

## Greater Peoria District CityLink Mass Transit Bus Service



CityLink Peoria has been providing Mass Transit Service in Greater Peoria area since 1970 through a fleet of large & small buses of various types. It carries over 3 Million passengers annually and provides connectivity to citizens, students, families and other travelers, not only in Greater Peoria but near by counties too.

City buses are required to have high degree of reliability in all seasons, day in and day out. The buses generally are supplied by bus manufacturers with flooded batteries as they are inexpensive and which are generally meant for starting, lighting and ignition (SLI) application. Most flooded batteries fitted on bus fleets are SLI Batteries.

The batteries on city buses are required to supply energy to air conditioning systems and other electrical loads, apart from SLI Loads, which in many seasons may exceed the rating of the alternator. This causes deep discharge of the batteries and incomplete recharging of the batteries. This results in sulphation of batteries and destruction in a short time and the batteries are replaced in as little as 3 -6 months. Apart from this, the flooded batteries required frequent topping up with water and measurement of the acid density for determining battery condition. As 2 X 8D flooded batteries are mostly used, the replacement is cumbersome due to the weight of 170 pounds for each battery.



CityLink of Peoria had similar failures and maintenance problems. Firefly Energy supplied 4 X G31 Batteries to replace these 8D Flooded Batteries in 2009. When these Trial Batteries completed 3 years without any failure, CityLink decided to use only Oasis G31 Batteries for their fleet of Buses. "Lead-acid batteries usually don't last very long in our buses," said CityLink chairman Don Shay, estimating the average battery life span at 12 to 15 months. "The Firefly battery ran for three years. These batteries endure. If we can avoid battery failure when a bus is on a route, it's a great savings to us," he said.

In 2013, Firefly and CityLink jointly decided to test and autopsy batteries from a Bus after 4 years operation. Out of 4, only 1 battery had failed due to drying-up. Batteries on another Bus lasted 5 years. CityLink in Montana and Urbana champagne are trying out our batteries on their buses. CityLink in Peoria have decided to fit "Oasis" batteries in all their buses.