





Butte Regional Transit Fixed route operation with around 36 vehicles

#### Problem/Challenge

- Couldn't track buses in real time
- Needed to make routes more efficient

**Solution** Streets ITS with Rangers allows for AVL tracking of buses in real time

#### Result

- More efficient routes
- Better service on the bus

# How Streets Enabled Butte Regional Transit to Make More Efficient Schedules

#### About Butte Regional Transit

Butte Regional Transit (B-Line) provides public transit and ADA complementary paratransit service across Butte County in California. They operate approximately 36 fixed route buses on around 20 fixed routes. Over the years, they have spent a great deal of time studying the efficiency of their transit system and to understand the needs of their ridership.

Heading various initiatives to improve service to riders is Jim Peplow, Senior Planner, Transit Operations. He has been involved with the development and beta-testing of the TripSpark fixed route software suite, Streets ITS since very early on. Although already a user of TripSpark demand response products, B-Line implemented an early version of Streets in December of 2010. Much of the development of our fixed route software products has come from the insight and input of our partners. Jim was instrumental in providing feedback in the early stages of the Streets build and he continues to contribute to its ongoing development. Fixed Route Software Success: Butte Regional Transit

*"Fixed route software has helped me make more efficient schedules."* 

# The Problem / Challenge

Jim determined that there were a number of key areas in which fixed route software could empower his agency. His number one concern was bus tracking. Not having access to bus locations makes everyone's job harder. For example, if a rider were to call in asking about an arrival time, it was very difficult for Jim and his team to pass on accurate information. As well, there was no way to see if a problem was developing on a route, without having to contact drivers directly. If a bus was falling behind schedule, it might go entirely undetected until complaint calls started to pour in.

Without accurate tracking information, it was difficult to monitor the efficiency of routes. Jim needed a solution that could provide data to enhance multiple areas of concern. What he discovered was that Streets can provide the ability to not only monitor buses, but also to collect key data in order to make his operation more efficient.

### **Fixed Route Software Solution**

Before the ruggedized Ranger in-vehicle mobile data terminals were installed, Jim was unable to monitor schedules in real time using AVL (Automated Vehicle Location) data. He needed to rely on dispatchers to tell him where buses were, resulting in a slow-down when it came to dealing with issues. Jim claims he can now simply "call dispatchers up and ask why a bus is running 20 minutes late." He can even monitor buses in real time to verify schedule adherence from his own desk.

Having hard data is also instrumental in being able to determine if a change to a route is needed. Earlier this year Jim made key decisions to significantly modify then-current routes. His decisions were based entirely on the information drawn from Streets. In particular, he tracked headway times and could determine the precise amount of time it took for a bus to get from one stop to the next. This information revealed trends that led to the modification and improvement to certain routes.

*"Streets helps with the administration of the whole system."* 

*"I was able to look at the hard data. In the past, it was just my best guesstimate."* 

#### Passenger Information Systems

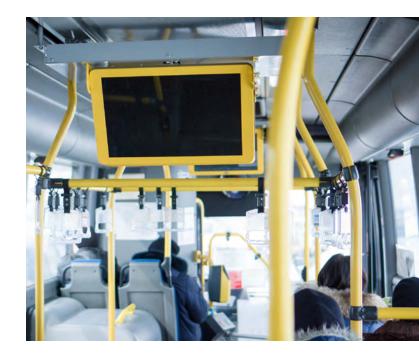
B-Line offers a number of ways for riders to have access to transit information. Their B-Line Tracker System allows riders to text a unique bus stop ID in order to receive information about when their bus will arrive. Check out their cool video ad that shows how their B-Line Tracker works for receiving text updates. In the past, the operators received a great number of "where's my bus" calls. Riders can now get incredibly accurate estimates about bus arrival times sent directly to their phones, all without having to wait in on-hold queues. "People really like it and they use it a lot. It's a very popular feature," reports Jim.



B-Line Tracker System Ad

### Annunciators Enable ADA Compliance

ADA compliance is a priority for Jim and his team. Announcing stops is a mandatory requirement for the ADA. The fact is, however, it wasn't always guaranteed that every stop would get announced as it should. With the Ranger in-vehicle mobile data terminal, annunciator systems are automatically connected through Streets fixed route software. Now, there's no question that announcements are automatically made at every required stop. In addition, they have LCD screens that automatically flash and display every upcoming stop. Again, since these peripheral devices are tied into the Ranger units and synchronized with back office software, all the stops are displayed and announced accurately, and precisely when they're required.



# **Google Maps Integration**

B-Line provides riders with a fully integrated, Google Maps portal for enhanced trip planning. Through it, riders can simply plug in their departure and destination addresses to view their transit options on a map. This allows riders to determine the most convenient trip, based upon their proximity to a particular bus stop and the departure times of buses passing through that stop. Visitors to Butte County can also view transit routes and options when searching on Google Maps because the entire B-Line transit schedule (including routes and even departure frequency) is exported to Google. "Streets makes it easy," says Jim.



# TripSpark Support

B-Line had some early issues with exporting their transit schedules to Google and handling the Google Verification process. Jim and the TripSpark support team worked together to configure Streets in order to export schedules that would meet the specifications that Google requires.

*"Response has been very good. If you have an issue, they [support] respond to it."* 

Insight from partners like Butte Regional Transit allows us to enhance Streets in order to provide a more robust software product. In turn, riders receive a more robust transit service offering from B-Line.