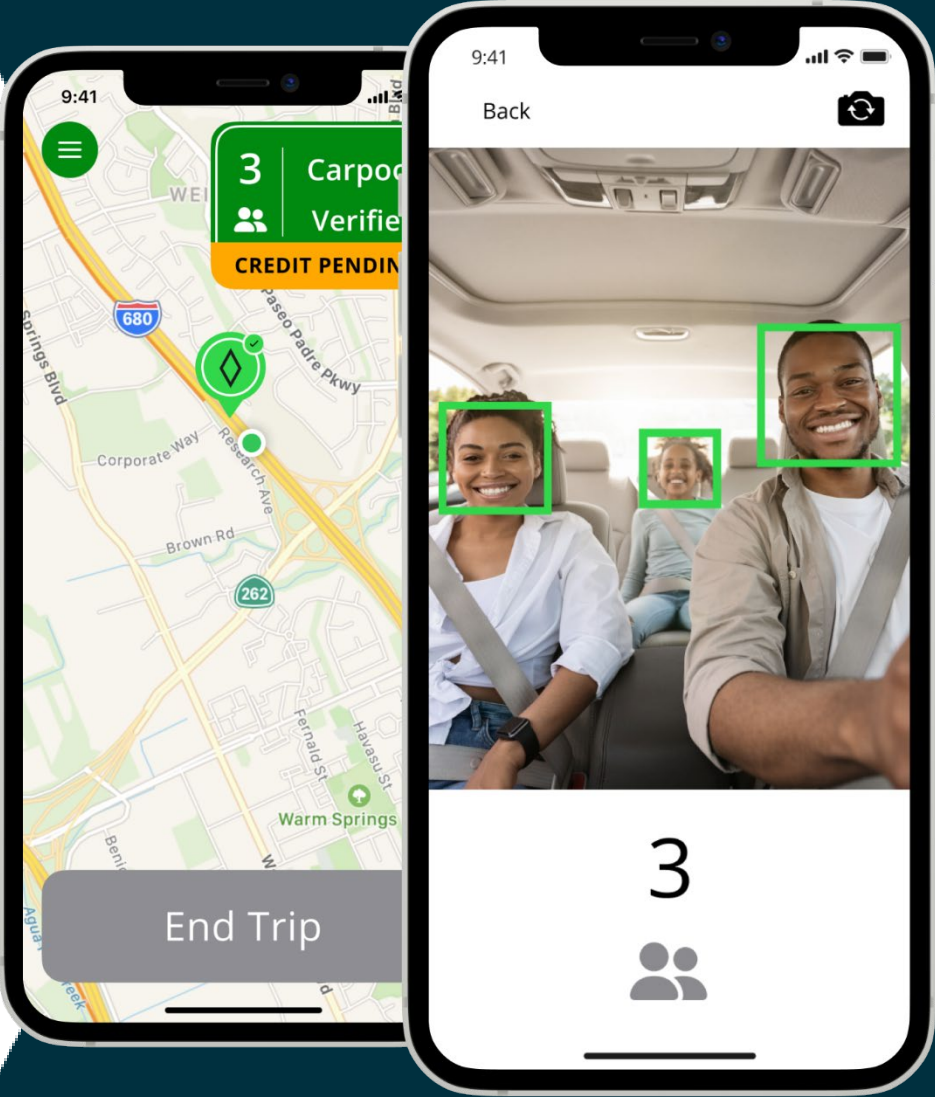


Express Carpool Check Smartphone App Pilot Update

December 13, 2024



Key Points

1. What we've accomplished so far
2. What were the results
3. What's next?

Reducing Carpool Violations in Express Lane Supports:



Reliable travel times
for carpool and transit



Reduced congestion and
increased public confidence



Reduced need for CHP
field enforcement



Regional **greenhouse**
gas emissions reduction
goals

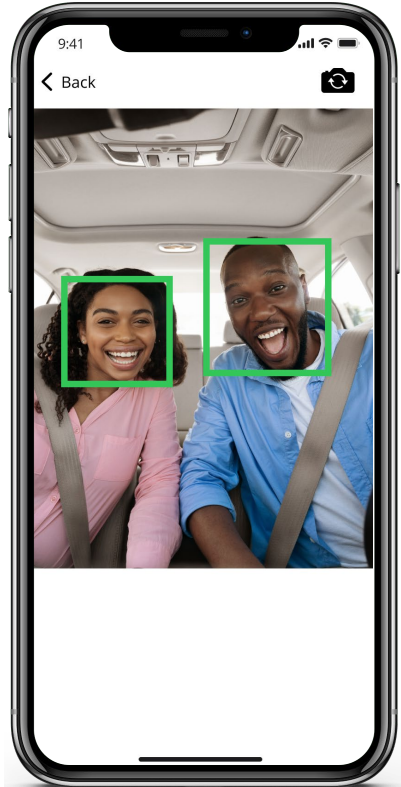
Express Carpool Check Phase 1 Pilot Goals

