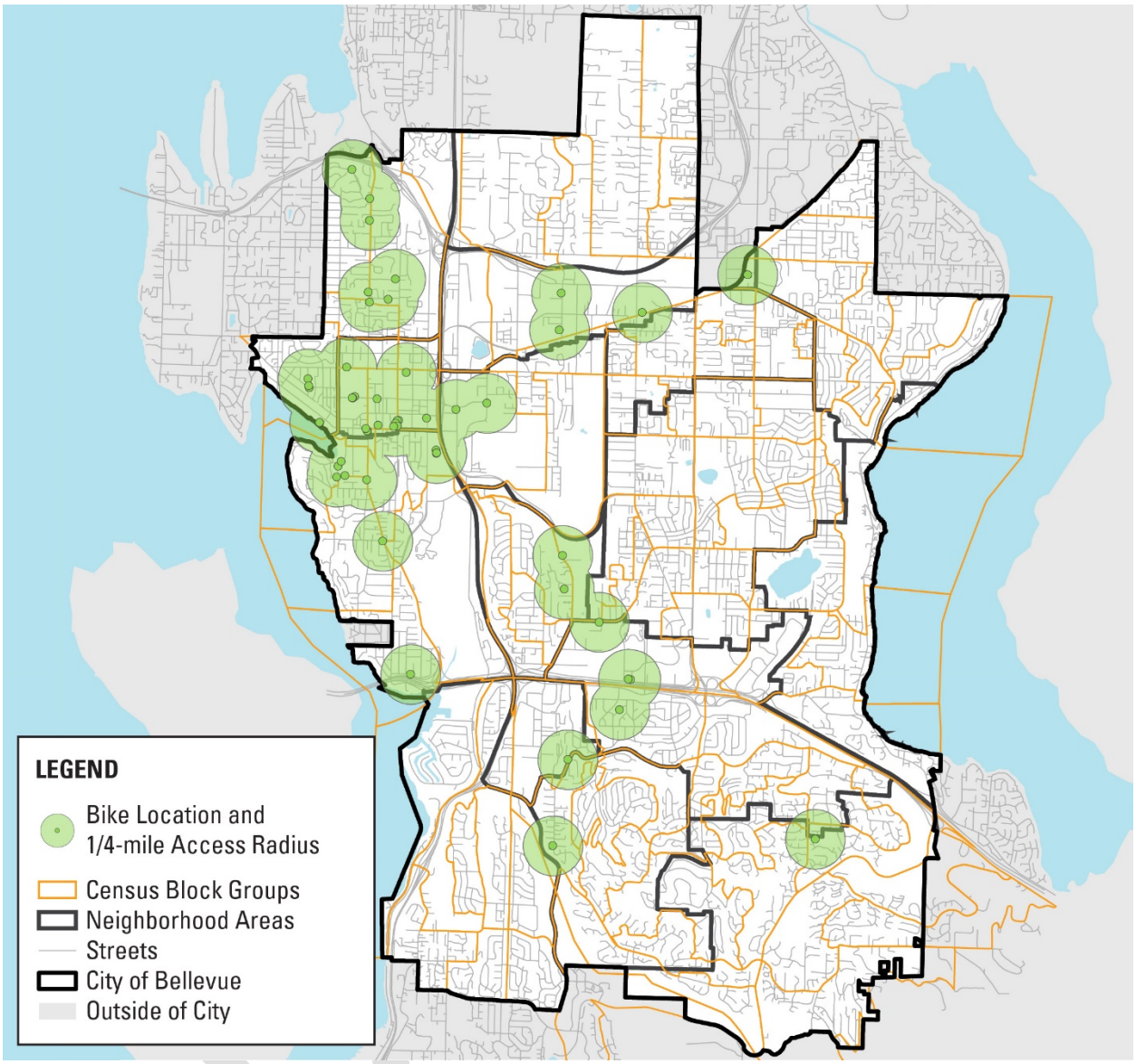
**Map 2B-12 – Bike Locations and Buffer Areas for Sample 12: 2/18/19 at 7pm**



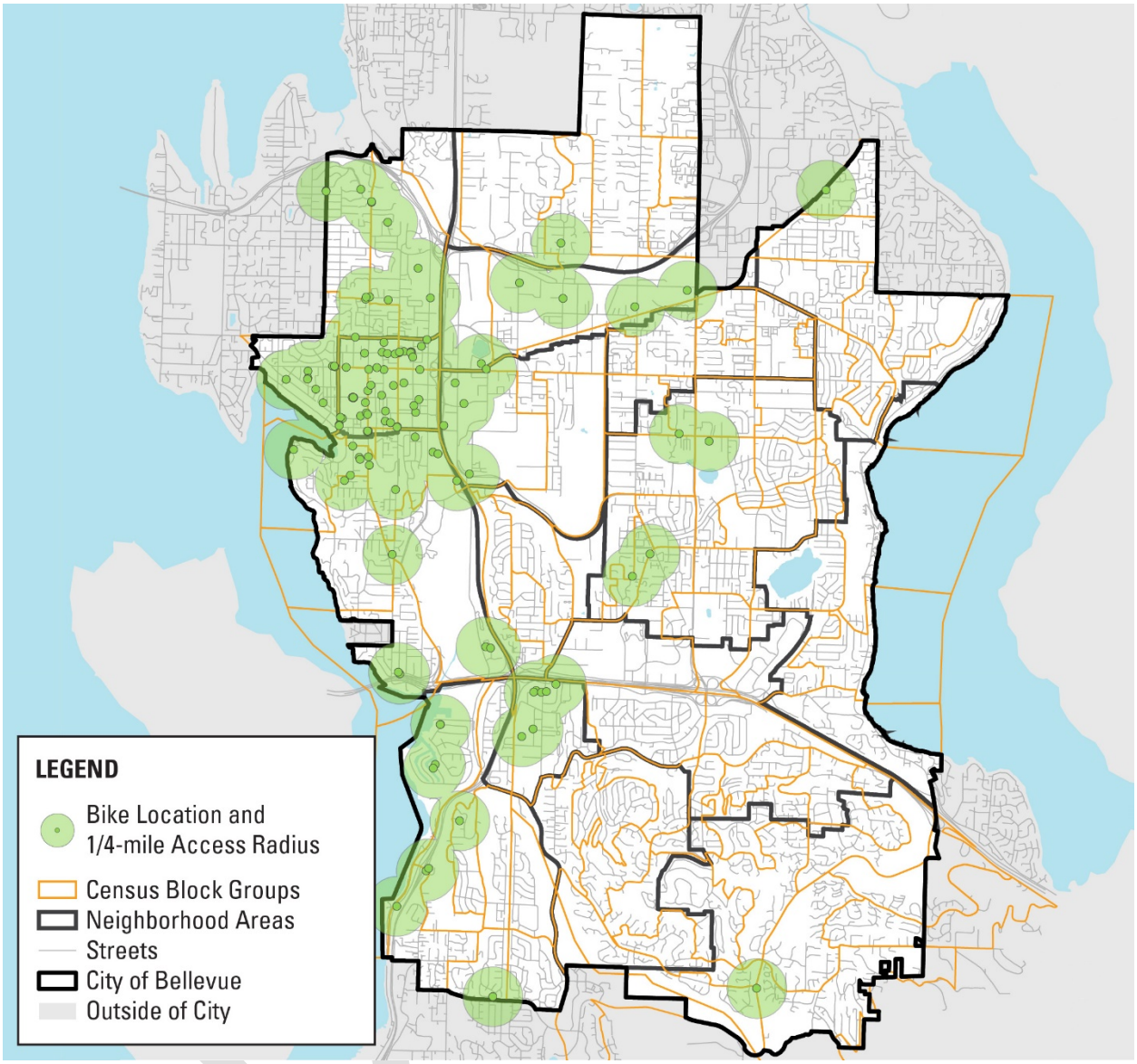
**Map 2B-13 – Bike Locations and Buffer Areas for Sample 13: 3/9/19 at 7am**



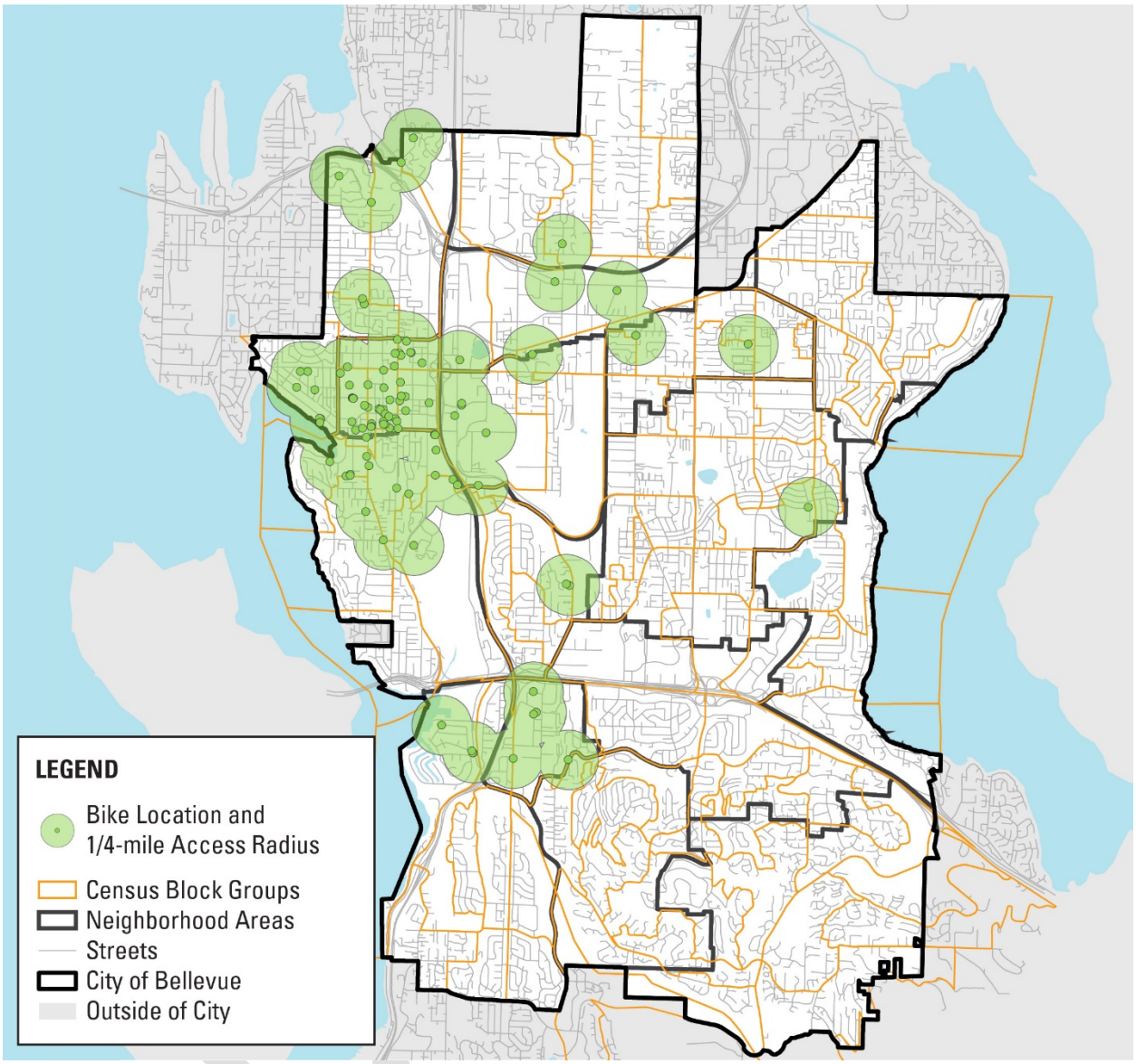
**Map 2B-14 – Bike Locations and Buffer Areas for Sample 14: 3/29/19 at 7pm**



