



July 2022

2021 Bike Count Program Report

For more information please visit
winnipeg.ca/publicworks/pedestriansCycling/default.stm



**Public Works
Travaux publics**

Introduction

Winnipeg's bike count program consists of a continuous count program, a short-duration count program, and request-based counts.

- The **continuous bike count program** collects data at static locations continuously throughout the year.
- The **short-duration bike count program** collects data at a predetermined series of locations on either an annual basis or on a 3-year rotating schedule. Short-duration bike counts are collected with portable bike counters (1-2 weeks in duration) and provide broad coverage of the bike network.
- **Request-based bike counts** are conducted for specific projects and may be several hours or days in duration.

This report summarizes bike count data collected through Winnipeg's continuous bike count program to year-end 2021. The short-duration or request-based bike count data are not currently provided in this report as they have not been fully implemented.



Continuous Bike Count Sites

The term “continuous count site” refers to a location where permanent equipment collects traffic data 24/7, 365. The purpose of these sites is to identify temporal traffic patterns that can be used to estimate average traffic at a number of locations throughout the city in combination with data from short-duration count stations. Installing and maintaining continuous count sites is relatively expensive, so short-duration counts using portable equipment are used to collect data on the majority of the transportation network.

All the City’s continuous bicycle count sites utilize inductive loop sensors, which detect metal from bicycle wheels (rims) as they pass over the sensor and disturb the electromagnetic field. Figure 1 shows an example of what an inductive loop sensor looks like.



Figure 1: Inductive loop sensor for counting bikes

As shown in Table 1, the City has 11 continuous count sites, the majority of which are located on multi-use paths. The approximate locations of these sites are shown in Figure 2 on the next page.

Table 1: Continuous Bike Count Site Information

Site ID	Location	Facility Type	Active
Bishop Grandin Greenway 1	West side of Fort Garry Bridge	Multi-use path	Yes
Bishop Grandin Greenway 2	At 1 km marker West of Mercy Tunnel	Multi-use path	Yes
Bishop Grandin Greenway 3	West of the Seine River	Multi-use path	No
The Forks 01 ¹	Fort Gibraltar Trail East of Main Street	Protected bike lane	Yes
Harte Trail 1	West of access from Glenbush Street	Multi-use path	Yes
Harte Trail 2	East of access from Cathcart Street	Multi-use path	No
Northeast Pioneers Greenway 1	South of Munroe Avenue	Multi-use path	Yes
Northeast Pioneers Greenway 2	North of Roberta Avenue	Multi-use path	Yes
Northeast Pioneers Greenway 3	South of Chief Peguis Trail	Multi-use path	Yes
Transcona Trail 1	East of Plessis Road	Multi-use path	No
Yellow Ribbon Greenway 1	East of Whytefold Road	Multi-use path	No

¹This counter is owned and operated by The Forks and data access is provided to the City of Winnipeg

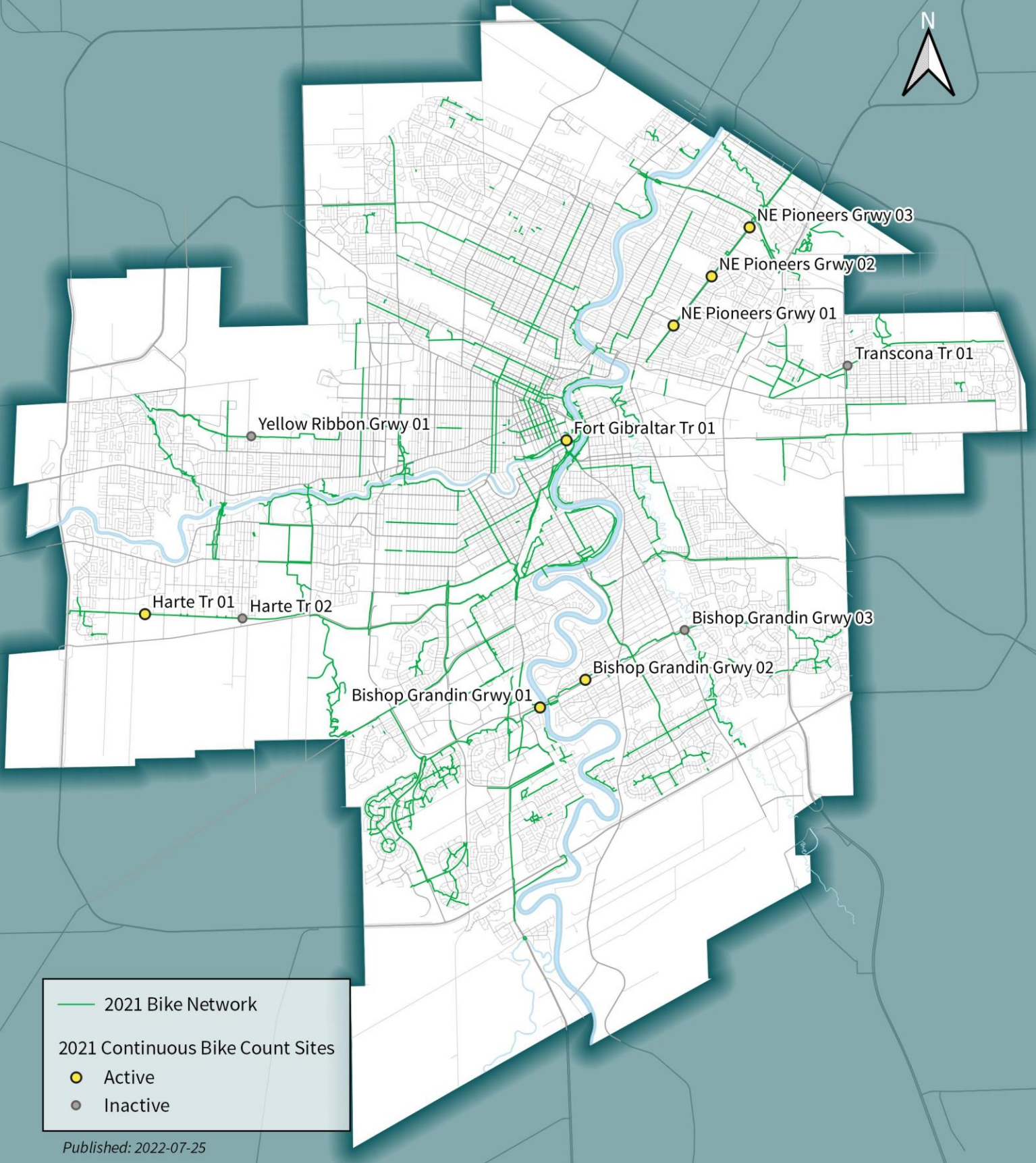


Figure 2: Continuous Bike Count Sites.

Appendix A: Continuous Bike Count Summaries

This appendix presents the *Continuous Bike Count Summaries* that represent temporal bike traffic characteristics for each site (shown in Figure 3).



Figure 3: Snap-Shot of the Continuous Bike Count Summaries.

The following legend provides further detail about each of the report elements to help the reader further understand the data behind the statistics.

Count Site Information

Site ID: BG01
 Counter ID: Y2G13094317
 Location: West side of Fort Garry Bridge
 Facility: Multi Use Pathway

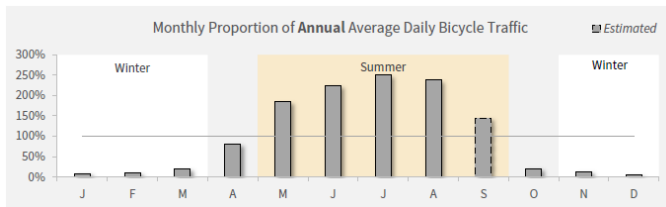
Site ID: Short form of site name
Counter ID: Serial number for the data logger, as provided by vendor
Location: Approximate location
Facility: Type of bicycle infrastructure (multi-use path, protected bike lane, buffered bike lane, painted bike lane, neighbourhood greenway, on-street)

Average Bicycle Traffic Statistics

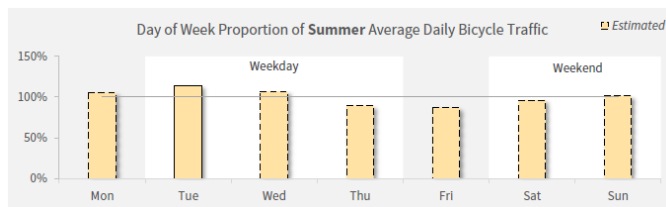
	Daily Volume	Completeness
Annual	320	93%
Winter	70	100%
Summer	660	83%
Weekday	680	87%
Weekend	650	80%
Weekday Ratio	1.05	

Daily Volume: average daily bikes for the specified period, calculated using a simple average.
Completeness: percentage of days in the specified period without any missing data
Annual: all days in the specified year
Winter: only days from January to March and November to December
Summer: only days from May to September
Weekday: only Tuesdays, Wednesdays, and Thursdays
Weekend: only Saturdays and Sundays
Weekday ratio: weekday average divided by weekend average

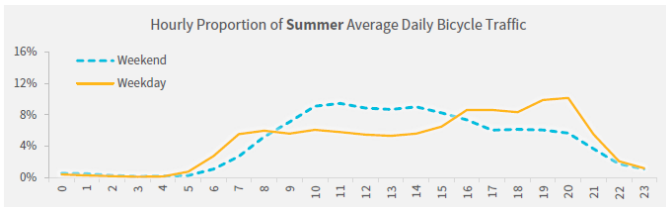
Variation of Average Daily Bicycle Traffic



This chart shows the monthly trends in bike traffic. Each bar represents the daily average bike traffic for the month relative to the daily average for the whole year. For example, the average daily bike traffic in July is approximately 2.5 times the annual average. Dashed lines are used to identify values that are calculated with at least one day missing from the dataset.

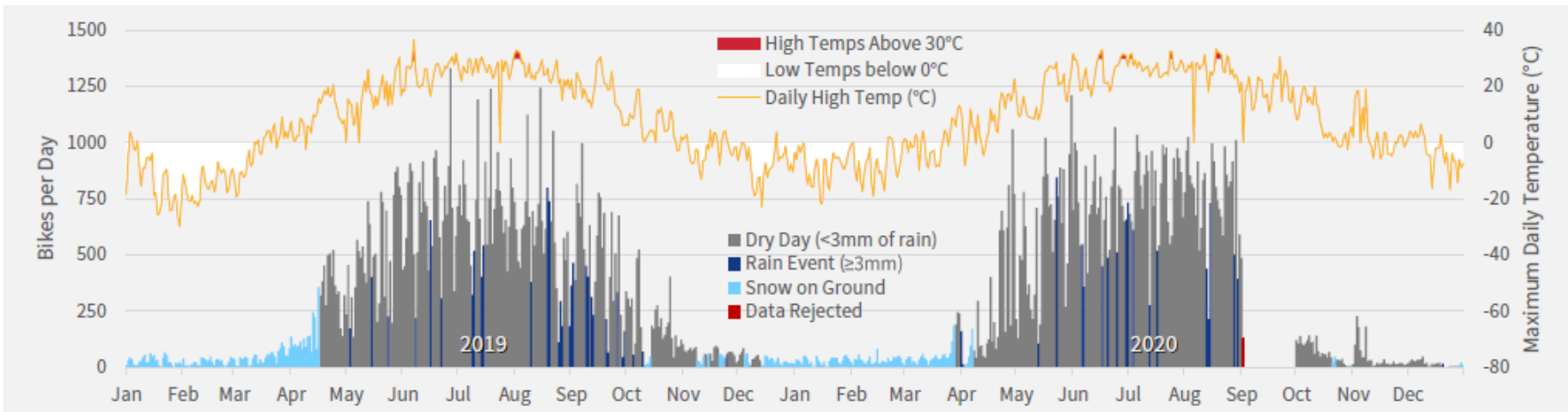


This chart shows the day of week trends in bike traffic for summer months. Each bar represents the average daily bike traffic for a particular day of week during summer months relative to the average for all days in summer months. For example, the average bike traffic on Tuesdays in the summer months is approximately 1.1 times the average of all summer days. Dashed lines are used to identify values that are calculated with at least one day missing from the dataset.



