Student Transportation
Student transportation is more than just routing.

Routing will always be at the core of your transportation operation, but your job today involves so much more. From fleet maintenance to activity trips, from vehicle tracking to parent communication, you do it all. Which means that your technology must support you in every aspect of your work.

At Tyler Technologies, we took this as a challenge: could we change the way transportation technology is designed and delivered to make it truly holistic, able to meet all of your needs?

That’s why we developed Traversa®.

“\textit{We love the layout and the ease of use. We’re so glad we made the switch.}”

- Shari Blair, Transportation Supervisor, Saranac Central School District, New York
Geolocate a Run with Your Smartphone

Traversa’s Run Collector is a mobile solution designed to simplify the creation of routes using available technology. With mobile device in hand, you follow the route of your choosing, either in your own vehicle or by riding along on a bus run. Start collecting data when you leave your starting point, and hit “stop” each time you arrive at a bus stop. Along the way, your phone leaves data crumbs marking the exact route you take. When you finish the run, the system locates each place you marked using latitude and longitude to estimate the address name of the nearest residence. This allows you to create GPS-accurate routes using only the GPS in your smartphone, no other equipment necessary.

Data-Supported Routes Increase Safety and Efficiency

With an emphasis on individual needs and data collected in realistic situations, Traversa is not only capable of accepting an exception to the rules — it is built from the ground up to reflect and manage the real world of student transportation. Traversa supports you in building routes in the way you know to be right for your district.

Managing Student Needs Individually

Each student’s record in Traversa contains their unique information: do they go to one location on Monday, another on Tuesday, and yet another Wednesday to Friday? Do they require extra time to board the bus? Do they need to be loaded only onto vehicles with special equipment? Because this information is stored on the student record, Traversa makes it easy to accommodate every need, no matter what run the student is assigned to.

You Set the Routing Rules

The Traversa mapping system provides multiple views to ensure you have complete knowledge of your district area. Set the groundwork for your routes by marking roads which cannot be navigated, travel speeds, traffic patterns, and more. The map is global, allowing for trips that leave your district.

Realistic Stop Locations

Traversa includes building footprints, land parcel boundaries, and address ranges, allowing you to place stops in realistic locations. A house may be marked at the back of the property, but your bus stop needs to be placed right by the road. With a simple touch you can move the stop, without overwriting the student's address data from your student information system.

Intuitive Run-Building Tools

When it comes to building runs, Traversa makes it easy. You can import addresses without overwriting data or unlocating students, add a stop with a single click, and use features like our automated “optimize run” functionality to calculate the most efficient way to reach each highlighted stop. Traversa will follow all the rules already set in your map, such as right-side routing. You can also build your morning pick-up route and then use “reverse run” to create your afternoon drop-off route on the exact same path, in reverse.

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“Traversa opened my eyes to what routing software could do for me — the additional features available, the user friendliness.” — Adam Mayo, Director of Transportation, MSAD 75, Maine
Complete Transportation Management

Flexible Trip Planning
With Traversa Activity Trips you can enter trip information, plot the path on a map, and specify who is driving and being transported on that trip. Advanced functionality for more complex trip management is available as a solution enhancement. For example, multiple drivers and vehicles can be assigned to different sections of the trip with accurate time and mileage for each driver reported.

Proactive Fleet Maintenance
Integrated workflow with Traversa’s Fleet Maintenance application helps you stay ahead of repairs and improve the safety of your riders through preventive maintenance. Record work orders with details of what vehicle is to be worked on, the work that’s being done, which parts are used, and who is doing the work.

Total Resource Management
- Students — Students can have multiple addresses, multiple pick up and drop offs, and can be marked for special needs around equipment, allergies, or any other information you need. The system allows for unlimited custom fields and document attachments.
- Resources — Review and edit information for all your employees, vehicles, and schools. Check employee certifications, manage your driver and mechanic information, and track vehicle preventive maintenance, all in one convenient location.

A Modern Approach to Dispatch
Every day, dispatchers ensure all drivers are present and ready to depart, and each vehicle leaves the lot on time. They deal with situations that arise when a driver is absent or when a bus won’t start. Traversa’s Electronic Rollout Sheet feature (Rollout) electronically manages this process and makes the daily dispatch faster, more intuitive and — most importantly — mobile.

“My favorite part of Traversa is that I am able to look up multiple students at the same time.”
- Tami Barlow, Assistant Head Bus Driver, Ichabod Crane Central School District, New York
A Wealth of Data with Telematics

Step Into the Future with Tyler Drive

Traversa can also be enhanced by Tyler Drive™, an on-board tablet with one-of-a-kind software and hardware, which is mounted on the school bus console. Once installed, Tyler Drive essentially turns a vehicle into a mobile transportation management terminal. Not only is it the first solution to provide drivers with turn-by-turn directions to each stop on their route, it also manages student ridership, employee timekeeping, and pre- and post-trip vehicle inspections. All of this is fully integrated in real time with Traversa.

