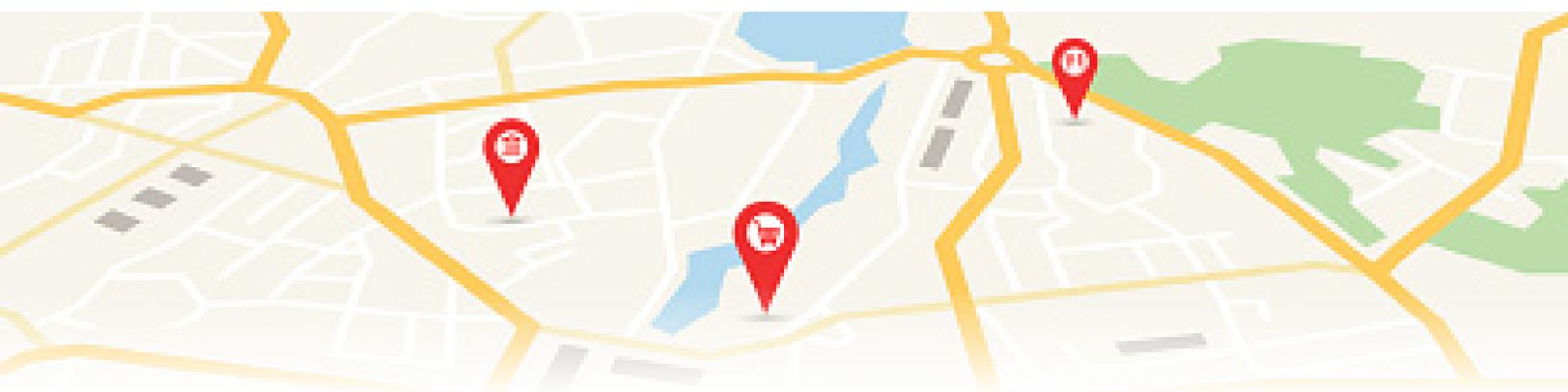




Integrating Technology Into Your Transit Operations

national express | *transit*



Introduction

Sophisticated technology available in today's marketplace can be seen in any industry, and transit is no exception. With numerous software providers and more technology-driven and innovative vehicles, many agencies are realizing the transformative benefits of modern technology. However, with so many different solutions available, many agencies can still have trouble realizing the full benefits of technology if the right solution isn't leveraged. Some agencies may be asking the question, "why is technology so important today?" The answer to that is simple: technology is everywhere and integrated into everything we do.

The most successful transit agencies across the country place large emphasis on people, safety, and rider satisfaction. In order to truly take a more customer-centric approach to your transit operations, it is necessary to leverage technology and software tools to help better serve customers and make transit more accessible to the community.

At National Express Transit, safety and customer satisfaction are always the main focus of our operations and we believe that technology plays an overarching role in that focus. Throughout this eBook, we will discuss the benefits transit agencies can see from integrating technology into agency operations, how transit agencies are already using technology to improve transit operations, and how you can get started integrating technology into your own agency operations.

Follow along to find more detail about transit industry use cases, tech solutions to problems that all transit agencies face today, and some tips from our expert team.

Why Integrate Technology?

The benefits for transit agencies leveraging modern technology in today's business climate can transform transit operations and improve critical transit metrics. These benefits include:

- **Improved overall operational efficiency, and ensured safety for drivers and riders**
- **Increased visibility into the day-to-day actions of drivers, schedulers, and dispatchers**
- **Cost savings (which is generally the biggest concern for most transit operations managers and directors)**



Ensure Safety

With a large focus on customer satisfaction and rider safety, many agencies are leveraging technology solutions to have more visibility into the rider experience and operator management. This can help reduce accident rates and improve customer satisfaction metrics.



Increased Visibility

Another benefit of having the right solution in place for managing trips and customer service is that it can increase visibility into the day to day actions of operators, schedulers, and dispatchers. Having a better understanding of these day-to-day processes by putting yourself in the shoes of these transit professionals can give much-needed insight into where improvements can be made to transit operations in regards to efficiency and safety.



Improved Operational Efficiency

Increasing overall operational efficiency is also a major concern for all transit managers and directors. The right technology solution can help to improve transit

metrics such as rides per hour, overall ridership numbers, no-show rates, fuel costs, and on-time performance. Automation is key when it comes to increasing operational efficiency, so it is important to find a software provider that offers automated scheduling and dispatching processes. With the right software, you can eliminate all manual entry and other administrative burdens.



Cost Savings

Budget constraints have long been a burden for agencies trying to grow in the tumultuous business climate that is the transit industry. Most agencies are looking for a technology solution that can help cut operational costs while simultaneously improving other critical transit metrics.