This chart shows the hourly trends in bike traffic for weekdays and weekends in summer months. The values represent the proportion of the daily traffic that occurs in each hour of the day. For example, approximately 10% of weekend bike traffic occurs between 10:00 and 11:00.

Daily Bicycle Traffic

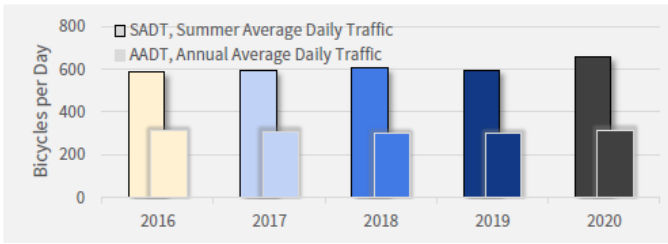


This chart shows the daily bike volumes for each day in the past two years. It also displays several factors that contribute to variations in the daily volumes (i.e., temperature, rain, and ground cover). All weather-related data is sourced from Environment Canada (station: 27174, Winnipeg A CS) where:

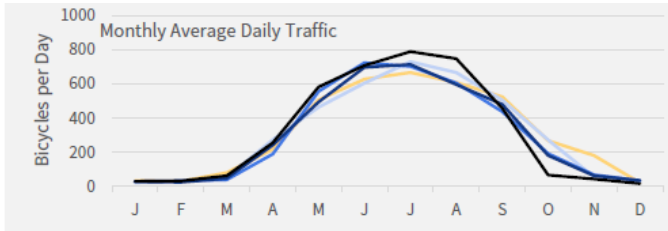
- High temperatures are defined as days with highs above 30°C.
- Low temperatures are defined as days with highs below 0°C.
- Rain events are defined as days with ≥3mm of recorded rain.
- Snow on ground refers to days with reported snow cover.

The 'data rejected' field indicates that the data was removed from all analyses because of reasons such as equipment malfunctions.

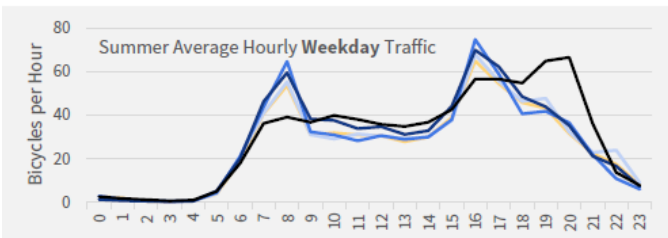
Historical Trends



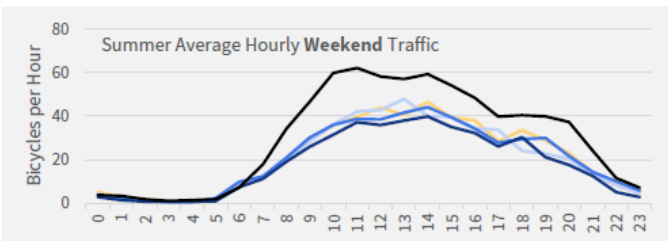
This chart shows the yearly trends in bike traffic over the past 5 years. Each year has a bar that indicates the average daily bike traffic for all days and the average daily bike traffic during just the summer months. For example, on average there were approximately 600 bikes counted per day in the summer months of 2019 and 650 bikes counted per day in the summer months of 2020.

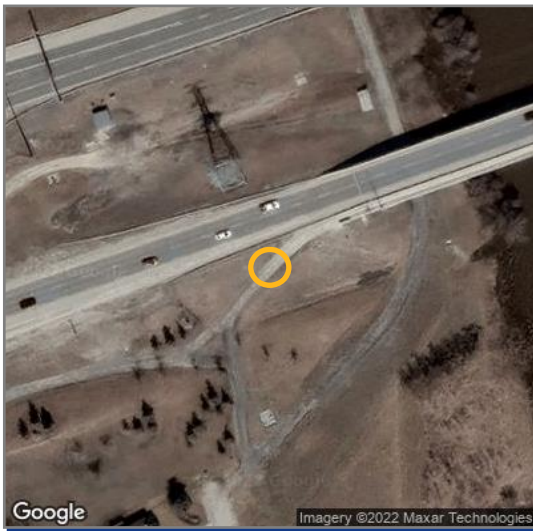


This chart shows how the monthly trends in bike traffic have changed over the past 5 years. Each data point represents the average daily bike traffic for a given month in a given year. For example, an average of approximately 800 bikes per day were counted in July 2020, whereas an average of approximately 200 bikes per day were counted in April 2018.



These charts show how the hour of day trends in bike traffic in summer months have changed over the past 5 years. Each data point represents the average number of bikes that were counted in a particular hour, during the summer months of a particular year. For example, an average of approximately 75 bikes per hour were counted between 16:00 and 17:00 on weekdays in the summer months of 2018.





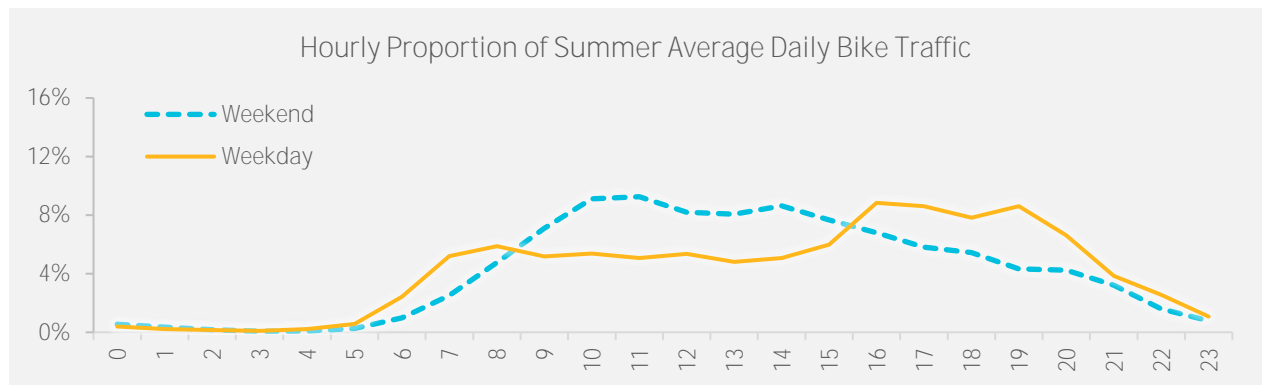
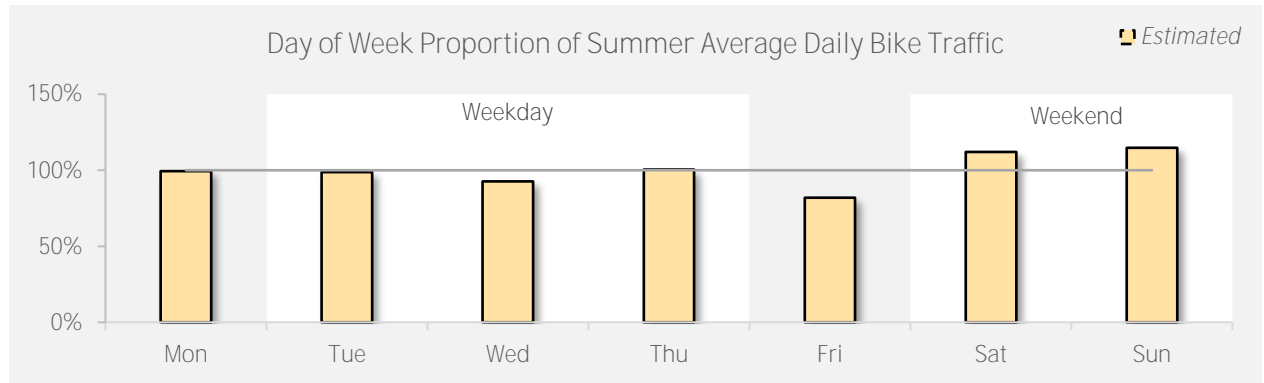
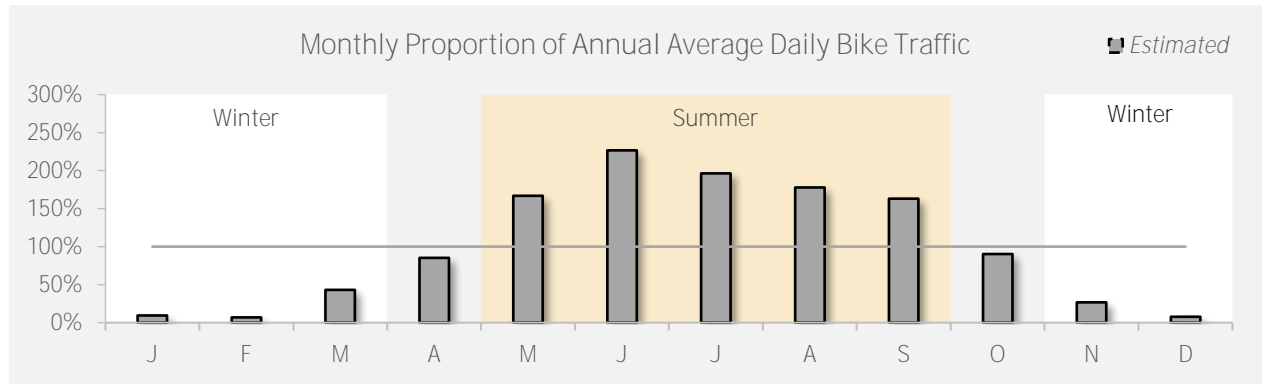
Count Site Information

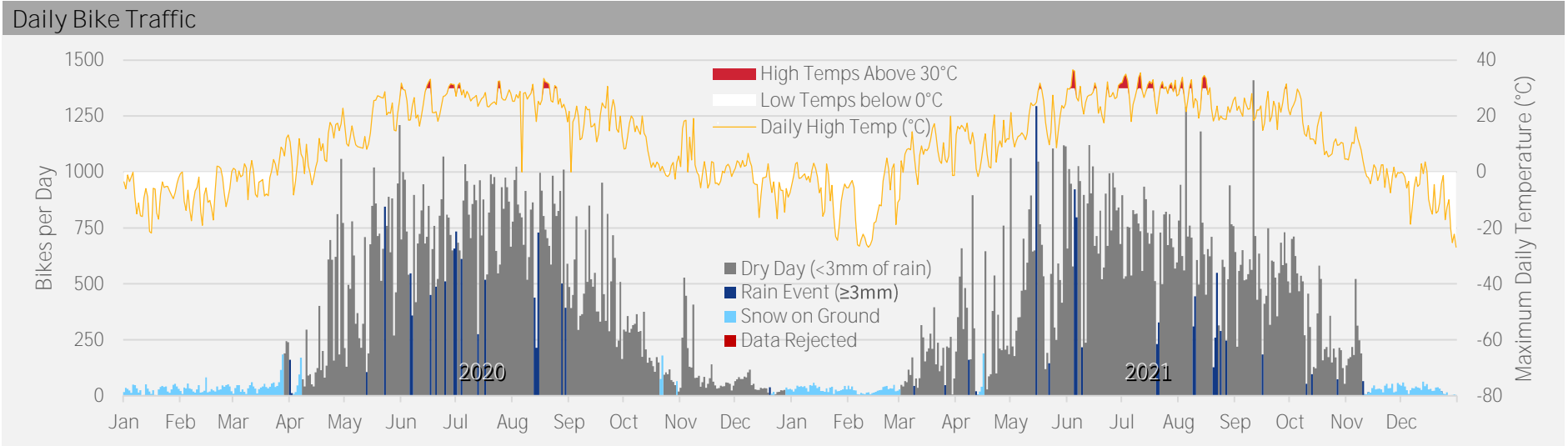
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 Counter ID: Y2G13094317
 Facility: Multi-use path
 Location: Bishop Grandin Grwy West of Fort Garry Bridge

