

10 Questions to Ask When Considering a Student Bus Tracking System



BUSBOSS™

Because Your Precious Cargo Comes First

www.busboss.com



Introduction

What if we told you there was an affordable and easily-implemented system that could ease your daily operations, save money, and keep your students safer at the same time? That system is here with RFID student tracking. With a tiny microchip inside student and faculty ID badges, and some scanners set up around campus, you can quickly get a minute-by-minute overview of the activities of everyone on-campus. You'll know who's getting on the bus in the morning, who's properly attending their classes, and who got off at the right stop in the evening. There's quite a lot of misinformation about RFID tags right now, so this whitepaper will provide an overview of the major benefits of the technology, along with some suggestions for the human side of implementation.



BUSBOSS[™]

Because Your Precious Cargo Comes First

www.busboss.com

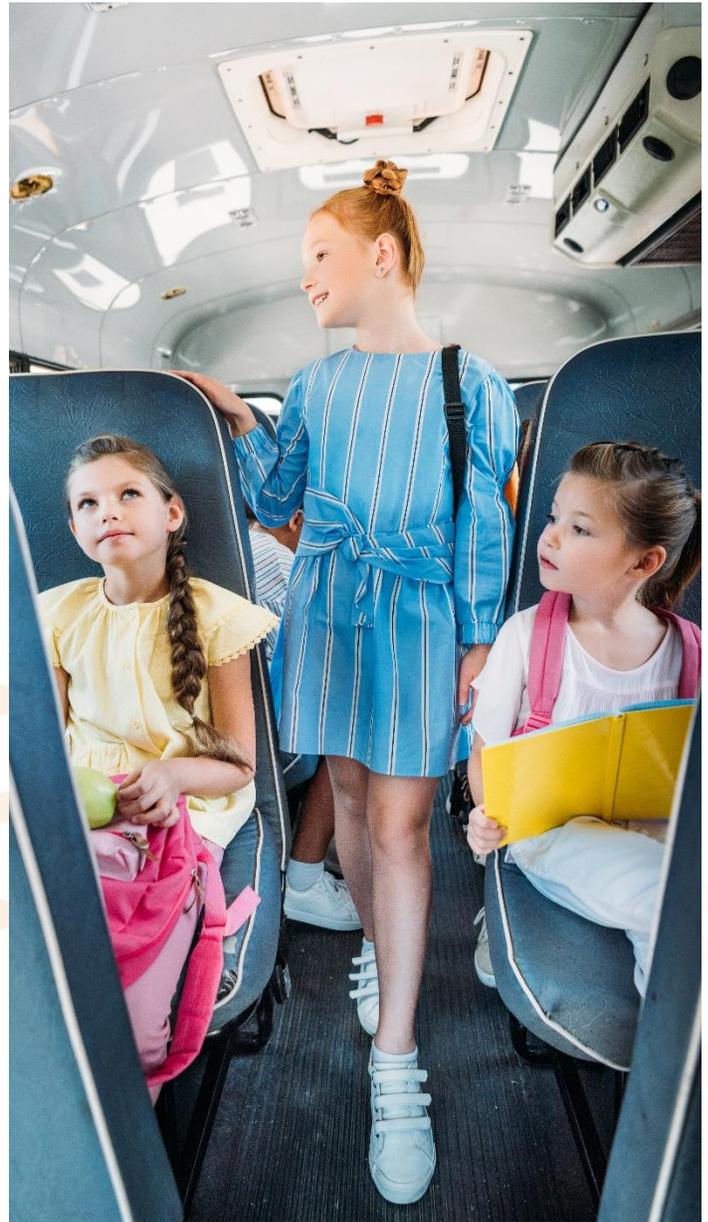
1. What are the Student Benefits to RFID?

An RFID tracking system means that your school district is doing everything technologically possible to know where the students are at all times. From the moment the bus picks them up in the morning, to the evening drop-off, there won't be any question where they are.

Further, if a student goes truant, you'll be notified the moment they aren't tagged entering their assigned class. If a student tries to sneak off campus, the scanners at the doors will instantly notify the office of an unplanned exit. You'll be able to catch them before they're even off the property. In other words, RFID means that whenever a parent asks "Do you know where my child is?" you'll have an answer for them.

2. How Does RFID Help My Transportation System?

The most direct benefit to your busing operations is that it gives you instant and reliable data on your ridership, from day to day. An RFID scanner at the door of the bus will immediately tag anyone who gets on or off the bus, giving you hard proof of ridership for all your reporting needs.



It also adds another layer of safety for students. The RFID system can alert bus drivers if a student is getting off at the wrong stop the moment it happens, giving your drivers opportunity to assess the situation or make a note that "Susie went home with Kelly today."



3. What Other Benefits Do RFID Tags Bring?

To hit a few more highlights:

- Automatic attendance counting, with students being recognized as they walk in.
- Quick and easy verification of evacuation for disaster drills.
- Establishing off-limit areas (like the chem lab) which alert you if a student trespasses.
- Location-based PA announcements for specific students that don't disrupt other classes.
- Rapid reporting: Since everything goes in a database, state reports take seconds to compile.
- Early response: The system could, for example, alert you if a student is motionless for too long, which could indicate a health problem.

4. Is RFID a Safe and Proven Technology?

Absolutely! RFID was invented in the 1980s, and quickly became ubiquitous in manufacturing and shipping industries specifically because it was reliable, low-cost, and low-power.

