# 7 Reasons Transit Agencies Need a Rider App

The transparency and user-friendly functionality of popular ride-sharing apps delivering exactly what riders expect to see and how they want to see it—provides a model for all transit apps to follow.

# WHAT ARE THE 7 REASONS TRANSIT AGENCIES NEED A RIDER APP LIKE PASSIO GO?

#### 1- Everything in One Place

Riders expect to be able to get to and view everything they need in one place on an app—in real-time and instantly. It's true for any app whether banking, healthcare, travel, dating, music, and yes, transit apps as well. Good rider apps offer exactly that.

Take a typical transit passenger, looking to grab a bus later. A good app allows them to check, from anywhere, the bus schedule for any route when and how often the buses run, and all the stops on the route. If they miss one, when's the next one? It's right there in the app.

Tapping on a stop on the route map that appears in the app lets them know at exactly what time the bus is arriving, and if there are any delays. The predictability that an app offers riders lets them go about their day with more freedom, knowing they're in control of their schedule.



As a SmartCitiesDive article notes, "Knowing when the bus will actually arrive is possibly the biggest advance for riders even if it doesn't make the bus faster or more on time.

It gives riders certainty and allows users to manage their time avoiding unproductive excessive wait times."

Any good rider app is focused on improving the rider experience in myriad ways, and all with an eye towards earning the loyalty and continued patronage of your existing rider base, while also attracting new riders drawn by the ease and convenience of the process.

Adding that app, and integrating it into an existing transit agency system, is hardly a big technological hurdle. The above SmartCitiesDive article, in listing a rider app as one of the key things transit agencies can add to improve service, notes the relative ease of doing so:

"Implement an app for smart phones combined with a call-in service that allows real time bus information for each line and every stop. This isn't rocket science since most transit vehicles in the U.S. are already equipped with GPS and transponders that emit the actual bus location."

While riders are just the first beneficiary of rider apps (as they should be), it'd be a worthwhile investment to add one to your transit system even if riders were the only beneficiary. That said, rider apps reliably deliver a whole host of benefits to transit agencies as well—aside from increased ridership.

According to a 2021 article on Zesium - "[H]aving a mobile app helps your brand's credibility and authority. When consumers can access your brand easier, it tells your consumers that you are there for them."

#### 2 - Ready-to-Go Notification System

Think about a transit agency that doesn't have a rider app yet. Every time you change a route or schedule, drop or add a stop, run a promotion or special offer, or any other subject relevant to your riders, you have to get the word out somehow.

That can mean putting up signage in your buses, updating your website, sending mass emails to riders, etc. If that's how you're currently keeping your riders "in the loop," you have a pretty good idea of what that can cost in time, money, and manpower. With a rider app, all the above can be "pushed" through the app, thanks to typically easy-to-use agency interfaces.

#### 3 - Rider-Feedback Conduit

A good rider app is, essentially, a powerful feedback mechanism that makes it easy to gather info that riders submit—info that can lead to changes and improvements in stops, routes, and the transit experience in general.

This steady feedback from riders, coupled with data collected from day-to-day card scans, reveals ridership patterns, which stops/routes are most/least used, etc. from all the rides booked in a particular area over time can yield a goldmine of insights that can help developers spot trends in ride demand and make changes that can improve service and routing.

Moreover, that data can often replace costly studies that transit agencies might need to undertake, to gather such information, in the absence of those feedback mechanisms.

#### 4 - Built-In Driver Monitoring

That feedback system, featuring an easy interface for contacting the transit agency directly (just like sending a text), also allows riders to report drivers who are driving too fast or recklessly, or doing anything else that could potentially endanger riders. When drivers are aware that there's an easy conduit for riders to report driver behavior, that can't help but improve overall driver performance.

#### 5 - Reduce Customer-Service Time/Staffing

This benefit is one you don't realize until you put a rider app in place. Agencies without a rider app have to rely on their customer-service and transitagency reps to field FAQs and complaints from riders and clients about routes, stops, and more.