Average Bike Traffic Statistics

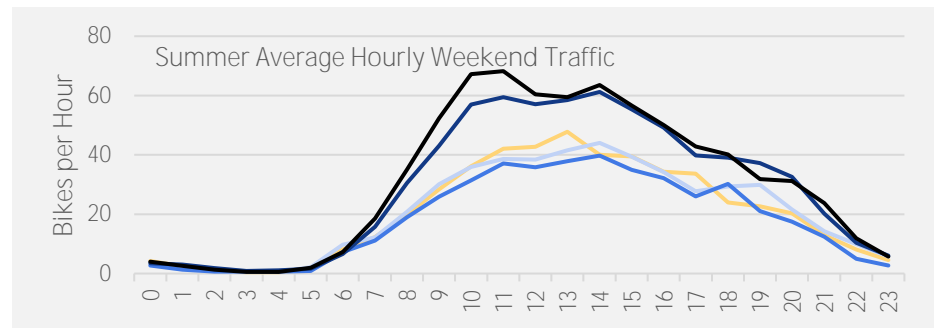
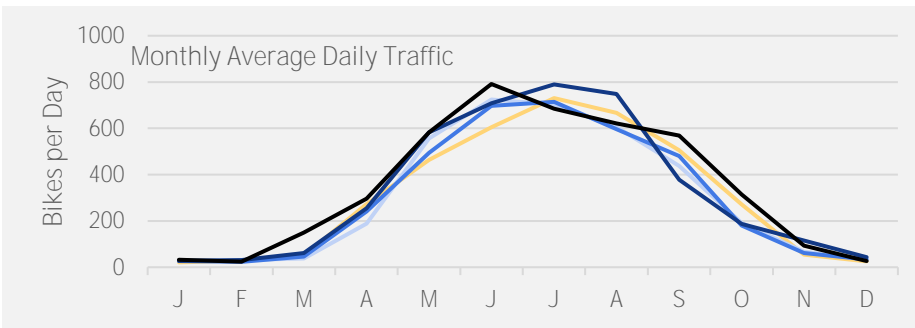
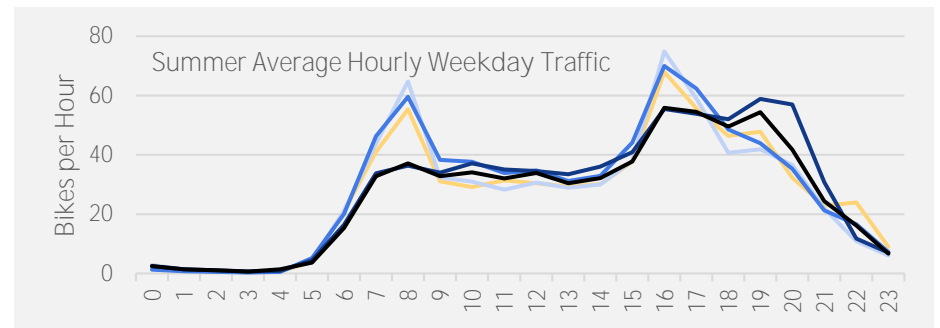
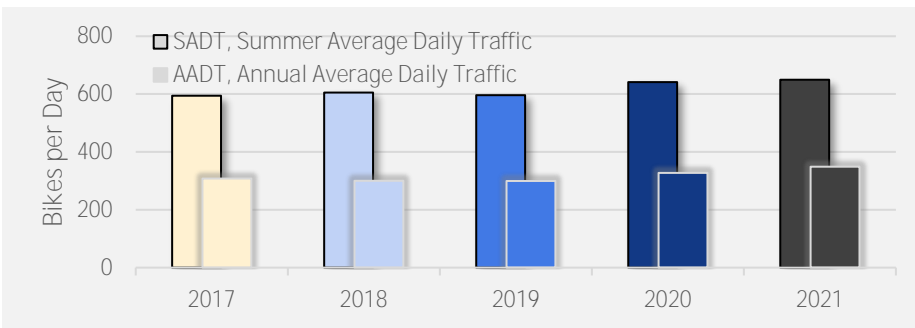
	Daily Volume	Completeness
Annual	350	100%
Winter	130	100%
Summer	650	100%
Weekday	630	100%
Weekend	740	100%
Weekday Ratio	0.85	

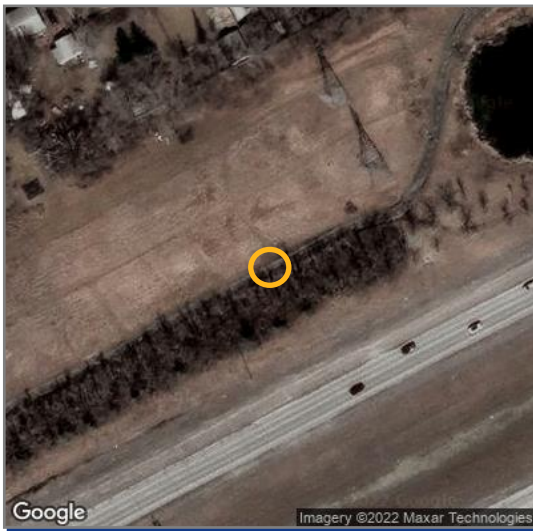
Variation of Average Daily Bike Traffic





Historical Trends





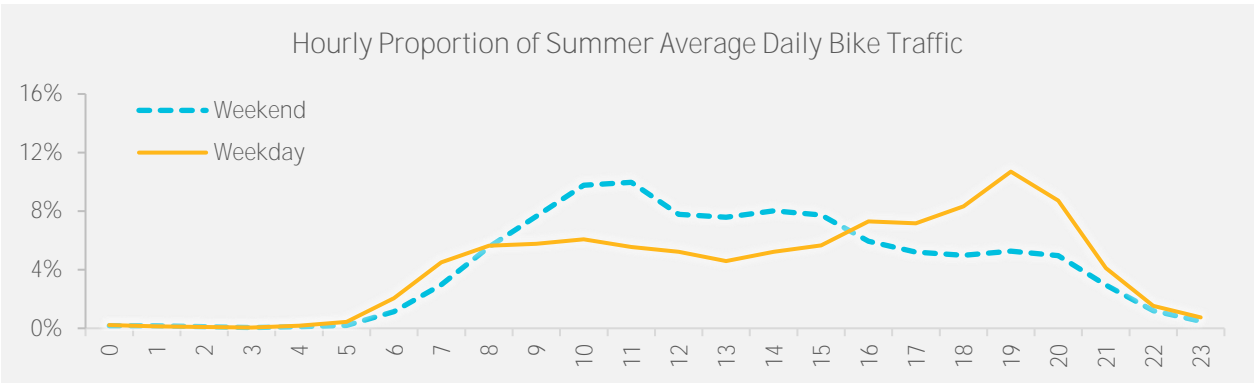
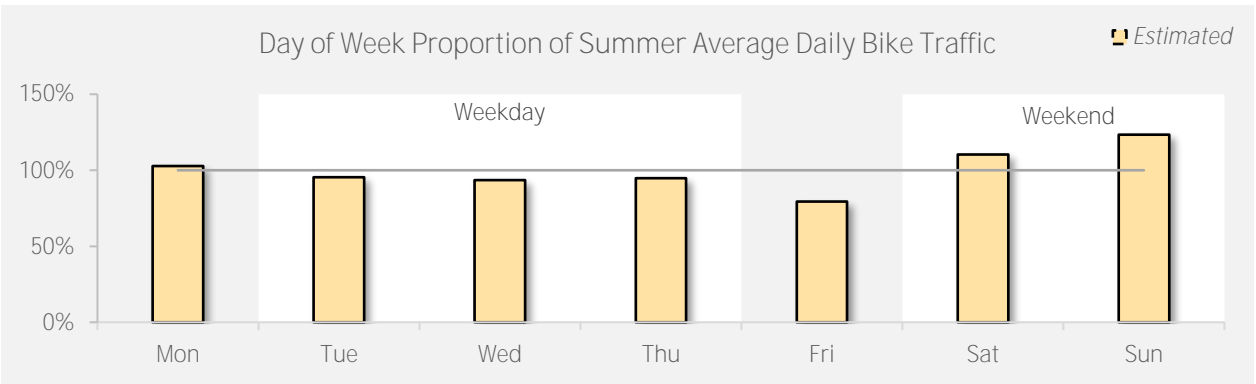
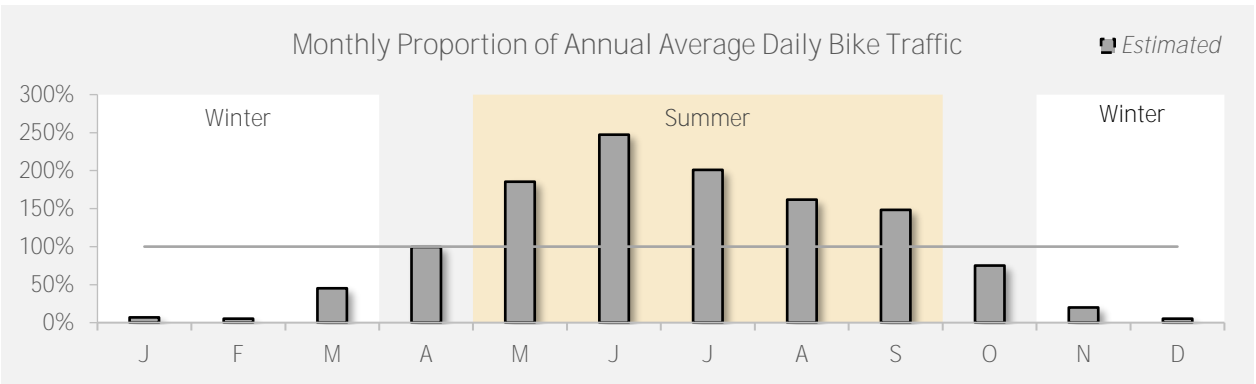
Count Site Information

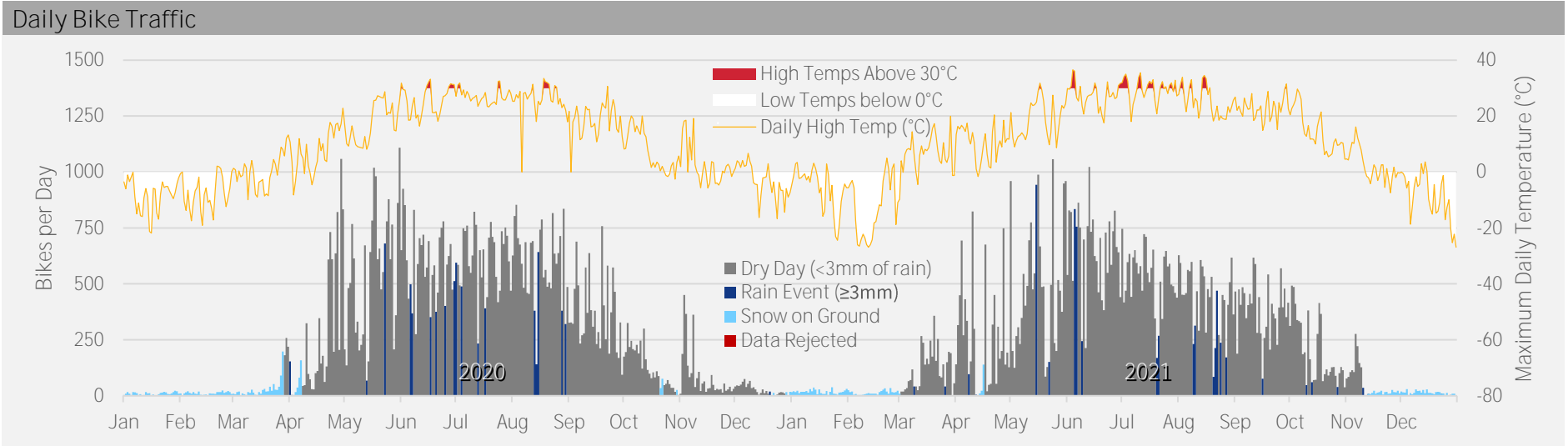
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 Counter ID: Y2G13094315
 Facility: Multi-use path
 Location: Bishop Grandin Grwy West of Mercy Tunnel

