

Written Testimony from Matt Brooker, Automotus, Inc.

## Regarding: Pennsylvania State Senate Transportation Committee Hearing on the Role of Parking in the Transportation System

April 28, 2024

My name is Matt Brooker, and I serve as the Director of City Partnerships at Automotus. Our company leverages AI and computer vision technologies to help cities manage their curbsides effectively, ensuring safer, more sustainable, and efficient urban transportation. With eight years of experience in the parking technology industry, I bring insights from both my colleagues and my own experiences regarding the impact of parking on transportation systems, the benefits of automation in curb management, and recommendations for legislation that will enhance cities' capabilities to deliver safe and efficient urban transportation for all.

### *Role of Parking and Curb Management in Transportation*

Effective parking and curb management are essential for maintaining efficient urban transportation systems. Challenges like double parking—where vehicles obstruct traffic lanes to load or unload—not only create congestion and elevate safety risks but also disrupt the operations of public transportation and emergency services. Compounding this issue, vehicles that block bus lanes force buses to offload passengers into active traffic lanes, exacerbating congestion and safety concerns. Additional obstructions in bike lanes, bus stops, crosswalks, and designated 'no parking' areas further contribute to these challenges.

These problems are particularly acute in disadvantaged communities, where lower car ownership rates increase reliance on public transit, walking, and biking. The transient nature of these violations, combined with staffing shortages in city enforcement departments, makes traditional enforcement methods inadequate. Cities lack the resources to station enforcement personnel at every critical location continuously, highlighting the need for more efficient solutions.

### *Automated Curb Management Overview and Benefits*

Automotus technology utilizes specialized camera sensors mounted on streetlight infrastructure, employing artificial intelligence (AI) in the form of computer vision to automatically detect traffic and parking violations. When vehicles are identified engaging in specific actions, such as violations or parking in designated automated loading zones, the system captures the vehicle's license plate number using Automated License Plate Recognition (ALPR) to retrieve the registered owner's details. Consequently, parking violations or invoices for unpaid fees are mailed to the vehicle's owner.

To ensure privacy and data security, our cameras are configured to automatically blur all faces and license plates not directly involved in billing or enforcement actions. We adhere to industry best practices for data security, ensuring that license plate data is securely stored and promptly expunged once invoices or citations are settled. Our data retention practices are adaptable to meet specific city requirements. Additionally, Automotus is SOC II compliant, underscoring our commitment to maintaining the highest standards of data protection. We also carry comprehensive cybersecurity insurance to safeguard against potential risks.

Although the field of automated curb management is still developing, it has been successfully implemented in various cities including Pittsburgh, Bethlehem, Miami, Atlanta, New Orleans, Los Angeles, Omaha, and Pikeville (KY).

Automating payment for curb use in commercial loading zones is a vital aspect of comprehensive curb management, functioning alongside automated enforcement. This automation facilitates the management of increasing commercial activity at the curb by employing usage-based fees, much like parking meters regulate parking demand. The system offers a toll-road style experience for commercial fleets during loading and unloading operations, where payments are fully automated based on license plate recognition. This setup not only prevents misuse but also promotes turnover in loading zones, effectively addressing the root cause of issues like double parking by ensuring curb access is consistently available for delivery vehicles.

In collaboration with the Pittsburgh Parking Authority and the City of Pittsburgh, we launched an automated smart loading zone pilot in 2022. The integration of automated payment and enforcement in this pilot has significantly reduced double parking by 73%, cut congestion by 40%, and lowered carbon emissions by 12 metric tons per zone annually.

### ***Recommended Legislative Enhancements***

We recommend that Pennsylvania enact legislation allowing all municipalities to issue parking and traffic violations by mail using technologies such as ALPR and automated enforcement. Additionally, mandating front license plates would increase camera placement flexibility and improve the effectiveness of license plate capture for payment and enforcement purposes.

Should you have any questions, please don't hesitate to contact me directly at the information below. Thank you for your consideration.

Sincerely,



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