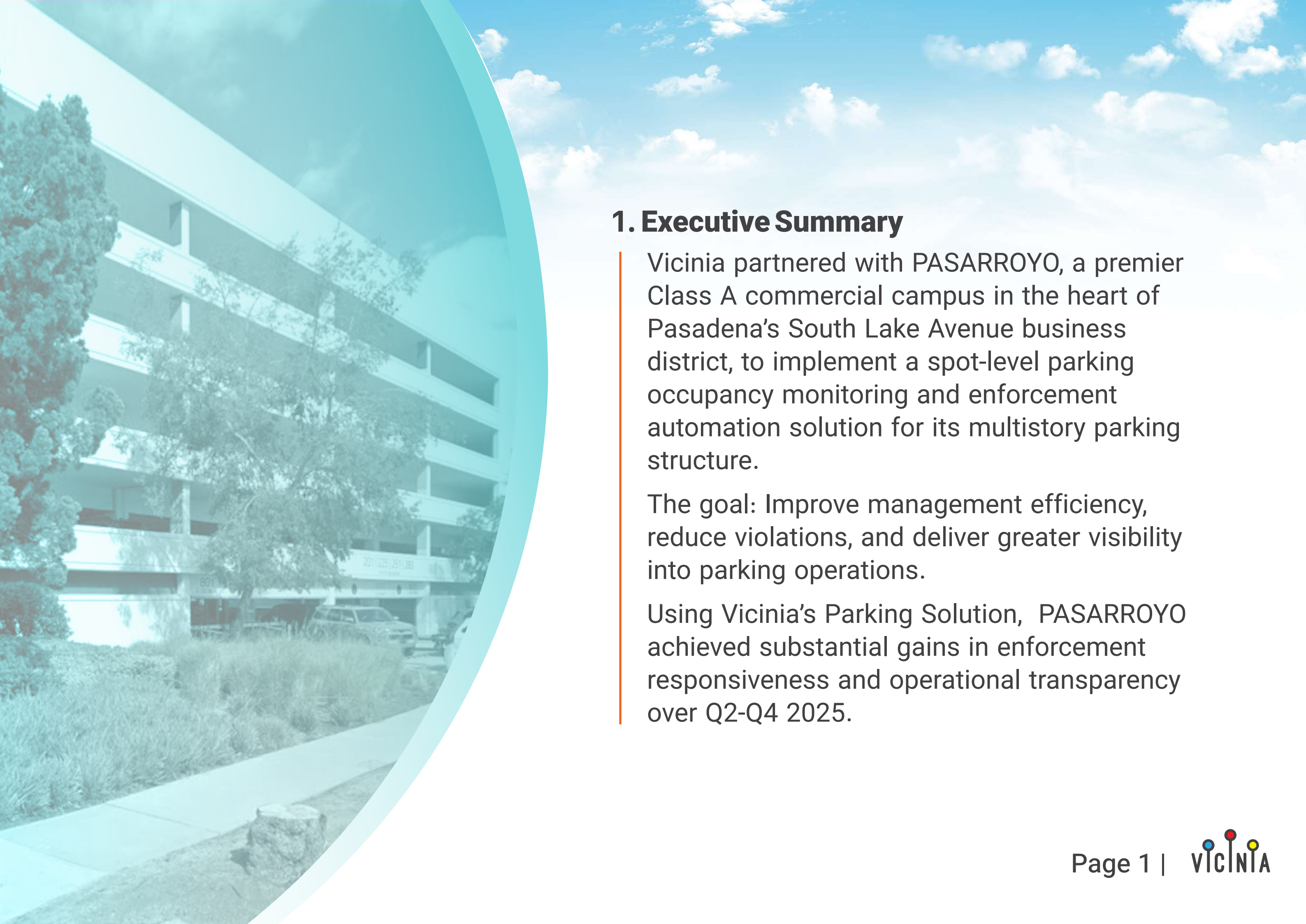


**PASARROYO aims for Smart Spaces.
Smarter Insights.**

Transforming Parking Efficiency at PASARROYO

A Vicinia Parking Occupancy
Monitoring - Case Study
Pasadena, CA
Client: Avison Young





1. Executive Summary

Vicinia partnered with PASARROYO, a premier Class A commercial campus in the heart of Pasadena's South Lake Avenue business district, to implement a spot-level parking occupancy monitoring and enforcement automation solution for its multistory parking structure.