Average Bike Traffic Statistics

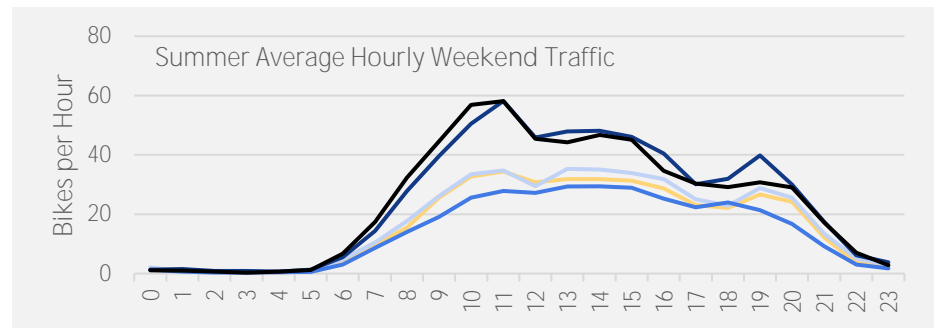
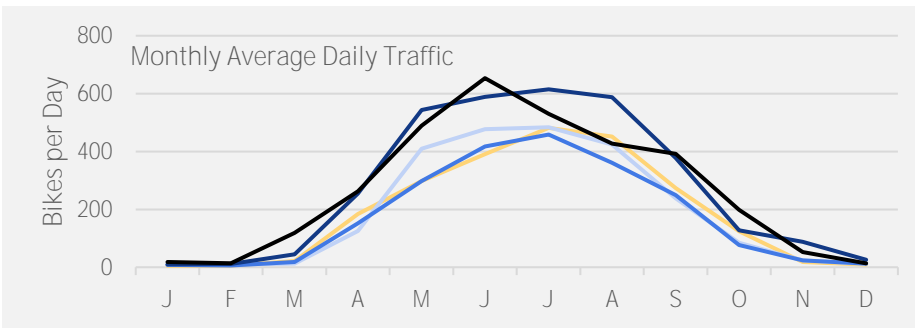
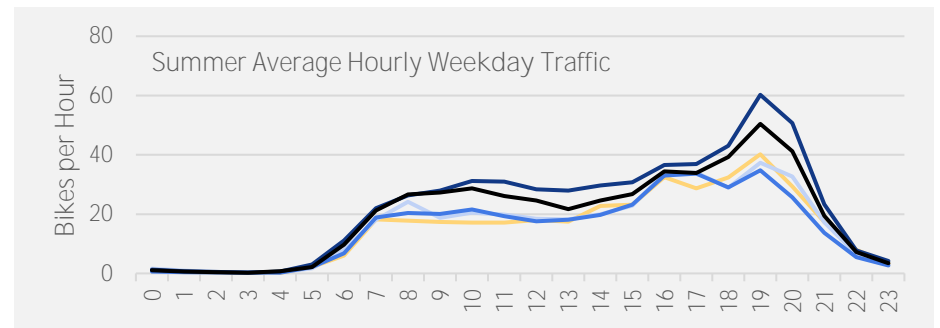
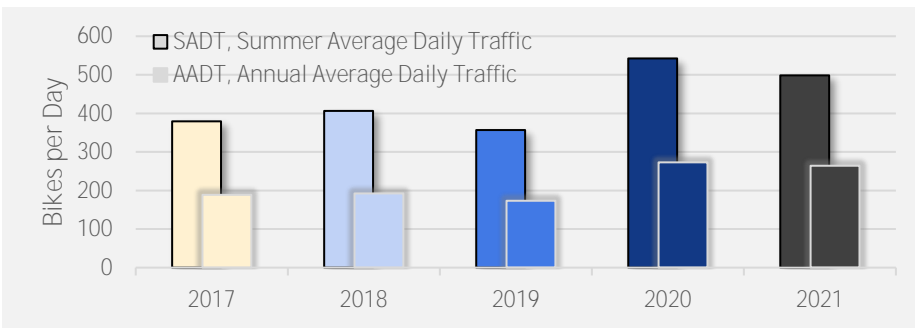
	Daily Volume	Completeness
Annual	260	100%
Winter	80	100%
Summer	500	100%
Weekday	470	100%
Weekend	580	100%
Weekday Ratio	0.81	

Variation of Average Daily Bike Traffic





Historical Trends





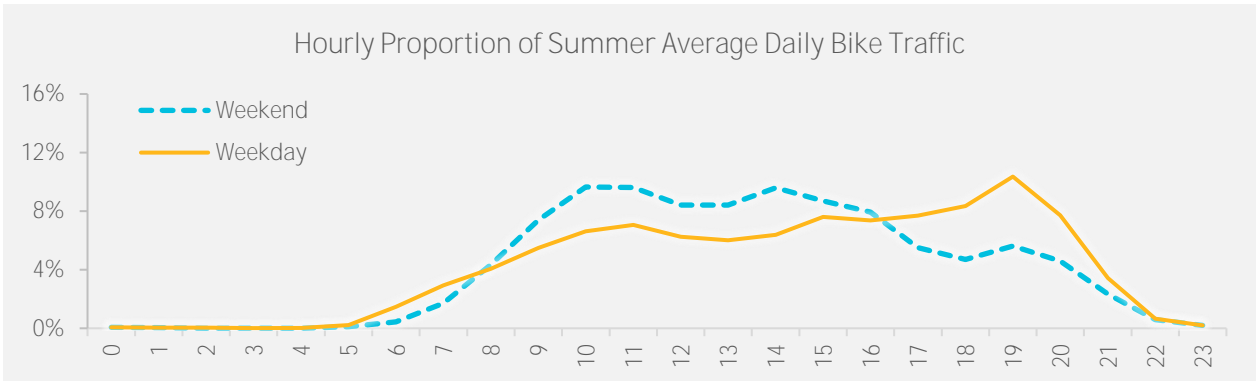
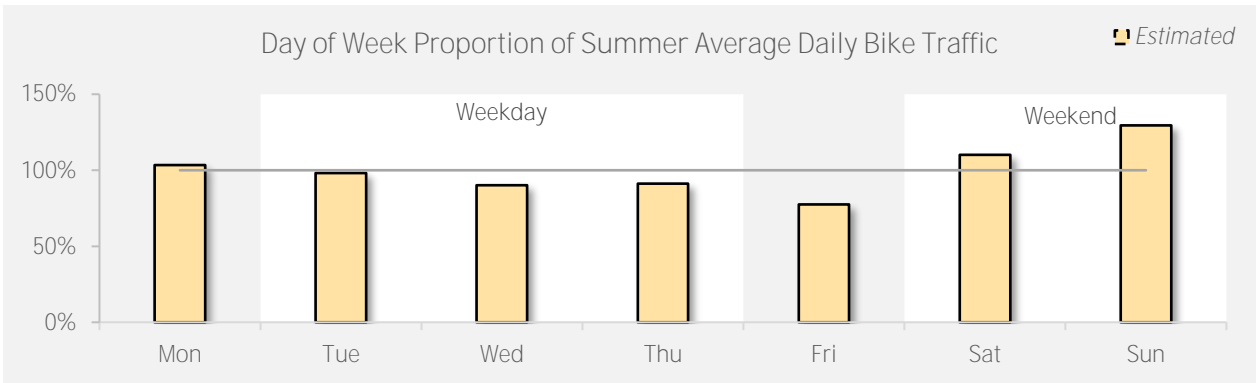
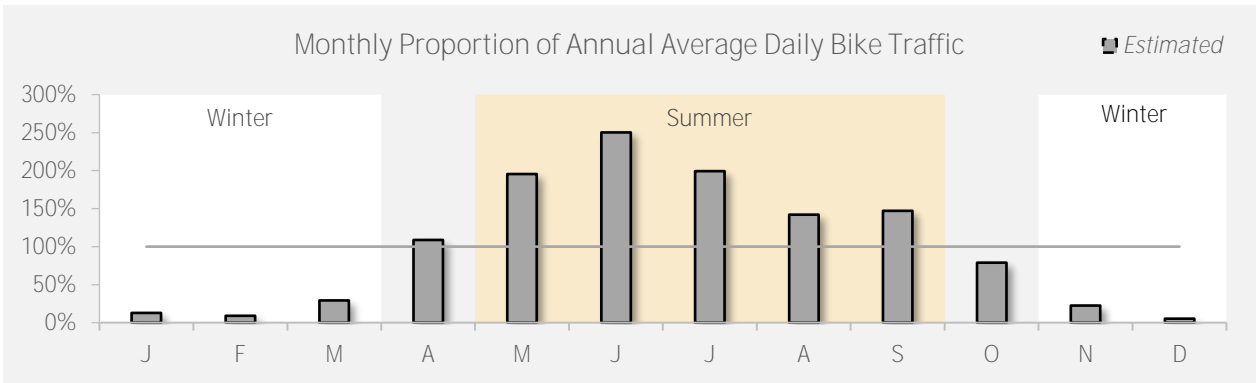
Count Site Information

Site ID: HT01
 Counter ID: Y2G13094323
 Facility: Multi-use path
 Location: Harte Tr West of access from
 Glenbush Street

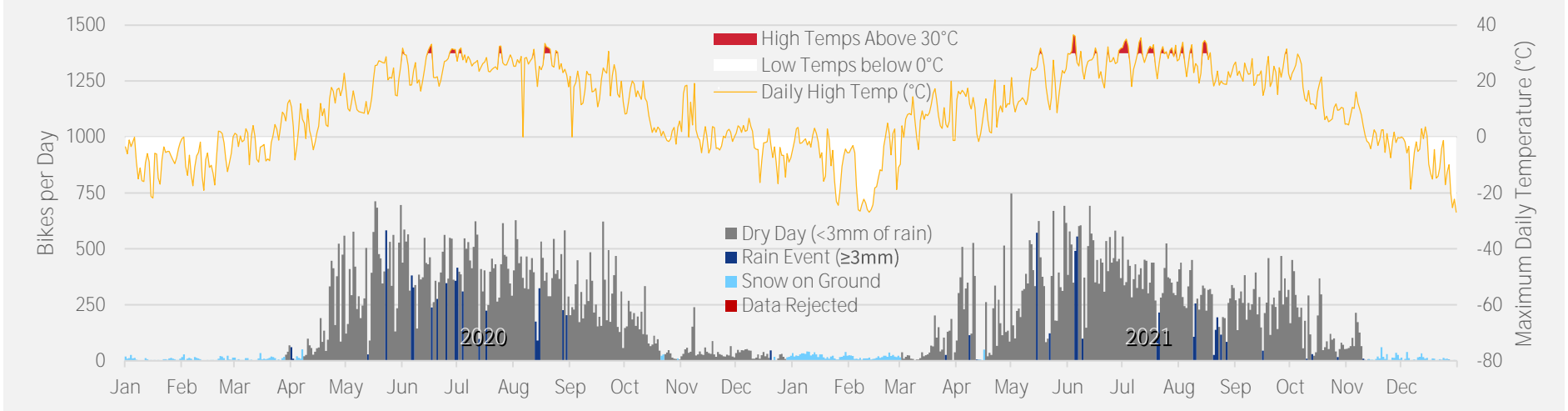
Average Bike Traffic Statistics

	Daily Volume	Completeness
Annual	180	100%
Winter	60	100%
Summer	340	100%
Weekday	320	100%
Weekend	410	100%
Weekday Ratio	0.78	