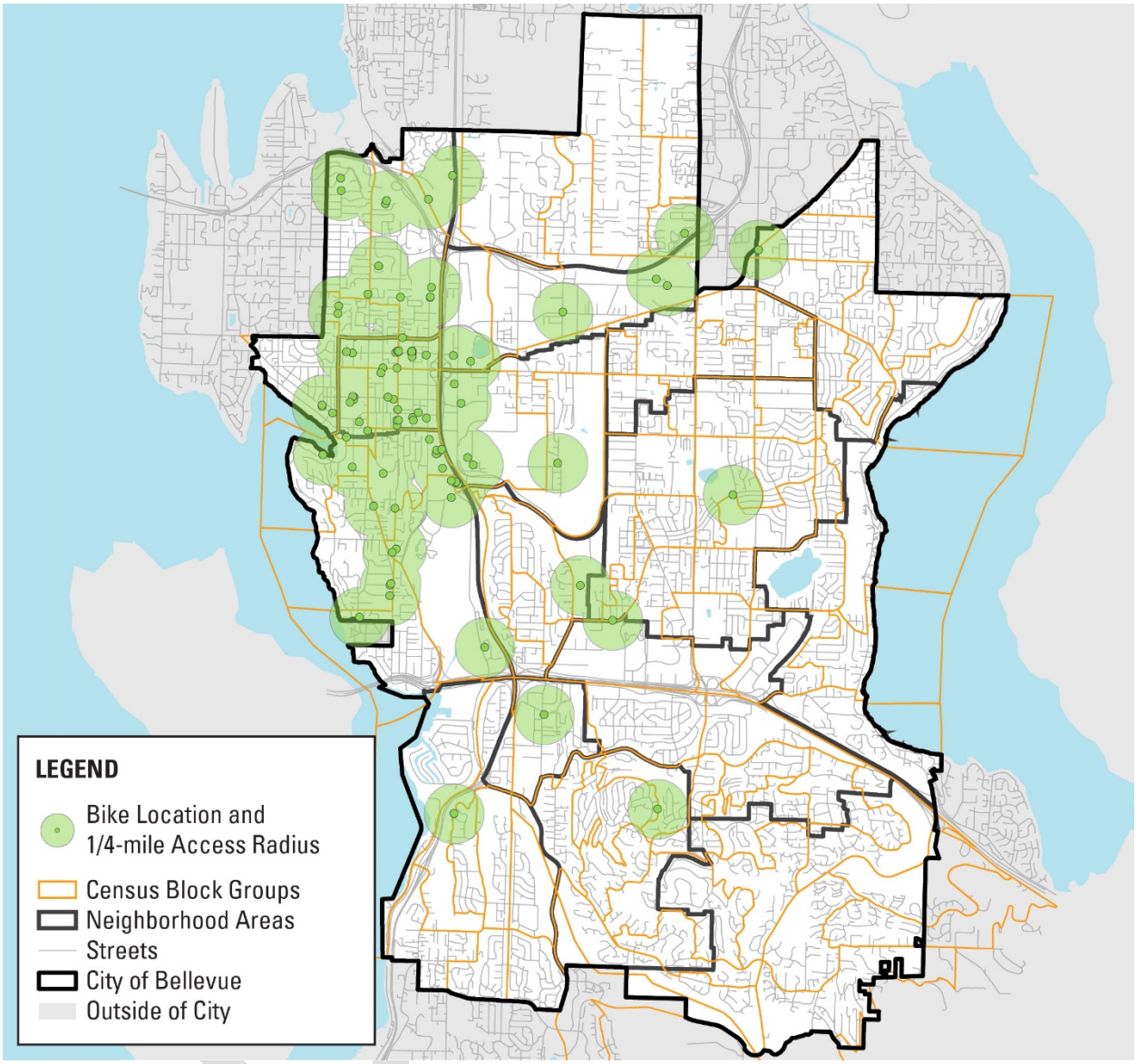
**Map 2B-15 – Bike Locations and Buffer Areas for Sample 15: 4/26/19 at 7am**



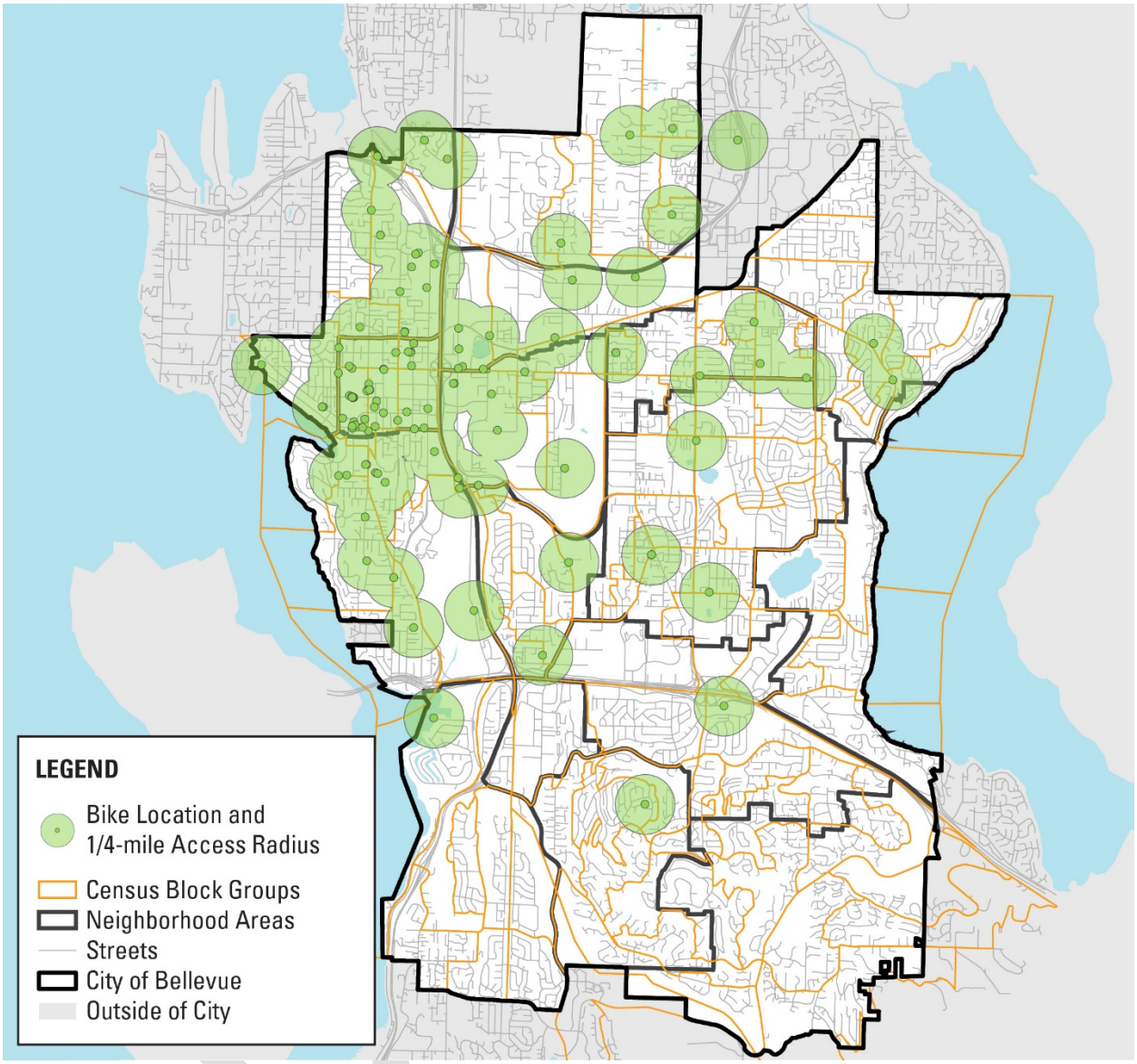
**Map 2B-16 – Bike Locations and Buffer Areas for Sample 16: 4/9/19 at 7pm**



**Map 2B-17 – Bike Locations and Buffer Areas for Sample 17: 5/16/19 at 7am**



**Map 2B-18 – Bike Locations and Buffer Areas for Sample 18: 5/4/19 at 7pm**



# 3. System Performance

*These questions provided insight into bike share's performance as a transportation mode and mobility option, including where bike share trips started and ended, along which corridors users traveled, and the proximity of trips to select locations of interest like bus stops and city parks. In the following queries, "geographic areas" refers to established Neighborhood Areas* (see Comprehensive Plan)*, Bike Share Service Areas* (see Permit Special Conditions Attachment C), and *Census Block Groups.*

## 3A. Trips – General

**Results**:

**Overall**

- 38,310 trips were taken on Lime bikes in Bellevue between July 31, 2018 and May 22, 2019.
  - Half of all trips were taken by the end October—the third month of service. During these three months, ridership ranged between about 6,000–6,800 trips each month.
- Overall, an average of 129 bike share trips were taken daily. During the first trimester (weeks 1–15 – 7/31–11/11), an average of 201 trips were taken daily.
  - The most trips taken in a single day was 309 (on 10/11), and the least during that period was 59 (on 8/2, the third day of service).
- September was the month with the most ridership, with an average of 228 trips taken daily.
  - Week-on-week average daily ridership dropped significantly three times in October and November: in week 10 (-34%, from 262 to 174), week 13 (-27%, from 226 to 165), and week 16 (-25%, from 188 to 138).
    - During the last of these, the week of Thanksgiving, Lime began reducing the fleet deployed in Bellevue—from 301 bikes to 276, then to 240. The average number of bikes available in Bellevue continued to decline every week thereafter through mid-February—week 29 (2/11–2/17), the end of the second trimester—when an average of only 68 bikes remained in Bellevue. Weekly average daily trips declined faster than the available fleet during most of these weeks.
- Average trips per bike per day (t/b/d) was also greatest during the first trimester (1.10), though the metric was nearly the same in the third trimester (1.08) when the average available fleet and number of trips taken were both significantly lower.
  - The overall t/b/d metric (0.88) is impacted by performance during the second trimester (average of 0.47).
  - The lowest weekly average t/b/d was 0.19 (week 28 – 2/4-2/10), when only 73 bikes were available and an average of 14 daily trips were taken. During that week, an average of 28 bikes were available in Downtown daily.
- Just as there is considerable variation in the trips and trips per bike per day metrics when considered overall versus during different time periods—for example, by month or trimester—there is also significant variation when considered by different geographies.
  - Downtown generated more than half of the average daily trips taken for all but two months of the evaluation period—January and May 2019, the two months with the smallest average daily fleet available in Downtown. This is despite Downtown generally having only a quarter to a third of the bicycles available citywide at 7am daily.

