A Bold New Transportation Vision in 5 Big Moves

Energy Working Group – May 23, 2019

A History of Innovation

- Automated Highway “Demo ’97”
- I-15 Congestion Pricing System
- South Bay BRT–Connected Vehicle Pilot
- Bike Early Action Program $200M
- Mobility Hub Strategy
- Environmental Mitigation Program
- I-5 NCC Public Works Program

Blue Line Trolley
Vision Lab

Emerging Technologies

- Vision Lab
- SMARTPHONES
- BATTERY TECHNOLOGY
- INTERNET OF THINGS (IoT)
- 5G WIRELESS
- CONNECTED AUTONOMOUS VEHICLES
- ARTIFICIAL INTELLIGENCE
- IMPROVED DATA/ANALYTICS
- DECLINING IMPORTANCE OF CAR
- CHANGE
- UNCERTAINTY
- OPPORTUNITY
- SHARED ECONOMY

DECLINING IMPORTANCE OF CAR

IMPROVED DATA/ANALYTICS

ARTIFICIAL INTELLIGENCE

CONNECTED AUTONOMOUS VEHICLES

SMARTPHONES

BATTERY TECHNOLOGY

INTERNET OF THINGS (IoT)

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DECLINING IMPORTANCE OF CAR

SHAED ECONOMY

CHANGE

UNCERTAINTY

OPPORTUNITY
5 Big Moves

- Complete Corridors
- Transit Leap
- Mobility Hubs
- Next OS
- Flexible Fleets
Complete Corridors

- repurposed
- multi-modal
- connected
- active management
- congestion pricing
- charging infrastructure

Transit Leap

- high frequency
- high capacity
- high speed
- fixed guideway
- convenient
Mobility Hubs

integrated services | origins and destinations | amenities | multi-modal infrastructure | smart growth

Flexible Fleets

personalized | shared | autonomous | on-demand | dedicated space | electric
Next OS

data exchange | real-time information | IoT | optimized performance
integrated app

Where People Live and Work

Population Densities

Employment Densities
Potential Critical Connections

- High Speed Complete Corridor
- East-West Complete Corridor
- Blue Line Express
- Purple Line
- Del Mar Trench
- UTC-Sorrento Valley Connector

A Bold New Transportation Vision in 5 Big Moves
Regional Electric Vehicle Charging Program Partnership Opportunity

Regional Energy Working Group
Item 6 | May 23, 2019

The Challenge:
Regional EV adoption is outpacing infrastructure investment. The San Diego region has a 2025 projected gap of thousands of public chargers.
Growth of the San Diego County EV Market

From Q4 2017–Q3 2018, EVs were 6.1% of new light-duty vehicle sales

2025 Target: 110,000 zero-emission vehicles (ZEVs)

2030 Target: 410,000 ZEVs

Growth in Number of Level 2 EV Chargers and Estimated Need in 2025 for San Diego County

Level 2 EV Charge Ports in San Diego County

Supporting programs include:

2020 Program:

Source: US Department of Energy, AFDC (May 2019) and CEC EV Infrastructure Projection Tool (March 2018)
Growth in Number of DC Fast Chargers and Estimated Need in 2025 for San Diego County

DCFC EV Charge Ports in San Diego County

2020 Program:
Supporting programs include:

Source: US Department of Energy, AFDC (May 2019) and CEC EV Infrastructure Projection Tool (March 2018)

Public Chargers in the Region

Source: Plugshare (May 2019)
SANDAG Charging Program

2015 Regional Plan Actions

- Establish incentive program for EV chargers
- Commit $30 million from 2020-2050
- Support future Regional Plan development
- Reduce GHG emissions from passenger vehicles

Caltrans SB1 Planning Grant

- $600,000 grant over 2018-2020
- Phase 1 – best practices and program coordination (2018)
- Phase 2 – design program framework (2019)
- Phase 3 – program build out (2019-2020)

sandag.org/EVChargingProgram

Opportunity: California EV Infrastructure Project

- CALeVIP is a mechanism to provide targeted EV charging infrastructure incentives in California
  - Regional EV infrastructure investment
  - Expert program implementation and administration at a reduced cost
  - Projects are designed to be responsive to regional and customer needs
  - Assures full implementation and reporting through online application and tools

sandag.org/EVChargingProgram
Estimated Partner Budgets and Scope

- Implement 2015 Regional Plan and SCS
- Level 2 Chargers
- Budget est. $1 million/year until 2050

- Implement County Climate Action Plan
- Level 2 Chargers
- Budget est. $500,000/year up until 2030

- Implement Executive Order B-48-18 targets for EV chargers
- Level 2 and DC Fast Chargers
- Budget est. ranges from $10-23 million total allocation

Next Steps

- Board consideration May 24
- CEC selections this summer
- Return in July with program framework
- Seek additional partnership opportunities with SDG&E, Electrify America, EVgo and other charging providers
Thank You!

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ReCAP Overview
Roadmap Program Climate Action Planning Services

Custom CAP Services
- CAP Development, Implementation Plans, Benefit-Cost Analysis
- Currently working with seven cities

ReCAP Snapshots
- GHG Emissions Inventory, Performance Indicators
- Prepared for all Roadmap cities every 2 years

Climate Action Data Portal
- Forthcoming web-based tool for CAP-related data

ReCAP Snapshot Template

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City Name / ReCAP Snapshot - June 2020 Edition
Regional Plan GHG Considerations

- Senate Bill 375 GHG reduction targets
  Passenger vehicle emissions
  Investments in transportation strategies and infrastructure
- Local Climate Action Plans
  Ensure plan supports local goals
  Identify complementary programs and policies
- CEQA GHG analysis
  Analyze all sources of emissions

Ongoing 2019 Activities

- CAP services for seven cities
- ReCAP Snapshots available July 2019
- Climate Action Data Portal
- 2021 Regional Plan
  Energy-Climate Programs Study
  Regional GHG emissions inventory