

OEI

OFFICE OF EXTRAORDINARY
INNOVATION

Defining the Problem

Problem: Mobility in Los Angeles County is not working

Thesis: We need to do things very differently to reduce Single Occupancy Vehicle (SOV) use

Proposed solutions: Set a course, accelerate projects, and try new stuff

A blurred photograph of a city street at night, showing light trails from vehicles and streetlights, creating a sense of motion.

“We have to have stretch goals that area realistic”

ROLE OF METRO STRATEGIC PLAN

- Foundation that aligns all plans, programs, and services to achieve a common vision
- Establishes mission, vision, and goals to be adopted by other plans (e.g. Long Range Transportation Plan, NextGen Bus Study, etc.)
- Sets principles for making decisions and conducting business



STRATEGIC MOBILITY: SUPPLY

- Increase capacity for non-SOV modes
- Improve quality of existing transit system



STRATEGIC MOBILITY: DEMAND

- Manage demand
 - Pricing beyond transit fares
 - Congestion pricing
 - Regulate TNCs



Amount of space required to transport the same number of passengers by car, bus, or bicycle.

Event info at www.facebook.com/Urban.Ambassadors - Photos by www.tobinbennett.com

(Des Moines, Iowa - August 2010)



“This is a really innovative idea but we can’t do it. It’s never been done before”

MicroTransit Pilot

Can Metro increase customer satisfaction & attract new riders?

- > A cross between a pooled ride and a shuttle bus
- > Meets increasing expectation for convenience
- > Expands FMLM solutions
- > Flexible and seamless
 - Integrated with transit system
 - Serves non-linear travel



**On Demand | Dynamically
Routed Data Driven | Corner to
Corner**

A blurred photograph of a city street at night, showing light trails from vehicles and streetlights, creating a sense of motion and urban environment.

“If we improve our service more people will use it and
we can’t afford that.”

Mobility on Demand

Partner with a transportation network company
to provide better and more equitable access to 3
pilot transit stations





“We could have thought of that on our own.”

Unsolicited Proposals: Background

In February 2016, Metro opened its doors to the private sector, at an Industry Forum.

- > Pledged our commitment to pursuing agency-wide innovation
- > Focus on partnerships-based approach to drive value
- > Debuted the Unsolicited Proposal Policy
 - Any company can submit a proposal on any idea
 - Encourages the private sector to tell us what we should do differently
 - Declares intention to implement ideas with financial/technical merit

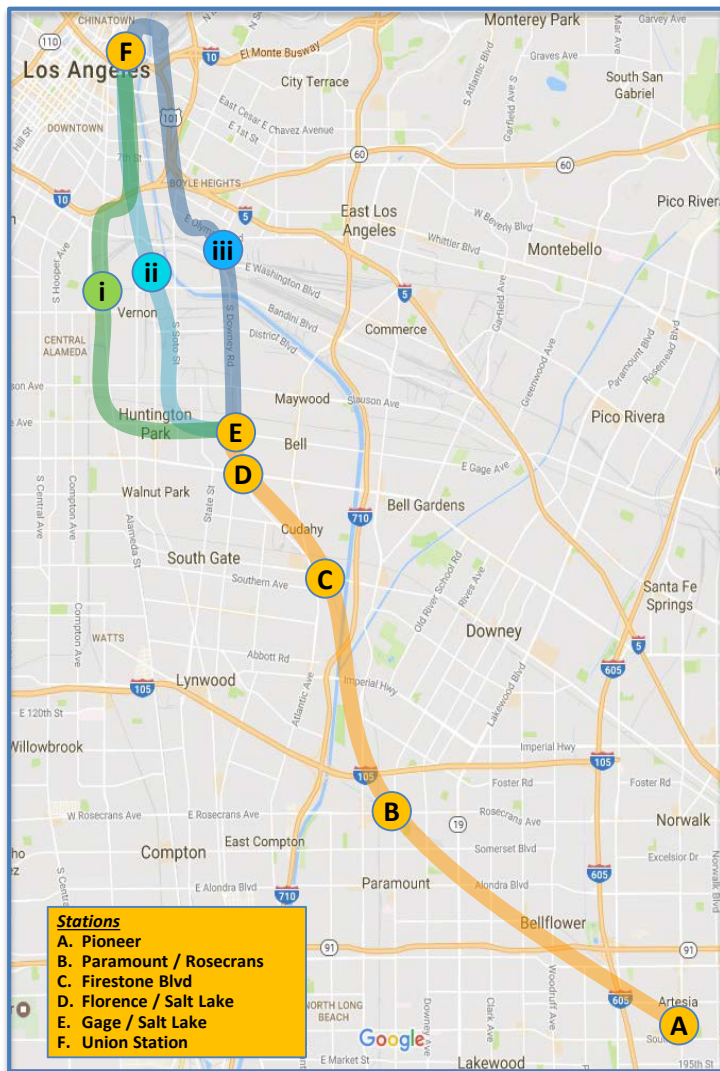


Megaproject & Finance Proposals

OEI has advanced 3 megaprojects based on unsolicited proposals

- > West Santa Ana Branch Transit Corridor
 - > Will be a competitive P3
- > Sepulveda Pass Transit Corridor
 - > Will be a Project Development Agreement (PDA)
- > Strategic Managed Lanes Network
 - > Toll bond underwriting pool

