

CASE STUDY | VOYAGE



“
Swift has been a key partner on our journey to create safer, more comfortable and more affordable autonomous driving experience for our customers.
”

—Oliver Cameron, Co-Founder & CEO of Voyage

CUSTOMER

Voyage

PRODUCTS

Skylark,
Piksi Multi, Duro®

USE CASE

Automotive

[Voyage](#) is working to create safer, more comfortable and more affordable transportation options—powered by autonomous driving technology—for communities all across North America. Voyage enables its community members to summon on-demand self-driving taxis and move effortlessly from one destination to the next.

Challenge

The challenge facing the founding team at Voyage is to quickly deploy self-driving technology in a real-world environment that delivers a low-cost, reliable and safe transportation solution, while involving their customers who stand to benefit most from the technology in the process.

While competitors within the autonomous driving space often develop their technologies within the confines of labs and are constrained by the complexities of local legislation, Voyage has expedited the roll-out of a true production application of self-driving cars within private communities—in tandem with customers using their product—to constantly improve and iterate its technologies to provide a better user experience.

The Villages

The Voyage fleet stays within the bounds of a given community, where all roads have been precisely mapped, speed limits are lower, and traffic patterns are more clearly defined than in metropolitan cities—where other autonomous vehicle testing is only

starting to take place. Voyage's approach makes it possible for them to deliver a self-driving taxi service to a community in a matter of months. With its vision in sight, the first community that Voyage has deployed its self-driving fleet within is The Villages in San Jose, California. Residents in The Villages—a community of 4,000—are able to summon a Voyage self-driving taxi using a smartphone app and have a ride waiting at their front door. This service is especially valuable to customers with mobility limitations that might prevent them from walking to an event or reaching a bus stop down the street. Voyage takes residents of The Villages to and from the gym, to visit with friends, to the golf course and to community center events, to name a few. Watch Voyage in action at The Villages [here](#).

Solution



Voyage is able to deliver this self-driving technology to communities thanks in part to Swift Navigation. Using Swift Navigation's Skylark™ GNSS Cloud Corrections Service and outfitting its fleet with Piksi® Multi RTK GNSS receivers, Voyage has utilized Swift's centimeter-accurate GPS technology in its navigation sensor suite. The manpower and overhead that would have been required by the Voyage team to develop precision navigation technology in-house was offset by Swift Navigation's end-to-end autonomous driving solution. Voyage would have had to buy expensive GNSS receivers, set them up, monitor them and hire engineers to write algorithms to achieve what Swift delivers with its Skylark Cloud Corrections Service and GNSS receivers. The precise centimeter-level localization delivered by the Swift product suite is critical to the needs of the communities that Voyage serves, as its customer base—especially those with mobility issues—require a smooth start and stop to their rides. Swift makes this possible.

Results

Voyage has been using Swift Navigation products for the entire deployment at The Villages in San Jose and is actively providing rides every day, improving quality of life for its residents. Voyage will next utilize the Swift product suite in its upcoming deployment launching to 125,000 retirees at The Villages complex in Florida. Voyage is expanding community-by-community across the country and with each deployment is targeting communities with more residents, more roads and its own set of unique challenges.

Contact us to see how Swift Navigation can bring your autonomous project to life.

WWW.SWIFTNAV.COM | @SWIFTNAV | SALES@SWIFTNAV.COM