SMART CURBS
MIAMI-DADE COUNTY

Community Engagement **Report**

Prepared By :

UHP
Urban Health Partnerships


MIAMI-DADE COUNTY
Miami-Dade County is now using SMART Loading Zones to reduce carbon emissions and make our streets safer.
Scan the QR Code or visit miamidade.gov/SmartCurbs to learn more about this new technology.
PARK
Zuma

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Executive Summary

Urban Health Partnerships (UHP) joined the Miami-Dade County SMART grant team to lead community engagement for the project and provide technical support as needed with local stakeholders and partners. UHP has over a decade of experience in engaging community members to co-design sustainable solutions in transportation and mobility in South Florida. Notably, UHP has led collaborations on several emerging mobility solution pilot projects for Miami-Dade County, and was able to leverage this experience to inform the piloting of technologies explored in this project to manage the increasing demand of e-commerce.

For this effort, UHP utilized the UHP Community Liaison Framework wherein community members are hired for their community expertise to guide the community engagement approach and materials for engaging stakeholders from the project area of Downtown Miami and Brickell.

Community Outreach

The Urban Health Partnerships team engaged a wide range of community stakeholders that interact with day-to-day delivery operations in the project area of Downtown Miami and Brickell. From origin point to destination, the UHP team identified key players to connect with that could deepen the project team's insights on delivery activities, and their challenges and opportunities within the project area.

Community Liaisons

The UHP outreach team recruited two Community Liaisons (CLs) who are community members of the project area to guide and lead outreach activities for the project.
The CLs used their knowledge of the Downtown Miami area and population to plan outreach locations and timing, and to strategize approaches for outreach.

As with all UHP projects, the Community Liaisons were provided with capacity building related to outreach strategies, active listening, design thinking questions, and project-related mobility and mobility solutions topics. The outreach team also provided supervision including 1-on-1 support as needed by the CLs.

Image: Members of the UHP Outreach team engaged the public in Downtown Miami and Brickell.

ENGAGEMENT:

- **46** delivery drivers
- **9** local delivery businesses
- **6** national freight companies
- **5** local government agencies

COMMUNITY LIAISONS:

Daymee "Didi" Sanchez

Aubrey Best

Didi is a Lead Community Liaison. A proud Miami resident, Didi grew up in Little Havana, which deeply informs her passion for bridging the community's needs with resources and support available through her role. Didi holds a degree in Human Development & Family Sciences from Florida State University.

Aubrey is a Miami-Dade County Community Liaison. Aubrey is a passionate individual from South Carolina, currently based in Miami, FL. With a strong commitment to advocating for better health options in Florida, Aubrey is actively working towards destigmatizing HIV & AIDS.

CO-DESIGNING OUTREACH

The project's outreach strategies and materials were developed using a co-design process led by the UHP Community Liaisons with support from the UHP Outreach and Communications teams.

Printed materials were guided by the CLs, including using images of people that reflected the local delivery workforce, and centering the significance of delivery drivers to the project through messaging.

Flyers and presentation materials were also provided in Spanish and Haitian Creole.

The SMART Curbs website was also co-developed with the Community Liaisons who ensured the language was accessible and authentically represented the project's intent to the public.

Key Stakeholders

Major players identified as impacted by or influencing the project area's delivery operations include the following:

- Local delivery drivers
- National freight companies
- Local government agencies and organizations
- Microfreight solutions companies
- People with disabilities
- Local businesses

These individuals, businesses, and agencies were engaged to discuss the future of curb management and microfreight for Miami-Dade County.

Image: Outreach flyers distributed in English, Spanish, and Haitian Creole.

Local Delivery Drivers

Our engagement of delivery drivers in the Downtown Miami and Brickell area was focused on delivery models that have been greatly increasing in demand. This included box truck and van drivers for national freight companies in e-commerce (e.g. UPS, FedEx, DHL, Amazon) and moped and e-bike drivers for delivery apps (e.g. DoorDash, Uber Eats, Instacart).

The UHP team interacted frequently with the gig delivery drivers to gain insights on their work experience including challenges, strengths, and ideas related to microfreight delivery operations. Through these efforts the team gathered input from 46 microfreight delivery drivers, and held two community conversations with several drivers to deepen the County's understanding of how to encourage, improve, and expand microfreight use.

Truck and van delivery drivers were less likely to engage with the UHP team, often moving quickly to and from their vehicles.

