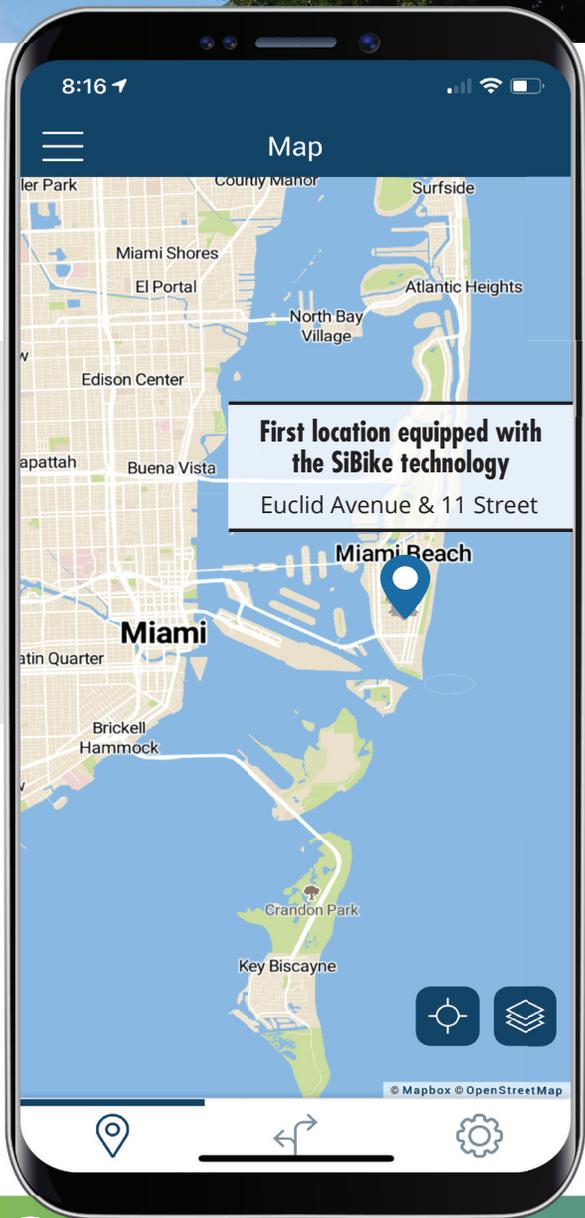




CONNECTING BIKES TO INFRASTRUCTURE



SiBike provides GPS-based bike detection through a smartphone app. Once set up, the free SiBike app knows where the bike rider is, and also what intersections have been configured to accept a bike detection message. As a result, traffic signal controllers programmed to interface with the app will detect the rider approaching the intersection and facilitate a green light for the bicyclist as soon as safely possible.

Benefits of bicycle detection*

- ✔ Improves efficiency and reduces delay for bicycle travel
- ✔ Increases convenience and safety of bicycling
- ✔ Discourages red light running by bicyclists without causing excessive delay to motorists
- ✔ Can be used to prolong the green phase to provide adequate time for bicyclists to clear the intersection

* <https://nacto.org/publication/urban-bikeway-design-guide/bicycle-signals/signal-detection-and-actuation/>

Miami-Dade County considers bicycles an essential mode of transportation

As part of the new Advanced Traffic Management System (ATMS) project, the Miami-Dade County Department of Transportation and Public Works (DTPW) is testing the SiBike bicycle detection system. Based on the technology's performance and input from the biking community this type of bicycle detection will be considered for implementation at additional intersections in Miami-Dade County.

THE GOAL IS TO TEST BICYCLE DETECTION TECHNOLOGY TO ENSURE THAT BICYCLISTS ARE CONSIDERED IN THE OPERATION OF THE TRAFFIC SIGNAL SYSTEM.



For more information about how to participate in the testing of the SiBike application, please email Alicia Gonzalez at agonzalez@mrgmiami.com or visit miamidadeatmsproject.com.

HOW IT WORKS?

DOWNLOAD THE SIBIKE APPLICATION AND SET IT UP.

SiBike runs in the background and automatically senses when a person starts and ends a cycling trip.