  - The monthly average trips per bike per day never quite hit 1.5 citywide—it was 1.42 in August and 1.47 in May. However, this metric was significantly higher in Downtown than in any other neighborhood throughout the pilot, exceeding 1.0 t/b/d for all but two months, exceeding 1.5 t/b/d for four months, and averaging 1.4 for the pilot evaluation period overall.
    - This analysis is imperfect, as bikes not in a given neighborhood at 7am may have been brought into that area later in the day before being used again. However, this offers a reasonable estimate of where bikes were located in comparison to where trips began.
  - In general, growth in the weekly average available fleet corresponded with a decline in weekly average t/b/d, and vice versa with fleet decline.
- Based on the observed patterns, some inferences can be made about what might have happened if service had remained more consistent throughout the pilot. If service had been reduced less during the winter, and if service in late spring and summer 2019 had matched that provided in fall 2018, it is reasonable to estimate that about 66,000 trips could have been taken during the one-year pilot period. This estimate is based on the following assumptions:
  - If the average available fleet (114 bikes) and ridership (140 daily trips) of the last six full weeks of the evaluation period (4/8–5/19) had continued from 5/23–7/31—a period for which verified data is not yet available—about 9,800 additional trips would be reflected in the annual pilot evaluation data, or 48,083 total trips.
    - This assumes no growth in availability or use, just a flat projection through the remainder of the pilot period.
    - The data for May 2019 does not reflect the full month; the last day for which data was provided is 5/22. In the last six full weeks of data, the average weekly fleet is 119 bikes, there were an average of 140 daily trips, and about 1.19 trips were taken per bike per day.
  - If the average available fleet (264 bikes) and ridership (147 daily trips) of November and early December had been maintained from December through April, an additional 11,100 trips may have been taken during this time—double the actual ridership with a significantly reduced fleet.
    - By comparison, from 12/1–4/30, the average available fleet was 113 bikes, there were 74 daily trips on average, and a total of about 11,100 trips. During that time, the fleet fell below 100 bikes on 12/23 and remained below 100 bikes until 4/8.
  - If the average available fleet and daily ridership of August through October 2018 had been redeployed and replicated in May through July 2019, an additional 5,800 trips may have been taken during this time relative to the straight projection of spring trip data (noted above).
  - Together, these estimations result in a hypothetical annual total of about 66,500 trips—over 28,000 (74%) more than realized in the pilot evaluation period.

**Trips by Day**

- Chart 3A-1 depicts the relationship between daily citywide available fleet, average daily trips, and average trips per bike per day. This demonstrates that even as the overall number of bikes deployed remained relatively consistent over a series of consecutive days, ridership fluctuated significantly.
- Charts 3A-2 and 3A-3 depict the relationship between the daily citywide available fleet and daily trips taken.

**Chart 3A-1 – Daily Trips and Trips per Bike per Day Compared with Daily Fleet**

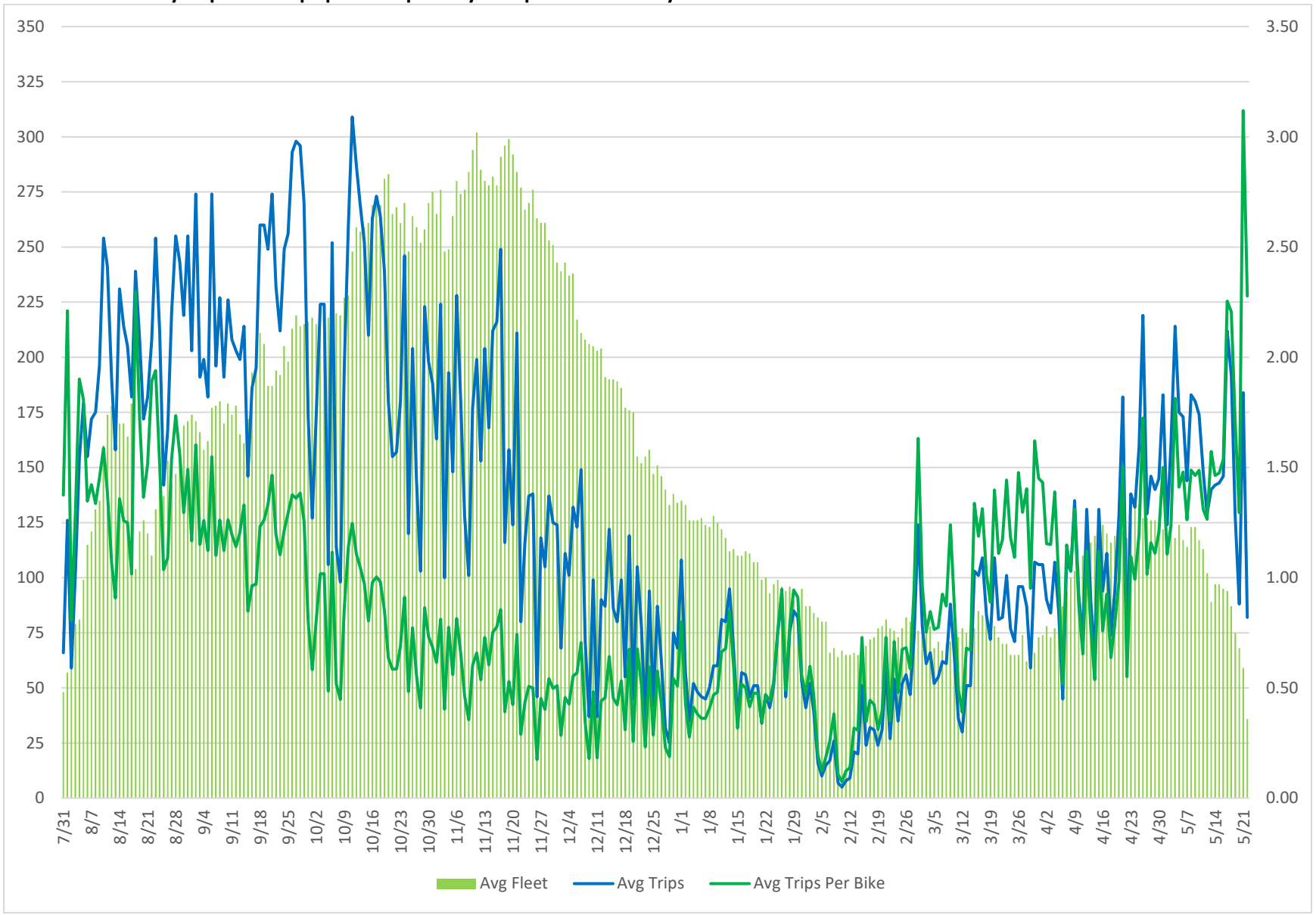


**Chart 3A-2 – Relationship of Daily Trips to Daily Available Fleet**

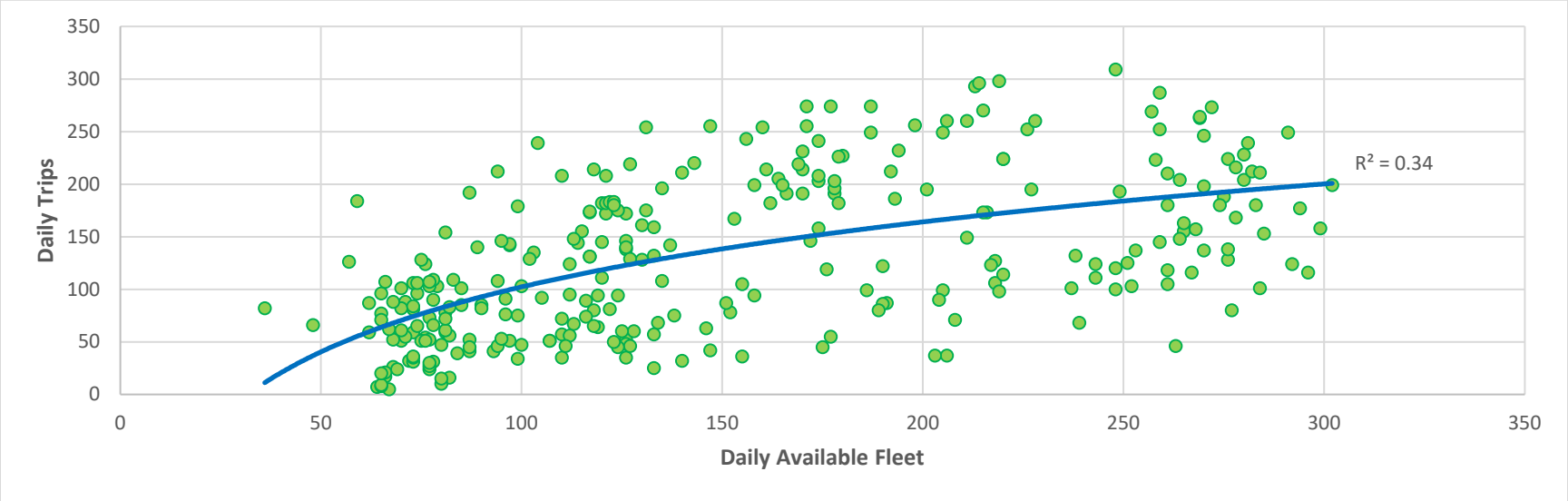
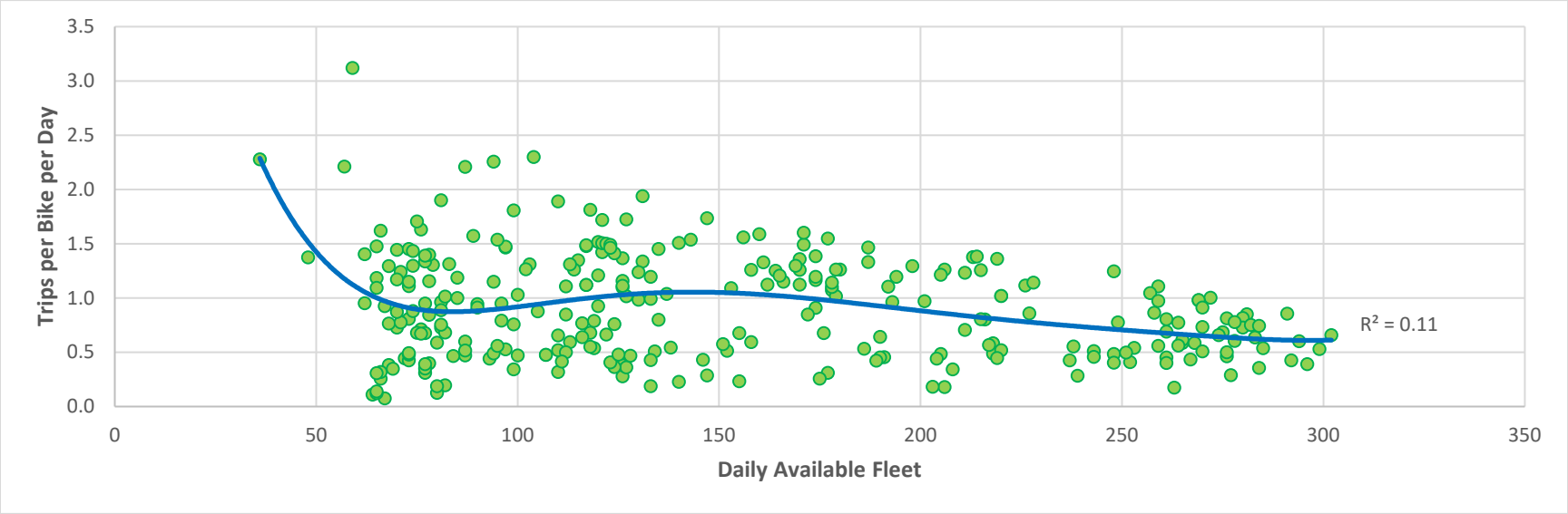



**Chart 3A-3 – Relationship of T/B/D to Daily Available Fleet**



**Trips by Week**

- Table 3A-1 depicts the total number of trips taken during each week and the cumulative share of the total during the pilot evaluation period.
- Table 3A-2 summarizes by week the average available fleet, average daily trips, and average trips per bike per day.
- Table 3A-3 expands on the former to calculate week-on-week percent change in each of the three metrics, plus the difference between them. This shows that changes to the fleet—positive or negative—did not necessarily result in the same for daily trips. For example, while the fleet grew every week from weeks 5 through 12, there were four weeks during that period when average daily ridership declined.
- Chart 3A-4 depicts the relationship between the average citywide available fleet, average daily trips, and average trips per bike per day summarized by week.
- Chart 3A-5 depicts the relationship between weekly average available fleet and average daily trips, showing that an increase in fleet generally relates to an increase in trips ($R^2$=0.41). Data from the pilot indicates diminishing returns the larger the fleet grew; however, it should be noted that the largest fleets also correspond with the late fall and beginning of the winter season.
- Chart 3A-6 depicts the relationship between weekly average available fleet and average trips per bike per day.
- Chart 3A-7 depicts the cumulative trips taken by week, highlighting how early in the pilot half of all trips taken was achieved.