West Santa Ana Branch Corridor



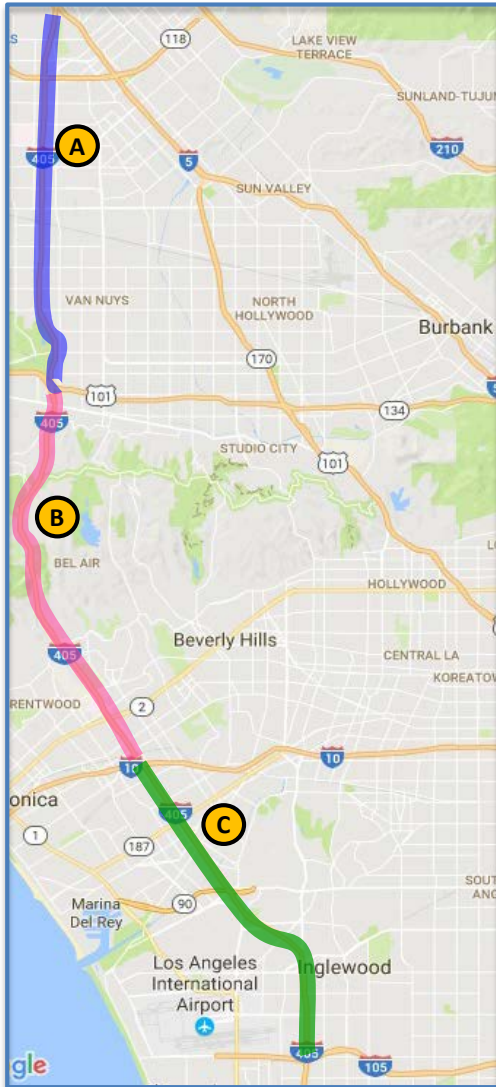
Metro Planned Delivery

- > Light rail transit split into two phases:
 - \$3.7-\$4.5 billion capital cost
 - Groundbreaking in 2022
 - Delivery in 2028 (Phase I) & 2041 (Phase II)

Unsolicited Proposals

- > Kiewit and Skanska proposed different models for P3 delivery, both of which combine phases and provide substantial acceleration
- > Sufficient evidence from financial analysis to indicate P3 is preferred delivery method
- > Still need to solve cash flow challenges due to early operations and debt financing
- > A Project Development Agreement did not offer substantial benefits because cash flow is the key issue

Sepulveda Pass Transit Corridor



Metro Planned Delivery

- > Managed lanes through Sepulveda pass with transit element
 - \$9.8 billion capital cost
 - Groundbreaking in 2024
 - Delivery in 2026 (Managed Lanes), 2033 (transit element), & 2048 (transit to LAX)

Unsolicited Proposals

- > Parsons and Cintra each submitted proposals suggesting design and delivery innovations that could speed delivery and reduce cost of transit element significantly
- > Managed Lanes component was removed from P3 consideration due to lack of value to Metro, but revenue will still be allocated to this project
- > Includes a Project Development Agreement (PDA) through environmental process before proceeding to a P3

Express Lanes System Financing

METRO EXPRESSLANES

Metro Planned Delivery


- > Tiered deployment of Express Lanes projects based on cap-ex needs on a single-project basis

Unsolicited Proposal

- > Goldman Sachs suggested using excess revenues from existing Express Lanes Projects to finance cap-ex of new projects through a system-wide security with a single revenue pledge
 - Avoids use of Measure M sales tax/bond revenue, freeing funds for other projects
 - Reduces need for short term borrowing at higher rates to fund initial project costs
 - Requires us to develop a toll bond underwriting pool, among other steps
 - Is not a traditional P3, but could support/accommodate P3s with statutory authority