Most interactions with these drivers were brief, often only allowing the CLs to hand the drivers a project flyer. Engagement with national freight company leaders helped gain further understandings on these drivers' experiences.

The gig delivery drivers on moped and e-bike, on the other hand, were often stationed while waiting for their next delivery order to arrive via app. These drivers often congregated in informal social hubs at commercial loading zones near restaurants and major retail centers associated with their most common origin points for orders.

These informal waiting areas provided a great opportunity for the CLs to engage with these drivers on a more frequent basis, often with time enough to converse and gather insights while the drivers waited for orders. Conversations often also emerged among the groups of drivers gathered in the same loading zone, which also provided further details on their views and experience.

These on-the-ground engagements allowed the outreach team to identify themes among the feedback heard, and to provide this feedback to the project team during the weekly check-ins with other project partners.

Major Freight Companies

Throughout the project, major freight companies were engaged including FedEx, DHL, UPS, and Amazon.

These companies were more hesitant to connect with the project team, which may be for a couple of reasons. At the regional level, local leaders from these companies changed in recent years, requiring establishing a new connection. Additionally, these companies maitain a high-level of use of unauthorized parking practices to maintain their delivery schedules and keep up with demand and competition.

Image: Delivery box truck parked in an unauthorized location (bike lane)

Insights on major freight were gained from Open Mobility Foundation (OMF) convenings focused on curb management solutions. OMF Participants included Urban Freight Lab, Amazon, Google, parking solutions companies, and other US city and county agencies with projects related to curb management.

Local Government Agencies & Organizations

The UHP team connected with several local government agencies with direct involvement in curb activities within the project area.

Miami Parking Authority (MPA) - this agency manages parking and commercial loading zones within the project area. The MPA was a crucial connection for understanding the challenges of managing loading zones and improving delivery activities.

Their primary challenges with managing the public commercial loading zones relate to unauthorized parking of non-delivery vehicles, extended occupancy of the loading zone by vehicles beyond the posted time

limit, and private owners closing off access or repurposing their private loading areas.

Miami Downtown Development Authority (DDA) - This agency is focused on the economic development of Downtown Miami, and as such was able to provide some insights on focal points of delivery activities and help establish connections to local residential building managers often receiving e-commerce or app-based deliveries.

Miami-Dade County Commission District 5 - The project area corresponds with Dsitrict 5 of the Miami-Dade County Commission. The District 5 Office was engaged to discuss emerging microfreight businesses with interest in expanding in the Downtown area.

Friends of the Underline - the Underline currently maintains a linear park running through the Brickell area. Microfreight solutions were explored for potential use by the maintenance crew, which seemed favorable, particularly the use of e-cargo bikes.

SEOPW Community Redevelopment Agency (CRA) - similarly to the Friends of the Underline, the SEOPW CRA maintains the right of ways and other public spaces within the historic neighborhood of Overtown, as part of their redevelopment area. This agency was also engaged to explore the use of e-cargo bikes by their maintenance crews, which seemed favorable to the staff.

Image: The metal sign (top) informs how to use the zone while a temporary sign (below) provides project information.

Microfreight Solutions Companies

Numerous microfreight solutions were explored for adaptability to the project area. This effort included discussions with Fernhay, Dutch X, Post Parcel, Microhub, Net Zero Logistics, and various curb management solutions companies. These interactions allowed the County to learn about their logistical needs for siting and operations.

Notably, Microhub is a Miami-based startup company that provides off-site delivery management to buildings within the project area. Microhub provides relief to building managers struggling to manage the increase of deliveries by receiving deliveries at their warehouse, offering on-demand delivery or pick-up to residents, and reducing drop-off points for freight companies to a single location.

Microhub leaders noted that although they were received well by many buildings and residents, they found some occasions of disagreement between the condo board and the building manager. In these situations, the board favored use of Microhub's services, while the managers seemed concerned about potential job losses to their staff.

While exploring microfreight solutions, UHP also explored opportunities for job creation and training since these concerns have been prevalent for other mobility solutions pilot projects UHP has engaged the public for.

The project team visited Microhub, a local startup using microfreight solutions to support e-commerce delivery management in Downtown Miami and Brickell.

Image: Microhub distribution center in Downtown Miami

People with Disabilities

To ensure all proposed activities at the curb do not negatively impact pedestrians, and particularly people with disabilities, our team gathered input from the Miami-Dade County ADA Coordinator and the Senior Advocate and Engagement Manager for Older Adults, Mental Health and Disabilities.