**Chart 3A-4 – Average Daily Trips Compared with Average Available Fleet by Week**

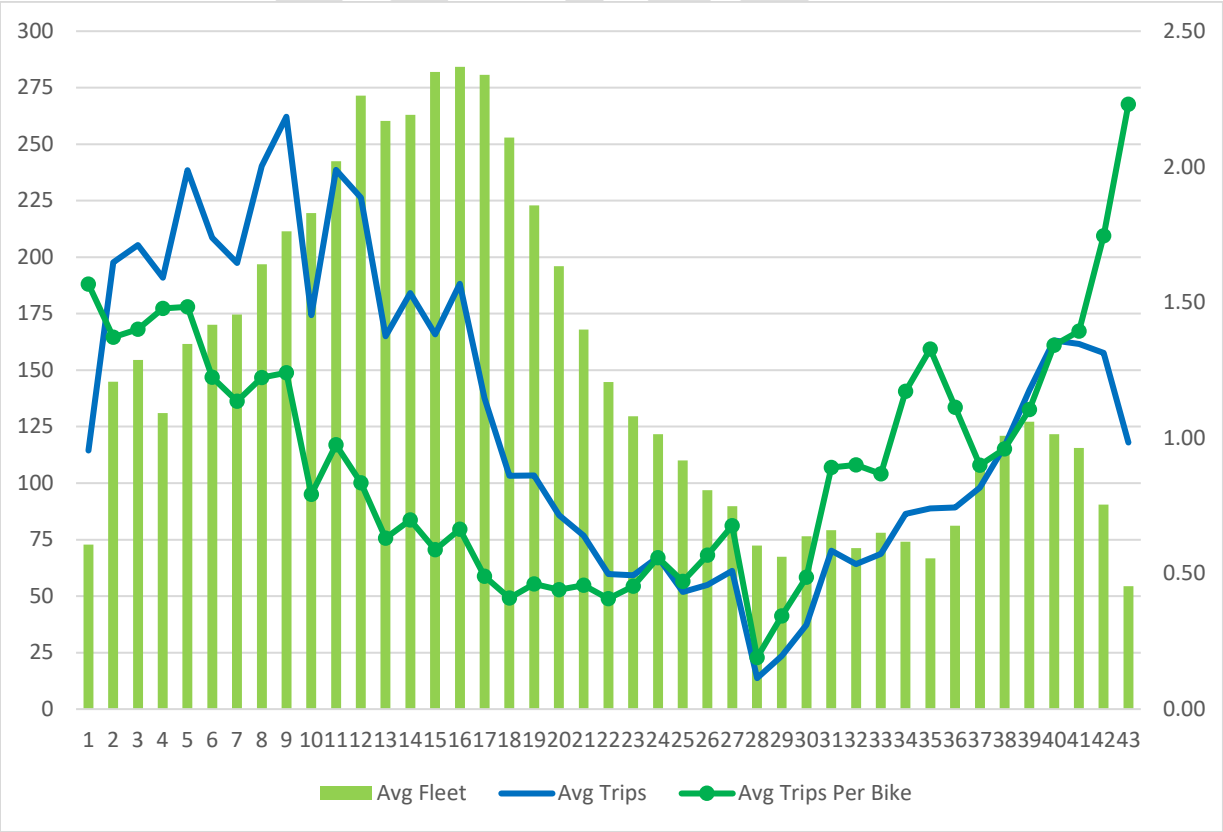


**TABLE 3A-1 – Total and Cumulative Trips by Week**

| Week | Date Range | Total Trips | | Cumulative Trips | |
|---|---|---|---|---|---|
| | | # | % | # | % |
| **1** | 07/31/18 – 08/05/18 | 687 | 1.8% | 687 | 2% |
| **2** | 08/06/18 – 08/12/18 | 1,384 | 3.6% | 2,071 | 5% |
| **3** | 08/13/18 – 08/19/18 | 1,437 | 3.8% | 3,508 | 9% |
| **4** | 08/20/18 – 08/26/18 | 1,336 | 3.5% | 4,844 | 13% |
| **5** | 08/27/18 – 09/02/18 | 1,669 | 4.4% | 6,513 | 17% |
| **6** | 09/03/18 – 09/09/18 | 1,460 | 3.8% | 7,973 | 21% |
| **7** | 09/10/18 – 09/16/18 | 1,382 | 3.6% | 9,355 | 24% |
| **8** | 09/17/18 – 09/23/18 | 1,682 | 4.4% | 11,037 | 29% |
| **9** | 09/24/18 – 09/30/18 | 1,835 | 4.8% | 12,872 | 34% |
| **10** | 10/01/18 – 10/07/18 | 1,220 | 3.2% | 14,092 | 37% |
| **11** | 10/08/18 – 10/14/18 | 1,670 | 4.4% | 15,762 | 41% |
| **12** | 10/15/18 – 10/21/18 | 1,584 | 4.1% | 17,346 | 45% |
| **13** | 10/22/18 – 10/28/18 | 1,155 | 3.0% | 18,501 | 48% |
| **14** | 10/29/18 – 11/04/18 | 1,289 | 3.4% | 19,790 | 52% |
| **15** | 11/05/18 – 11/11/18 | 1,161 | 3.0% | 20,951 | 55% |
| **16** | 11/12/18 – 11/18/18 | 1,318 | 3.4% | 22,269 | 58% |
| **17** | 11/19/18 – 11/25/18 | 964 | 2.5% | 23,233 | 61% |
| **18** | 11/26/18 – 12/02/18 | 723 | 1.9% | 23,956 | 63% |
| **19** | 12/03/18 – 12/09/18 | 724 | 1.9% | 24,680 | 64% |
| **20** | 12/10/18 – 12/16/18 | 601 | 1.6% | 25,281 | 66% |
| **21** | 12/17/18 – 12/23/18 | 537 | 1.4% | 25,818 | 67% |
| **22** | 12/24/18 – 12/30/18 | 418 | 1.1% | 26,236 | 68% |
| **23** | 12/31/18 – 01/06/19 | 414 | 1.1% | 26,650 | 70% |
| **24** | 01/07/19 – 01/13/19 | 471 | 1.2% | 27,121 | 71% |
| **25** | 01/14/19 – 01/20/19 | 363 | 0.9% | 27,484 | 72% |
| **26** | 01/21/19 – 01/27/19 | 385 | 1.0% | 27,869 | 73% |
| **27** | 01/28/19 – 02/03/19 | 428 | 1.1% | 28,297 | 74% |
| **28** | 02/04/19 – 02/10/19 | 96 | 0.3% | 28,393 | 74% |
| **29** | 02/11/19 – 02/17/19 | 165 | 0.4% | 28,558 | 75% |
| **30** | 02/18/19 – 02/24/19 | 261 | 0.7% | 28,819 | 75% |
| **31** | 02/25/19 – 03/03/19 | 491 | 1.3% | 29,310 | 77% |
| **32** | 03/04/19 – 03/10/19 | 449 | 1.2% | 29,759 | 78% |
| **33** | 03/11/19 – 03/17/19 | 481 | 1.3% | 30,240 | 79% |
| **34** | 03/18/19 – 03/24/19 | 605 | 1.6% | 30,845 | 81% |
| **35** | 03/25/19 – 03/31/19 | 622 | 1.6% | 31,467 | 82% |
| **36** | 04/01/19 – 04/07/19 | 625 | 1.6% | 32,092 | 84% |
| **37** | 04/08/19 – 04/14/19 | 686 | 1.8% | 32,778 | 86% |
| **38** | 04/15/19 – 04/21/19 | 814 | 2.1% | 33,592 | 88% |
| **39** | 04/22/19 – 04/28/19 | 988 | 2.6% | 34,580 | 90% |
| **40** | 04/29/19 – 05/05/19 | 1,142 | 3.0% | 35,722 | 93% |
| **41** | 05/06/19 – 05/12/19 | 1,131 | 3.0% | 36,853 | 96% |
| **42** | 05/13/19 – 05/19/19 | 1,103 | 2.9% | 37,956 | 99% |
| **43** | 05/20/19 – 05/22/19 | 354 | 0.9% | 38,310 | 100% |
| **Overall** | **07/31/18 – 05/22/19** | **38,310** | | | |

**TABLE 3A-2 – Summary of Daily Trips by Week**

| Week | Date Range | Average Available Fleet | Average Daily Trips | Average Trips per Bike per Day |
|---|---|---|---|---|
| **1** | 07/31/18 – 08/05/18 | 73 | 115 | 1.57 |
| **2** | 08/06/18 – 08/12/18 | 145 | 198 | 1.37 |
| **3** | 08/13/18 – 08/19/18 | 155 | 205 | 1.40 |
| **4** | 08/20/18 – 08/26/18 | 131 | 191 | 1.48 |
| **5** | 08/27/18 – 09/02/18 | 162 | 238 | 1.48 |
| **6** | 09/03/18 – 09/09/18 | 170 | 209 | 1.22 |
| **7** | 09/10/18 – 09/16/18 | 175 | 197 | 1.14 |
| **8** | 09/17/18 – 09/23/18 | 197 | 240 | 1.22 |
| **9** | 09/24/18 – 09/30/18 | 211 | 262 | 1.24 |
| **10** | 10/01/18 – 10/07/18 | 220 | 174 | 0.79 |
| **11** | 10/08/18 – 10/14/18 | 242 | 239 | 0.97 |
| **12** | 10/15/18 – 10/21/18 | 271 | 226 | 0.83 |
| **13** | 10/22/18 – 10/28/18 | 260 | 165 | 0.63 |
| **14** | 10/29/18 – 11/04/18 | 263 | 184 | 0.70 |
| **15** | 11/05/18 – 11/11/18 | 282 | 166 | 0.59 |
| **16** | 11/12/18 – 11/18/18 | 284 | 188 | 0.66 |
| **17** | 11/19/18 – 11/25/18 | 281 | 138 | 0.49 |
| **18** | 11/26/18 – 12/02/18 | 253 | 103 | 0.41 |
| **19** | 12/03/18 – 12/09/18 | 223 | 103 | 0.46 |
| **20** | 12/10/18 – 12/16/18 | 196 | 86 | 0.44 |
| **21** | 12/17/18 – 12/23/18 | 168 | 77 | 0.46 |
| **22** | 12/24/18 – 12/30/18 | 145 | 60 | 0.41 |
| **23** | 12/31/18 – 01/06/19 | 130 | 59 | 0.45 |
| **24** | 01/07/19 – 01/13/19 | 122 | 67 | 0.56 |
| **25** | 01/14/19 – 01/20/19 | 110 | 52 | 0.47 |
| **26** | 01/21/19 – 01/27/19 | 97 | 55 | 0.57 |
| **27** | 01/28/19 – 02/03/19 | 90 | 61 | 0.68 |
| **28** | 02/04/19 – 02/10/19 | 72 | 14 | 0.19 |
| **29** | 02/11/19 – 02/17/19 | 67 | 24 | 0.34 |
| **30** | 02/18/19 – 02/24/19 | 76 | 37 | 0.49 |
| **31** | 02/25/19 – 03/03/19 | 79 | 70 | 0.89 |
| **32** | 03/04/19 – 03/10/19 | 71 | 64 | 0.90 |
| **33** | 03/11/19 – 03/17/19 | 78 | 69 | 0.87 |
| **34** | 03/18/19 – 03/24/19 | 74 | 86 | 1.17 |
| **35** | 03/25/19 – 03/31/19 | 67 | 89 | 1.33 |
| **36** | 04/01/19 – 04/07/19 | 81 | 89 | 1.11 |
| **37** | 04/08/19 – 04/14/19 | 110 | 98 | 0.90 |
| **38** | 04/15/19 – 04/21/19 | 121 | 116 | 0.96 |
| **39** | 04/22/19 – 04/28/19 | 127 | 141 | 1.10 |
| **40** | 04/29/19 – 05/05/19 | 122 | 163 | 1.34 |
| **41** | 05/06/19 – 05/12/19 | 116 | 162 | 1.39 |
| **42** | 05/13/19 – 05/19/19 | 91 | 158 | 1.75 |
| **43** | 05/20/19 – 05/22/19 | 54 | 118 | 2.23 |
| **Overall** | **07/31/18 – 05/22/19** | **152** | **129** | **0.90** |

