Exploring Innovative Technologies and Fostering Smart Cities:

A Showcase of Recent Projects and Pilots

10/08/2024

Toolbox Tuesday

WWW.SCAG.CA.GOV

Housekeeping

1. Meeting length: 1.5 hour
2. This meeting is being recorded
3. All participant lines will be muted
4. At the end, there will be a Q&A session
5. If you have a question during the presentation, please type it into the chat box or press the "raise hand" function
6. We will log all questions and then voice a selection at the end of the presentation
7. Closed captioning can be turned on by clicking “Show captions” on the Zoom ribbon
8. A recording of this webinar and the PowerPoint slides will be available on the SCAG website. We will send a link to everyone who has registered after the event
9. Please fill out our survey at the end to help us improve future Toolbox Tuesdays!

Agenda

- Brief Overview: Smart Cities at SCAG
- Partner Presentations
  - Zackary Campos, Los Angeles Department of Transportation
  - Caitlin Sims, San Gabriel Valley Council of Governments
  - Christopher Macon, City of Laguna Woods
- Smart Cities (FCPP and SCP SCMI) Program Conclusions
- SCAG's Smart Cities Program, Tools, and Resources
- Questions & Answers (Q&A)

Poll #1: What type of organization do you represent?

- Community Member
- Advocacy Organization
- School or Academic Institution
- Tribal Organization
- Local Government
- Regional Government
- State or Federal Government
- Private Company
- Other

Poll #2: Which best describes where you are today?

- SCAG Region
  - *Imperial, Los Angeles, Orange, Riverside, San Bernardino, or Ventura Counties*
- Elsewhere in California
- Elsewhere in the US
- Outside of the US

Poll #3: What technologies are you most interested in?

- Artificial Intelligence
- Smart Vehicles
- Open Data
- Internet of Things
- Smart Buildings
- Smart Parking
- Other (please describe)

Poll #4: What technologies have you worked with?

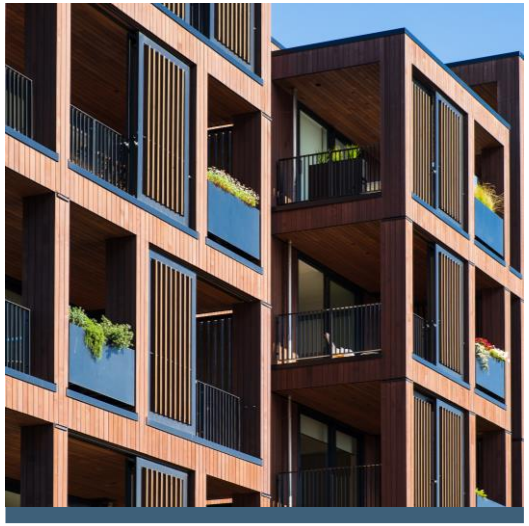
- Artificial Intelligence
- Smart Vehicles
- Open Data
- Internet of Things
- Smart Buildings
- Smart Parking
- Other (please describe)

A BRIEF OVERVIEW: SMART CITIES AT SCAG

Vision & Plan

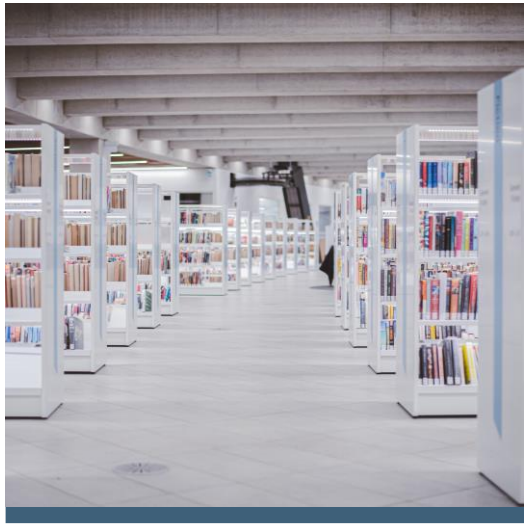
SCAG serves as a catalyst for a brighter future for Southern California by leading a vision to elevate the region and creating the holistic plan to achieve our unified goals.