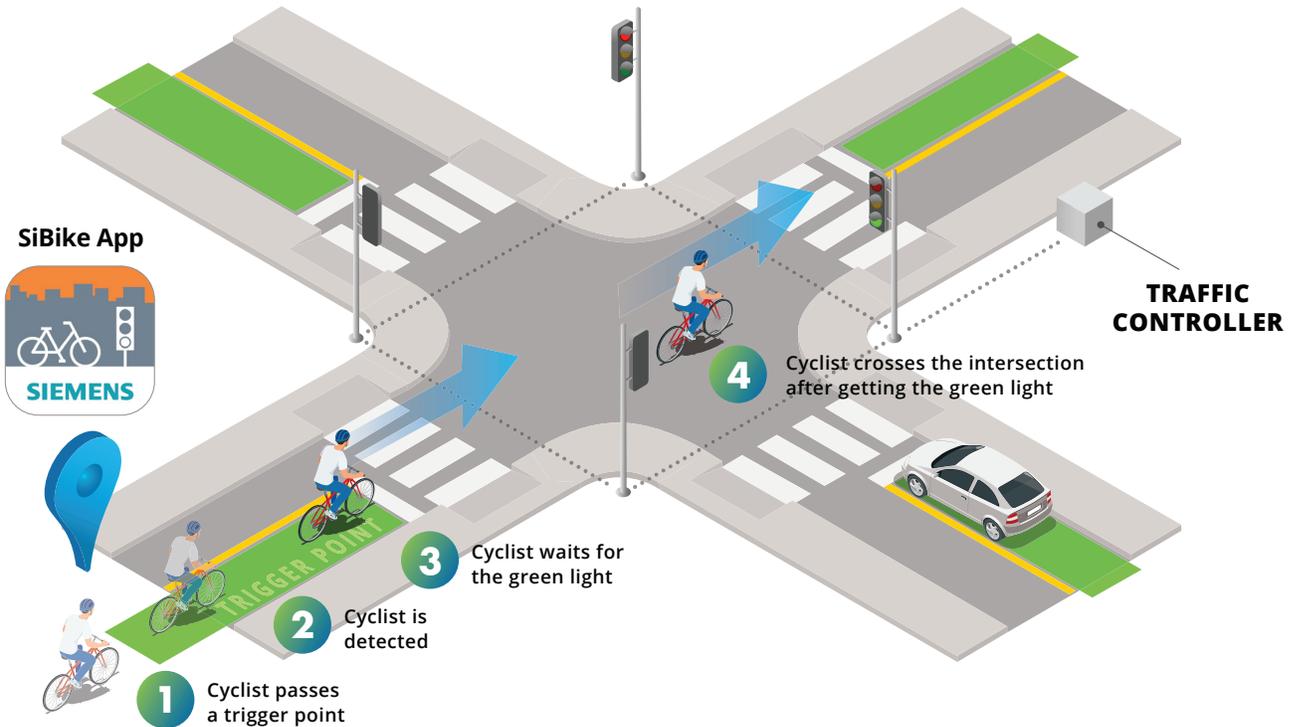
iOS



Android



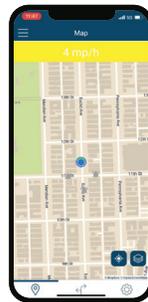
Available on App Store or Google Play



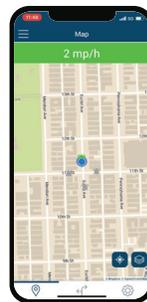
APP USER INTERACTION



Open the **SiBike App** and enable GPS location service by touching the marked icon.



SiBike App sends the cyclist's location via GPS to the traffic signal. The cyclist presence has been detected.



Cyclist's presence has passed validity checks, and will wait for the green light.



The app continues to track the cyclist's location after crossing the intersection.

When a user is biking, the SiBike app knows not only where the bicyclist is, but also what intersections have been configured to accept a bicycle detection message.

When the app detects it is near an intersection that can accept a bike detection message, the app communicates to the SiBike cloud server.

Messages are then collected and forwarded to the central server where detector calls are then placed with the appropriate intersection controllers and facilitates the green light to the bicyclist as soon as safely possible.



For more information about the application or the ATMS project, please email [Alicia Gonzalez](mailto:agonzalez@mrgmiami.com) at agonzalez@mrgmiami.com or visit miamidadeatmsproject.com.