Transit Industry Use Cases

The combination of route optimization software and the implementation of various tech tools such as camera technologies, GPS technologies, and RFID tags in verified vehicle inspections gives the visibility needed to make an impact on operator development, customer satisfaction, operator and rider safety, and can also improve critical transit metrics. The quality data that agencies can collect with technology and modern software and tech solutions can give insight into driver behavior, critical transit metrics, and can ultimately make strategic changes to future planning and preventative measures.

Automated processes with **modern route optimization software** take the burden of manual entry and other administrative tasks away and open up more resources for core operational activities. Route optimization software has proven to be effective at improving all critical transit metrics and the cost of regular maintenance. With solutions for scheduling and dispatching, paratransit, and demand response transit, modern transit software is a transformative solution that can cut operational costs while simultaneously improving rides per hour, decreasing no-show rates, and improving on-time performance.

Many agencies are implementing tech tools that can give more visibility into day-to-day trip operations and safety measures. With event-triggered and continuous on-bus camera systems, safety for both rider and operator are accounted for. Camera systems offer solutions

for preventative maintenance and tracking analytics for unsafe behaviors like the number of hard braking moments during a trip, the number of sharps turns made during a trip, and excessive speeding.

GPS technology and RFID tags can offer insight into driver performance and can streamline the vehicle inspection process. Drivers will still walk through the vehicle with a tablet that tracks the inspection. The RFID tags ensure that each part of the inspection is completed. The data is then generated and sent to the maintenance department automatically. This automated “head-to-toe” inspection process can save time and extend the life of fleet vehicles. It also allows agencies to capture data such as battery power and other engine diagnostics through the RFID tags connected directly with the engine and other key components of the vehicle.

National Express Transit links RFID tags and GPS technology from **Zonar Solutions** to automate and electronically verify vehicle inspections. This technology also includes GPS, idling, speeding, and vehicle tracking. In addition, Zonar links to the National Express Transit in-house operator scheduling, dispatching, operator time clock and payroll processes. This gives maximum oversight to operator performance and can help the development of drivers to ultimately increase performance. GPS technology provides more data for on-route performance and can help future planning to improve on-time performance and route optimization. The other benefit to this technology is the opportunity to tailor operator training to recurring opportunities for improvement that are identified in system reports.

Ultimately, the combination of route optimization software and other advanced technology solutions that are available to those in the transit industry can create definitive change to critical transit operations, operator development, safety, and customer satisfaction.

How Can You Successfully Integrate Technology?

Now that you can see why technology is so important to integrate into your transit operations and how some others, including National Express Transit, are already doing this in the industry, it's your turn. Below are some tips and best practices, outlined by our experts, to follow when integrating technology into your transit operations.

TIP

1

“Prioritize what needs to be improved first.”

Target the most critical part of your operations that needs to be changed and will have the biggest impact on the overall success of your agency. Measure the importance of safety, versus efficiency, versus maintenance. All three are critical parts of any organization but it is best practice to target one core competency at a time. Also, targeting one specific area for improvement can have a trickle down effect to other areas and improvement in those areas can happen organically. For example, if you increase operational efficiency by implementing route optimization software, your team will have more time to focus on safety measures and maintenance processes.

TIP

2

“Don’t try to implement everything all at once.”

In sync with the first tip, it is best practice to target one area at a time. This includes one solution at a time as well. If you try to force the implementation all of the technology solutions that your organization is targeting all at once, the effectiveness of each solution will diminish. Focusing on one key solution like GPS technology will ensure that the implementation is done properly and that it will have a lasting impact with quality data to drive improvement in operator performance and route optimization. Once you have implemented this first solution, you can then start targeting what tech tool will have the most impact on your operations.

TIP

3

“Talk to other agencies across the country.”

Use your network of other agencies and organizations to find out what technology solutions they are using and what they recommend. Getting recommendations from agencies who are already using the technology with proven results is always a smart choice when looking for the right software solutions. Generally, you will find more honest feedback from your peers and learn some of the not-so-flattering facts about a technology that you otherwise wouldn’t get from talking to the provider directly.

TIP

4

“Get information about statewide providers.”

Many states will contract a single vendor or multiple vendors as preferred technology providers. Using the same provider as other organizations across the state can be very beneficial for operational efficiency and coordination efforts from agency to agency. The invaluable benefits seen from consistent technology use across agencies does create a better environment for both transit agencies and transit riders across a state.

Conclusion

Integrating technology is paramount to an agency’s future success in the transit industry. With a more customer-centric approach industry-wide, it is important to leverage technology that can help improve customer satisfaction. Providing timely, comfortable, reliable, and safe transit services to riders is the goal of all transit agencies across the country and the right technology can help make that a reality.

To learn more about how integrating modern technology can help improve the success of your transit agency, **tell us about your current challenges and request more info** about our services to see how National Express Transit can solve for you today.

Additional Technology Resources to Explore Further

- [Ecolane Route Scheduling Software](#)
- [Zonar Solutions](#)