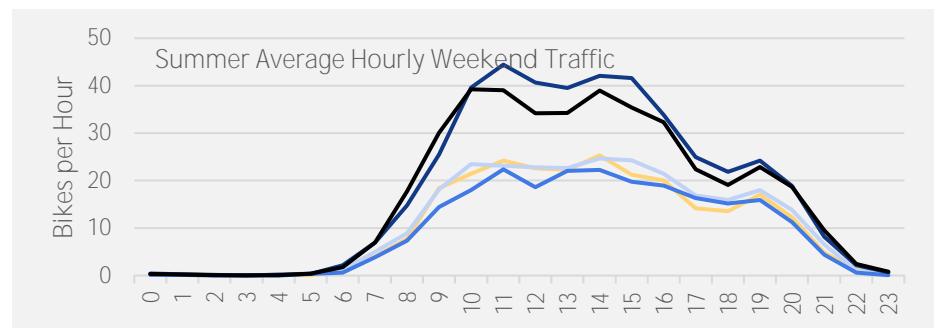
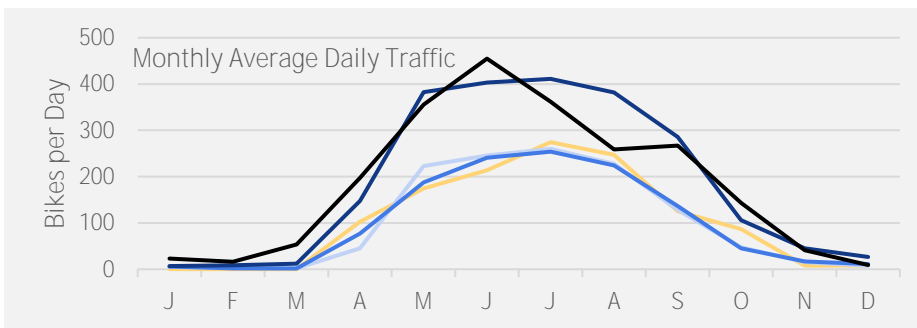
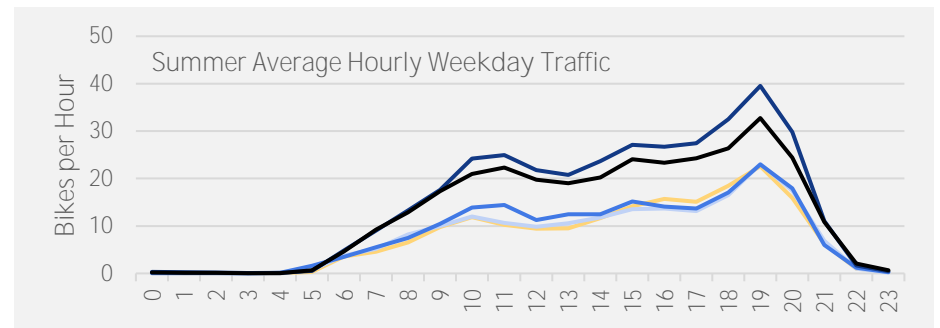
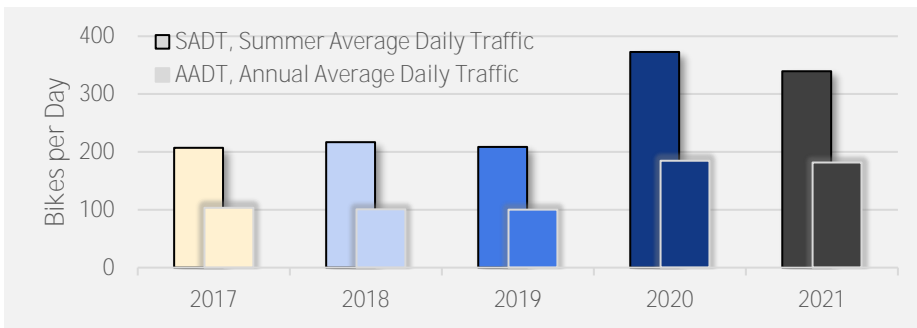
Variation of Average Daily Bike Traffic

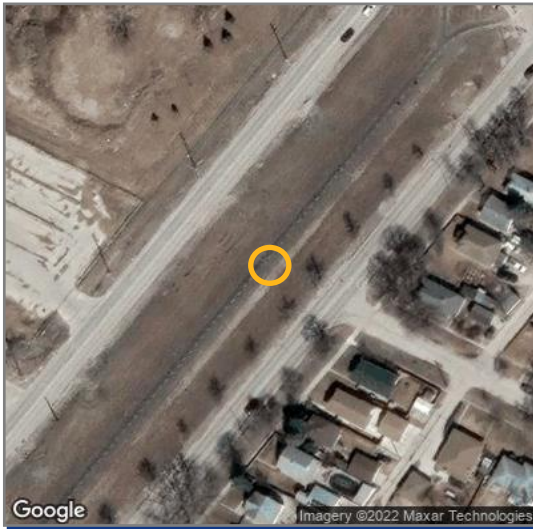


Daily Bike Traffic



Historical Trends





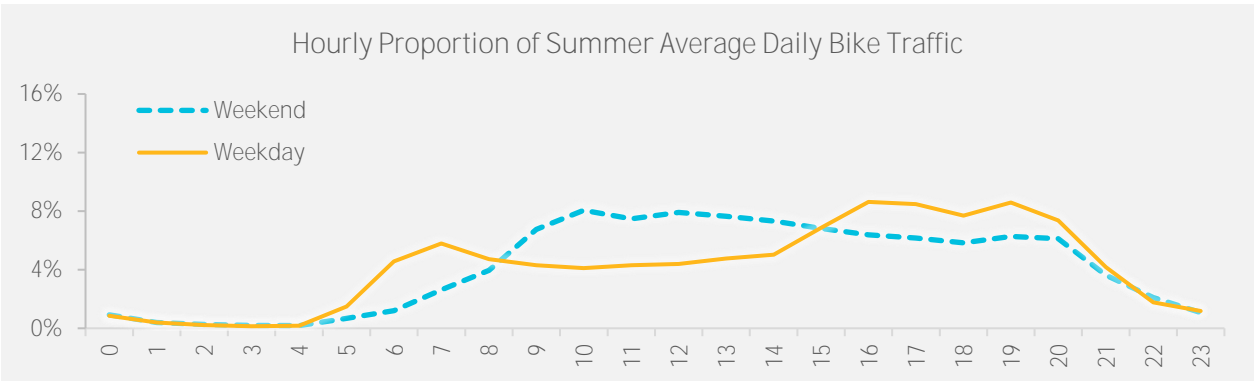
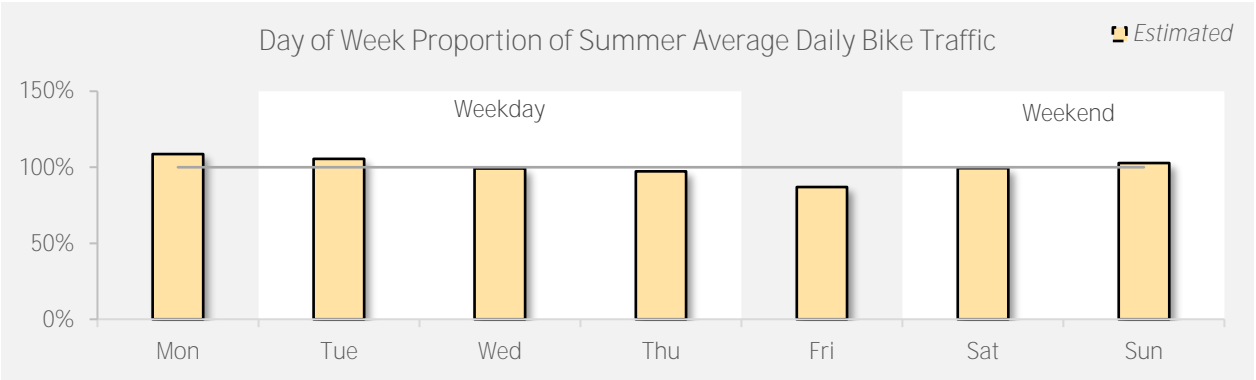
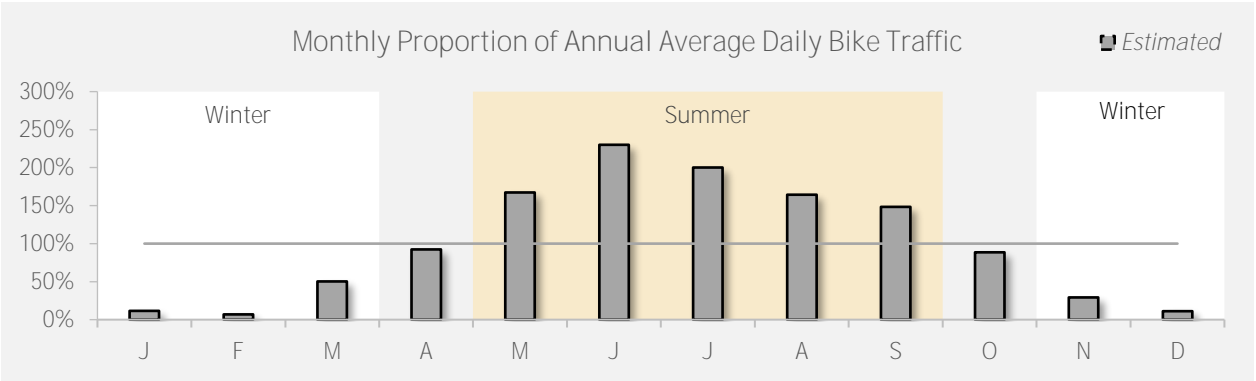
Count Site Information

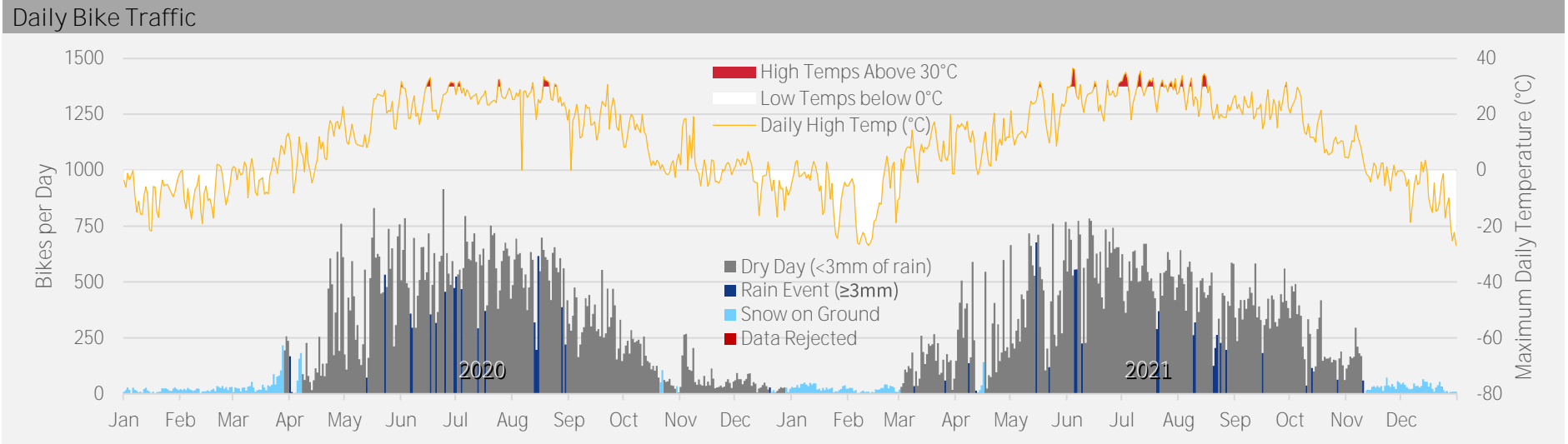
Site ID: NP01
 Counter ID: Y2G14045539
 Facility: Multi-use path
 Location: NE Pioneers Grwy South of
 Munroe Avenue