Input from these individuals helped highlight priorities for preserving or enhancing accessibility at the curb and in identifying potential points of conflict with vehicles and other users.

Local Businesses

The UHP team also reached out to various local small businesses in the Downtown Miami and Brickell area who provided courier services or utilized delivery services as part of their business model.

During outreach to these businesses, the team learned that some couriers were delivering less frequently post-pandemic due to the increase of remote services that emerged out of necessity in 2020.

These companies previously provided courier services of documents for the courts and offices. Some of these couriers reported a shift from multiple daily deliveries pre-pandemic to a few deliveries a week post-pandemic. As a result of their decreased demand, one business expressed hesitance in exploring new mobility solutions, seeing it as an unnecessary risk, when their current need is minimal and functions as-is.

A few niche delivery services were also contacted, including a cosmetics delivery service and weekly groceries delivery service. The weekly groceries delivery service is utilizing non-electric cargo bicycles once a week, and did not express further interest in exploring e-cargo bikes.

The cosmetics delivery service was highly interested in utilizing a quad e-cargo bike if it could also support integration of customized functional features for providing mobile salon services.

Community Conversations

Throughout the course of the project's outreach activities, the Urban Health Partnerships team sought interested delivery drivers to participate in in-depth discussions. Four delivery gig drivers using microfreight vehicles (e.g. mopeds, e-bikes) participated in these facilitated discussions with each other to help Miami-Dade County gain insights into their experience, challenges, concerns, and ideas related to using a microfreight vehicle for deliveries within the project area. Of the four participants, three of the delivery drivers use a motorcycle and one driver uses an e-bike.

The project team co-developed questions for the drivers, and Urban Health Partnerships planned the events and facilitated the conversations.

Attendees were provided with a short presentation to introduce the Miami-Dade County SMART Curbs project.

Prior to the facilitated discussion, the drivers were asked if they agreed with the top priorities identified by the project team during outreach activities to date, or if any information seemed to them to be missing, misrepresented, or incorrect. All four drivers agreed with the priorities identified by the project team. The findings from past outreach activities and the community conversations with the drivers are outlined in the "Key Feedback Themes" section of this report.

Prior to beginning the discussion, the facilitator provided the group with an explanation of the discussion format, guidelines to protect participants' privacy, and information on how the information from the conversation would be utilized to inform recommendations for the County and relevant stakeholders.

Digital Transparency

An aim of this project's community engagement is to make information about the technology and data being used for the SMART Curbs Program available in a comprehensive, easy-to-understand format to the public for improved transparency, legibility, and accountability. To support this commitment, the County adopted the open-source Digital Trust for Places & Routines (DTPR) standard, a communication standard for technologies in public spaces.

By using DTPR, the project's signage at the SMART Loading Zones and on the SMART Curbs website offers a detailed inventory of the digital technologies involved in the SMART Curbs Program, ensuring that anyone can understand how these technologies function, what data is collected, and how it is managed.

miamidade.gov/SmartCurbs

The SMART Loading Zones are distinguished from other loading zones in Downtown Miami with purple paint to demarcate the area and signage. Following the DTPR standard, these signs (shown in image to the right) feature icons that provide key information about the technologies in use and QR codes that link directly to the SMART Curbs website for more information.

A "Digital Transparency" page was developed as part of the project website where the public can find more information about the purpose of each technology introduced to the public realm and details on the types of data captured, their processing, who has access, and how the data is stored. This layered notice system ensures that essential details are available on-site, while more in-depth explanations can be easily accessed online.

Image: Project information signage developed using the DTPR Standard.

Image: The project website provided examples of the camera captures at SMART Loading Zones.

Key Feedback Themes

The following section outlines major themes from the community's feedback gathered during outreach.

1) LOADING ZONE CHALLENGES

- **Congestion and Competition**: Loading zones are in high demand. Delivery and service vehicles, mopeds, e-bikes, and rideshare vehicles compete for limited spots while in areas with cyclists and pedestrians.
- **Time Constraints vs. Reality**: The 10- and 30-minute loading zones are felt to be insufficient by delivery drivers due to delays with restaurant order preparation, building security lines, slow elevators, or multiple drop-offs in the same building.
- **Unauthorized Parking by Passenger Vehicles**: Both delivery drivers and the MPA feel passenger vehicles occupying loading zones during times for commercial are a major challenge, forcing drivers to cruise further for parking.