Integrated GPS/AVL

Tyler Telematic GPS works seamlessly with Traversa to transform your transportation operation.

- Using planned versus actual comparisons and geo-fencing alerts, districts can plan the most efficient routes.
- Instant alerts of engine faults and diagnostic codes help mechanics stay one step ahead of costly breakdowns and repairs.
- Defend your drivers against reports of harsh braking, speeding, missed stops, or accident fault with exact data.

Never Miss the Bus Again

Traversa Ride 360™ is a mobile app for Apple® and Android® devices to help ensure your students never miss the bus again. Ride 360 allows parents and students to access their own secure data for bus stop location, route, and pickup time. When your buses are equipped with Tyler Telematic GPS, Ride 360 can use the GPS geolocation to let users know when to expect their bus each day. This drastically reduces the number of calls placed to the transportation department by parents and guardians.
A Better User Experience with Technology

If you’re used to seeing software that feels dated and inefficient, you’ll know right away that Traversa is a game changer. Built using HTML5, Traversa is touch-friendly and functional on most mobile devices and tablets. The interface is equally intuitive for PC users and, as it is web-based, it can be accessed from work, home, or anywhere else you need. Your work can go where you do.

Customized Views by Role
Traversa is flexible enough to handle the needs of the transportation manager who has to do it all, or the staff member assigned to a single function. It has a customizable, role-tailored interface based on extensive research and testing with transportation offices across the country. Each Traversa user sees only what they need to do their job — no more, no less. While one employee may need to know right when they log in that there are a number of vehicles out of service today, another may only need to know they have trip requests that require immediate approval.

Secure Cloud Hosting
Traversa is provided as a software-as-a-service (SaaS) solution, meaning your district does not need to own, update, or safeguard computer hardware on site. Tyler hosts our many cloud-based solutions, including Traversa, in secure data centers. We ensure connectivity, and the responsibility — whether of completing backups, or restoring software and data — belongs to us.

Why Tyler?
Tyler Technologies is committed to the public sector. We develop software and support solutions that meet the specific requirements of local governments, municipalities, and schools — and have been doing so since 1979. By serving thousands of clients nationwide, we are able to see common issues, help identify best practices, and develop innovative solutions for our clients.

We Know Schools
For decades, Tyler Technologies has been focused on delivering the best software to K-12 districts. More than 5,000 school districts use one or more Tyler school solutions, with nearly 2,000 using our routing solutions. We serve districts of all sizes; our clients range from schools of 250 students to multi-campus districts with 200,000 students. Traversa is a core component of Tyler Technologies’ integrated school solution suite, which provides solutions for finance, human resources, student information, data analytics, and more. With a complete Tyler software suite, districts see a significant reduction in staff hours spent performing redundant tasks in multiple systems, managing integrations with third-party systems, and reporting on districtwide data.

Tyler’s Evergreen Promise
Tyler is committed to providing clients with the tools they need today and into the future. We have dozens of clients who have used our solutions for more than 30 years and we expect they will be with us for decades to come. Why? Because we are committed to their satisfaction and continue to develop new solutions to meet their changing needs. Every year we release new feature upgrades with no relicensing fees for clients with an annual maintenance contract. We call this our evergreen philosophy. And to help clients stay current with updates, we have the EverGuide® support initiative which provides training resources to ensure that you never lag behind. Tyler is committed to helping you maximize your Traversa solution today and for years to come.

“Training time on Traversa is drastically reduced because of how easy it is to understand, to grasp the concepts and the workflow. It’s just seamless.”

- Clif Pierluissi, Director of Routing and Analytics,
Cook Illinois Corporation, Illinois
Software that thinks like you do.

Tyler Technologies (NYSE: TYL) is the largest and most established provider of integrated software and technology services focused on the public sector. Tyler’s end-to-end solutions empower local, state, and federal government entities to operate more efficiently and connect more transparently with their constituents and with each other. By connecting data and processes across disparate systems, Tyler’s solutions are transforming how clients gain actionable insights that solve problems in their communities. Tyler has more than 21,000 successful installations across 10,000 sites, with clients in all 50 states, Canada, the Caribbean, Australia, and other international locations. A financially strong company, Tyler has achieved double-digit revenue growth every quarter since 2012. It was also named to Forbes’ “Best Midsize Employers” list in 2018 and recognized twice on its “Most Innovative Growth Companies” list. More information about Tyler Technologies, headquartered in Plano, Texas, can be found at tylertech.com.