But, add a user-friendly, function-rich rider app to your transit service, and many of those questions either disappear or can be asked through app. Not only are your customer-service reps now freed up to offer an even higher level of service to your clients, but, over time, you may find you can reduce your customer-service staffing.



#### **PASSIO GO EXPRESS**

#### 6 - Raise Your System's Visibility

Get a group of friends together, and get them talking about how nice it'd be if there was a way to do "X" or "Y," and you're likely to hear the half-joking/half-serious retort, "There's an app for that!" The unspoken being that, if there was an app, they'd definitely use it.

Smartphone apps have become a way of life for all of us, and a huge and growing segment of the digital transformation movement is mobile-app development. Given how comfortable and familiar we've all become with Smartphone apps, if you want to people to use your product or service, one of the best ways to ensure that is to create an app.



Rider apps for transit agencies is a perfect example. Create an app, and you've just raised the visibility of your transit system in the eyes of current and future users.

When something (like a bus system) is more visible, and the gateway to using that system is a portal (the app) similar to so many portals your audience has come to depend on, you've just removed one of the biggest barriers for current users to increase their use, and for new users to "get onboard."

#### 7 - Buses Are "Greener" than Cars

Sustainability is a huge trend these days, with more and more consumers embracing all things "green." Every new rider on a bus system is one less driver in a car. Certainly, many riders take buses because it's their only way to get around, but providing a bus system that offers a high level of convenience on many levels (i.e., including a rider app) can attract green-conscious riders who can afford to own a car.

As a Vulcan Post piece (about a wildly successful rider app created in Singapore) reports: "The fact that sustainability has become a buzzword has also helped their cause. According to the company's CEO, "...commuters are looking for an attractive alternative to...buying a car. For the latter, the cost of car ownership in Singapore is getting increasingly expensive."

#### Why Haven't You Added a Rider App Yet?

The answers to the above question typically fall into one of two categories that can be summed up in two words: Inertia and Money.

Inertia is, arguably, the most important one. It's always easier for any organization, transit agencies included, to just "stay the course" and not make any major changes. After all, change always involves a certain level of short-term upheaval, and who wants that?

Related to inertia is the understandable fear that undertaking a major improvement such as adding a rider app, will end up being a major hassle. Agencies are wise to ask, Will the process go as promised, or are we in for unpleasant surprises?

The good news is that the prevailing level of transit technology is high and getting better all the time. The major players are the major players because (as noted) they've made it easy and relatively painless for transit agencies to integrate a rider app into the existing platform, and take their operations to the next level. Speaking of "the next level," there's Reason #2: Money.

#### "What's this Going to Cost?"

If a transit agency finally hits a point where they know they need to upgrade their services, and they've committed to overcoming their institutional inertia to order to do so, money is the next question. Is there some huge lump sum that needs to paid upfront? Are there more budget-friendly options available to pay for it?

Not surprisingly, different transit-technology providers operate differently. While some do structure their offerings with upfront investments, others offer more flexible arrangements. One company offers the best of both worlds...



#### Passio Makes It Easy

As you've seen, adding a rider app to your transit system can pay healthy dividends to both riders and transit agencies. For well over a decade, Passio Technologies has helped over 250 transit agencies elevate their systems to the next level of performance, flexibility and service, with their innovative, customizable transit solutions including our rider app, Passio GO.

Passengers simply tap on a stop or touch the screen to let Passio GO know where they want to go. In just seconds, the passenger knows what time the bus is coming, where it will pick up, when it will drop them off, and where they need to walk to catch the bus—making scheduling and planning a breeze. Transit agencies are in full control of updating and editing routes and stops —not dependent on their transit-technology provider to make those changes.

#### **Flexible Payment**

Passio offers two ways to invest in our GPS CAD/AVL solutions. There's our standard arrangement where you pay for hardware and software upfront. If you're worried about steep upfront costs, or equipment installation and warranties, consider Passio GO Express.