**TABLE 3A-3a – Summary of Week-on-Week Percent Change in Daily Trips** (First Trimester: Weeks 1–15)

| Week | Date Range | Average Available Fleet | | Average Daily Trips | | | Average Trips per Bike per Day | | |
|---|---|---|---|---|---|---|---|---|---|
| | | # | % Change | # | % Change | Diff | # | % Change | Diff |
| **Overall** | **07/31/18 – 05/22/19** | **152** | | **129** | | | **0.90** | | |
| **1** | 07/31/18 – 08/05/18 | 73 | – | 115 | – | – | 1.57 | – | – |
| **2** | 08/06/18 – 08/12/18 | 145 | 99% | 198 | 73% | -26% | 1.37 | -13% | -85% |
| **3** | 08/13/18 – 08/19/18 | 155 | 7% | 205 | 4% | -3% | 1.40 | 2% | -2% |
| **4** | 08/20/18 – 08/26/18 | 131 | -15% | 191 | -7% | 8% | 1.48 | 5% | 13% |
| **5** | 08/27/18 – 09/02/18 | 162 | 23% | 238 | 25% | 2% | 1.48 | 0% | -25% |
| **6** | 09/03/18 – 09/09/18 | 170 | 5% | 209 | -13% | -18% | 1.22 | -18% | -5% |
| **7** | 09/10/18 – 09/16/18 | 175 | 3% | 197 | -5% | -8% | 1.14 | -7% | -2% |
| **8** | 09/17/18 – 09/23/18 | 197 | 13% | 240 | 22% | 9% | 1.22 | 8% | -14% |
| **9** | 09/24/18 – 09/30/18 | 211 | 7% | 262 | 9% | 2% | 1.24 | 1% | -8% |
| **10** | 10/01/18 – 10/07/18 | 220 | 4% | 174 | -34% | -37% | 0.79 | -36% | -3% |
| **11** | 10/08/18 – 10/14/18 | 242 | 10% | 239 | 37% | 26% | 0.97 | 23% | -14% |
| **12** | 10/15/18 – 10/21/18 | 271 | 12% | 226 | -5% | -17% | 0.83 | -14% | -9% |
| **13** | 10/22/18 – 10/28/18 | 260 | -4% | 165 | -27% | -23% | 0.63 | -24% | 3% |
| **14** | 10/29/18 – 11/04/18 | 263 | 1% | 184 | 12% | 11% | 0.70 | 11% | -1% |
| **15** | 11/05/18 – 11/11/18 | 282 | 7% | 166 | -10% | -17% | 0.59 | -16% | -6% |

**TABLE 3A-3b – Summary of Week-on-Week Percent Change in Daily Trips** (Second Trimester: Weeks 16–29)

| Week | Date Range | Average Available Fleet | | Average Daily Trips | | | Average Trips per Bike per Day | | |
|---|---|---|---|---|---|---|---|---|---|
| | | # | % Change | # | % Change | Diff | # | % Change | Diff |
| **Overall** | **07/31/18 – 05/22/19** | **152** | | **129** | | | **0.90** | | |
| **16** | 11/12/18 – 11/18/18 | 284 | 1% | 188 | 14% | 13% | 0.66 | 13% | -1% |
| **17** | 11/19/18 – 11/25/18 | 281 | -1% | 138 | -27% | -26% | 0.49 | -26% | 1% |
| **18** | 11/26/18 – 12/02/18 | 253 | -10% | 103 | -25% | -15% | 0.41 | -16% | 9% |
| **19** | 12/03/18 – 12/09/18 | 223 | -12% | 103 | 0% | 12% | 0.46 | 13% | 13% |
| **20** | 12/10/18 – 12/16/18 | 196 | -12% | 86 | -17% | -5% | 0.44 | -5% | 12% |
| **21** | 12/17/18 – 12/23/18 | 168 | -14% | 77 | -11% | 4% | 0.46 | 4% | 15% |
| **22** | 12/24/18 – 12/30/18 | 145 | -14% | 60 | -22% | -8% | 0.41 | -11% | 11% |
| **23** | 12/31/18 – 01/06/19 | 130 | -10% | 59 | -1% | 10% | 0.45 | 11% | 12% |
| **24** | 01/07/19 – 01/13/19 | 122 | -6% | 67 | 14% | 20% | 0.56 | 23% | 10% |
| **25** | 01/14/19 – 01/20/19 | 110 | -10% | 52 | -23% | -13% | 0.47 | -16% | 7% |
| **26** | 01/21/19 – 01/27/19 | 97 | -12% | 55 | 6% | 18% | 0.57 | 21% | 15% |
| **27** | 01/28/19 – 02/03/19 | 90 | -7% | 61 | 11% | 18% | 0.68 | 19% | 8% |
| **28** | 02/04/19 – 02/10/19 | 72 | -19% | 14 | -78% | -58% | 0.19 | -72% | 6% |
| **29** | 02/11/19 – 02/17/19 | 67 | -7% | 24 | 72% | 79% | 0.34 | 81% | 9% |

**TABLE 3A-3c – Summary of Week-on-Week Percent Change in Daily Trips** (Third Trimester: Weeks 30–43)

| Week | Date Range | Average Available Fleet | | Average Daily Trips | | | Average Trips per Bike per Day | | |
|---|---|---|---|---|---|---|---|---|---|
| | | # | % Change | # | % Change | Diff | # | % Change | Diff |
| **Overall** | **07/31/18 – 05/22/19** | **152** | | **129** | | | **0.90** | | |
| **30** | 02/18/19 – 02/24/19 | 76 | 13% | 37 | 58% | 45% | 0.49 | 41% | -17% |
| **31** | 02/25/19 – 03/03/19 | 79 | 4% | 70 | 88% | 85% | 0.89 | 83% | -5% |
| **32** | 03/04/19 – 03/10/19 | 71 | -10% | 64 | -9% | 1% | 0.90 | 1% | 9% |
| **33** | 03/11/19 – 03/17/19 | 78 | 9% | 69 | 7% | -2% | 0.87 | -4% | -11% |
| **34** | 03/18/19 – 03/24/19 | 74 | -5% | 86 | 26% | 31% | 1.17 | 35% | 9% |
| **35** | 03/25/19 – 03/31/19 | 67 | -10% | 89 | 3% | 13% | 1.33 | 13% | 10% |
| **36** | 04/01/19 – 04/07/19 | 81 | 22% | 89 | 0% | -21% | 1.11 | -16% | -17% |
| **37** | 04/08/19 – 04/14/19 | 110 | 36% | 98 | 10% | -26% | 0.90 | -19% | -29% |
| **38** | 04/15/19 – 04/21/19 | 121 | 10% | 116 | 19% | 9% | 0.96 | 7% | -12% |
| **39** | 04/22/19 – 04/28/19 | 127 | 5% | 141 | 21% | 16% | 1.10 | 15% | -6% |
| **40** | 04/29/19 – 05/05/19 | 122 | -4% | 163 | 16% | 20% | 1.34 | 21% | 6% |
| **41** | 05/06/19 – 05/12/19 | 116 | -5% | 162 | -1% | 4% | 1.39 | 4% | 5% |
| **42** | 05/13/19 – 05/19/19 | 91 | -22% | 158 | -2% | 19% | 1.75 | 25% | 28% |
| **43** | 05/20/19 – 05/22/19 | 54 | -40% | 118 | -25% | 15% | 2.23 | 28% | 53% |