Further, RFID stores absolutely no data on the chip besides an identification number. Without access to the main school student database, there is no possible way to match that ID number to a specific student's private information. They are completely secure.

RFID is literally one of the backbones of the entire modern global manufacturing system, and chances are, your home and school are both filled with products that made their way to you via RFID. It's completely safe, secure, and in use worldwide.



BUSBOSS™

Because Your Precious Cargo Comes First

www.busboss.com



5. Is RFID Tracking Expensive?

No. In fact, it's remarkably inexpensive, because it's seen so much use within the manufacturing sector.

An individual RFID chip is roughly the size of a grain of rice and costs, at most, a couple cents. There may actually be more material costs involved in the plastic and laminate on your ID cards than in the RFID chip.

The scanners themselves are similarly low-cost and easy to deploy, since each only has a few feet of signal strength.

6. Are there Cost Benefits to RFID?

In most cases, yes, although they are indirect. The better record-keeping, along with an improved ability to locate truant students, translates to more students in seats, and reliable numbers showing they're there. Districts implementing RFID tracking have generally reported a 2-4% increase in attendance, for example.

This then translates to higher state reimbursements on anything relating to attendance or bus ridership.

Peripherally, higher attendance also usually correlates to higher test scores, which then bring higher funding. You may also see reductions in expenditures on lost-child hunts and other emergency measures.

So while every district's situation is different, RFID will usually bring some gains to your bottom line.



BUSBOSS[™]

Because Your Precious Cargo Comes First

www.busboss.com



7. How Many RFID Scanners Will My District Need?

Individual needs may vary, but broadly speaking, one per door will provide good coverage, especially when using passive scanners that don't require "swiping." This will give you highly accurate headcounts of the movements of people within your districts' buildings.

8. What Computer Equipment and Skills are Needed?

Many districts fear technological upgrades because of the accompanying need for new computer systems. However, most of them do not realize just how diverse and newcomer-friendly modern business computing has become.

- For larger districts with significant IT departments already, these systems can be implemented entirely in-house.
- For those without the on-site equipment, there are now Software-as-a-Service offerings that allow them to use the same software with nothing more than broadband Internet service.
- If your district is concerned about software licensing fees, leasing options are available that, in most cases, are considerably lower than your per-month savings will be.

As long as your district has an Internet connection, you have the minimum setup necessary to implement RFID.



BUSBOSS™

Because Your Precious Cargo Comes First

www.busboss.com

9. What is Required of the Students?

One of the best aspects of RFID is that it requires so little of the students. With passive scanning, literally all they have to do is have their ID badges with them whenever they ride the bus or are on campus. While it is possible to subvert the RFID chips by, for example, wrapping the card in tinfoil, any such measures are quickly defeated with a visual check.

Plus, if a student does this while on campus, the system will note their apparent absenteeism anyway.

We recommend having your bus drivers ask to see students' IDs before they get on the bus. This will go a long ways towards eliminating forgotten or sabotaged badges.

Some card readers are also available with numeric keypads so students that have forgotten their badges can just enter their identification number. Special needs students can accounted for by having the Aide on the bus take of this instead.



10. What will the Parents Say?

Finally, we would be remiss if we didn't acknowledge that RFID-based student tracking is controversial, even though it's consistently shown positive results in implementations. RFID systems absolutely do increase attendance and decrease avoidable risks to the students... but this needs to be properly explained, or else unfounded "Big Brother is watching!" style fears may take root.

So a well-planned RFID rollout therefore requires considering the PR and communications aspect of the venture as well. Its success or failure will in large part depend on getting the parents on your side.



BUSBOSSTM

Because Your Precious Cargo Comes First

www.busboss.com



Implementation Tips

- Give plenty of warning; don't make it a last-minute surprise.
- Leave time for questions and comments, along with a willingness to compromise in the face of solid resistance.
- Consistently focus on the practical benefits, versus the imagined dangers. Challenge the disapproving to explain why higher attendance and fewer misplaced students is a bad thing.
- Explain the ability for the parents to also be able to use the system to know how far the bus is in the morning, in case of bad weather and estimated time of arrival for in case they are running late in the afternoon.
- Emphasize security, such as the fact that each ID chip contains no personal information about a student.
- Be wary of too much financial talk, which can seem calculated or impersonal. It's good to mention the improved state funding – especially in that it could prevent higher taxes – but your focus should be on the student benefits.

- If possible, prepare multimedia materials in advance, such as videos that integrate an explanation along with slideshow data. Videos are often better-believed than live spokespeople.
- Don't forget your teachers and bus drivers: Many of them, especially the tenured, may also be wary of RFID. Good staff outreach is vital for getting them onboard.

Many parents are uncomfortable with the rush of technology and the changes it constantly makes to our ways of life. Anything you say which eases that discomfort, while emphasizing all the many benefits to the parents and children, will ultimately help ensure implementation is a success.

There are a number of naysayers, but the reality is that RFID is one of the best investments a school can make for its' student safety. You'll have higher attendance – and hopefully the higher grades that go with it – along with improved state reporting, and a high likelihood of better financial returns.

It's a win-win situation for everyone involved, even if the students might not appreciate it. When a district needs to be doing everything possible to keep students safe, RFID provides the solution.



Learn More About BusBoss Products



BUSBOSS™

Because Your Precious Cargo Comes First

www.busboss.com