Average Bike Traffic Statistics

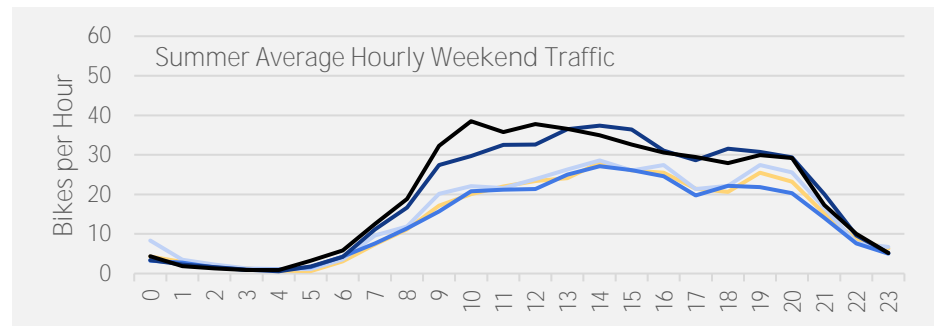
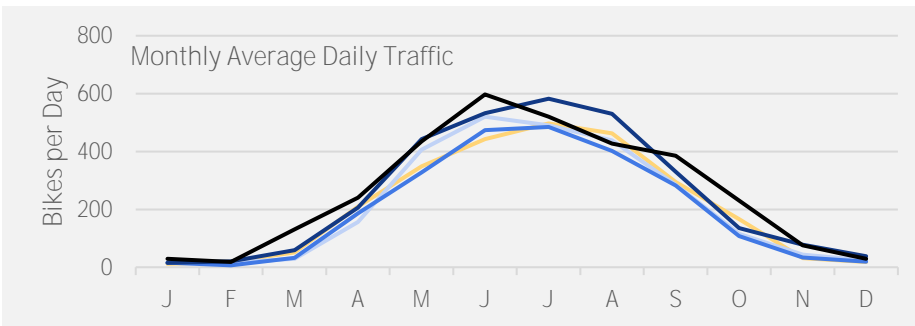
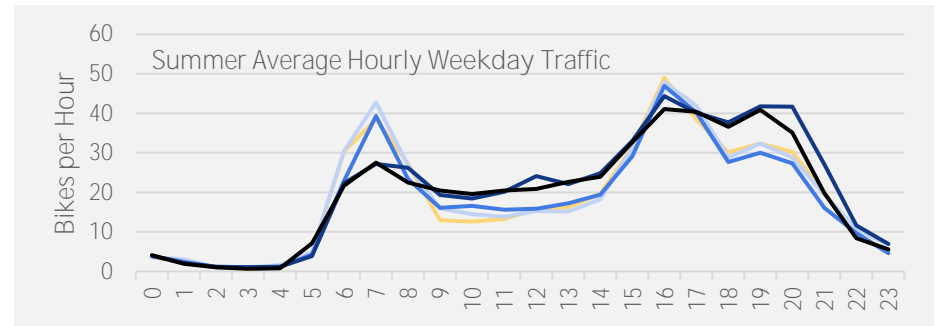
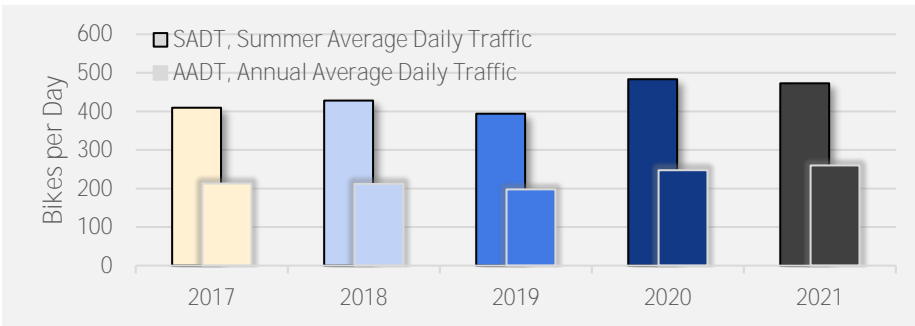
	Daily Volume	Completeness
Annual	260	100%
Winter	110	100%
Summer	470	100%
Weekday	480	100%
Weekend	480	100%
Weekday Ratio	1.00	

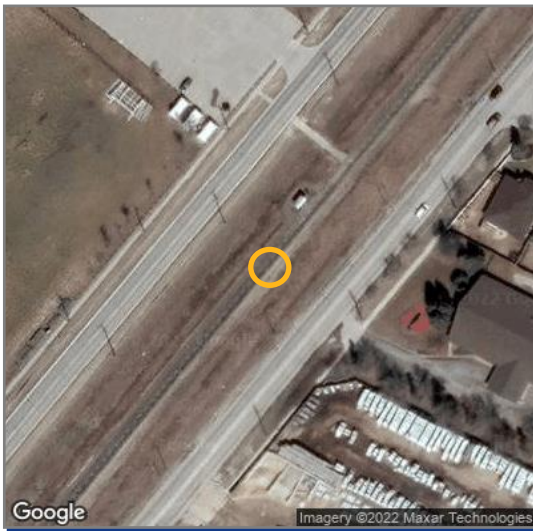
Variation of Average Daily Bike Traffic





Historical Trends





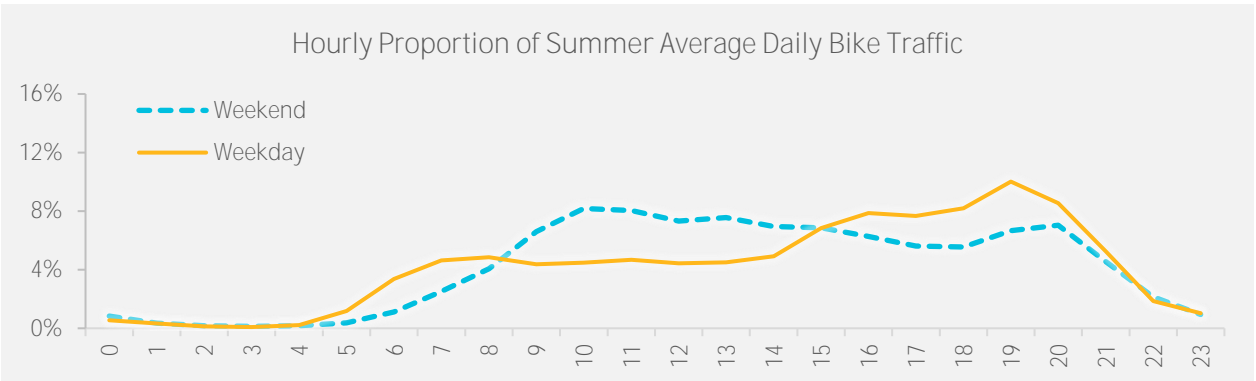
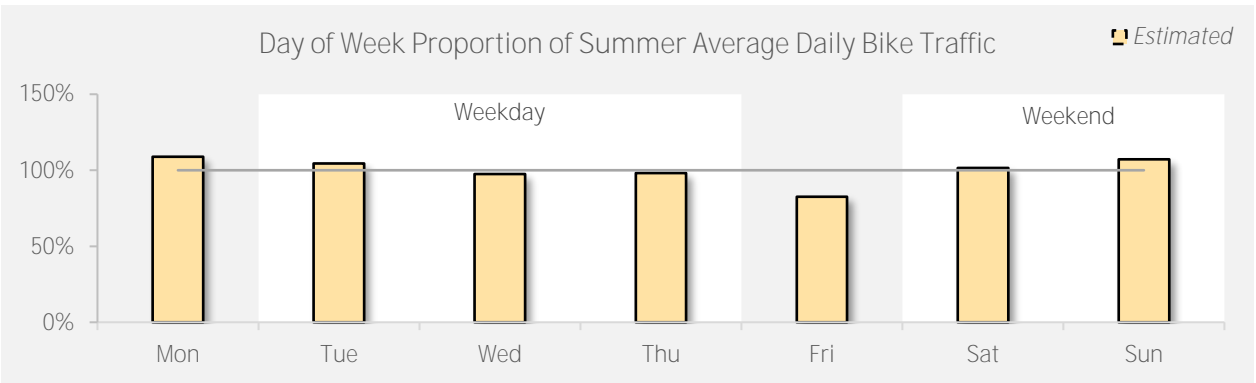
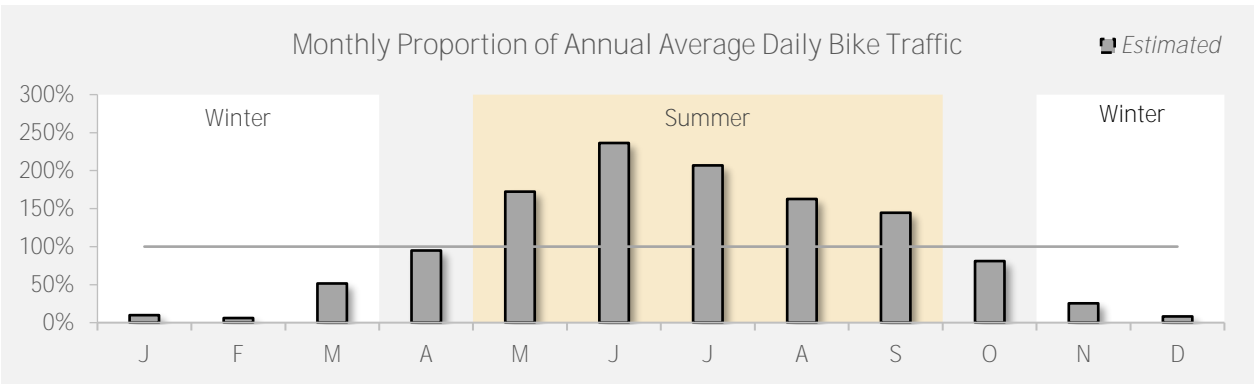
Count Site Information

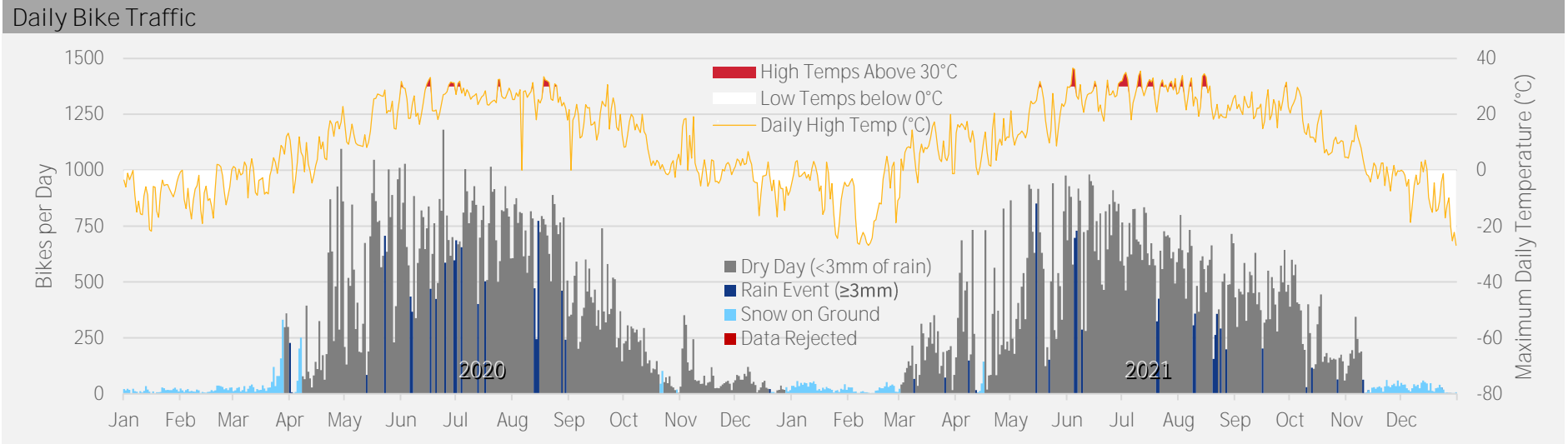
Site ID: NP02
 Counter ID: Y2G13094318
 Facility: Multi-use path
 Location: NE Pioneers Grwy North of
 Roberta Avenue