**Chart 3A-5 – Relationship of Daily Trips to Average Fleet by Week**

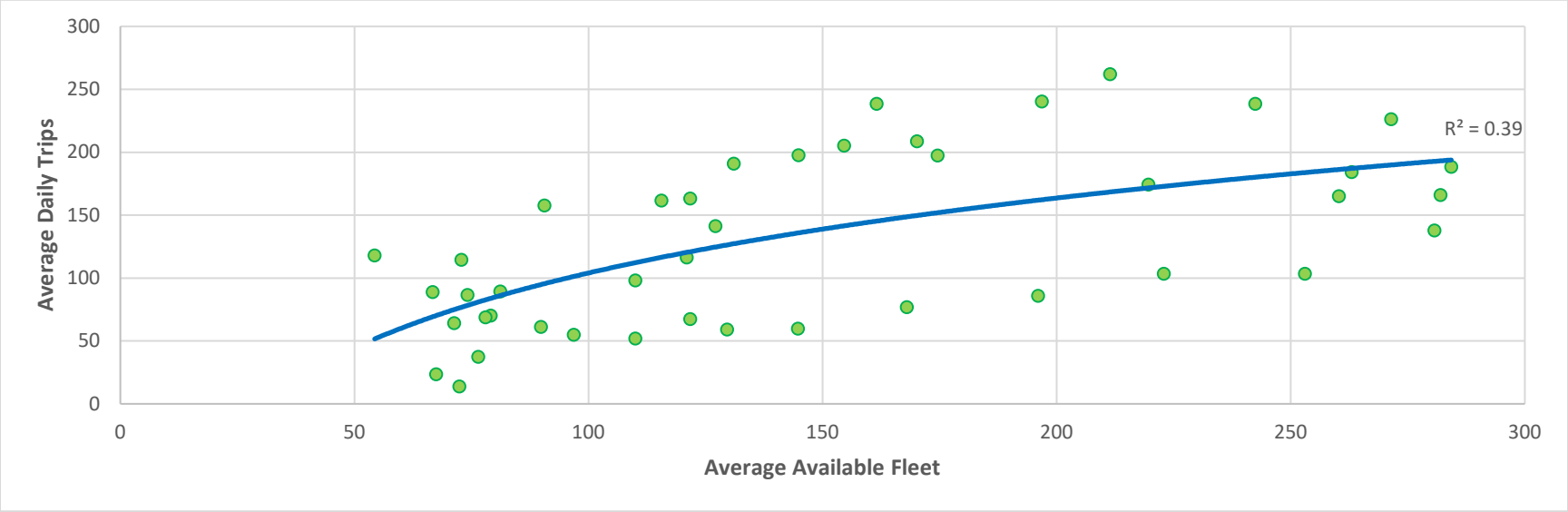



**Chart 3A-6 – Relationship of T/B/D to Average Fleet by Week**

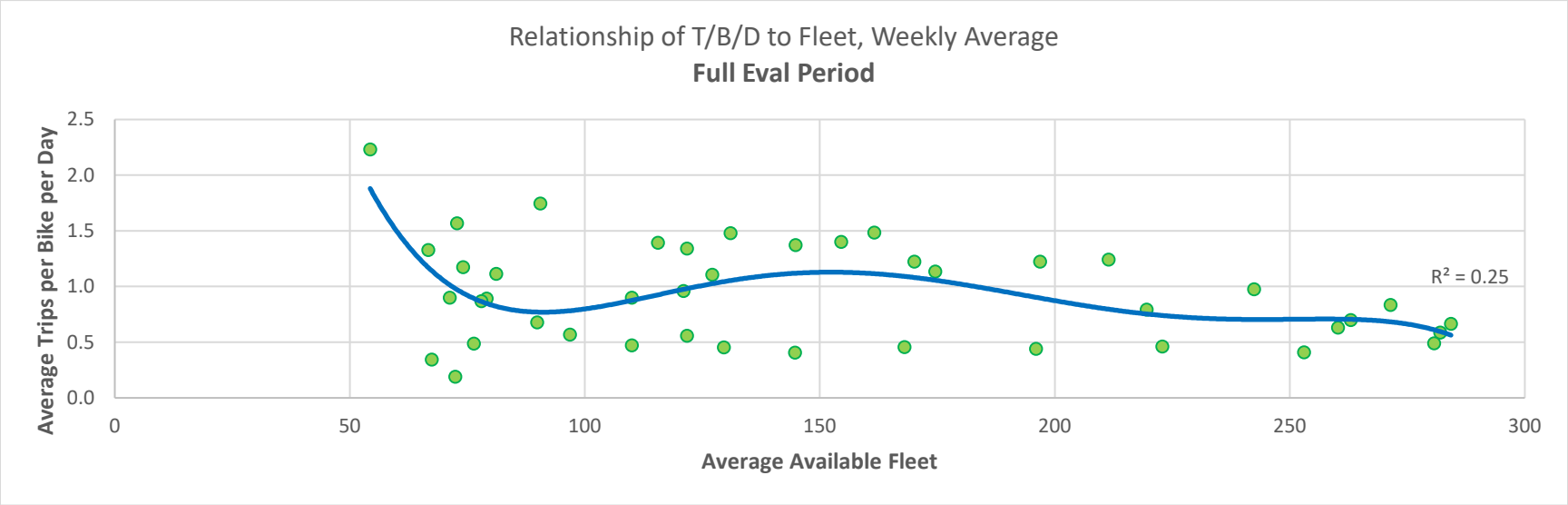
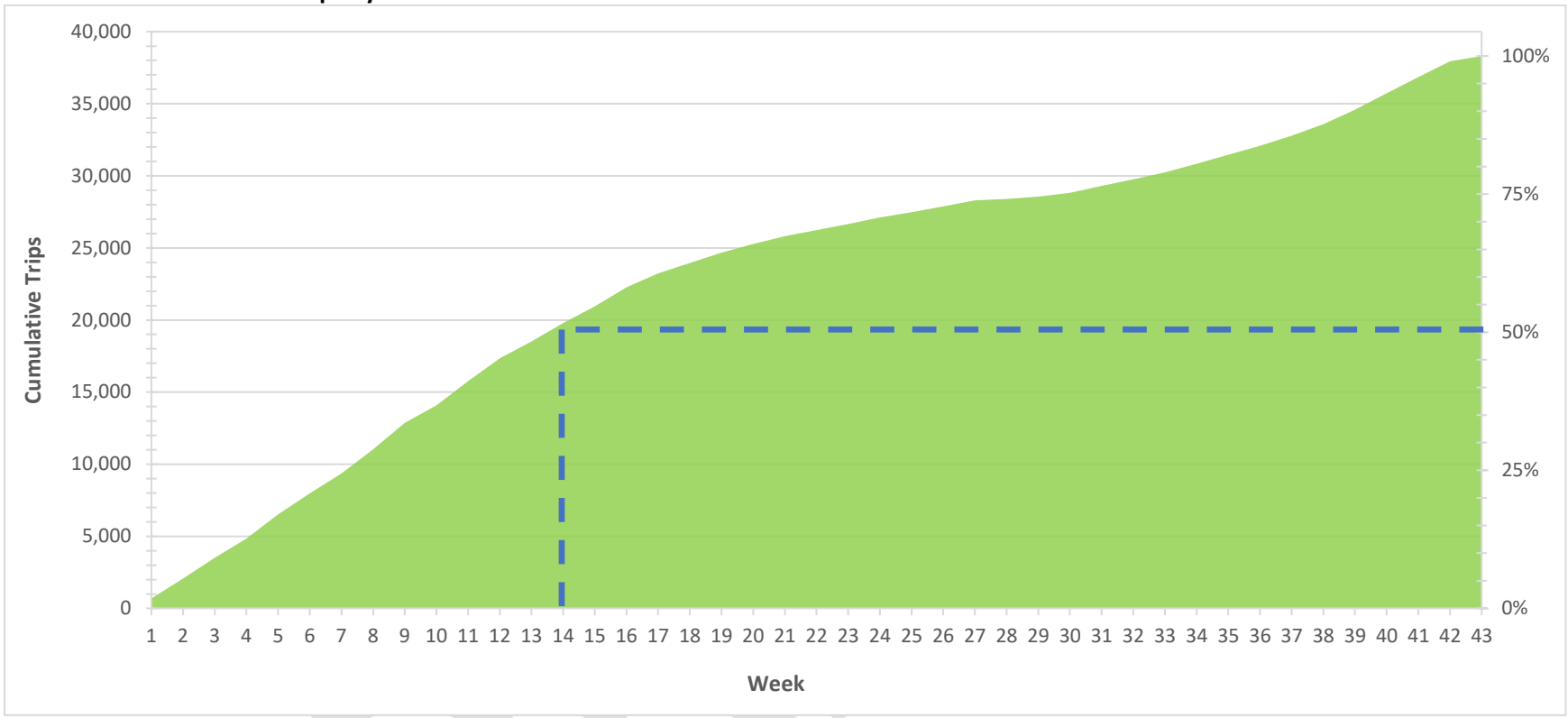


**Chart 3A-7 – Cumulative Trips by Week**



**Trips by Month**

- Table 3A-4 depicts the total number of trips taken during each month and the cumulative share of the total during the pilot evaluation period.
- Table 3A-5 summarizes by month the average available fleet, average daily trips, and average trips per bike per day.
- Table 3A-6 expands on this monthly summary, also depicting the minimum and maximum for each of these measures.
- Table 3A-7a presents variation in monthly average daily trips summarized by day of week, and Table 3A-7b summarizes this by weekday and weekend.
- Table 3A-8a presents variation in monthly average daily trips per bike per day summarized by day of week, and Table 3A-8b summarizes this by weekday and weekend.
- Table 3A-9 presents an estimation of unrealized potential ridership during the pilot, projecting the performance of periods with larger fleets and greater ridership onto like periods when the fleet was reduced and the observed ridership was less. For example, fall 2018 ridership is projected onto late spring and early summer 2019, estimating the ridership that might have been achieved with the earlier level of service.
- Table 3A-10 presents the average number of daily trips taken by neighborhood each month.
- Table 3A-11 presents the average trips per bike per day by neighborhood each month.
  - Note that the citywide figures in both of the above tables are different than those presented in previous tables because trips that began outside of Bellevue are not accounted for here, as this table examines only trips with origins in Bellevue neighborhoods.
- Table 3A-12 summarizes the contents of the two previous tables—average daily trips and average trips per bike per day by month—for Downtown compared to all other neighborhoods and the citywide average.
- Chart 3A-8 depicts the relationship between average available fleet at 7am and average trips per bike per day by month, comparing Downtown and all other neighborhoods.

**TABLE 3A-4 – Total and Cumulative Trips by Month**

| Month | Total Trips | | Cumulative Trips | |
|---|---|---|---|---|
| | # | % | # | % |
| July* | 66 | 0.2% | 66 | 0.2% |
| August | 5,970 | 15.6% | 6,036 | 15.8% |
| September | 6,836 | 17.8% | 12,872 | 33.6% |
| October | 6,238 | 16.3% | 19,110 | 49.9% |
| November | 4,654 | 12.1% | 23,764 | 62.0% |
| December | 2,540 | 6.6% | 26,304 | 68.7% |
| January | 1,861 | 4.9% | 28,165 | 73.5% |
| February | 882 | 2.3% | 29,047 | 75.8% |
| March | 2,420 | 6.3% | 31,467 | 82.1% |
| April | 3,398 | 8.9% | 34,865 | 91.0% |
| May** | 3,445 | 9.0% | 38,310 | 100.0% |
| **Overall** | **38,310** | | | |

**Includes only one day, July 31, 2018—the day of system launch*
***Does not reflect the full month; only includes 5/1–5/22.*

**TABLE 3A-5 – Summary of Daily Trips by Month**

| Month | Average Available Fleet | Average Daily Trips | Average Trips per Bike per Day |
|---|---|---|---|
| July* | 48 | 66 | 1.35 |
| August | 135 | 193 | 1.45 |
| September | 187 | 228 | 1.21 |
| October | 250 | 201 | 0.80 |
| November | 275 | 155 | 0.56 |
| December | 185 | 82 | 0.44 |
| January | 111 | 60 | 0.55 |
| February | 75 | 32 | 0.41 |
| March | 73 | 78 | 1.04 |
| April | 111 | 113 | 0.99 |
| May** | 101 | 157 | 1.52 |
| **Overall** | **152** | **129** | **0.88** |

**Includes only one day, July 31, 2018—the day of system launch*
***Does not reflect the full month; only includes 5/1–5/22.*

**TABLE 3A-6 – Summary of Daily Trips by Month**

| Month | Average Available Fleet | | | Average Daily Trips | | | Average Trips per Bike per Day | | |
|---|---|---|---|---|---|---|---|---|---|
| | Average | Min | Max | Average | Min | Max | Average | Min | Max |
| July* | 48 | 48 | 48 | 66 | 66 | 66 | 1.38 | 1.38 | 1.38 |
| August | 135 | 57 | 179 | 193 | 59 | 255 | 1.46 | 0.81 | 2.30 |
| September | 187 | 158 | 219 | 228 | 146 | 298 | 1.22 | 0.80 | 1.60 |
| October | 250 | 215 | 283 | 201 | 98 | 309 | 0.80 | 0.41 | 1.25 |
| November | 275 | 248 | 302 | 155 | 46 | 249 | 0.56 | 0.17 | 0.86 |
| December | 185 | 133 | 243 | 82 | 25 | 149 | 0.44 | 0.18 | 0.71 |
| January | 111 | 90 | 135 | 60 | 34 | 108 | 0.55 | 0.28 | 0.95 |
| February | 75 | 64 | 87 | 32 | 5 | 73 | 0.41 | 0.07 | 0.95 |
| March | 73 | 62 | 85 | 78 | 30 | 124 | 1.07 | 0.39 | 1.63 |
| April | 111 | 73 | 133 | 113 | 45 | 219 | 1.03 | 0.52 | 1.72 |
| May** | 101 | 36 | 130 | 157 | 82 | 214 | 1.62 | 1.11 | 3.12 |
| **Overall** | **152** | **36** | **302** | **129** | **5** | **309** | **0.90** | **0.07** | **3.12** |