The goal: Improve management efficiency, reduce violations, and deliver greater visibility into parking operations.

Using Vicinia's Parking Solution, PASARROYO achieved substantial gains in enforcement responsiveness and operational transparency over Q2-Q4 2025.

2. Client Background

PASARROYO is a four-building Class A office campus encompassing approximately 600,000+ sq ft in downtown Pasadena. Located at 201, 225, 251 and 283 S Lake Ave, the campus features a seven-story garage with about 2,000 parking spaces.

Target users for the parking solution included building tenants, their visitors, and facility/parking management staff. The operational context: a high-traffic office campus with short-term and visitor parking lots that experienced frequent violations and lacked real-time occupancy visibility.

PASARROYO



3. The Challenge

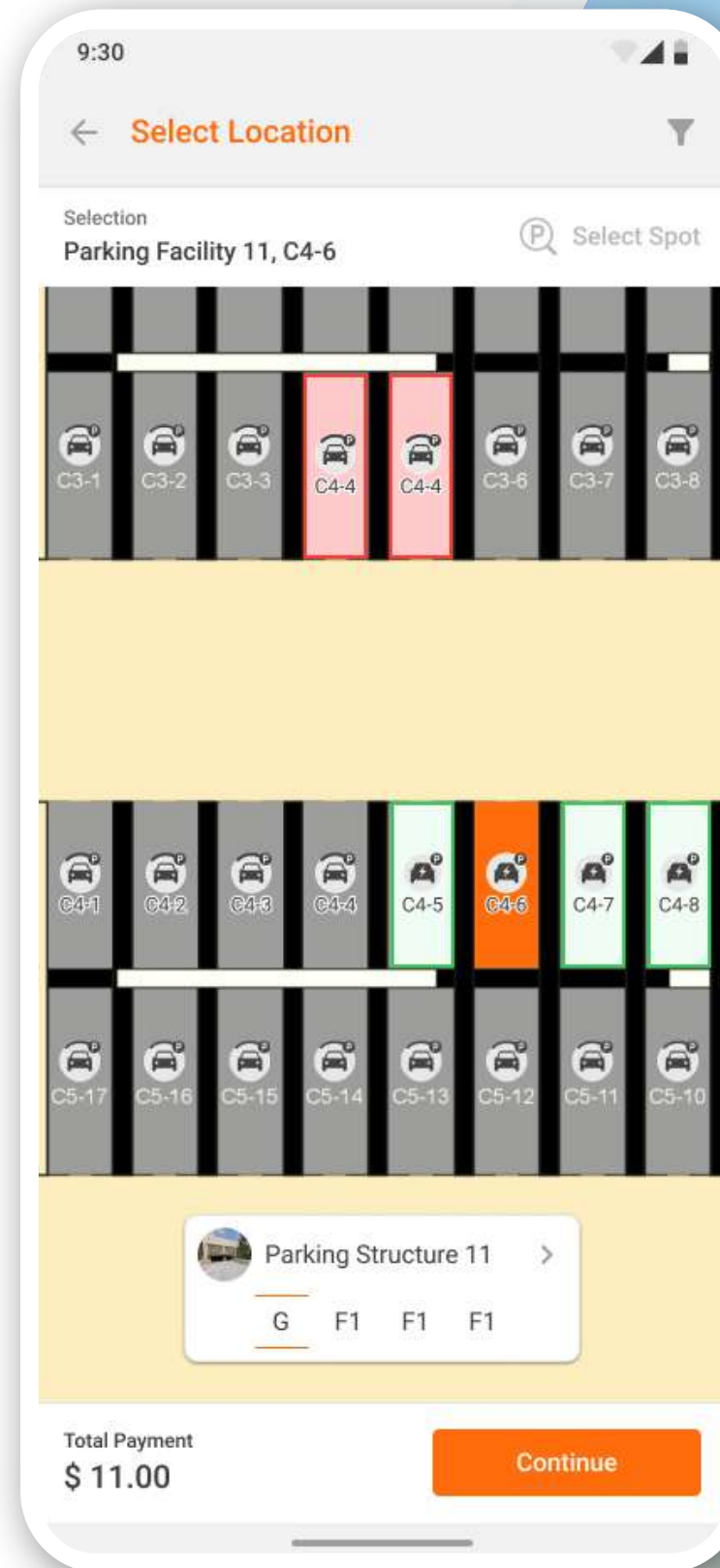
Before Vicinia's intervention, PASARROYO's short-term parking areas faced multiple operational issues:

- Violations in monitored zones escalated as only one staff member handled daily manual enforcement.
- No real-time indicator of spot-level occupancy, meaning time and effort wasted by patrols driving to locate violations.
- Fragmented system: parking enforcement, occupancy monitoring and analytics were separate or manual processes.
- **Decentralized Legacy Systems:** Existing tools were fragmented across departments and lacked integration — making data consolidation, reporting, and oversight difficult.

4. Objectives

To overcome these challenges, the PASARROYO management team and Vicinia defined the following goals:

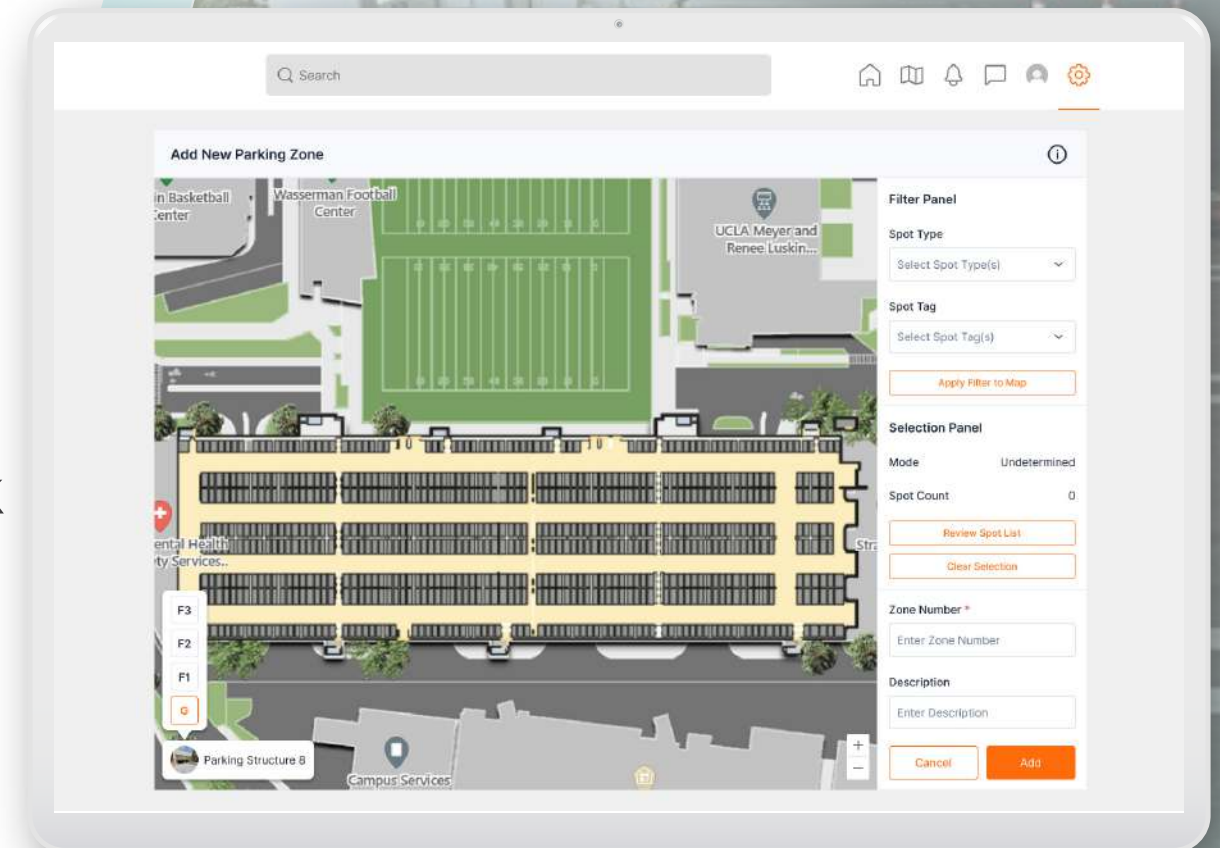
- Automate alerts to enforcement teams in real time.
- Minimize time spent patrolling the lot to identify violators.
- Improve time-to-action and overall enforcement efficiency.
- Reduce the number of violators in the monitored zones.