With Passio GO Express, you simply pay a monthly fee for each vehicle. There are no setup, license or equipment fees, and you choose the term—12, 30 or 60 months. You receive a plug-in unit for each vehicle, and once installed, you get all the same benefits: great customer service, web-based management platform, and a connection to our Passio GO app.

For more information on Passio's full suite of state-of-the-art, transittechnology solutions, including the Passio GO app, and Passio GO Express:

Visit www.passiotech.com or call 678-825-3456.

Go to passiotech.com/passio-go/ to purchase or learn more

# Making Green Transit Even Greener Using Intelligent Technology

Buses rock. While 29% of annual U.S. carbon emissions are attached to transportation, only a tiny fraction of that comes from buses, which leads to certain apparent conclusions:

If more people switch to cost-effective public transit—with a far smaller (per capita) carbon footprint than cars—carbon emissions will naturally decrease. As they will when those transit systems are "greener" (i.e., biodiesel, hybrid or electric). But, there's one more step...

When those transit systems employ innovative technology that monitors and analyzes the operations of those fleets, and provides those agencies with actionable data, emissions drop even further—while both overall performance and customer service get a boost.

Change from

#### U.S. Transportation GHG Emissions (Tg CO, Equivalent)

(19 002 Edulation)							1990 to 2019			
Source	1990	2005	2015	2016	2017	2018	2019	Absolute	Percent	
On-Road Vehicles <sup>6</sup>	1,206.8	1,647.4	1,510.5	1,534.6	1,540.7	1,563.9	1,555.7	348.9	28.9	
Passenger Cars	639.6	691.7	752.5	763.5	760.6	770.3	762.3	122.8	19.2	
Light-Duty Trucks	326.7	537.7	320.9	330.2	324.3	325.7	323.1	-3.6	-1.1	
Motorcycles	1.7	1.6	3.7	3.9	3.8	3.8	3,6	1.9	111.4	
Buses	8.5	12.3	19.6	19.1	20.6	22.0	22.2	13.7	162	
Medium- and Heavy- Duty Trucks	230.3	404.1	413.9	417.9	431.4	442.1	444.4	214.1	92.9	
Aircraft	189.2	193.6	160.5	169.0	174.8	175.5	181.1	-8.1	-4.3	
Commercial Aviation	110.9	134.0	120.1	121.5	129.2	130.8	135.4	24.5	22.1	
Military Aircraft	35.3	19.5	13.6	12.4	12.3	11.9	12.0	-23.3	-66.1	
General Aviation	42.9	40.1	26.8	35.1	33.3	32.8	33.7	-9.3	-21.6	
Ships and Boats	47.0	45.4	33.8	40.8	43.9	41.2	40.4	-6.6	-14.0	
Rail	35.8	46.6	40.3	36.8	38.1	39.9	37.6	1.8	4.9	
Pipelines <sup>7</sup>	36.0	32.4	38.5	39.2	41.3	49.9	53.7	17.7	49.2	
Lubricants	11.8	10.2	11.0	10.4	9.6	9.2	8.9	-3.0	-24.9	
Transportation Total	1,526.6	1,975.6	1,794.6	1,830.7	1,848.3	1,879.6	1,877.4	350.8	23.0	



PUBLIC TRANSIT HAS A FAR LOWER PER CAPITA CARBON FOOTPRINT THAN CARS, LOWER STILL WITH ELECTRIC OR HYBRID BUSES, AND EVEN LOWER WHEN COMBINED WITH INNOVATIVE TRANSIT-TECHNOLOGY PLATFORMS.

\*EPA chart, showing the small % of emissions generated by buses. From EPA.gov

#### **Buses Are Better**

According to the Center for Climate and Energy Solutions, individuals can save close to \$10,000 by utilizing public transit instead of driving, adding, "Communities with strong public transportation can reduce the nation's carbon emissions by 37 million metric tons yearly."

In fact, if just one driver switched from a 20-mile, single-occupancy-vehicle commute to public transit, it would reduce their annual CO2 emissions by 48,000 pounds. Not to mention the huge reductions in gas consumption and road congestion.