**Includes only one day, July 31, 2018—the day of system launch*
***Does not reflect the full month; only includes 5/1–5/22.*

**TABLE 3A-7a – Average Daily Trips by Day of Week by Month**

| Month | Average Daily Trips | | | | | | |
|---|---|---|---|---|---|---|---|
| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
| July* | – | 66 | – | – | – | – | – |
| August | 176 | 210 | 193 | 187 | 201 | 194 | 186 |
| September | 215 | 231 | 235 | 255 | 245 | 216 | 207 |
| October | 163 | 202 | 238 | 229 | 209 | 212 | 156 |
| November | 126 | 169 | 166 | 144 | 156 | 166 | 162 |
| December | 94 | 59 | 107 | 80 | 102 | 77 | 59 |
| January | 56 | 65 | 59 | 51 | 64 | 68 | 60 |
| February | 27 | 25 | 29 | 42 | 36 | 34 | 28 |
| March | 64 | 63 | 78 | 70 | 86 | 95 | 84 |
| April | 109 | 120 | 105 | 103 | 132 | 98 | 125 |
| May** | 134 | 157 | 148 | 150 | 182 | 185 | 144 |
| **Overall** | **116** | **128** | **138** | **130** | **141** | **133** | **120** |

**Includes only one day, July 31, 2018—the day of system launch*
***Does not reflect the full month; only includes 5/1–5/22.*

**TABLE 3A-7b – Average Daily Trips by Week/Weekend by Month**

| Month | Average Daily Trips | |
|---|---|---|
| | Weekday | Weekend |
| July* | 66 | – |
| August | 193 | 190 |
| September | 236 | 211 |
| October | 207 | 184 |
| November | 152 | 164 |
| December | 89 | 68 |
| January | 59 | 64 |
| February | 32 | 31 |
| March | 73 | 89 |
| April | 114 | 111 |
| May** | 154 | 164 |
| **Overall** | **131** | **126** |

**Includes only one day, July 31, 2018—the day of system launch*
***Does not reflect the full month; only includes 5/1–5/22.*

**TABLE 3A-8a – Average Trips per Bike per Day by Day of Week by Month**

| Month | Average Trips per Bike per Day | | | | | | |
|---|---|---|---|---|---|---|---|
| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
| July* | – | 1.38 | – | – | – | – | – |
| August | 1.29 | 1.51 | 1.65 | 1.35 | 1.38 | 1.66 | 1.42 |
| September | 1.15 | 1.25 | 1.23 | 1.36 | 1.32 | 1.15 | 1.12 |
| October | 0.66 | 0.81 | 0.95 | 0.93 | 0.80 | 0.84 | 0.62 |
| November | 0.45 | 0.60 | 0.60 | 0.53 | 0.58 | 0.59 | 0.58 |
| December | 0.51 | 0.30 | 0.56 | 0.43 | 0.56 | 0.40 | 0.33 |
| January | 0.52 | 0.59 | 0.55 | 0.47 | 0.56 | 0.62 | 0.54 |
| February | 0.35 | 0.31 | 0.37 | 0.56 | 0.48 | 0.44 | 0.37 |
| March | 0.86 | 0.88 | 1.04 | 1.03 | 1.19 | 1.29 | 1.12 |
| April | 1.05 | 1.11 | 0.99 | 0.97 | 1.16 | 0.82 | 1.09 |
| May** | 1.45 | 1.95 | 1.68 | 1.37 | 1.66 | 1.78 | 1.46 |
| **Overall** | 0.81 | 0.91 | 0.97 | 0.88 | 0.96 | 0.94 | 0.85 |

**Includes only one day, July 31, 2018—the day of system launch*
***Does not reflect the full month; only includes 5/1–5/22.*

**TABLE 3A-8b – Average Trips per Bike per Day by Week/Weekend by Month**

| Month | Average Daily Trips per Bike per Day | |
|---|---|---|
| | Weekday | Weekend |
| July* | 1.38 | – |
| August | 1.44 | 1.54 |
| September | 1.26 | 1.13 |
| October | 0.83 | 0.73 |
| November | 0.55 | 0.59 |
| December | 0.48 | 0.37 |
| January | 0.54 | 0.58 |
| February | 0.42 | 0.40 |
| March | 1.01 | 1.20 |
| April | 1.06 | 0.95 |
| May** | 1.63 | 1.62 |
| **Overall** | 0.91 | 0.89 |

**Includes only one day, July 31, 2018—the day of system launch*
***Does not reflect the full month; only includes 5/1–5/22.*

**TABLE 3A-9 – Estimation of Unrealized Ridership Potential by Month**

| Month | Actual | May-July (Estimate) | Winter (Estimate) | Spring (Estimate) | Cumulative (Estimate) |
|---|---|---|---|---|---|
| July* | 66 | 66 | 66 | 66 | 66 |
| August | 5,970 | 5,970 | 5,970 | 5,970 | 5,970 |
| September | 6,836 | 6,836 | 6,836 | 6,836 | 6,836 |
| October | 6,238 | 6,238 | 6,238 | 6,238 | 6,238 |
| November | 4,654 | 4,654 | 4,654 | 4,654 | 4,654 |
| December | 2,540 | 2,540 | 4,561 | 2,540 | 4,561 |
| January | 1,861 | 1,861 | 4,561 | 1,861 | 4,561 |
| February | 882 | 882 | 4,119 | 882 | 4,119 |
| March | 2,420 | 2,420 | 4,561 | 2,420 | 4,561 |
| April | 3,398 | 3,398 | 4,414 | 3,398 | 4,414 |
| May** | 3,445 | 4,702 | 3,445 | 6,348 | 6,836 |
| June | N/A | 4,189 | N/A | 6,348 | 6,836 |
| July | N/A | 4,328 | N/A | 6,348 | 6,836 |
| **Total** | **38,310** | **48,083** | **49,424** | **53,909** | **66,487** |
| **Difference** | | **+9,773 (+26%)** | **+11,114 (+29%)** | **+15,599 (+41%)** | **+28,177 (+74%)** |

**Includes only one day, July 31, 2018—the day of system launch*
***Does not reflect the full month; only includes 5/1–5/22.*

***Notes:***
*May-July Estimate reflects final 6-week average projected over the last 9 days in May (5/23-5/31) and through July*
*Winter Estimate reflects the average from 10/29–12/9 as fleet was strong but t/b/d started to decline for the winter*
*Spring Estimate reflects the 3-month average for August–October 2018 applied to the last three months of the pilot*
*Cumulative Estimate reflects the Winter and Spring Estimates combined.*

**TABLE 3A-10 – Average Daily Trips by Neighborhood by Month**

| Month | Average Daily Trips by Neighborhood of Origin | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Citywide | BelRed | Bridle Trails | Cougar Mountain / Lakemont | Crossroads | Downtown | Eastgate | Factoria | Lake Hills | Newport | Northeast Bellevue | Northwest Bellevue | Somerset | West Bellevue | West Lake Sammamish | Wilburton | Woodridge |
| **July*** | 61 | 1 | 0 | 0 | 0 | 50 | 0 | 3 | 1 | 0 | 0 | 2 | 0 | 1 | 0 | 1 | 2 |
| **August** | 181 | 11 | 2 | 0 | 4 | 105 | 1 | 5 | 8 | 1 | 1 | 16 | 0 | 16 | 0 | 9 | 1 |
| **September** | 218 | 11 | 3 | 0 | 2 | 134 | 2 | 3 | 7 | 1 | 1 | 18 | 0 | 22 | 1 | 10 | 2 |
| **October** | 195 | 9 | 2 | 0 | 3 | 117 | 3 | 5 | 9 | 2 | 1 | 16 | 0 | 17 | 1 | 7 | 2 |
| **November** | 152 | 7 | 1 | 0 | 5 | 89 | 1 | 5 | 5 | 2 | 1 | 13 | 0 | 16 | 0 | 7 | 1 |
| **December** | 79 | 3 | 0 | 0 | 5 | 41 | 1 | 3 | 5 | 0 | 2 | 5 | 0 | 7 | 0 | 4 | 0 |
| **January** | 57 | 3 | 0 | 0 | 4 | 28 | 1 | 3 | 3 | 1 | 0 | 6 | 0 | 5 | 0 | 3 | 0 |
| **February** | 29 | 1 | 0 | 0 | 0 | 19 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 2 | 0 |
| **March** | 65 | 5 | 0 | 0 | 1 | 33 | 2 | 1 | 3 | 1 | 1 | 7 | 0 | 8 | 0 | 4 | 0 |
| **April** | 97 | 6 | 1 | 0 | 1 | 51 | 2 | 2 | 3 | 1 | 0 | 12 | 0 | 10 | 0 | 5 | 1 |
| **May**** | 133 | 10 | 2 | 0 | 6 | 61 | 2 | 3 | 8 | 1 | 2 | 14 | 0 | 17 | 0 | 5 | 1 |
| **Overall** | **35,660** | **1,921** | **326** | **34** | **899** | **20,175** | **471** | **909** | **1,486** | **314** | **241** | **3,244** | **55** | **3,540** | **59** | **1,683** | **303** |

**Includes only one day, July 31, 2018—the day of system launch*
***Does not reflect the full month; only includes 5/1–5/22.*

**TABLE 3A-11 – Average Trips per Bike per Day by Neighborhood by Month**

| Month | Average Trips per Bike per Day by Neighborhood of Origin | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Citywide | BelRed | Bridle Trails | Cougar Mountain / Lakemont | Crossroads | Downtown | Eastgate | Factoria | Lake Hills | Newport | Northeast Bellevue | Northwest Bellevue | Somerset | West Bellevue | West Lake Sammamish | Wilburton | Woodridge |
| **July*** | 1.24 | 0.25 | 0.00 | - | - | 3.33 | - | 0.50 | 1.00 | - | - | 0.17 | - | 0.17 | 0.00 | 0.50 | 2.00 |
| **August** | 1.34 | 1.08 | 0.97 | 0.68 | 0.89 | 2.04 | 0.54 | 1.56 | 1.06 | 0.63 | 0.79 | 1.01 | 0.60 | 0.75 | 0.20 | 0.93 | 0.43 |
| **September** | 1.15 | 0.91 | 0.57 | 0.40 | 1.47 | 1.97 | 0.49 | 0.96 | 0.75 | 0.36 | 0.54 | 0.70 | 0.50 | 0.65 | 0.13 | 0.84 | 0.77 |
| **October** | 0.77 | 0.54 | 0.30 | - | 0.95 | 1.41 | 0.48 | 0.59 | 0.57 | 0.28 | 0.11 | 0.62 | 0.37 | 0.38 | 0.18 | 0.45 | 0.31 |
| **November** | 0.55 | 0.37 | 0.23 | 0.19 | 0.46 | 0.91 | 0.23 | 0.28 | 0.44 | 0.31 | 0.17 | 0.39 | 0.21 | 0.41 | 0.16 | 0.40 | 0.10 |
| **December** | 0.45 | 0.27 | 0.16 | 0.11 | 0.27 | 1.05 | 0.34 | 0.24 | 0.37 | 0.11 | 0.22 | 0.32 | 0.06 | 0.26 | 0.06 | 0.52 | 0.09 |
| **January** | 0.59 | 0.36 | 0.29 | - | 0.54 | 1.67 | 0.58 | 0.35 | 0.34 | 0.26 | 0.10 | 0.49 | 1.50 | 0.30 | 0.13 | 0.42 | 0.15 |
| **February** | 0.38 | 0.21 | 0.17 | 0.08 | 0.38 | 0.56 | 0.14 | 0.74 | 0.18 | 0.06 | 2.00 | 0.50 | - | 0.16 | 0.11 | 0.34 | 0.12 |
| **March** | 0.87 | 1.10 | 1.50 | 0.00 | 1.08 | 1.32 | 0.87 | 0.38 | 1.40 | 0.40 | 0.42 | 0.66 | 0.57 | 0.46 | - | 0.84 | 0.28 |
| **April** | 0.85 | 1.17 | 0.77 | 0.38 | 0.76 | 1.28 | 0.83 | 0.41 | 0.88 | 0.21 | 0.57 | 0.66 | 1.00 | 0.53 | 0.00 | 0.67 | 0.67 |
| **May**** | 1.25 | 1.36 | 0.75 | 4.00 | 1.46 | 2.13 | 1.76 | 1.33 | 1.85 | 0.68 | 0.45 | 0.79 | 0.56 | 0.78 | 0.13 | 0.68 | 0.81 |
| **Overall** | **0.80** | **0.65** | **0.47** | **0.29** | **0.58** | **1.40** | **0.51** | **0.46** | **0.63** | **0.27** | **0.27** | **0.60** | **0.24** | **0.46** | **0.14** | **0.60** | **0.31** |