Transportation



Housing

Collaboration & Advocacy



Tools & Resources

Primary Roles & Responsibilities

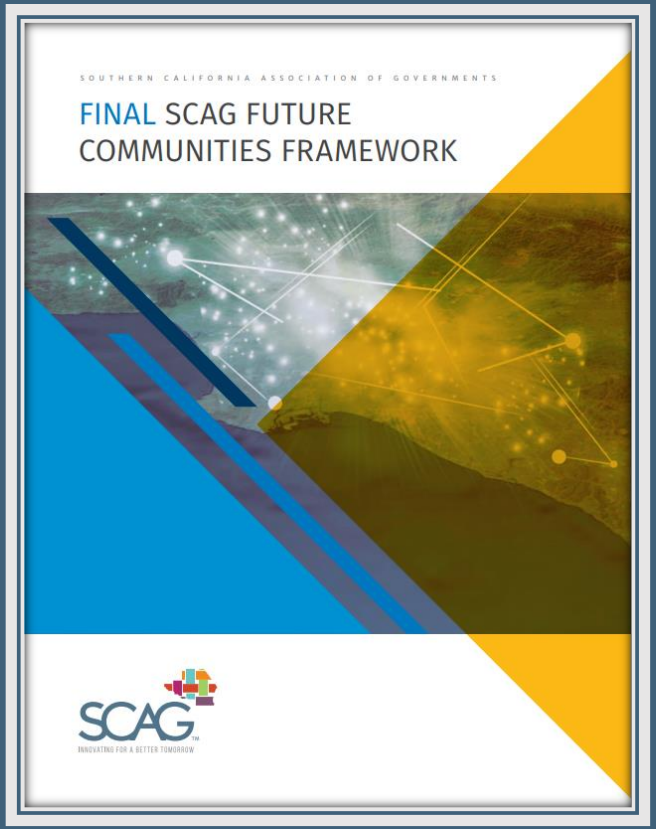
1. Regional Transportation Plan (RTP)
2. Sustainable Communities Strategy (SCS)
3. Federal Transportation Improvement Program (FTIP)
4. Regional Housing Needs Assessment (RHNA)
5. Regional Data & Information Center
6. Forum for Issues of Regional Significance

SCAG's Smart Cities Programming Efforts

- SCAG's Clean Transportation Technology Policy, established by Regional Council Resolution No. 23-654-5
- Electric Vehicle Charging Site Suitability Study and the Plug-in Electric Vehicle Atlas Update
- Clean Technology Compendium
- Emerging Technology Guiding Principles
- Goods Movement Partnerships
  - Zero Emission Truck Infrastructure (ZETI) Study
  - Last Mile Freight Program (LMFP)
- Southern California Clean Cities Coalition DOE Partnership
  - Collaborations with entities like the Los Angeles Clean Tech Incubator and the University of California, Irvine
- Emerging Technologies Committee
- Providing education, resources, and tools
  - Participation in "Ride and Drive" events and WRCOG's AltCar Expo
  - Educational panels and programming for policy committees
  - Support for ever-changing federal and state regulations

The Future Communities Framework

- SCAG's formal smart cities policy originated in the **Future Communities Framework (FCF)**
  - Adopted by SCAG's Regional Council in 2017
- The **Framework** supported SCAG's role as a leader in technology and innovation
- The FCF outlined several program areas and work products:
  - **The Regional Data Platform (RDP)**
  - **The Future Communities Pilot Program (FCPP)**



The Future Communities Pilot Program (FCPP)

- Program goals included:
  - **Apply new technologies and data analytics to reduce VMT & GHG**
  - **Improve the efficiency of municipal services**
  - **Promote replicable pilots in the region**
- The program aligned pilots with SCAG's long-range planning (RTP/SCS 2020 policies)

The Future Communities Pilot Program (FCPP, FY19-20)