Average Bike Traffic Statistics

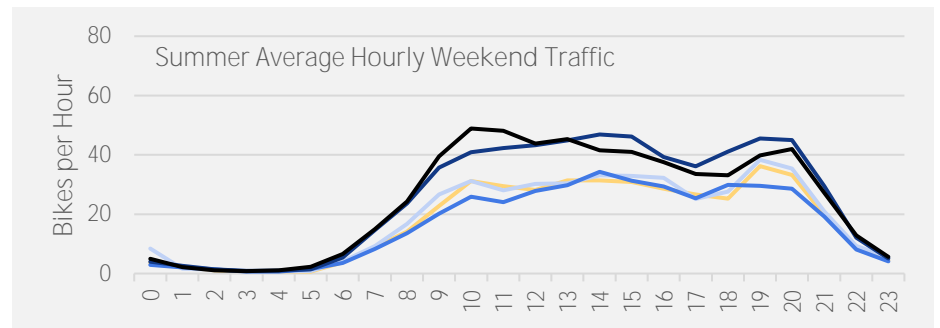
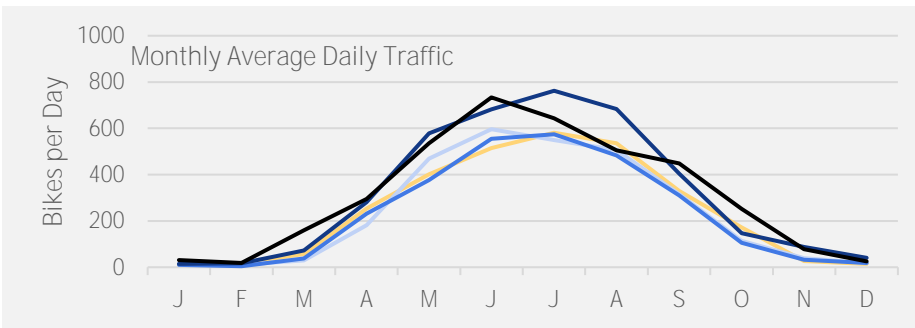
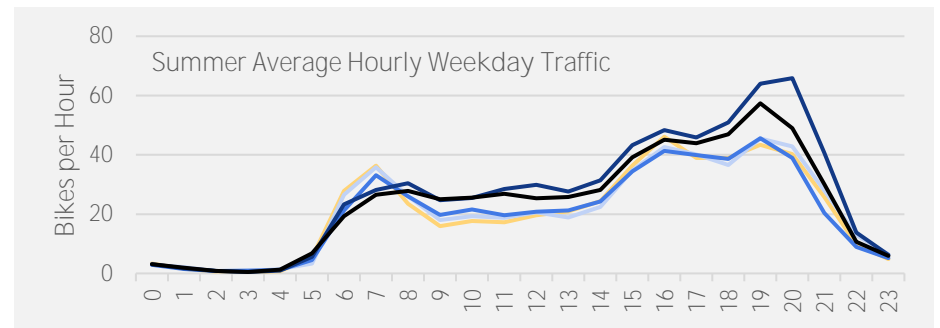
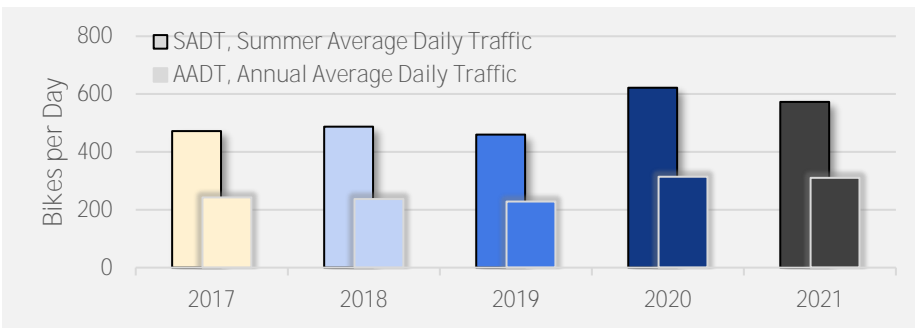
	Daily Volume	Completeness
Annual	310	100%
Winter	120	100%
Summer	570	100%
Weekday	570	100%
Weekend	600	100%
Weekday Ratio	0.95	

Variation of Average Daily Bike Traffic





Historical Trends





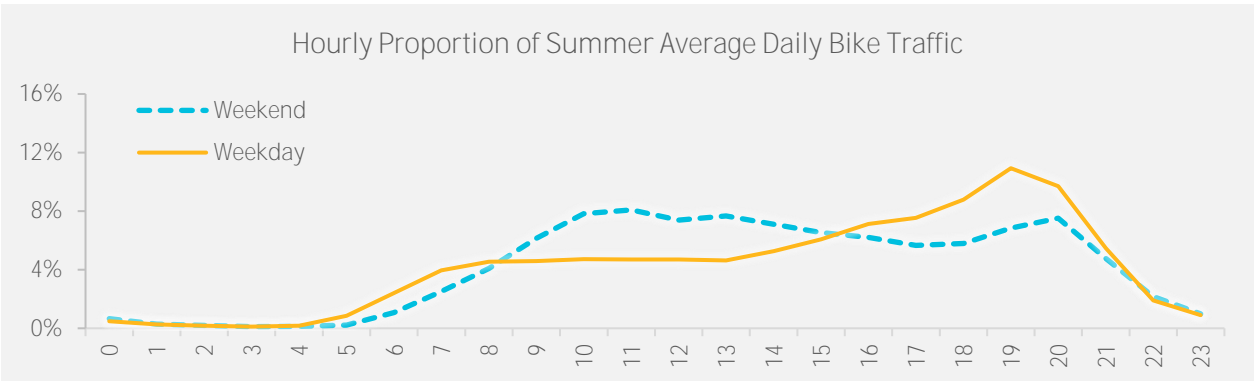
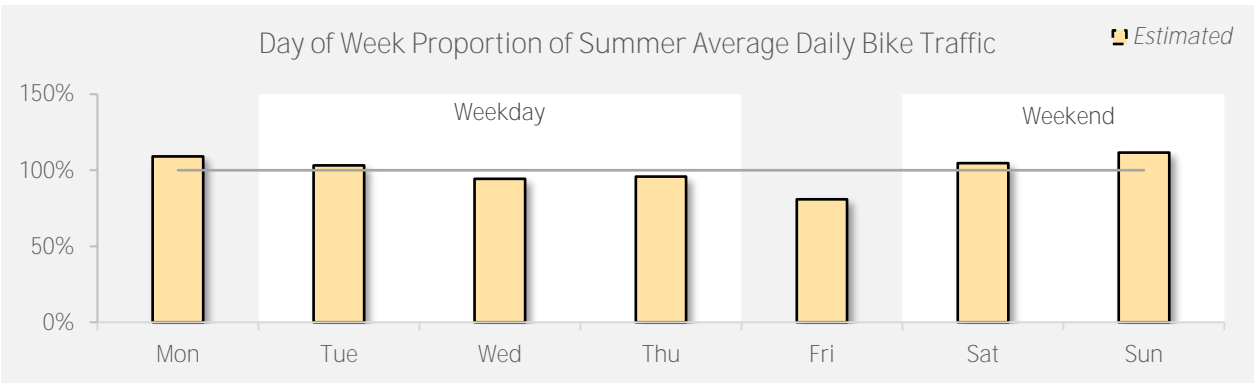
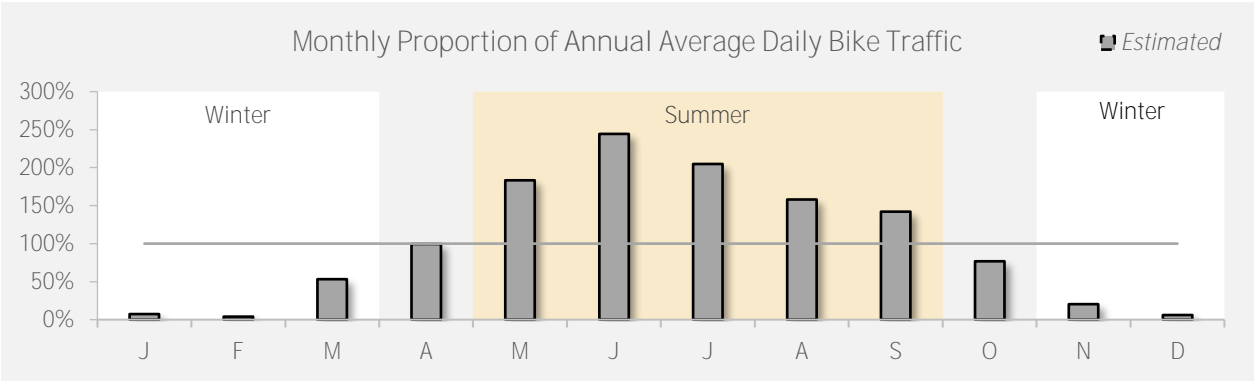
Count Site Information

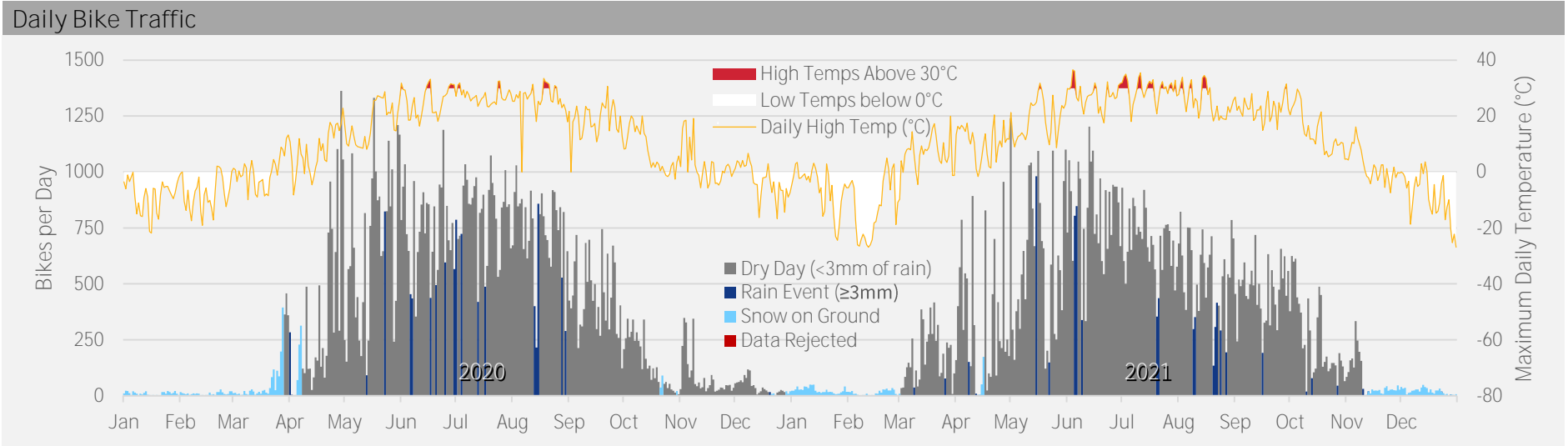
Site ID: NP03
 Counter ID: Y2G13094319
 Facility: Multi-use path
 Location: NE Pioneers Grwy South of Chief Peguis Trail

