## Challenge & Solution

The NYC Metropolitan Transit Authority's (MTA) bridges and tunnels carry more than 800,000 cars on an average workday. With so much traffic passing through the region, it is extremely prone to accidents which are recorded using the Collision Accident Report System (CARS) - an Oracle forms based system. Traditionally, when an accident occurred, the MTA officer would fill out a paper form with the accident information, then a clerk would manually enter the information into the system back at the office. This process was not only time consuming, but vulnerable to human error. To address these incidents quickly and efficiently, MTA needed a way to record the collisions on location on mobile devices.

MTA sought a solution that would allow them to record accidents on location, however, finding this solution was challenging due to poor connectivity in tunnels and bridges. In addition, they were not looking to enter into a lengthy, costly and risky redevelopment project of their existing Oracle Forms back-office system. MTA found a solution to its business needs in a modernization project using AuraPlayer and Oracle Mobile Cloud Service (MCS). Using AuraPlayer's unique solution, MTA enabled the Forms to mobile in days without redevelopment, saving MTA months of development cost and risk. These AuraPlayer services were then "plugged-into" MCS to allow for scalability, monitoring, analytics as well as full offline synch capabilities.

The solution provides MTA the best of both worlds; an offline, robust mobile solution to report accidents in the field, and the ability to leverage their existing Oracle Forms CARS system. This project solved an important corporate challenge, with a low risk solution requiring minimal investment of time and money. Additionally, officers are now able to store photographs of the accidents at the scene, and even work offline and automatically update the back-office Oracle Forms CARS system when they are within network range. This will improve efficiency, accuracy and timeliness of the data, and eliminate the need to type the collision reports into desktop systems after the fact.

Sofbang was contracted as the go-to systems integrator to implement, integrate and productionize this solution. In addition, Sofbang is providing Oracle MAF and MCS consulting and training for this and future mobile initiatives for the Transit Authority.

# Features

- ✓ Using AuraPlayer's wizard, any business process "trapped" in Oracle Forms can be enabled for Mobile in minutes, without redevelopment. With Sofbang's mobile templates, apps can be developed in hours.

- ✓ Oracle's Mobile Backend Services include – Data Storage, Notifications, Authentication, Offline Capabilities, Analytics and Monitoring.

- ✓ The app supports voice recognition, handwriting to text and even image capture, providing a superior user experience. This allows officers to clear the scene of the accidents quicker, being both safer and more efficient for the flow of traffic

- ✓ Sofbang's "Designed for Change" methodology is a winning combination of agile development with reduced costs and risks.

> "Oracle Forms has been used here for a long time, and my staff has the skills of that technology," he says. "Migration would be a multiyear, multimillion-dollar endeavor. But we needed a way to quickly deliver mobile business apps to our employees today using our existing systems."
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> **Dyan Ganepola, MTA's director of IT for bridges and tunnels**
> **Forbes "New York MTA Mobile, Cloud Push No Accident" Dec. 2015**

## Before
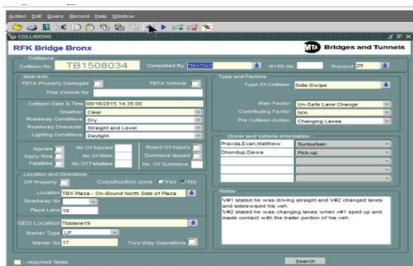


## After





> "This solution solves so many issues both at the scene and in our business processes," Ortega says. "Now people who are familiar with the scene of the accident enter the data directly into the system instead of the back-office staff. The backlog is cleared, and there's no more going back and forth because clerks couldn't read the handwriting."
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> Ortega expects the application to have a ripple effect through the organization. "The ability to process citations on location, faster, and with greater accuracy allows us to reduce errors and increase revenues over time"
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> **Carolyn Ortega, the MTA's chief of enterprise applications**
> **Forbes "New York MTA Mobile, Cloud Push No Accident" Dec. 2015**