- **Inaccessible Private Loading Zones**: In Brickell, private loading areas are used for non-delivery purposes (dumpsters, valet, storage), further reducing available space. Some private loading docks are regularly closed off and only available to delivery drivers with prior coordination, adding time to deliveries.

2) DRIVER MOTIVATIONS AND PRESSURES

- **Delivery Schedule Pressure**: Drivers for major freight companies are pressured by supervisors to prioritize delivery times over avoiding citations leading to frequent unauthorized parking. At $43, some felt the citations are so inexpensive that companies simply plan for citations as part of their budget.
- **Low Income and Gig Economy**: Many gig delivery drivers using apps like DoorDash, Uber Eats, and Instacart find their income very low, leading them to seek any opportunity to maximize earnings, sometimes by accepting higher risks of citation.
- **Feeling Undervalued**: Moped and e-bike delivery drivers often feel "treated like pests" and not valued for their labor, experiencing frequent confrontations with parking officers and building staff, low or no tips from clients, and poor compensation from the app companies.
- **Pride in Work**: Despite challenges, drivers express pride in their work, especially when serving homebound individuals, viewing it as honest and dignified labor.

3) ENFORCEMENT CONCERNS

- **MPA Enforcement Issues**:
  - MPA officers are seen as ticketing the delivery drivers too frequently
  - Delivery drivers report experiencing frequent confrontations with MPA officers
  - MPA staff feel they do not have sufficient officers to enforce adequately
- **Bike Lane Issues**: New bike lanes in Downtown Miami are felt to be underused, poorly connected, and frequently obstructed by construction, parked vehicles, and trash bins, posing safety risks and hindering e-bike navigation, including for delivery drivers using bikes and e-bikes.

4) LOCAL MICROFREIGHT TRENDS

- **Vehicle preference**: Mopeds and e-bikes are already prevalent, especially for individual meal and parcel deliveries. E-bikes are seen as slightly better due to them being easier to attain, navigate, and park. Drivers ranged from somewhat open to excited about new microfreight vehicle types.
- **Current Moped/E-bike Hub Locations**: Mopeds/e-bikes tend to congregate in shaded areas near high-order restaurants and retail since the apps ping drivers for orders based on proximity to the origin point of deliveries.
- **Quad/Trike E-Cargo Bikes**: These are seen by delivery drivers as potentially useful for larger hauls to a single building but not for the current model of individual meal and parcel deliveries. Companies offering delivery service, however, were more interested in or already using these vehicles (i.e. Microhub, DHL).

5) INFRASTRUCTURE AND ACCESSIBILITY

- **Reduced Public Commercial Loading Zones and Parking**: Removal of loading zones and parking for bike lanes and to accomodate construction has caused access and delivery problems for businesses.
- **Inconsistent Curb Ramps and Sidewalk Obstructions**: Curb ramp designs that vary from intersection to intersection create unpredictability and potential conflicts with others for users, particularly for people with disabilities. Similarly, obstructions and pinch points in the sidewalks create sudden potential conflict points or at times impassability.
- **Lack of Accomodation for Gig Deliveries**: Moped/e-bike drivers feel frustrated that there are no curb spaces that function with their work patterns, often contending with zone time limits, lack of racks for e-bikes, and the need to remain at loading zones near stores for apps to send them orders.

Recommendations

The following section outlines recommendations for Miami-Dade County based on community feedback to use as they continue to integrate and introduce mobility and curb management solutions to the Downtown Miami and Brickell public realm for the purpose of improving the success and sustainability of project outcomes.

Actions to Address Concerns

1) RE-EVALUATE LOADING ZONE INFRASTRUCTURE:

- **Increase enforcement of existing zones**: Increase frequency of enforcement and parking citation amount at Commercial Loading Zones to prevent unauthorized parking by passenger vehicles.
- **Designate moped / e-bike delivery driver spaces:** Designate stationing areas for moped and e-bike delivery workers, and coordinate with apps to ensure orders are sent to drivers in these areas. It should be noted that this strategy could also reduce confrontations between drivers and MPA, and reduce citations.

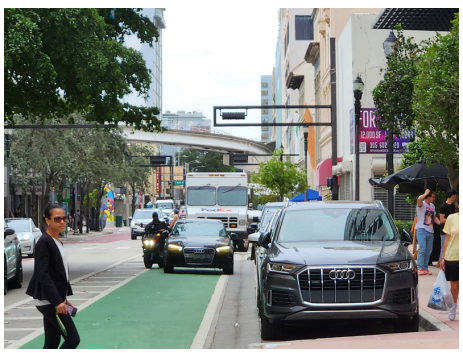
What Next?

