

Arizona DOT committed to DMS retrofit solutions



Phoenix, Arizona

In early 2014, Arizona Department of Transportation, with a "do more with less" mindset, began examining options to best utilize funding for DMS signs scheduled for replacements. With costs as high as \$300,000 for a complete replacement, AzDOT executed a pilot DMS retrofit upgrade from SESA on a metropolitan area freeway that spring. By late fall AzDOT executed another 20 retrofit upgrades based on the quality and performance of the trial project on several lessons learned:

- **Cost- Savings would result in excess of \$2,000,000 over the sign replacement original plan on the first phase alone.**
- **Sign performance- Notably brighter than existing signs.**
- **Support- Provided new sign warranty. Parts availability**
- **Engineering expertise- On site diagnostic support and adaptation to AzDOT hot climate applications**
- **Energy efficiency- Up to 80% more energy efficient than the signs updated. Thousands of dollars in electrical use savings per year.**
- **Weight reduction- Weight reduced by over 300 lbs. no structural replacements /changes needed.**

Entering 2015, the commitment was made to replace the other 23 signs eligible for a retrofit upgrade in the Phoenix metro area. The rural retrofit replacement signs to begin in October.

All told, of the over 100 signs qualifying for replacement will a result in an estimated savings of over \$5,000,000 depending of type of replacement and structural elements involved.

SESA can provide a brief rundown on how states and municipalities have upgraded their DMS at substantial savings. With the ability to upgrade over 21 different models and growing, let SESA provide an on-site survey at no obligation. A site survey will benefit your agency solely by having all the options available at your discretion for both immediate and future considerations. Or if preferred, [Brandon](#) or [Mike](#) will provide a fact finding presentation, in person or remotely, which will objectively allow you to assess your options. [Contact us](#) or

go to the [SESA retrofit upgrade web site page](#) for technical details and documents.

— LATEST SESA TECHNOLOGY—

A comprehensive system for traffic data direct to DMS signs

DataCONNECT

Traffic data collection and posting has been primarily a result of point A to point B systems utilizing labor and cost intensive sensors or static, locational devices such as Bluetooth. Processing the data requires investing in software usually located at a central traffic control center, then activating manually to specific locations, generally in a 5 -10 minute window. **In a 25 minute national average commute, does that not feel too long?** By then it's a piece of roadway history, hampering the commute into poor alternative route / planning decisions. In 5 minutes alone you could easily have 3 roadside incidents not recorded.

SES America has a data connect system seamless in **delivering current travel time and alternative routing (one minute or less) for real time decision making**. These systems include the data packaged via a fusion method combining regional multiple route information that would include arterial and side road data. A total comprehensive evaluation and posting in 1/5 the time or more than conventional static device methods.

A solar powered DMS Connect system has the following benefits

locations in a region, not a point A to point B route.

- **Entirely self contained with integrated solar power-** not grid reliant
- **No software or traffic management center needed.**
- **No long term maintenance or installation costs.** One sensor fails the entire system is no longer accountable affecting overall accuracy
- **Repostings every minute**
- **Exceptional opportunity for rural applications** or weather sensitive areas lacking infrastructure.
- **No devices on roadways or shoulders**
- **No maintenance labor deployment**

DMS CONNECT

EXISTING TECHNOLOGY
Limited Options, Costly Installation and Maintenance



DMS CONNECT TECHNOLOGY
The Simple and Flexible Solution



This systematic method of data accumulation and posting to DMS signs utilizes a Big Data fusion method of cell tower, GPS, and incident management information. Given its wide range of informational reach, factoring or extraneous events and traffic can't be done on traditional point A-to Point B devices.

Ships crossing the ocean no longer rely on sextants to circumnavigate the oceans. Its a semi accurate measurement device with limited use capabilities. Why take the same sextant-like approach with maintenance intensive devices offering limited scope, are vulnerable to damage and extended costs, and failure can endeavor unforced errors to traffic data. Time to move to using the highly accurate and impeccably reliable system available for data direct to DMS, DataConnect.

DataCONNECT



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