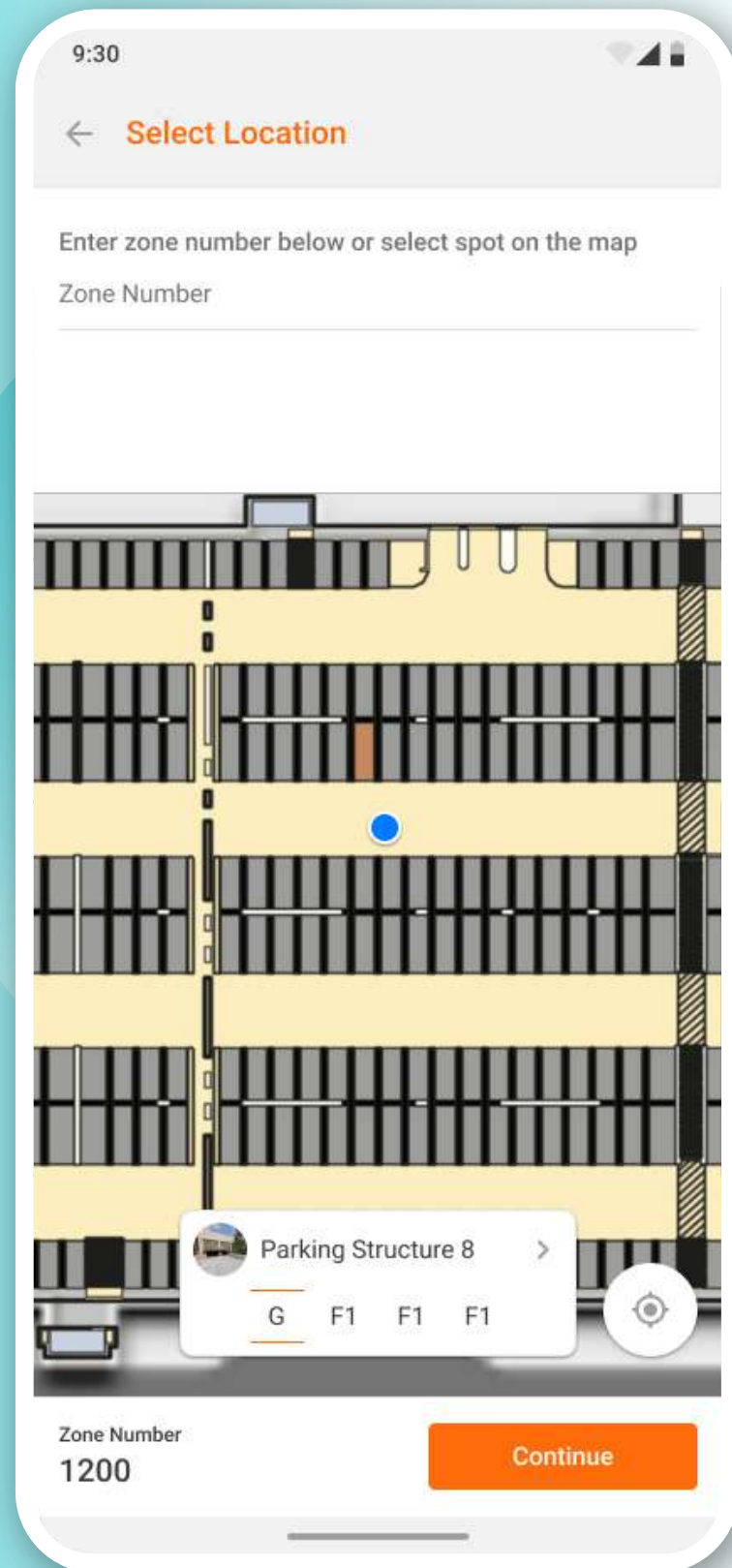


5. The Solution

Vicinia deployed its Parking Solution combined with Indoor Maps to bring granular real-time visibility and automation to PASARROYO's parking operations. Key elements:

- Installed floor sensors at each parking spot in the monitored zones to capture live occupancy data.
- Deployed Vicinia analytics dashboard for facility and parking management, enabling enforcement teams to view spot-level occupancy, trigger alerts and track enforcement activity.
- Mapped the parking lot layout into the Vicinia platform, including zones, EV charger areas
Integrations: PASARROYO's EV provider, PowerFlex and signage.
- Delivered onboarding and training for management and enforcement staff on how to monitor alerts and use analytics for proactive enforcement.
- Access provided via web and mobile devices; solution hosted in the cloud.





