Data as a Service

Data as a Service is the rapid exchange of real-time condition and service information between customers, service providers, government and the supporting infrastructure to optimize safety, efficiency and the transportation experience. These pilots are opportunities to move LADOT towards Data as a Service by giving the staff experience in managing and optimizing data-sharing partnerships, exploring the value of analytics, and testing new tools.
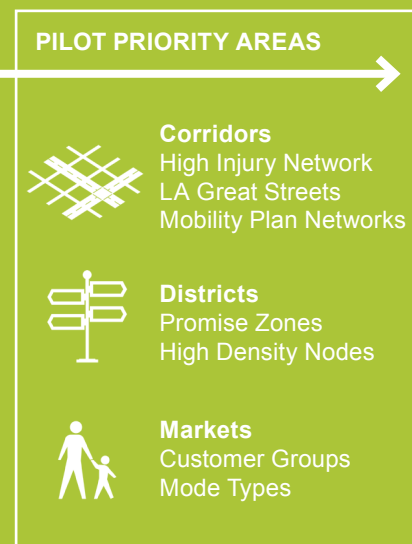
- Analyze crowdsourced data for roadway design impacts on congestion.
- Test customer feedback tools on public services.
- Develop an online project dashboard for this strategy.
- Deploy connected infrastructure in the Promise Zones.
- **Experiment with parking inventory technologies.***

PILOTS

PILOT PRIORITY AREAS

Corridors
High Injury Network
LA Great Streets
Mobility Plan Networks

Districts
Promise Zones
High Density Nodes

Markets
Customer Groups
Mode Types

Mobility as a Service

Mobility as a Service centers on the customer; it provides a suite of transportation mode options through a single platform and payment system to simplify access to mobility choices. While many elements to deploy a true Mobility as a Service model in the region are beyond LADOT's jurisdiction, these pilots can demonstrate how more shared mobility, better connectivity, and improved interoperability between modes can shift travel behaviors for Angelenos.

- **Launch mobility hubs to integrate + connect modes.***
- Pilot on-demand transit.
- Expand shared services to low-income neighborhoods citywide.
- Test smart fares.

Infrastructure as a Service

Infrastructure as a Service is the idea that the use and access of public infrastructure should be subject to pay-as-you-go user fees that more closely align the costs associated with providing the infrastructure itself to how the infrastructure is being used. Since full-scale implementation of this model is contingent on state legislation and requires standardization, these pilots introduce interim ways to deploy technologies to respond more efficiently to changing infrastructure demand while testing public appetite for new approaches.

- Deploy temporary car-free zones across the city.
- Test assumptions around roadway capacity + utilization.
- Identify new infrastructure assessment tools.
- Launch an AV pilot.
- Pilot an AV network on city streets + incentivize sharing.

Urban MOBILITY in a Digital Age

With the rapid rise of technology in transportation, the City of Los Angeles Department of Transportation (LADOT) will need to deploy and support an ecosystem of advanced technologies to meet policy objectives and create truly great streets for all Angelenos. LADOT must evolve into a platform for transportation innovation that focuses on three core customer services:

DATA, MOBILITY + INFRASTRUCTURE.

* Pilot project already planned or underway.

08.12.2016

August 2016

Transportation Technology STRATEGY

1 — Build a solid data foundation.

POLICY RECOMMENDATIONS
1. Define what can be shared.
2. Adopt privacy principles.
3. Develop a standard data sharing agreement.
4. **Create a regional blueprint for system integration.***
5. Establish design guidelines for digital infrastructure.

TODAY (0-2 years)
1. Inventory available data.°
2. Create a wishlist for other data sets + prioritize.°
3. Create a data analysis bench contract + grow internal capacity.°
4. Develop a roadmap for new data resources.

TOMORROW (3-5 years)
1. Make the data easier to use with data dictionaries and other tools.
2. Adopt APIs + other tools to streamline sharing.

FUTURE (6+ years)
- Leverage data to manage a more flexible transportation system with public + private service providers.

2 — Leverage tech + design for a better transportation experience.

POLICY RECOMMENDATIONS
1. Create ATSAC 3.0.
2. Enforce congestion-busting rules for safety.
3. Adopt a customer bill of rights and metrics for transportation happiness.
4. Require corridor + building designs that serve multiple modes.
5. Eliminate parking minimums.
6. Rethink parking garages.
7. Stop widening roads.

TODAY (0-2 years)
1. **Code the curb to optimize access.***
2. Develop customer-centered requirements for public services.
3. Integrate real-time data + tech into urban design and planning processes.
4. Publish data on EV charging station locations.
5. **Advance fleet conversion to greener fuel.***

TOMORROW (3-5 years)
1. Create a unified wayfinding program.
2. Route transit by demand where suitable.
3. Expand ExpressPark citywide.
4. Introduce a portal for employers to manage transit benefits.

FUTURE (6+ years)
- Create a universal fare system for LA.

3 — Create partnerships for more shared services.

POLICY RECOMMENDATIONS
1. Update regulations to include new transportation modes.
2. Make it easier to work with the City + provide a level playing field.
3. Adopt a new transportation demand management (TDM) ordinance for developments.

TODAY (0-2 years)
1. **Develop a shared mobility action plan.**
2. Form a multi-discipline mobility assessment team to understand changes + data needs.
3. **Designate an innovation pilot project manager.***°

TOMORROW (3-5 years)
1. Bring sharing to City Hall through carsharing, bikesharing + carpooling platforms.
2. Launch a mobility lab.

FUTURE (6+ years)
- Implement Mobility as a Service.

4 — Establish feedback loops for services + infrastructure.

POLICY RECOMMENDATIONS
1. Become a more responsive service provider by enabling feedback + measuring impact.
2. Establish a project evaluation standard.

TODAY (0-2 years)
1. Create a user experience working group.
2. Investigate new tools for the ongoing evaluation of infrastructure conditions.
3. Engage the entire community on infrastructure assessments.
4. Partner and support a marketing campaign on shared mobility.

TOMORROW (3-5 years)
1. Streamline LADOT online content + launch a project dashboard.
2. Prepare the workforce for changes driven by innovation in transportation tech.
3. Adopt multi-modal smart fare system.

FUTURE (6+ years)
- Develop a methodology to move to Infrastructure as a Service.

5 — Prepare for an automated future.

POLICY RECOMMENDATIONS
1. **Call for mobility innovation in California.**
2. Collaborate regionally to promote interoperability.
3. Launch a taskforce on data monetization strategies.
4. Advocate for new approaches to financing infrastructure projects.

TODAY (0-2 years)
1. **Develop a business plan for a city AV fleet.***
2. Create a dedicated staff position focused on connected and automated vehicle tech.
3. **Implement blind spot detection systems for public transit vehicles.***
4. Expand LADOT connected bus technologies fleet-wide.
5. Invest in lane markings that enhance effectiveness of lane departure warning and prevention systems.

TOMORROW (3-5 years)
1. Create better access to ATSAC data and enhance transparency of network prioritization for planning.
2. Develop an AV road network along transit and enhanced vehicle networks.
3. Launch a Data as a Service program to provide real-time infrastructure data to connected vehicles.

FUTURE (6+ years)
- Convert the public transit vehicle fleet to fully automated.

° Action proposed for bench contracts.   * Action already planned or underway.