

# Project Requirements Document: Cyclistic

## Purpose:

*(Briefly describe why the project is happening and why the company should invest resources in it.)*

Cyclistic's Customer Growth Team is creating a business plan for next year. The team wants to understand how their customers are using their bikes;

**Top priority is identifying customer demand at different station locations.**

The dataset includes millions of rides, so the team wants a dashboard that summarizes key insights, so they can create business plans that are driven by customer insights and are more successful than plans driven by just internal staff observations.

## Key dependencies:

*(Detail the major elements of this project. Include the team, primary contacts, and expected deliverables.)*

This project will require a dataset of customer data, plus geographic and climate data of NY.

(Also, should detail approval in this session, if is necessary for the project)

## Stakeholder requirements:

*(List the established stakeholder requirements, based on the Stakeholder Requirements Document.*

*Prioritize the requirements as: R - required, D - desired, or N - nice to have.)*

The dashboard must help Cyclistic decision-makers understand how their customers are using the bikes and the demand at different locations. Including factors that might influence that demand.

- A table or map visualization exploring starting and ending station locations, aggregated by location - R
- A visualization showing which destination (end locations) are popular based on the total trip minutes - R

- Gather insights about congestion at stations - N
- Gather insights about the number of trips across all starting and ending locations - R
- Gather insights about peak usage by time of day, season, and the impact of weather - R

### Success criteria - Use SMART criteria

**Specific:** BI insights must clearly identify the specific characteristics of a successful product. They must demonstrate how customers are currently using bikes and what impacts demand at station locations.

**Measurable:** Each trip should be evaluated using starting and ending location, duration, variables such as time of day, season, and weather. For example, do customers use Cyclistic less when it rains? Or does bikeshare demand stay consistent? Does this vary by location and user types (subscribers vs. non-subscribers)?

**Action-oriented:** These outcomes must prove or disprove the theory that location, time, season, and weather impact user demand. Then, the Cyclistic team will use this knowledge to refine future product development.

**Relevant:** All metrics must support the primary question: How can we build a better Cyclistic experience?

**Time-bound:** Analyze data that spans at least one year to see how seasonality affects usage. Exploring data that spans multiple months will capture peaks and valleys in usage.

### User journeys:

*(Document the current user experience and the ideal future experience.)*

The main purpose of Cyclistic is to provide customers with a better bike-share experience.

### Assumptions:

*(Explicitly and clearly state any assumptions you are making.)*

The dataset includes latitude and longitude of stations but does not identify more geographic aggregation details like zip code, neighborhood name, or borough.

The weather data provided does not include what time precipitation occurred; it's possible that

on some days, it precipitated during off-peak hours. However, for the purpose of this dashboard, you should assume any amount of precipitation that occurred on the day of the trip could have an impact.

Starting bike trips at a location will be impossible if there are no bikes available at a station, so we might need to consider other factors for demand.

### Compliance and privacy:

*(Include compliance, privacy, or legal dimensions to consider.)*

The data must not include any personal data such as name, email address, phone number, or physical address.

The user provides this data as part of their device activation but is not necessary for this project. It is paramount that the users be anonymized to avoid any bias.

### Roll-out plan:

*(Detail the expected scope, priorities and timeline.)*

Plan to complete the BI tool in six weeks:

- Week 1:
  - Dataset assigned
  - Initial design for fields and validated to fit the requirements
- Weeks 2-3:
  - SQL
  - ETL development
- Weeks 3-4:
  - Finalize SQL
  - Dashboard design - 1st draft
- Weeks 5-6:
  - Dashboard development
  - Testing