- **Solutions Implemented:** Vicinia Parking, Vicinia Indoor Maps, Vicinia Organization
- **Key Features Used:** Spot-level occupancy sensors, real-time dashboards, alerting engine, EV dedicated parking spots for duration of stay and usage.
- **Integration Details:** Vicinia occupancy Sensors; EV charger provider (PowerFlex) data feed; asset map in Vicinia
- **Accessibility & Devices:** Web portal + mobile access for enforcement staff
- **Deployment Type:** Cloud-hosted (SaaS on US-based AWS infrastructure)

6. Implementation

Timeline by Phase:

- **Discovery:** Defined challenges, identified key zones and stakeholder requirements
- **Mapping & Design:** Created digital twin of parking lot, zoned areas, EV charger locations
- **Installation of Hardware:** Floor sensors deployed per parking spot; integrations enabled
- **Training & Onboarding:** Admins and enforcement staff trained on the system; bi-weekly review meetings set up
- **Monitoring & Adjustment:** After go-live, bi-weekly check-ins for the first 8 weeks to fine-tune alert thresholds and analytics
- **Ongoing Support:** Monthly performance reviews and dashboard refinements



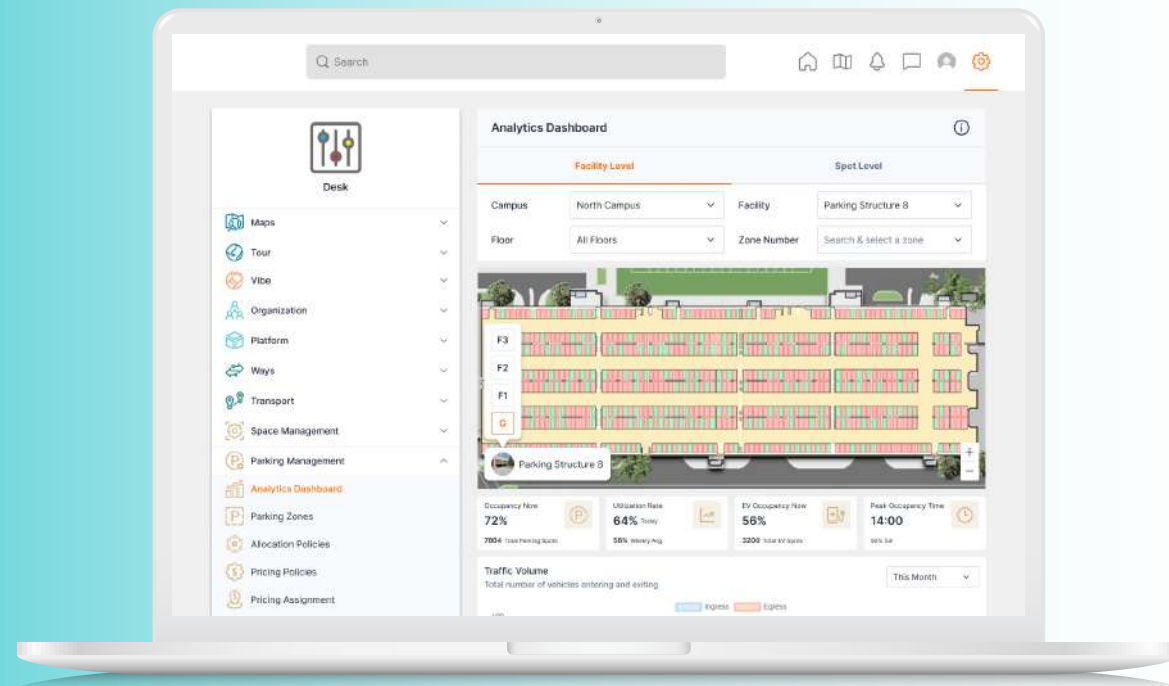
7. Results & Impact

Key Metrics: Bi-weekly check-ins and adjustments based on real-time feedback **Quantitative Improvements:**

