



# ADAMS 12 FIVE STAR SCHOOL DISTRICT

ADAMS 12 FIVE STAR SCHOOL DISTRICT USES ZONAR SMART FLEET MANAGEMENT TECHNOLOGY TO OVERHAUL SCHOOL BUS OPERATIONS AND STUDENT EXPERIENCE

**Customer:**

Adams 12 Five Star Schools

**Industry:**

Pupil

**Location:**

Colorado

**Organization Size:**

163 buses and 130 vehicle white fleet

**School District Impact:**

Zonar helped Adams 12 achieve:

- Increase return on technology investment
- Improve driver accountability
- Streamline tracking and account management capabilities
- Improve compliance
- Optimize routing

**Zonar Solutions Involved:**

- Zonar V3™ and Ground Traffic Control®
- Zonar Electronic Verified Inspection Reporting (EVIR®)
- Transfinder Routefinder Pro
- Zonar Z Pass™

*“Before we started using Zonar, the only way we could truly know if a driver performed an inspection was after a fresh snowfall. If he or she turned in their paperwork and there weren’t footprints around the bus, it was a strong indication that they were pencil-whipping their inspection and not doing the full walking around inspection.”*

– Dave Anderson, Director of Transportation, Adams 12 Five Star Schools

## SCHOOL DISTRICT CHALLENGE

Adams 12 Five Start School District is located just north of Denver, Colorado. The district serves 43,000 students in the five communities of Broomfield, Federal Heights, Northglenn, Thornton, Westminster and unincorporated Adams County.

Similar to many school districts, Adams 12 was under pressure to identify and implement new cost-cutting measures. For Director of Transportation, Dave Anderson, the challenge was to improve routing, compliance, accountability and student ridership tracking while saving money for his school district. Adams 12 had an existing routing system, but it was slow, clunky and required a long time to implement updates. Anderson wanted a solution that integrated and synced daily with their Infinite Campus student system and provided GPS, improved operation efficiencies such as fuel economy and idling, student ridership information, preventative and proactive maintenance and improved compliance.

The solution Anderson chose was a combination of Transfinder routing and Zonar smart fleet technologies. Zonar and Transfinder easily integrate with each other and Transfinder works in conjunction with the Adams 12 Infinite Campus student information system.

To initiate a three-system solution, Adams 12 began by installing Zonar’s V3 telematics device on each of its buses and Zonar’s Ground Traffic Control web portal. Adams County funded the entire project independently, and it paid for itself after one year.



## SOLUTION AND RESULTS

By deploying Zonar smart fleet management technology and Transfinder including V3 telematics, EVIR, Z Pass and Transfinder Routefinder Pro, the Adams 12 Five Star School District has:

- **Streamlined pre- and post-trip inspection:** With EVIR Adams 12 was able to eliminate paperwork for inspections and repairs
- **Received real-time route optimization:** With Zonar GPS and Transfinder routing, Adams 12 has been able to re-route buses around accidents and traffic resulting in more efficient times of arrival and reduced fuel usage
- **Improved compliance:** EVIR delivered digitally verifiable records of pre- and post- trip inspections which ensures that Adams 12 drivers are complying with CDL trip inspection regulations
- **Improved safety and peace of mind:** With the addition of GPS tracking on buses and the use of Z Pass, Adams 12 has gained visibility into when where and how buses are operated as well as when and where students are getting on and off the bus.
- **Improved maintenance:** Zonar’s V3 delivers insights to Adams 12 for engine diagnostic and management

For more information about Zonar solutions, visit: <http://www.zonarsystems.com>

For more information about Transfinder, visit: <http://www.transfinder.com>

For more information about the Adams 12 Five Star Schools, visit: <http://adams12.org>

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## THE ADAMS 12 SOLUTION INCLUDES

- **Zonar's Electronic Verified Inspection Reporting (EVIR®) tool for pre-and post-trip inspections** – Trip inspections are a required part of a school bus driver's day, but prior to Zonar, they were paper-based and hard to account for by Adams 12. EVIR has automated the process, eliminated paperwork, and ensured consistency of drivers completing inspections. With EVIR, if there is an accident or mechanical issue with a bus there is digitally documented proof of whether a driver complied with CDL pre- and post- trip inspection regulations prior to the issue. "Before we started using Zonar the only way we could truly know if a driver performed an inspection was after a fresh snowfall," said Anderson. "If he or she turned in their paperwork and there weren't footprints around the bus, it was a strong indication that they were pencil-whipping their inspection and not doing the full walking around inspection." EVIR has also led to a reduction in the number of large repairs on Adams 12 buses because small problems are reported and repaired quickly.
- **Bus idling tracking** – The Zonar solution tracks how long vehicles are idling, the location a vehicle idles, and the cost of fuel spent on unnecessary idling. In addition to wanting to save on fuel costs and have a greener fleet, as the director of transportation, Anderson's focus on idling is also for the purpose of children's health. He and his team set up "geofences" in Zonar's Ground Traffic Control to specifically identify when excessive idling was occurring near schools. With Zonar idling reports are provided to fleet managers who in turn can use the information to coach their drivers on better operating behavior.
- **Predictive and proactive maintenance** – Traditionally school bus repairs cost Adams 12 additional time, money, and paperwork. But with EVIR inspection data connected to the fleet management repair system, mandatory repairs such as a broken head light are recognized during pre-trip inspections and instantly communicated to the repair shop, so that repairs can be completed and new replacement parts can be ordered without any paperwork. And, if a critical repair is necessary while a bus is in operation, a replacement bus or repair vehicle can be sent to a known location to help, and other bus routes can be re-routed seamlessly with Zonar's integration with Transfinder Routefinder Pro if necessary.
- **Route optimization** – The Zonar with Transfinder solution at Adams 12 allows for remote route management. Location, speed, and engine diagnostics for every bus in the fleet are available in real time on Ground Traffic Control. If there is an issue that requires a route change, Routefinder Pro can easily reroute the bus leveraging Zonar GPS information. Routefinder Pro can also easily be optimized for variant bus schedules. For example, if a school has staggered start times, optimized routing can enable a route in this scenario to only require a single bus. The Adams 12 routing solutions also integrate seamlessly with the district's student system, Infinite Campus, so when there are changes to student enrollment and ridership, that information is synced daily and updated with the Routefinder Pro to ensure every bus is routed appropriately.
- **Driver accountability** – With Zonar, Adams 12 can determine a driver's location and the driver's exact speeds relative to the posted limit at any time. This capability ensures accountability for the drivers and district by allowing complaints to be followed-up in a very direct and precise manner. It also supports good drivers. EVIR also helps with driver accountability by giving them a digitally verified record that not only did they complete pre- and post- trip inspections but that they identified and reported any issues with a bus.
- **Student accountability** – Adams 12 School District uses Zonar's Z Pass System. Z Pass improves the safety and security of Adams 12 school bus operation by enabling the school to quickly see where and when children entered and exited buses. With Z Pass information, Adams 12 can quickly locate a rider, including if they got on the wrong bus, improve routes and utilization with historical ridership information. Z Pass works by children carrying a passive RFID identification card that they scan onboard to log each entry and exit from the bus. The time, date, and location of each scan is logged and transmitted to a secure database for immediate access through Zonar's Ground Traffic Control. Anderson says that there was an initial learning curve but using the RFID passes has become as second nature to students as remembering to bring their books to school.