The 2021 Bipartisan Infrastructure Law demonstrates that the federal government also sees the potential in public transit and its ability to further "decarbonization goals." It marks the largest investment in America's infrastructure in decades, with \$107 billion being earmarked for transit.

\$39 billion of that is specifically focused on public transit upgrades, including reducing maintenance backlogs; modernizing aging fleets with greener vehicles, upgrading infrastructure, and increasing accessibility.

#### **Next Stop: Greener Buses**

While public transportation already contributes to lowering fuel emissions by reducing the number of vehicles on the road, low-emission vehicles take it to another level.

Bloomberg New Energy Finance predicts that nearly 60% of bus fleets will be electric in 2040. CALSTART, a nonprofit committed to clean, hightech transportation industry, reports that demand for E-buses is outstripping supply, with hundreds of backlogged orders.

It's no mystery what's driving the trend: greater awareness of the environmental benefits (bolstered by government incentives).

Don't forget to consider increasingly lower-cost batteries, greater charging infrastructure, and bottom-line cost savings, and even the beancounters are sold.

#### **Green Saves Green**

Electric bus manufacturer New Flyer estimates that, over its lifespan, an electric bus could save \$400,000 in fuel costs, and \$125,000 in maintenance costs. Plus, they simply offer a better, cleaner transit experience: a lot less noise and vibration, and no exhaust.

When the current administration announced in January 2021 plans to eventually transform all government vehicles to electric, it not only promised to boost electric vehicles in general, but it also mirrored a trend already in motion. According to the 2021 Rocky Mountain Institute (RMI) report, 81% of "local and state governments, utilities, universities, private technology companies, and delivery services" have started electrifying their fleets.



A January 2022 SmartCitiesDive article noted that the number of electric buses on order or operating in the U.S. rose 112% from 2018 to 2021. California holds the #1 spot with nearly 1,400 electric buses on the road or on order, followed by Washington, New York, and Florida.

While major metros such as Austin, Seattle, Los Angeles, and Oakland are electric-bus leaders, even smaller cities like Portland (ME), Duluth (MN), and Gainesville (FL) are also jumping on the BEB (battery-electric bus) bandwagon.

MBTA in Boston averages a weekday ridership of 276,000 on 1,150 buses and 180 routes. In 2019, MBTA purchased five electric buses, with a goal of running an all-electric fleet by 2040.

#### **PASSIO GO EXPRESS**

#### **Greener Transit Gets Educated**

Not surprisingly, transit systems on American college campuses often lead the charge for carbon neutrality. In 2009, 650 universities pledged to make measurable progress by 2020 towards lowering emissions—with nine schools reaching carbon neutrality in 2020.

Investments have included everything from buses running on biodiesel, biodiesel/electric hybrids or the newer zero-emission, all-electric vehicles.

Passio Technologies client, Harvard University made a recent move to replace a few of its biodiesel buses with battery-electric buses, making over 30% of its fleet zero-emission. In 2018, Harvard set a goal to eliminate the use of fossil fuels on its campus by 2050, and they're now on track to be carbon neutral by 2026.

Another Passio client, University of Georgia, currently boasts 30 all-electric buses—one of the "greenest" university fleets in the country—on its way to an all-electric fleet. Energy costs for the new zero-emission Proterra buses are reportedly about \$10 per bus per day (vs. \$100/day for their diesel buses), and yearly maintenance costs have plummeted by 2/3—from \$22,000 to roughly \$7,500 per bus.

According to UGA's TPS (Transportation and Parking Services), the new buses represent, "a tremendous step forward in reducing emissions and increasing opportunities for experiential learning and research."

