City of Arts & Innovation

Mobility & Infrastructure Committee Memorandum

TO: **MOBILITY & INFRASTRUCTURE COMMITTEE** **DATE: JANUARY 15, 2026**

FROM: **PUBLIC WORKS DEPARTMENT** **WARDS: ALL**

SUBJECT: **CONSIDER ADVANCEMENT OF A PILOT PERSONAL DELIVERY DEVICE PERMIT PROGRAM**

ISSUE:

Consider the potential advancement of a pilot personal delivery device permit program.

RECOMMENDATIONS:

That the Mobility and Infrastructure Committee:

1. Provide feedback on a potential personal delivery device on-street pilot program; and
2. Direct staff to return with a proposed regulatory framework for a pilot personal delivery device permit program.

BACKGROUND:

Personal delivery devices (PDDs) are enclosed, cart-like devices designed to carry goods for delivery. Increasingly, these devices have the capability to autonomously navigate sidewalks, roadway shoulders, and bicycle lanes at safe speeds. PDDs are most often used to deliver food from restaurants a short distance away to customers and are generally deployed in areas of high demand. An example PDD operating on Riverside's Main Street Pedestrian Mall as part of an October 2025 pilot is shown in Figure 1 below.

Figure 1: Doordash "Dot" PDD Operating on Main St Mall

The pilot in question was conducted at the request of Doordash Labs, whose "Dot" PDD was manually piloted from Gramm's BBQ Restaurant to City Hall following an event hosted by the Greater Riverside Chambers of Commerce.

DISCUSSION:

Today's PDD Policy Landscape

Doordash Labs has expressed interest in continued operation of PDDs on City of Riverside streets and sidewalks, prompting the conversation of how and whether Riverside should incorporate this emerging technology into its transportation landscape.

While many states, including Texas, Arizona, Utah, Washington amongst others have adopted statewide personal delivery device regulations, the State of California has yet to do so. Staff have engaged the Department of Motor Vehicles leadership and understand that there are no current plans to implement statewide regulations in California. Staff have begun advocating for the adoption of flexible statewide regulations of PDDs to establish uniform expectations of how these devices are operated in California cities where allowed.

In the absence of statewide guidance, several California cities have adopted their own PDD regulations and permitting programs, including: Santa Monica, Los Angeles, San Ramon, and Concord.

Riverside staff have continued to engage Doordash Labs to better understand their operating needs, with the intent of bringing today's proposal seeking policy guidance from the Mobility and Infrastructure Committee. To date, no other PDD companies have requested to operate within Riverside. Staff believe that the establishment of a pilot PDD permit program would be in alignment with General Plan Policy CCM-6.1:

"Policy CCM-6.1: Encourage the reduction of vehicle miles, reduce the total number of daily peak hour vehicular trips, increase the vehicle occupancy rate and provide better utilization of the circulation system through the development and implementation of Transportation Demand Management (TDM) programs contained in the South Coast Air Quality Management District (SCAQMD) and County of Riverside TDM Guidelines." – City of Riverside General Plan Circulation Element.

Why Allow PDDs?

Staff recommend the advancement of a PDD permitting program given the wide-ranging benefits of their use. However, as with any new technology, staff expect several challenges to arise and recommend that any permitting program is kept in pilot form for six months to one year before returning with a more permanent regulatory framework.

Benefits:

- May reduce congestion in areas where a high volume of roadway trips are associated with delivery vehicles;
- Lightweight PDDs cause less wear and tear on city streets when compared to passenger vehicles and delivery vans;
- Expands delivery and service options for local restaurants and businesses;
- Deployment of PDDs can help create work for service technicians and remote operators; and
- PDDs use cameras/sensors and GPS to navigate streets, Riverside envisions requiring PDD operators to furnish the City with valuable infrastructure data to help improve our own service (e.g. potholes, sidewalk lifts, overgrown vegetation, etc.)

Challenges:

- PDDs have been subject to vandalism and theft, which can be mitigated through remote monitoring and security systems;
- PDDs may encounter situations where they become stuck, requiring remote operation takeover and in some instances physical intervention. They may require manual programming to avoid certain complex intersections, roadways or crossing points; and
- PDDs lack a human's capability to resolve issues through hand gestures, eye-contact or verbal communication

As with any emerging technology, challenges are to be expected. Staff are supportive of a pilot program that would help gauge the community's acceptance and usefulness of PDD operation on city streets and sidewalks.

Components of a PDD regulatory program in Riverside

If recommended, staff would return with an ordinance and permitting guidelines establishing the pilot PDD program. Such a program would be multi-faceted, including the following general provisions, to be developed by staff prior to returning to Committee or Council:

Table 1: Provisions to be considered in a potential PDD permitting program

Provision	Notes
Geographic footprint	Staff recommend beginning with a small operating area, roughly the size of a Council ward or smaller, to be expanded after review.
Number of permittees	Staff recommend the program to begin with a single pilot permittee, expansion of the program to be considered following several successful deployment of the first pilot operator.
Device regulations	Staff recommend that whether remotely or autonomously operated, that PDDs are required to follow rules of the road similar to pedestrians and/or bicyclists dependent on the situation. Device speeds would be appropriately regulated dependent on whether the device is on-street or on a sidewalk. Some agencies choose speeds at or below 5 MPH for sidewalks, and up to 20 MPH for operation as a bicycle/ on roadways. PDDs would be required to yield/not obstruct traffic or pedestrians. Devices would not be allowed to transport hazardous materials, and device access requirements would be established regarding the transport of alcohol or any other controlled substance.
Device specifications	The weight, size and other physical specifications of the device are often regulated by agencies. These specifications also include lighting, braking capabilities, device identification, and more. Staff would review the current regulatory landscape to develop the appropriate recommendations.
Device Parking	Staff recommend that PDDs would be restricted from parking in the public right of way, with the exception of

	unloading operations where a private drive aisle is not available. Devices would be stored on private property.
Data collection and sharing	PDD operators would be required to meet data privacy requirements and share data regarding operations and incidents with the City. PDD operators would be required to furnish data collected related to city infrastructure, including potholes and sidewalk lifts.
Incident Response	Strict requirements related to remote and in-person human intervention following incidents or situations in which the PDD becomes unable to operate autonomously would be considered. PDD operators would also be required to address service requests submitted to the City in a timely fashion and may be required to integrate with our 311 system. Operators would be required to collaborate with law enforcement. The permittee would be required to have 24/7 customer service capabilities.
Permit Fee & Renewal	The City's master fees and charges schedule would be updated to reflect the appropriate fee for this program. Some agencies require annual or even monthly renewal of such a permit. Some cities have established administrative citations as an enforcement mechanism for permittees.
Insurance and Business Tax License	PDD operators would be required to be licensed in the City, and the permitting requirements would include insurances deemed appropriate by the City's Risk Management team.
Fleet size	Pilot regulations would limit the number of operating devices within the pilot area; many agencies use the total number of allowable devices as an enforcement mechanism. Fleets would be subject to inspection.

Given the complexity of potential regulations, this initial staff report is designed to seek preliminary policy guidance on whether staff should proceed with establishing a pilot PDD permitting program, and understand any high-level considerations the Committee would like staff to include in the program's framework. If approved, staff would move to expeditiously return with a developed program, ordinance, and fee structure for the Committee or Council's consideration.

FISCAL IMPACT:

There is no fiscal impact associated with this report.

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Attachments:

1. Presentation