- Determine app functionality & accuracy
- Receive feedback from app users
- Understand privacy concerns
- Explore full deployment potential
- Recruit 30% of participants from Equity Priority Communities

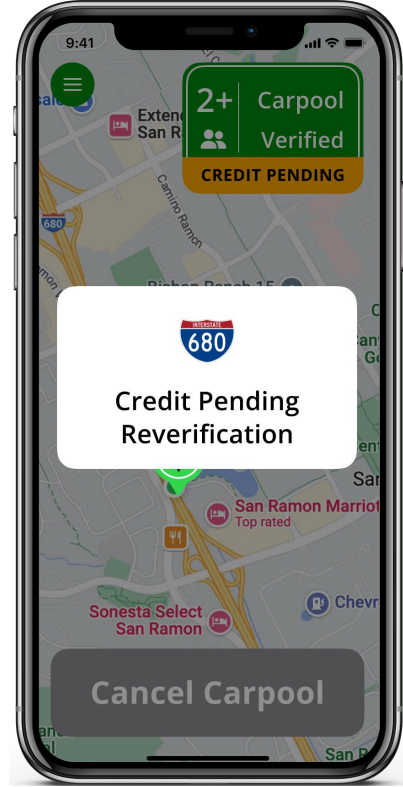


How the App Works:

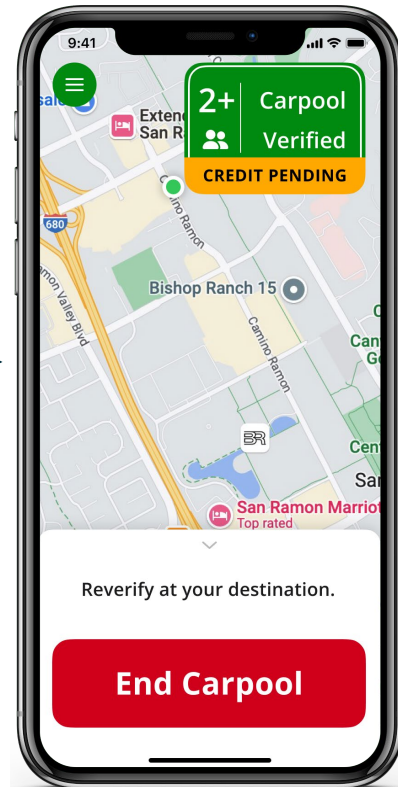
Testing two versions:
Geometry OFF ON



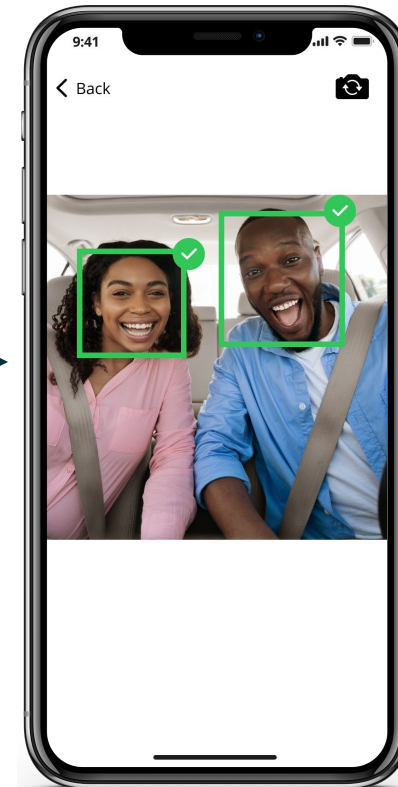
Verify
Carpool



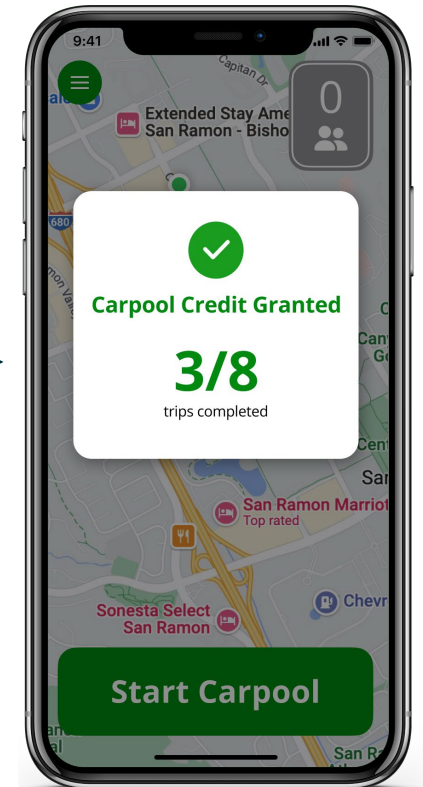
Credit Pending



Reverification Required



Reverify Carpool



Credit
Granted

Who Participated?