#### **Greener Buses Make \$ense**

For fleets considering the switch to BEBs (battery-electric buses), there are plenty of reasons to get into gear:

- Zero-emission BEBs deliver dramatic health benefits to riders and their communities.
- BEBs have longer driving ranges (on an overnight charge) than gas-powered buses, so transit routes can be longer, which will better serve riders.
- BEBs operate far more cheaply, thanks to substantial ongoing savings in gas, and with only 1/10th the number of parts of a regular engine, maintenance costs will plummet.
- When riders know their choices can help reduce their carbon footprint, they're more likely to choose mass transit.

#### It's Not Always Easy Being Green

While the growing number of electric buses is certainly good news, the ride towards greener transit isn't always smooth. BEBs, while having less carbon emissions, still often tap a grid powered by fossil fuels but, over time, as those grids transition to more sustainable ones, overall emissions will drop.

Additionally, faulty connections between vehicles and chargers often meant charge reliability of 50% or less, but improving charger technology is boosting reliability to 90%+.

Then there's reduced battery range in cold climates like Boston, where more energy has to go to heating the bus, leaving less drive time before charging is required. But again, evolving technology and empirical experience leads to inevitable improvements.



Transit systems looking to "green" their fleets to electric (or hybrid vehicles) need to think long term. Translation: Far better to decide to convert an entire fleet to electric than just make incremental changes. The "piecemeal" approach, according to the RMI report discussed earlier, can cost agencies four times as much as a longterm strategy would, and, "you'll...wind up with more stranded assets."

Agencies that go "big" can reap economies of scale that will reduce vehicle and infrastructure costs, while streamlining both the processes of permitting and utility interconnection. However, according to the RMI report, "Done badly, it can be a series of very costly errors."

#### Turbo-charge your "Electrifying" Decision

A few things are clear: public transit is far greener than millions of solo drivers, and the "greening" of transit fleets everywhere is growing by leaps and bounds.

There's one more step that transit agencies can take to dramatically enhance their decision to modernize their fleets: adopt a transit-technology solution that tracks your fleet's operations, providing "good-as-gold" insights into how to improve performance.

One solid market offering is the online cloudbased tool, Passio Navigator, from Atlanta-based Passio Technologies.

#### Navigator's Electric Vehicle Dashboard:

- Automatically calculates estimated savings in gas and maintenance (in \$); reduction in carbon footprint (vs. gas buses, which emit three times as much CO2); reduction in noise pollution; number of trees saved, and more.
- Tracks drivers and monitors their feedback on routes and electric vehicles. Managers can view each vehicle on a live map and see when they were last serviced and when they'll require maintenance again.
- Generates invaluable fleet data that allows transit agencies to better understand their new fleets, which, in turn, drives better transit decision-making (e.g., to charge routes and stops)—decisions that ultimately can improve customer service, increase ridership, more effectively utilize resources, further reduce carbon emissions and save even more money.
- Offers measurable proof of an agency's reduced impact on the environment, which can be used in marketing initiatives to green-conscious riders, to encourage even more riders to "get onboard."





Passio President Mitch Skyer states, "Passio is proud to be an agent of change towards electric transit. Solutions like ours will provide our customers with concrete evidence of money saved, carbon reduced, and their commitment to a cleaner world."

Contact us to learn more about our new Electric Vehicle Dashboard and Passio Navigator at www.passiotech.com or call 678-825-3456

PASSIOTECH.COM

# What Do Transit Agencies Really Want?

Passio Technologies & FASTER Assets Answers the Question with Their Best-of-Breed Transit Technology & Fleet-Management Solutions

> Poll the top management of most large transit agencies about where they want their systems to be—operationally and in the realm of fleet management—and you're certain to hear a lot of the same things. Let's explore that conversation a little more deeply...

### WHAT DO TRANSIT AGENCIES WANT IN THE REALM OF DAY-TO-DAY OPERATIONS?

- To optimize your day-to-day fleet operations—in terms of routing, stops, fuel consumption, and more.
- To make the transit experience safe, convenient, comfortable and transparent.
- To deliver outstanding customer service to existing customers and attract new ones.
- To know where your whole fleet or a specific vehicle is at any point in time.
- To be able to collect a multitude of data about your fleets, analyze that data, and generate reporting that boosts overall system-wide efficiency.