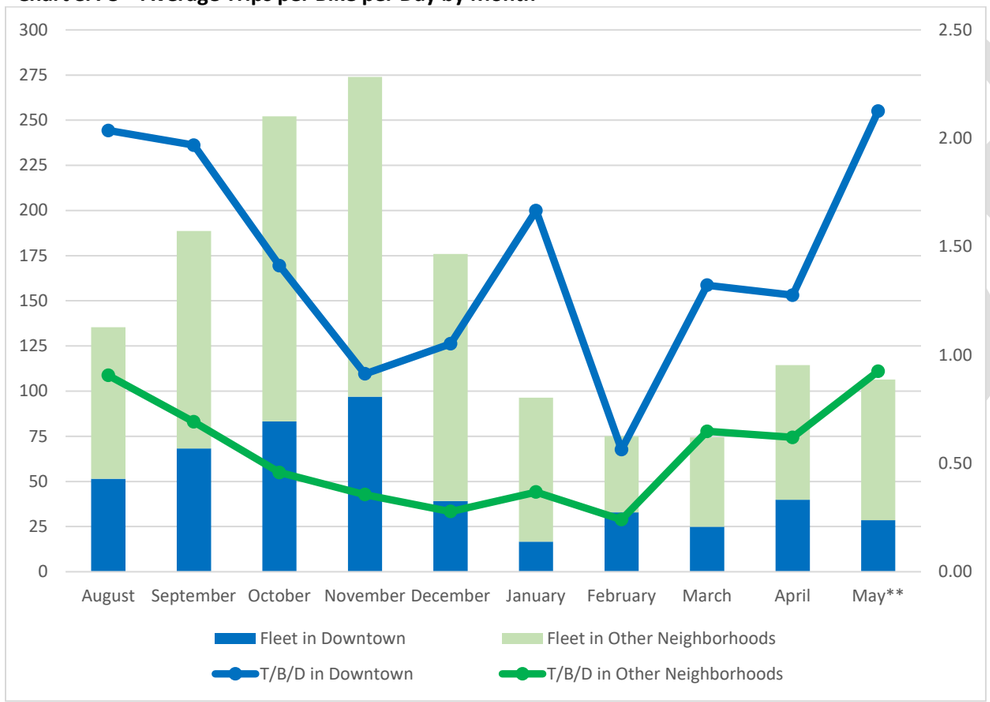
**Includes only one day, July 31, 2018—the day of system launch*
***Does not reflect the full month; only includes 5/1–5/22.*

**TABLE 3A-12 – Summary of Average Daily Trips by Neighborhood by Month**

| Month | Average Daily Trips by Origin | | | | | | | Average Trips per Bike per Day | | | Average Available Fleet at 7am | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Citywide | Downtown | | All Other Neighborhoods | | Outside Bellevue | | Citywide | Downtown | All Other Neighborhoods | Citywide | Downtown | | All Other Neighborhoods | |
| | | # | % | # | % | # | % | | | | | # | % | # | % |
| **July*** | 61 | 50 | **82%** | 11 | 18% | 5 | 8% | **1.24** | **3.33** | 0.32 | **49** | 15 | 31% | 34 | 69% |
| **August** | 181 | 105 | **58%** | 76 | 42% | 12 | 6% | **1.34** | **2.04** | 0.91 | **135** | 52 | 38% | 84 | 62% |
| **September** | 218 | 134 | **62%** | 83 | 38% | 10 | 5% | **1.15** | **1.97** | 0.69 | **189** | 68 | 36% | 120 | 64% |
| **October** | 195 | 117 | **60%** | 77 | 40% | 6 | 3% | 0.77 | **1.41** | 0.46 | **252** | 83 | 33% | 169 | 67% |
| **November** | 152 | 89 | **58%** | 63 | 42% | 4 | 2% | 0.55 | 0.91 | 0.36 | **274** | 97 | 35% | 177 | 65% |
| **December** | 79 | 41 | **52%** | 38 | 48% | 3 | 3% | 0.45 | **1.05** | 0.28 | **176** | 39 | 22% | 137 | 78% |
| **January** | 57 | 28 | 49% | 29 | **51%** | 3 | 5% | 0.59 | **1.67** | 0.37 | **96** | 17 | 17% | 80 | 83% |
| **February** | 29 | 19 | **65%** | 10 | 35% | 3 | 10% | 0.38 | 0.56 | 0.24 | **75** | 33 | 44% | 42 | 56% |
| **March** | 65 | 33 | **51%** | 32 | 49% | 13 | 20% | 0.87 | **1.32** | 0.65 | **74** | 25 | 34% | 49 | 66% |
| **April** | 97 | 51 | **52%** | 46 | 48% | 16 | 17% | 0.85 | **1.28** | 0.62 | **114** | 40 | 35% | 75 | 65% |
| **May**** | 133 | 61 | 46% | 72 | **54%** | 24 | 18% | **1.25** | **2.13** | 0.93 | **106** | 29 | 27% | 78 | 73% |
| **Overall** | **35,660** | **20,175** | **57%** | **15,485** | **43%** | **2,650** | **7%** | **0.80** | **1.40** | **0.51** | **151** | **49** | **32%** | **102** | 68% |

**Includes only one day, July 31, 2018—the day of system launch*
***Does not reflect the full month; only includes 5/1–5/22.*

**Chart 3A-8 – Average Trips per Bike per Day by Month**



**Trips by Trimester**

- Table 3A-13 depicts the total number of trips taken during each trimester and the cumulative share of the total during the pilot evaluation period.
- Table 3A-14 summarizes by trimester the average available fleet, average daily trips, and average trips per bike per day.
- Table 3A-15 expands on this trimester summary, also depicting the minimum and maximum for each of these measures.
- Table 3A-16a presents variation in trimester average daily trips summarized by day of week, and Table 3A-16b summarizes this by weekday and weekend.
- Table 3A-17a presents variation in trimester average daily trips per bike per day summarized by day of week, and Table 3A-17b summarizes this by weekday and weekend.

**TABLE 3A-13 – Total and Cumulative Trips by Trimester**

| Trimester | Weeks | Date Range | Total Trips | | Cumulative Trips | |
|---|---|---|---|---|---|---|
| | | | # | % | # | % |
| 1 | 1–15 | 07/31/18 – 11/11/18 | 20,951 | 55% | 20,951 | 55% |
| 2 | 16–29 | 11/12/18 – 02/17/19 | 7,607 | 20% | 28,558 | 75% |
| 3 | 30–43 | 02/18/19 – 05/22/19 | 9,752 | 25% | 38,310 | 100% |
| **Overall** | **1–43** | **07/31/18 – 05/22/19** | **38,310** | | | |

**TABLE 3A-14 – Summary of Daily Trips by Trimester**

| Trimester | Weeks | Date Range | Average Available Fleet | Average Daily Trips | Average Trips per Bike per Day |
|---|---|---|---|---|---|
| 1 | 1–15 | 07/31/18 – 11/11/18 | 198 | 201 | 1.11 |
| 2 | 16–29 | 11/12/18 – 02/17/19 | 160 | 78 | 0.47 |
| 3 | 30–43 | 02/18/19 – 05/22/19 | 92 | 104 | 1.13 |
| **Overall** | **1–43** | **07/31/18 – 05/22/19** | **152** | **129** | **0.90** |

**TABLE 3A-15 – Summary of Daily Trips by Trimester**

| Trimester | Average Available Fleet | | | Average Daily Trips | | | Average Trips per Bike per Day | | |
|---|---|---|---|---|---|---|---|---|---|
| | Average | Min | Max | Average | Min | Max | Average | Min | Max |
| 1 | 198 | 48 | 302 | 201 | 59 | 309 | 1.11 | 0.36 | 2.30 |
| 2 | 160 | 64 | 299 | 78 | 5 | 249 | 0.47 | 0.07 | 0.95 |
| 3 | 92 | 36 | 133 | 104 | 24 | 219 | 1.13 | 0.31 | 3.12 |
| **Overall** | **152** | **36** | **302** | **129** | **5** | **309** | **0.90** | **0.07** | **3.12** |

**TABLE 3A-16a – Average Daily Trips by Day of Week by Trimester**

| Trimester | Average Daily Trips | | | | | | |
|---|---|---|---|---|---|---|---|
| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
| 1 | 181 | 204 | 218 | 211 | 210 | 198 | 186 |
| 2 | 77 | 73 | 89 | 74 | 88 | 80 | 62 |
| 3 | 92 | 100 | 100 | 98 | 118 | 113 | 107 |
| **Overall** | **116** | **128** | **138** | **130** | **141** | **133** | **120** |

**TABLE 3A-16b – Average Daily Trips by Week/Weekend by Trimester**

| Trimester | Average Daily Trips | |
|---|---|---|
| | Weekday | Weekend |
| 1 | 205 | 192 |
| 2 | 80 | 71 |
| 3 | 101 | 110 |
| **Overall** | **131** | **126** |

**TABLE 3A-17a – Average Trips per bike per Day of Week by Trimester**

| Trimester | Average Daily Trips | | | | | | |
|---|---|---|---|---|---|---|---|
| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
| 1 | 0.97 | 1.15 | 1.24 | 1.13 | 1.10 | 1.11 | 1.01 |
| 2 | 0.44 | 0.43 | 0.52 | 0.44 | 0.56 | 0.49 | 0.41 |
| 3 | 1.01 | 1.13 | 1.13 | 1.06 | 1.23 | 1.21 | 1.14 |
| **Overall** | **0.81** | **0.91** | **0.97** | **0.88** | **0.96** | **0.94** | **0.85** |

**TABLE 3A-17b – Average Trips per Bike per Day by Week/Weekend by Trimester**

| Trimester | Average Daily Trips | |
|---|---|---|
| | Weekday | Weekend |
| 1 | 0.54 | 0.58 |
| 2 | 0.42 | 0.40 |
| 3 | 1.01 | 1.20 |
| **Overall** | **0.91** | **0.89** |

**Research Queries:**

3.1 *How many bike share trips have been taken in Bellevue?*

3.2 *How many bike share trips begin and/or end in Bellevue?*

3.3 *On average, how many trips are taken per bike in service per day in Bellevue?*