- 62% reduction in parking violations in the monitored zones.
- 79% reduction in time enforcement staff spent driving the lot to locate violators
- 40% increase in utilization of monitored spots by legitimate users (to be filled)

Qualitative Results:

- Enforcement staff now work from real-time dashboards and automated alerts rather than manual rounds
- Better data and analytics visibility mean management can track hot-spot zones and adjust policies
- Automated violation alerts mean quicker response and deterrence



Client Testimonial:

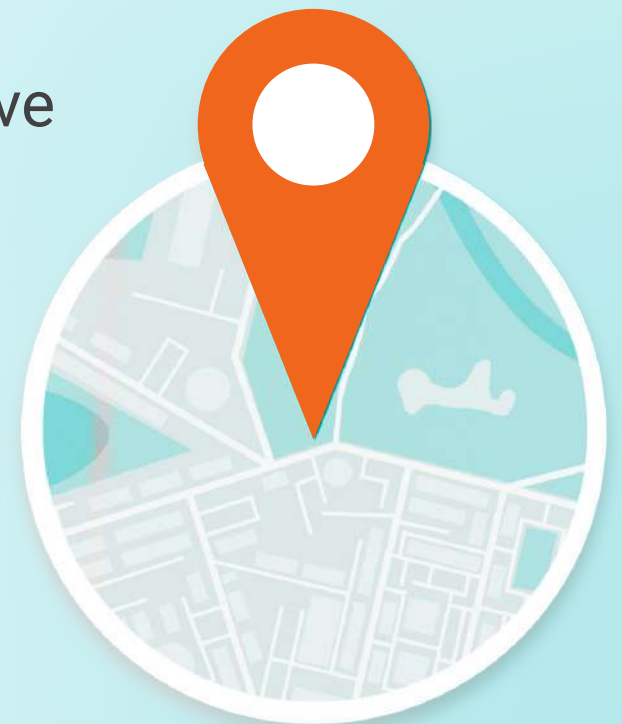
“Thanks to Vicinia’s platform we now see every spot in real time and enforce violations proactively — saving time and improving tenant experience.”

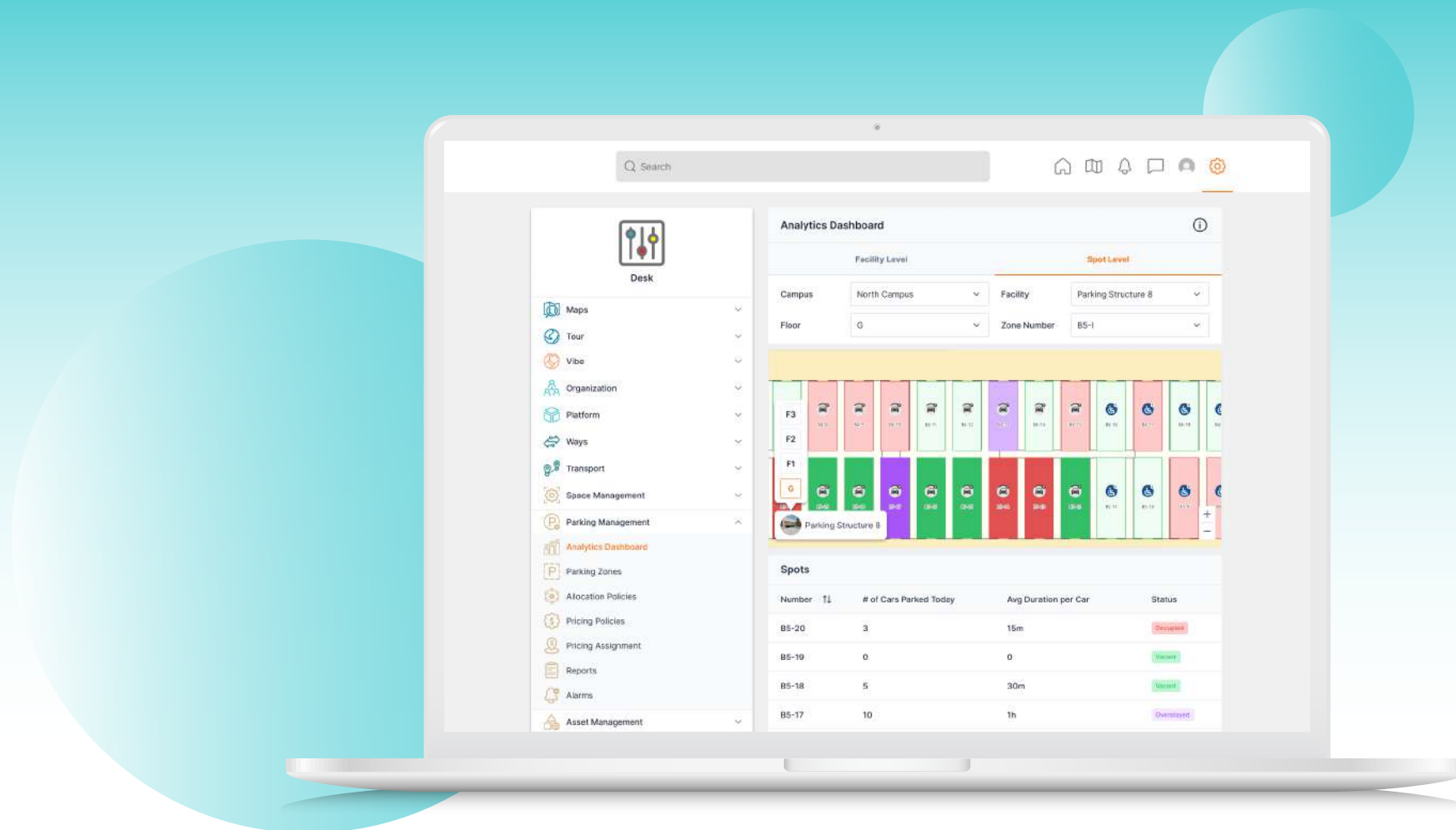
[Parking Manager, PASARROYO]