### WHAT DO TRANSIT AGENCIES WANT IN THE ARENA OF FLEET MANAGEMENT?

- To keep maintenance costs low minimize unplanned vehicle downtime (which, of course, increases costs and keeps you from delivering the highest quality customer service).
- To optimize fleet-wide fuel consumption
- To be able to gather and analyze a wide array of data on your fleet's operations in order to boost efficiency across your system, and drive better decision-making about your fleet.
- To improve and automate your maintenance workflow, so technicians work more efficiently, parts-ordering is simplified and jobs are completed faster and more effectively.

If you have an older Fleet Management System (FMS), you'd love to have...

An FMS that's web-based—meaning no more ongoing hardware or software costs, and where the solution provider handles ALL upgrades, updates, patches and glitches.

And if you haven't upgraded to a newer FMS yet...

You want the upgrade process to be as simple as possible, with minimal disruption to day-today operations, and allowing for easy integration with existing processes.

#### What Makes for a "Top Fleet"? By definition, transit agencies that achieve all the above are operating highly efficient fleets on multiple levels—and by multiple measures.

In fact, it's safe to say that such fleets would be recognized as the best fleets in the industry. Certainly, those top fleets would have "the right stuff"— a commitment to excellence on many levels, and a culture that welcomes and encourages input and collaboration from all levels of the agency.

But, just as importantly, they'd embrace new and innovative technologies that help them deliver an ever-improving transit experience to their customers. And, Passio Technologies and FASTER Assets are proud to be the providers of some of those industry-leading technologies.

And yes—you knew it was coming—a substantial percentage of our customers are recognized year after year by the NAFA Fleet Management Association as some of the '100 Best Fleets in the Americas'—as well as earning the Elite Fleet designation by Government Fleet.

In 2022, FASTER customers occupied 50% of the top 10 slots—including the #1 slot (San Bernardino County), and in 2021, 41% of the NAFA's 100 Best were FASTER customers. So, how exactly DO our two companies help transit agencies become the best they can be? Well, let's look at our earlier wish-lists and see how the solutions provided in tandem by Passio and FASTER can help transit agencies get there...

### THE DAY-TO-DAY OPERATIONS SIDE

On the transit-technology side, here's what transit agencies want, and how our solutions help them realize those ideal outcomes. First...

Optimize your day-to-day fleet operations—in terms of routing, stops, fuel consumption, and more.

An optimized fleet is one that more effectively manages its resources, operates with an ideal system of routes and stops, and keeps costs within budgets.

PASSIO'S LEADING-EDGE SOLUTIONS SUITE ALLOWS YOU TO DO ALL THAT. HOW? BY GIVING YOU VISIBILITY OVER YOUR ENTIRE NETWORK. AND THAT BEGINS WITH PASSIO NAVIGATOR, WHICH IS THE HEART AND SOUL OF THE PASSIO LINE.

What's Navigator? Think of it as the Mother Ship. The Main Brain. It's the hub for so many of Passio's applications, and it gives you easy access to a broad array of editing, messaging and reporting functions.

Logistically, Navigator is the engine behind the MDT (Mobile Data Terminal), a swappable device, featuring a touchscreen driver interface, which links to other onboard devices and allows you to both control and collect a wide variety of data.

Navigator also allows you to control your Passio settings, including passenger counts, voice/LED announcements, routes, stops, time-point scheduling, fleet information and more.

#### Where's My Bus/Fleet?

Navigator addresses another aim of transit agencies:

• To know where your whole fleet or a specific vehicle is at any point in time.

With Navigator's Live Map function, you get a bird's-eye view of your entire transit network at any given moment. You can, in real time...

- View bus locations
- View system status
- Monitor passenger loads
- Check a specific past Live Map view for comparison purposes

Through its Alerts functionality, Navigator generates vehicle and system alerts about driver speeding, accidents, passenger emergencies and more. That speaks to the safety and transparency aspects of another transit agency "ask":

• To make the transit experience safe, convenient, comfortable and transparent

To cover the above "convenient" and "comfortable" bases, Navigator is also the origin point for all the data that gets sent to our popular rider app, Passio GO.