Average Bike Traffic Statistics

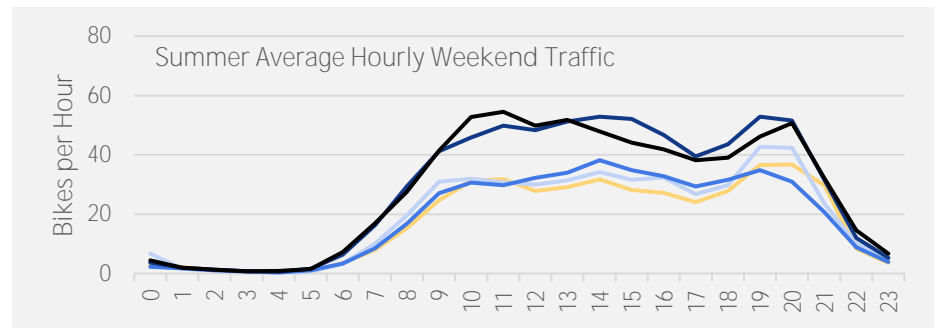
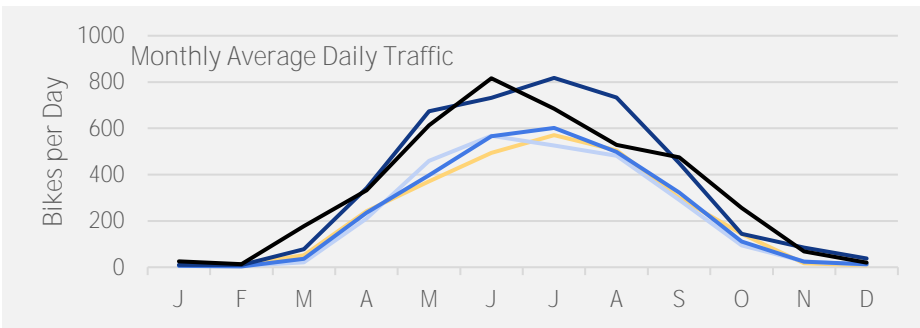
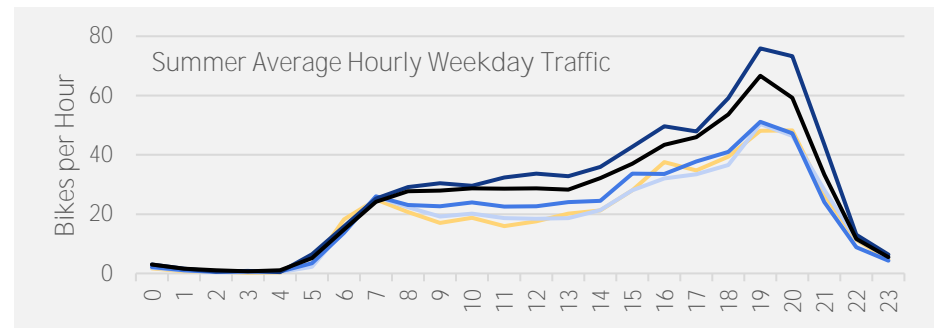
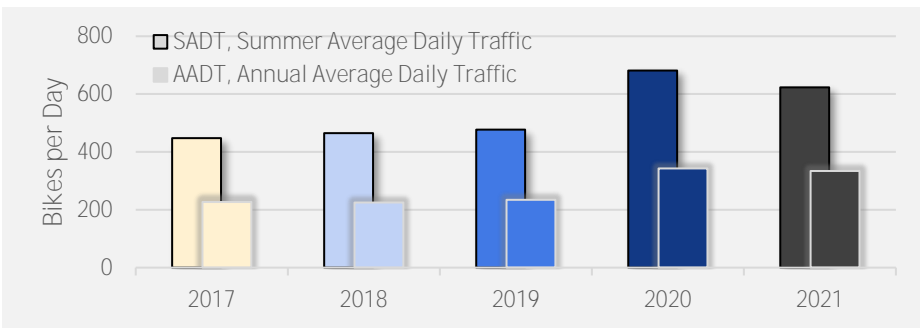
	Daily Volume	Completeness
Annual	330	100%
Winter	120	100%
Summer	620	100%
Weekday	610	100%
Weekend	670	100%
Weekday Ratio	0.91	

Variation of Average Daily Bike Traffic





Historical Trends





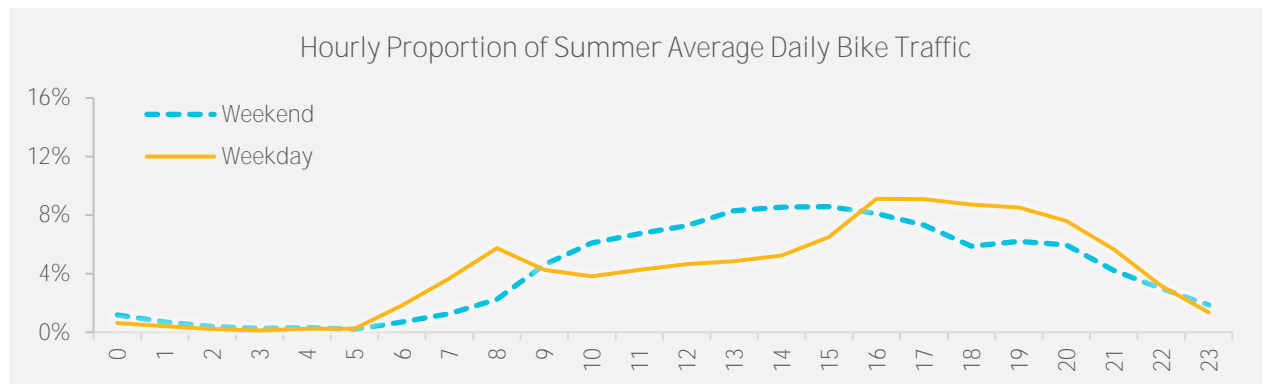
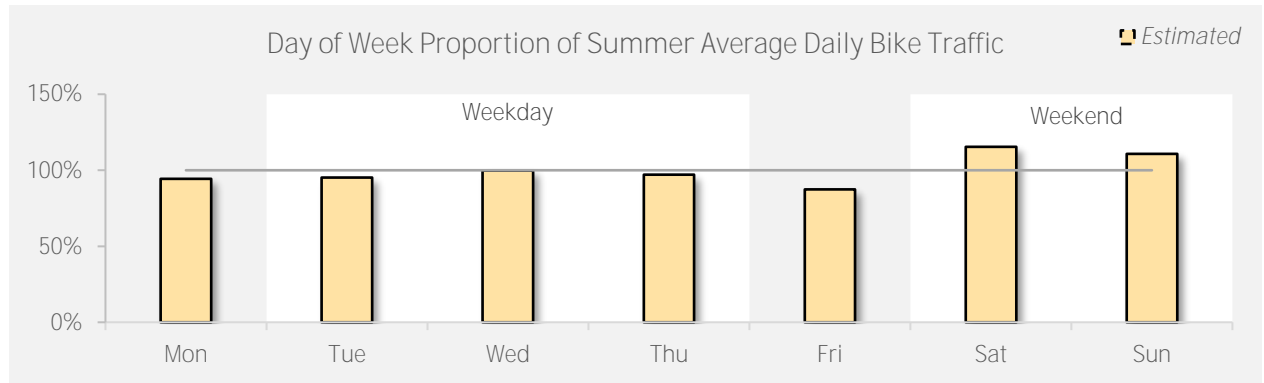
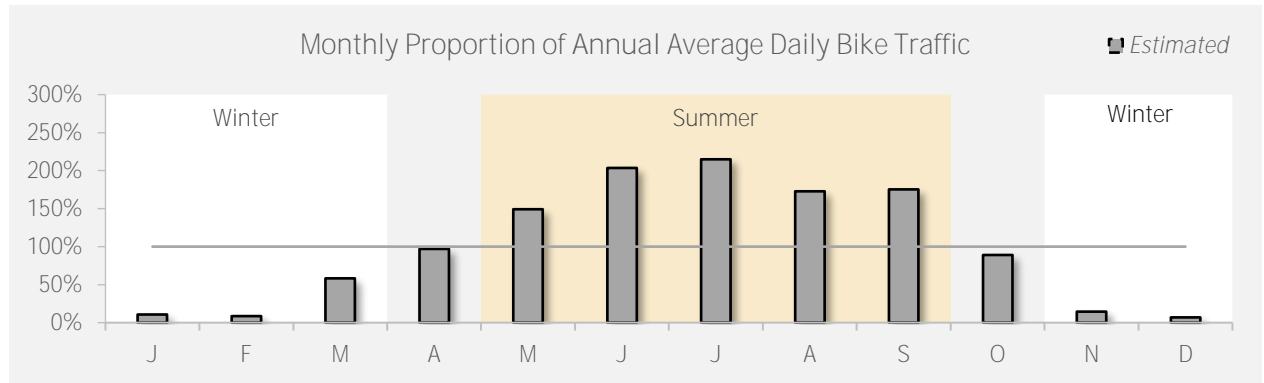
Count Site Information

Site ID: FR01
 Counter ID: Y2H15047627
 Facility: Protected bike lane
 Location: Fort Gibraltar Tr East of Main Street

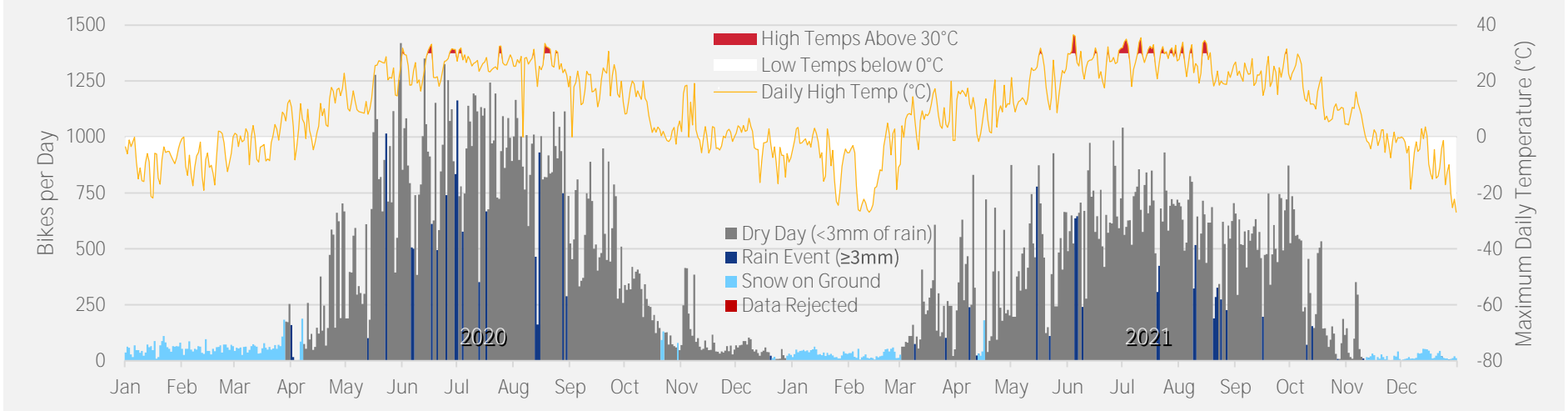
Average Bike Traffic Statistics

	Daily Volume	Completeness
Annual	320	100%
Winter	120	100%
Summer	580	100%
Weekday	560	100%
Weekend	650	100%
Weekday Ratio	0.86	

Variation of Average Daily Bike Traffic



Daily Bike Traffic



Historical Trends