Agency	Project	Objective
City of Anaheim	Smart Center City	• Integrate real-time parking guidance with the ATN transit planning and ride hailing mobile application (FRAN) • FRAN: "Free Rides Around the Neighborhood" electric shuttle fleet
City of Cerritos	Remote Services Enhancement Project	• Develop an online permitting and licensing software program offering online self-service, 24/7 real-time information, and record access
City of Los Angeles	BlueLA Electric Carshare	• Evaluate VMT/GHG reduction from the BlueLA fleet while surveying users for carshare preferences
City of Ontario	Smart City Rapid Validation Hub	• Implement broadband, micromobility, and intelligent trash bin infrastructure downtown

The Future Communities Pilot Program (FCPP, FY19-20)

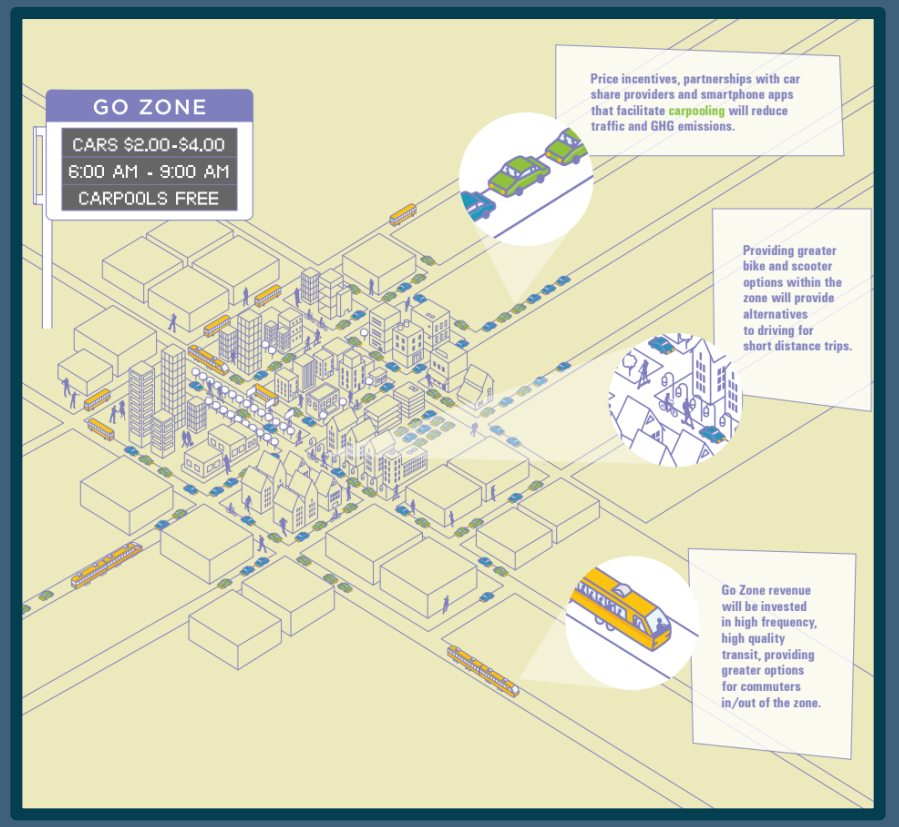
Agency	Project	Objective
City of Glendale	Route Optimization and Fleet Telematics	• Update older street sweeping and garbage collection routes to reduce VMT, GHG, and congestion
City of Monrovia	Incentivizing Bikeshare	• Encourage mode shift behavior • Incentivize bikeshare participation • Partner with local businesses for zero-emission delivery services
City of Riverside	Integrated Electronic Plans Solution	• Establish an online development permit process that coordinates review through eight city departments, dozens of blueprints, and multiple rounds of review
County of San Bernardino	Remote Electronic Warrants	• Upgrade the County's after-hours online system to a fully scalable, 24/7 platform to process warrant applications virtually

Sustainable Communities Program (SCP, FY20-21)

- Supports implementation of the 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), *Connect SoCal*
- SCP provides multiple opportunities to seek funding and resources to meet the needs of communities, address recovery and resiliency strategies, and support regional goals
  - **Call 1: Active Transportation & Safety (AT&S)**
  - **Call 2: Housing & Sustainable Development (HSD)**
  - **Call 3: Smart Cities & Mobility Innovations (SCMI)**
  - **Call 4: Civic Engagement, Equity & Environmental Justice (CEEJ)**

Smart Cities & Mobility Innovations (SCMI) Program

- The Smart Cities & Mobility Innovations Call focused on the implementation of three Connect SoCal Key Connections:
  - **Smart Cities & Job Centers**
  - **Go Zones**
  - **Shared Mobility & Mobility as a Service**
- Projects emphasized the use of technology and innovation by implementing curb space management measures and establishing best practices.