Thanks to the app, riders know where their bus is, when it's arriving, the next scheduled arrival after that, the closest stop to their location, any impending delays, and more. All that info is available on smartphones, computers and on public displays.



Further boosting the convenience, comfort and transparency of the transit experience is our flexible Automated Voice Announcement (AVA) program. It allows you to easily customize and schedule the content, frequency and trigger points for each stop and each route.

That system also enables LED sign-messaging—which can display the route, destination, the next stop, driver names and announcements (and can be integrated with existing PA or radio systems). All of that enhances your riders' experience.

Do all that, and you'll make good on another wish-list item:

• To deliver outstanding customer service to existing customers and attract new ones.

Finally, and arguably, the most important...

• To be able to collect a multitude of data about their fleets, analyze that data, and generate reporting that boosts overall system-wide efficiency.

Thanks to Navigator, that collected data includes: passenger loads, passenger counting (through a cloud-based application), passenger types (elderly, disabled, etc.), vehicle speed, boundary alerts, how many passengers board/deboard at a given stop; vehicle on-time records; how this data compares to historical trends; and more.

Analyzing that data can drive more efficient routing. For example, if far fewer passengers board at Stop A than Stop B, perhaps that leads to changes in stops/routing, which, in turn, can yield more efficient fuel consumption.

Okay, so that's an overview of how Passio—thanks to Navigator—can help you optimize the day-to-day operations of your fleet and provide a great rider experience.

## The Fleet-Management Side

Then, there's the fleet-management side, which is covered by FASTER Assets, and specifically, our best-of-breed, fleet-management system (FMS), FASTER Web. Let's review what transit agencies want in the fleet-management arena...

Remember, the first two are:

- To keep maintenance costs as low as possible, and...
- To minimize unplanned vehicle downtime (which, of course, increases maintenance costs and keeps you from delivering the highest quality customer service).

#### "Next-Level" Preventive Maintenance

How does FASTER accomplish this? Well, as you know, there's *preventive maintenance* and *predictive maintenance*. Preventive maintenance, of course, is regularly scheduled maintenance.

If you have an older FMS, you're likely relying on manual checking and imprecise metrics such as mileage and engine hours to determine a maintenance schedule.

For example, "Our schedule says it's time to change the oil or tires, etc...."

That's fine, but what happens when one of your vehicles develops an issue your current system doesn't detect—until it's too late? That resulting unscheduled maintenance will cost more—both in the repairs and the unplanned vehicle downtime.



FASTER's leading-edge FMS, FASTER Web allows for more effective preventative maintenance, as it's based on a more robust and accurate data set —things like industry averages, OEM guidelines, and best practices.

#### Predictive Maintenance—Like X-Ray Vision

But, far more importantly, FASTER Web can facilitate predictive maintenance—i.e., as needed —and based on a vehicle's actual condition.

#### FASTER Web uses telematics to collect "in-themoment" data on a vehicle's operation:

- Trouble alerts (i.e., from engines, tires, etc.)
- Meter readings (i.e., miles, hours, PTO, engine idle hours, etc.)
- Driver behavior
- Vehicle location/activity, and, it...
- Compares that data to current and historic baseline trends for such vehicles.
- For EV fleets: Data can also track battery optimization and battery lifecycle



The result is an invaluable "second sight" that can pre-emptively signal maintenance teams to impending failures—*before* they happen.

Your overall fleet-efficiency rises, as you can now plan for the repair and downtime, reducing costs on several levels. In the process, you end up delivering a more consistently high level of service to your customers.

#### Data "Fuels" Smarter Resource Management

But, that new data "dividend" addresses the next wish-list item...

#### • To optimize fleet-wide fuel consumption

With an older FMS, tracking fuel costs is a typically a challenging manual exercise. But, thanks to the fuel-consumption data collected by FASTER Web, you can automate the process of managing fuel usage and cost.