The project team was excited to discover an existing and robust microfreight community in the moped and e-bike delivery drivers of Downtown Miami and Brickell. These drivers understand a great deal about the dynamic delivery infrastructure of the area, and may be ideal participants for supporting future pilot projects for emerging microfreight vehicles.

- **Review time limits**: Re-evaluate the 10-minute time limit, as it is often insufficient for gig drivers.

2) IMPROVE RELATIONS BETWEEN DELIVERY WORKERS AND MPA:

- **Facilitate dialogue**: Organize formal meetings or ride-alongs between MPA officers and delivery drivers to foster mutual understanding of challenges and working conditions.
- **Improve capacity of MPA officers**: Designation of moped/e-bike delivery driver spaces may reduce the time MPA officers spend on managing the commercial loading zones, potentially improving their capacity to increase enforcement on unauthorized passenger vehicles parking.



3) ADDRESS BROADER INFRASTRUCTURE AND SAFETY ISSUES:

- **Continue improving bike lane network**: Prioritize the creation of well-connected and safe bike lanes, as they are currently underused, obstructed by vehicles and construction, and pose a danger to drivers while being midful of business access and delivery needs.
- **Prioritize access and safety improvements to sidewalks and ramps**: Prioritize funding for projects that address accessibility concerns and reduce potential conflict points due to obstructions or inconsistencies in path widths, configurations, or harmonization with driveway cross-slopes.
- **Increase enforcement for obstructing bike lanes**: Increase enforcement on businesses, individuals, incorrect MOT, and other entities that block bike lanes, sidewalks, and pedestrian ramps with vehicles, signage, trash bins, or other obstacles.

Actions to Take Advantage of Potential Opportunities

1) Embrace and Incentivize Microfreight:

- **Explore adaptability of microfreight solutions and delivery models**: Work with stakeholders (i.e. delivery companies, microfreight companies, curb management companies, local delivery drivers and public) to explore potential case uses and users for piloting smaller vehicles like e-bikes, e-cargo bikes, and microfreight hubs. These pilots will help inform how to adopt these solutions for scalability.
- **Develop vision for supportive infrastructure**: Consider developing a plan for microfreight infrastructure for Downtown Miami and Brickell that contemplates charging docks, parcel management systems, microfreight hubs, microfreight circulation, and other solutions.
- **Promote job opportunities**: Encourage microfreight solutions companies to engage with existing gig workers and delivery drivers who are already familiar with the area to fill potential new jobs using microfreight.

2) Leverage Technology for Planning and Operations:

- **Utilize data for informed decisions:** Use technology to capture and analyze data on traffic patterns, delivery hotspots, conflict points between users, and vehicle movements to better plan for efficient and safe delivery operations.
- **Coordinate with app companies:** Partner with companies like Uber Eats and DoorDash to explore "geo-fencing" solutions. This could involve designating specific waiting areas for drivers and coordinating with the apps to send orders to drivers located in those zones, reducing congestion and illegal parking at the commercial loading zones.

3. Foster Ongoing Stakeholder Engagement:

- **Integrate microfreight stakeholders into advisory committees:** prioritize recruiting local microfreight experts to serve as members of the Transportation Planning Organization (TPO) Advisory Committees, including experts on mobility solutions, as well as delivery drivers utilizing microfreight vehicles to provide continuous feedback and ensure solutions are practical and effective for increased microfreight use.
- **Continue utilizing the DTPR Standard on all future mobility pilots:** Consistent use of DTPR will improve transparency and help build trust and support from the public for County efforts when deploying micromobility and microfreight solutions.
- **Continue utilizing Miami-Dade County's Community Engagement Playbook on all future mobility pilots**: The Community Engagement Playbook was developed by Miami-Dade County and UHP to guide successful deployment of mobility solutions through authentic and effective community engagement led by a trusted network of Community Liaisons. This continued approach ensures the public has a voice in decisions impacting their daily use of the public realm.

About UHP

Urban Health Partnerships' (UHP) mission is to invest in our communities to co-design sustainable change and promote health and well-being across the lifespan. UHP' work is focused on communities experiencing health disparities due to a wide range of challenges in the social and built environment. We work closely with communities throughout Miami-Dade and Broward Counties where we have implemented leadership and capacity-building efforts to support advocacy, sustainable community-level change, and promote improved health outcomes.

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