100 users; 1,988 trips on I-680

- **26%** Low income
- **74%** Black, Indigenous, and People of Color
- **24%** Carpools with infants/children
- **2%** Limited English proficiency (LEP)
- **7%** of participants did not have Fastrak® accounts

Low-Income, Black, Indigenous, and People of Color, LEP Participants

Goal

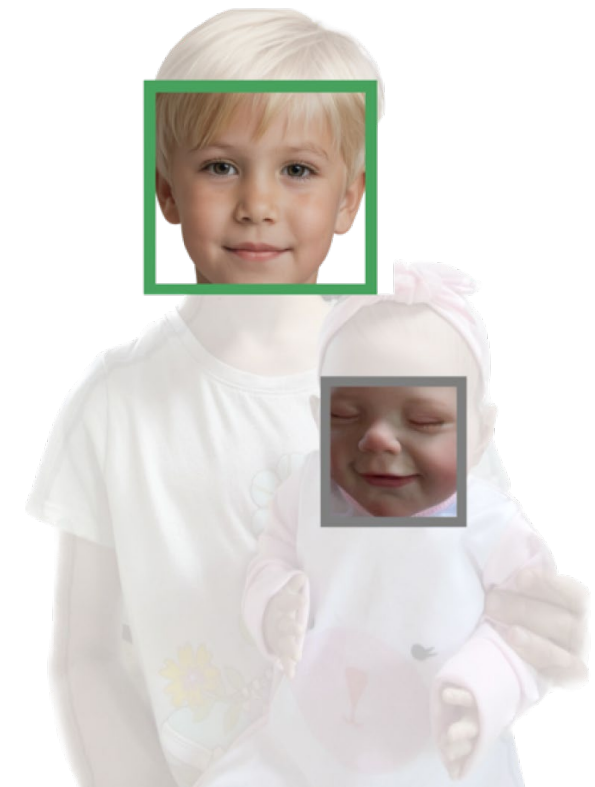
30%

Pilot

80%

Key Findings

- **99%** detection accuracy
- **No reported** cases of successful cheating
- **87%** reported that the app was very easy or easy to use
- **75%** reported a very positive or positive experience using the app with infants/children



*Testing scenario with realistic baby doll

Target Metrics and Results

Metric	Target	Result	Measured via Scenario Testing
Accuracy	99%	99%	<ul style="list-style-type: none"> - Accurate occupant counts - Detection with different skin tones, children, masks/sunglasses, hats, lighting environments

Metric	Target	Positive Responses	Measured via Survey Questions
Ease of Use	95%	87%	<ul style="list-style-type: none"> - Experience starting/ending carpool - Account sign up and comparison to other apps
App Satisfaction	95%	91%	<ul style="list-style-type: none"> - Overall satisfaction with app
Privacy	95%	80%	<ul style="list-style-type: none"> - Use of camera tech & use of app to verify carpools - Type of personal info collected (similar to FasTrak)

Results: Focus Group Insights

EASE OF USE

“The app itself was super easy to use. Very user friendly.”

“Starting and ending trips [was] very smooth. It was very solid.”

EQUITY

“We didn’t notice a skin tone issue. It seemed to pick my husband and I up. We’ve got different skin tones, obviously, and there didn’t seem to be any kind of problem with that.”

PRIVACY

“No, no concerns. As long as there’s a disclaimer of some kind. You know, verbiage that says we will not use your photos.”

PUBLIC ACCEPTANCE

“[Remembering to verify was] a habit that, I mean, I didn’t have initially, for sure.”

Potential Opportunities

Allows for transition to eligibility verification approach;
app does not issue violations

Automated system to reduce enforcement need,
human bias

Improve Express Lane performance and reduce
revenue loss due to occupancy violations

Possibility to phase out switchable transponder

Tool to incentivize carpooling



Considerations

Institutional/regional consistency; would require regional consensus for all Express Lanes + bridges

Operational feasibility, including back-office integration and interoperability

Equity, privacy & accessibility

Customer communication and phasing

Statutory/regulatory



Next Steps

Phase 1 Pilot (completed)

- Test technology, user acceptance
- Feedback from equity priority communities



Develop Roadmap for Phase 2 Pilot (2025)

- Vision, goals, objectives
- Evaluate considerations and phase 2 pilot priorities

Questions?

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