8. Lessons Learned & Future Plans

From Vicinia's Perspective

- Real-time data from the monitored zones confirmed the value of spot-level visibility for both enforcement and planning.
- The adaptive alerting engine benefited from early-phase tuning to align with actual user behavior and parking turnover patterns, improving alert quality and actionable insights.
- Integration opportunities with legacy systems (LAZ, Flash, EV charging) became clearer once operational workflows were mapped, reinforcing the need for a unified analytics layer.
- Existing reporting tools onsite are static and provide only CSV-exportable data, highlighting the importance of Vicinia's live dashboard for continuous visibility and decision automation.





From PASARROYO Management's Perspective

- Consolidating all monitored parking data into a single Vicinia dashboard eliminates manual processes and creates operational efficiency.
- Automated alerts significantly reduce time spent patrolling the lot and enable enforcement to focus on priority areas.
- Real-time analytics provide clearer visibility into parking turnover, violation patterns, and asset utilization — something not possible with their current decentralized legacy tools.
- The pilot demonstrated that data-driven enforcement leads to fewer violations, higher compliance, and better use of short-term parking spaces.



From the Parking User's Perspective

- **Improved Occupancy Visibility:** With interactive indoor maps and more accurate and consistent spot-level monitoring, users benefit from easier access to available spots.
- **Less Unauthorized Parking:** Increased enforcement accuracy reduces the number of drivers parking in reserved, short-term, or restricted zones, creating a fairer and more predictable experience for compliant users.
- **Easier Access to EV Chargers:** Better oversight of EV-designated spaces means less circling to find an available charger and fewer instances of EV spots being occupied by non-EV vehicles.
- The overall result is a smoother, more reliable, and user-friendly parking experience.

Future Expansion:

- **Implement permitted-zone monitoring** using the on-site **surveillance camera** system integrated with Vicinia's analytics for visual verification and automated alerts.
- **Branded Mobile App:** Vicinia Mobile app branded for Pasarroyo to enable corporate users with better parking and community services
- **Integrate existing parking systems**, including **LAZ** and **Flash**, directly into the **Vicinia Analytics Dashboard**, unifying all enforcement, occupancy, and payment data under one central platform.





Vicinia connects people, assets and environments through real-time spatial intelligence.

Our platform powers smarter campuses, hospitals and cities – with integrated modules for mapping, parking, mobility, workspace management and visitor engagement.

Book a Demo

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