



Secure Pre-Pass is a system for secure base access by vehicles on-the-move. Users request access via an app on their phone after taking a selfie, entering a PIN, and selecting a location. The phone adds its own unique identifier and sends an access request to a server, which verifies the user by facial recognition, PIN, and phone identifier (3-factor authentication). If the user is authorized access, the server returns a confirmation secret displayed on the phone as a QR code (in 3 seconds or less). At the gate, confirmed users are recognized via RFID code or a message sent by the users's phone and directed into a "fast lane" by signal lights. All vehicles in the fast lane are confirmed, and violators are stopped by a red light and/or boom gate while guards are audibly alerted.

Confirmations are valid for a limited time window, which is established by base policy and may be adjusted to support current threat conditions. Users may set an estimated time of arrival, and they can also cancel or make new requests at any time. The QR code representing a confirmation is displayed on the phone and may be used directly, in place of RFID, for pedestrian access.

Security benefits include 3-factor authentication, automated assistance for access decisions, early knowledge about who is expected at the gate, and faster response to new information. In addition, there are no more problematic traffic jams outside the gate because "fast lane" throughput is 5 times greater than a lane using manual ID card checks. Security personnel can now focus on real threats.

FEATURES & BENEFITS

- To users, Secure Pre-Pass is a phone app and RFID card
- Enrollment in the app is easy and takes just 2 minutes
 - Enroll: enter ID number, PIN, and 4-digit RFID key
 - Enroll: take a picture of the QR code on RFID card
 - Enroll: take a "selfie" face photo... DONE!
- Fast: request access and receive response in 3 seconds
 - Request access: take a selfie, enter your PIN
 - Request access: press a button for the desired base
 - The phone responds with a confirmation or problem description in 3 seconds
- Helpful and flexible for users
 - Any problems are identified explicitly, easing correction
 - Examples: bad face photo, wrong PIN, wrong phone
 - Users see a countdown timer for the confirmation time window, reducing anxiety about validity
 - New or lost phone? Just re-enroll
 - RFID card may be taken on travel, used in a rental car
 - RFID fits in a Tyvek sleeve attached to the inner windshield
 - Option: Instead of RFID, the user can press a button on the phone upon arrival at the gate; no RFID needed

- For security personnel, Secure Pre-Pass automates access
- 3-factor authentication ensures user matches DoD-issued ID card because enrollment verifies face with ID-card photo
- Access decisions are automated using the latest information
 - Confirmations may be canceled in response to changes
- Access is fast for most users, so security efforts can focus on real threats---spend more time on questionable cases
- Multiple RFIDs may be read at once for passengers

SOLUTIONS

Secure Pre-Pass speeds secure access for multiple use cases involving vehicles on-the-move as well as pedestrian applications and is very cost-effective. It's convenient for users while improving security for:

- Military bases and other secure installations
- Check points along a route
- Pedestrian access control points including ticketed venues
- Attendee verification at secure meetings