You'll also be able to compare traditional and alternative fuel-usage data to reveal ways to lower costs and emissions. You'll get "bankable" insights into your fleet's fuel economy, which, in turn, can driver smarter buying strategies for either electric vehicles or fuel alternatives.

#### Data-Driven Insights = Better Decision-Making

This enhanced data stream from FASTER Web is the gift that keeps on giving, and it delivers on the next item:

 To be able to gather and analyze a wide array of data on your fleet's operations in order to boost efficiency across your system, and drive better decision-making about your fleet.

All this newly available data on your fleet's operations allow for a robust level of reporting and Business Intelligence that older systems can only dream of providing.

We're talking about new data-driven insights that can yield system-wide benefits that go far beyond cost savings and better customer service:

 you'll enhance your vehicle-utilization levels, enable more informed "right-sizing" initiatives, and allow for better long-term decision-making.

#### **Take Workflow Automation to New Heights**

How about in your actual maintenance garages? In that arena as well, FASTER Web delivers on yet another wish-list item:

 To improve and automate your maintenance workflow, so technicians work more efficiently, parts-ordering is simplified and jobs are completed faster and more effectively.

Older systems mean manual scheduling (i.e., on a central standalone computer), while FASTER Web puts tablets into the hands of all technicians, and with just a few screen taps, you can automate workflows like never before.

- Technicians view and select their next job right on the screen.
- When a tech logs into a repair, their time is billed to the Work Order in real time.
- Technicians request parts right from their tablets, improving productivity and efficiency.
- Techs can use tablets to communicate amongst themselves to optimize repair outcomes.
- Easy-to-use, tablet-based interfaces make it a breeze to cross-train new and existing staff.

No More Ongoing Hardware/Software Costs

Then there's the significant and substantive savings in costs and hassles that FASTER Web delivers, addressing the desire on the part of transit agencies with older FMSs:

 An FMS that's web-based—meaning no more ongoing hardware or software costs, and where the solution provider handles ALL upgrades, updates, patches and glitches.



Agencies with an older FMS typically have to invest in new hardware every 3-4 years, not to mention the constant upgrades, updates and operating-system patches, as well as having to deal with firewalls and performance monitoring.

# FASTER handles ALL of that. Plus, it means no more:

- Ongoing hardware-upgrade costs and accompanying fees.
- Licensing fees for Crystal Reports
- · Citrix connectivity to remote locations
- Client installs during new deployments and upgrades.

#### Easy Integration with Existing Processes

But, no one looks forward to upgrading to a new FMS, and if you're considering it, that final wishlist item captures your concerns:

• You want the upgrade process to be as simple as possible, with minimal disruption to day-to-day operations, and allows for easy integration with existing processes.

The big fear? "Is doing this going to turn our operation upside down, and if so, for how long?"

While any significant technical upgrade will entail some short-term adjustment, FASTER Web provides enterprise-level integrations and automates existing processes with minimal downtime. There is plenty of good news on the migration front:

- We've moved countless companies to FASTER Web, meaning we've learned more, fine-tuned more, and ironed out the many kinks.
- You'll be assigned a dedicated implementation team to help move your data.
- You'll have access to data-cleanup tools to ensure data integrity and consistency.

Bottom line, we'll get your FASTER Web system integrated, tested, and fully functional, on average, 20% faster than other FMIS providers.



FAR MORE EFFICIENT DAY-TO-DAY OPERATIONS AND FLEET MANAGEMENT ARE A LOT CLOSER THAN YOU THINK, AND FROM <u>ONE</u> SOURCE—THE COMBINED EXPERTISE OF PASSIO TECHNOLOGIES AND FASTER ASSETS.

Again, there's a reason why so many of our customers routinely make the NAFA 100 Best Fleets list. A whole host of reasons, in fact, as we've detailed above.



For more information, visit www.passiotech.com and www.fasterasset.com

FASTER<sup>Web</sup>