Metro

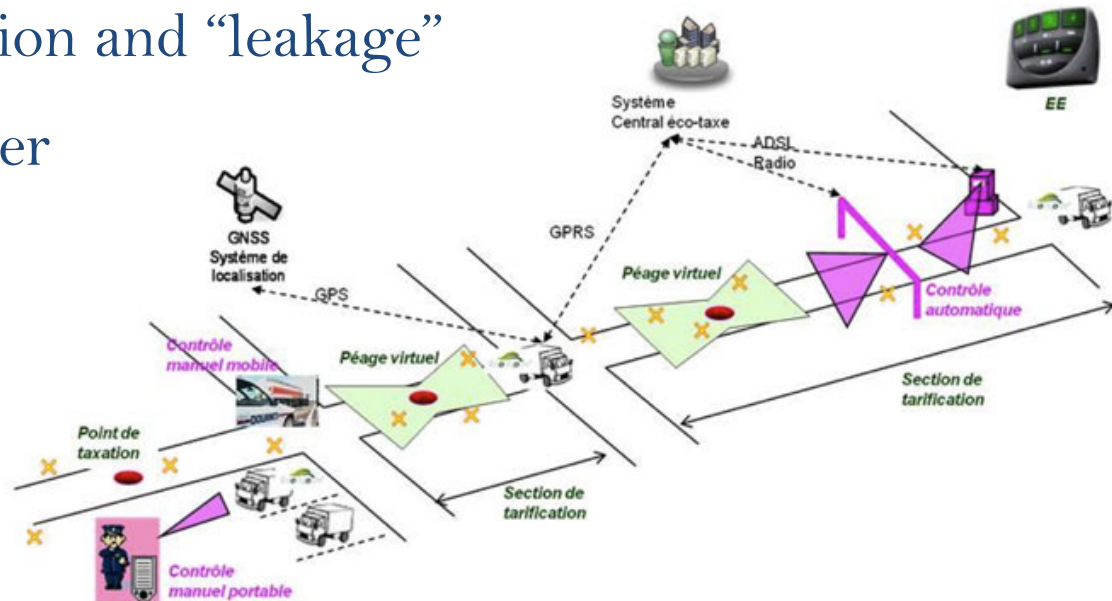
A blurred night photograph of a city street with lights and traffic, serving as a background for the top portion of the slide.

“We shouldn’t give our customers more options
– that will confuse them”

Mobile Tolling Concept

Can smartphones replace ExpressLanes infrastructure and improve system performance?

- > Reduce need for gantries and transponders
- > Increase ExpressLanes user base
- > Reduce toll evasion and “leakage”
- > Improve customer experience and convenience
- > Reduce costs



Real-Time Customer Information

Could more accurate ETAs when riders need them most improve customer confidence?

- > Evidence that poor arrival info hurts rider retention
- > Improved arrival prediction + better bus location data
- > Prediction accuracy improves as bus nears
- > **More certainty for customer, especially to avoid missed pick ups**



Smart Bike Racks

Could better bike access at stations allow more people to bike to Metro with fewer bikes on board trains?

- > Stronger locks and CCTV
- > Shared-use, free to customer
- > Accessible via walk-up or app
 - Potential TAP integration
- > Complements other bike planning initiatives





“This is a waste of time and money. That’s
what Bob told me.”

Vehicle-to-Infrastructure Communication

Can better information help Bus Operators catch more green lights on the Orange Line?

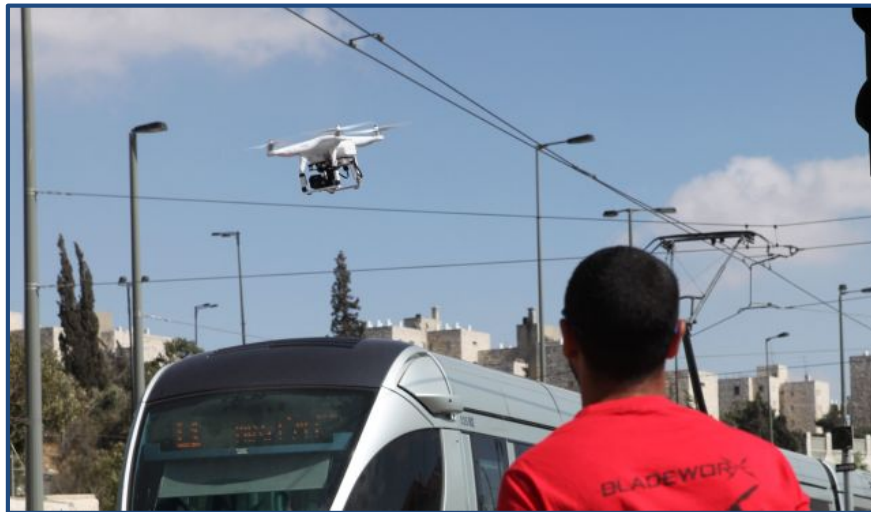
- > Faster, smoother ride for customers
- > More service with fewer buses
- > Reduced fuel consumption
- > Software development planned for small scale pilot



Drone-Based System Inspection

Can Metro utilize drones to inspect more for less?

- > Safer, more flexible operation
- > Increased efficiency, cost effectiveness and data capture
- > Broad range of additional use cases



Creating a Culture of Innovation

The Office of Extraordinary Innovation brings Metro staff together to solve problems and drive innovative thinking...

Systems Thinking

Matrix-based structure promotes connections & systems over silos

Market Exposure

Exposes Metro staff to a wide range of ideas, approaches, and products

Critical Thinking

Novel concepts that don't fit with existing protocols demand critical thinking

Solutions Focus

Shift from process-focused "Can we do this?" to solutions-focused "Would it add value?"

A nighttime photograph of a city street. In the foreground, a paved sidewalk leads towards the street. The middle ground is dominated by horizontal light trails from moving vehicles, with a prominent bright blue line and a red line. Above the light trails, the words "THANK YOU" are written in large, white, sans-serif capital letters. The background features dark silhouettes of trees and a building with some lit windows. A street lamp with two glowing lights is visible in the upper center, and a traffic light hangs from a pole to its right.

THANK YOU



Metro®