Smart Cities & Mobility Innovations Project Types

Curb Space Data Collection & Inventory

Technology Assessment or Adoption Plan

Parking Management Plan

Smart Cities & Mobility Innovations Awards

- **City of Los Angeles:** Curb Zone Data Inventory for Digital Curb Management
- **San Gabriel Valley Council of Governments:** GoSGV Engagement & Evaluation
- **City of Laguna Woods:** Mobility Technology Plan
- **City of Rialto:** Smart Cities Plan for Warehousing and Logistics
- **City of Long Beach:** Curb Space Management Study
- **City of Stanton:** Citywide Curb Management Plan
- **City of Desert Hot Springs:** Downtown and Light Industrial Parking Plan
- **City of Garden Grove:** Curb Data Parking Study

PARTNER PRESENTATIONS

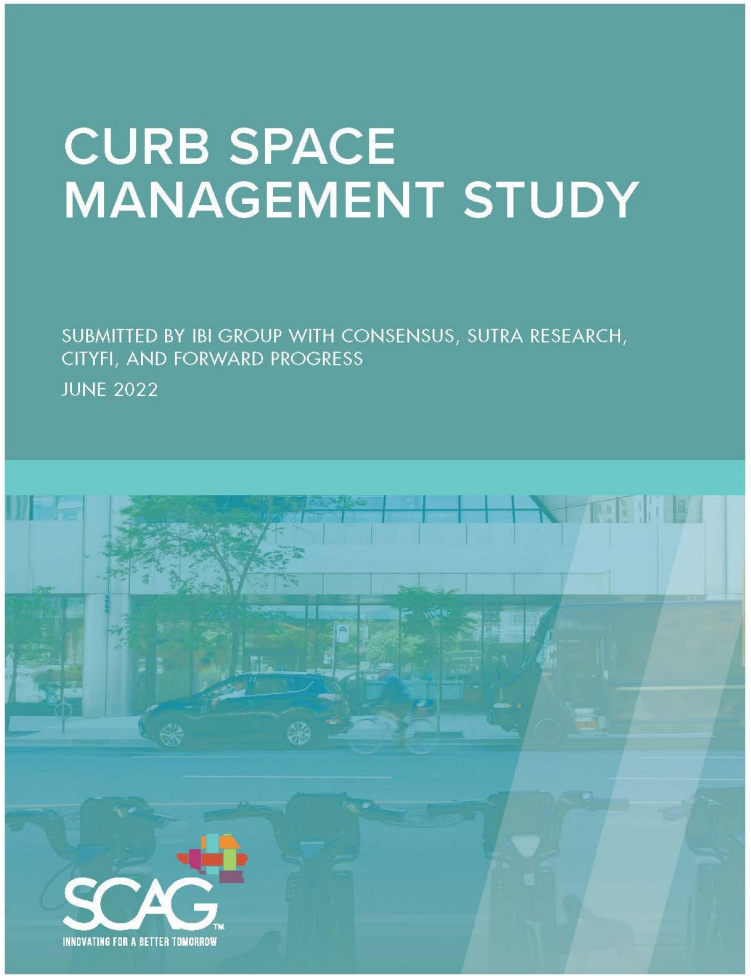
Hear from recent project partners on various smart city projects:

1. **Los Angeles**
2. **SGVCOG**
3. **Laguna Woods**

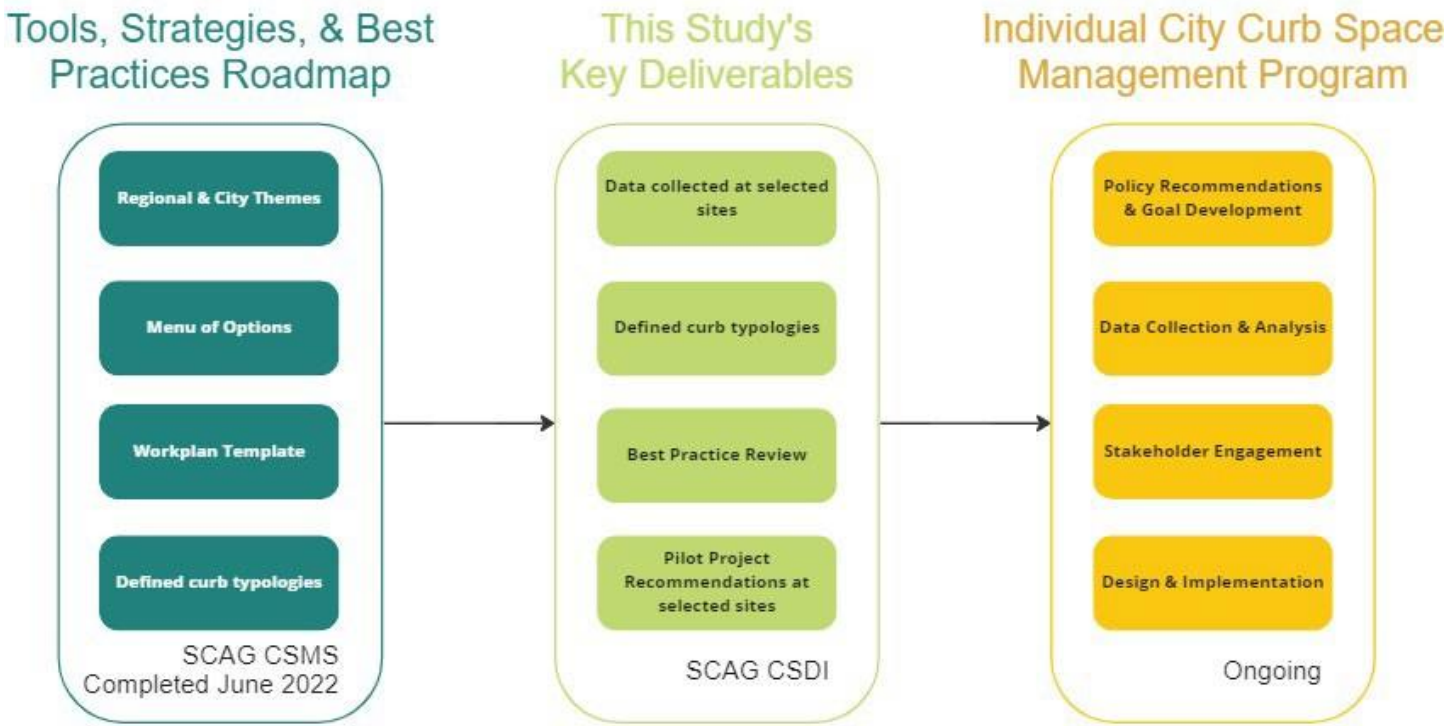
Curb Space Data Collection and Inventory Study

Background

Curb Space Data Collection and Inventory Study builds off existing SCAG projects in June 2022



Curb Space Management Roadmap



Vision & Goals

LADOT aims to create a world-class Curb Space Management Program that optimizes movement, ensures equitable access, and prioritizes safety through data-driven, context-sensitive solutions.

Safety

Must have
Nice to have
Future

Ensure curb space is designed and managed to provide safe use of the curb and the adjacent right of way

SCAG

Equity

Must have
Nice to have
Future

Allocate, manage and price the curb to promote equity

SCAG

Sustainability

Must have
Nice to have
Future

Embrace environmentally-friendly practices, e.g., prioritizing access for active transportation & transit to contribute to reducing traffic congestion & emissions

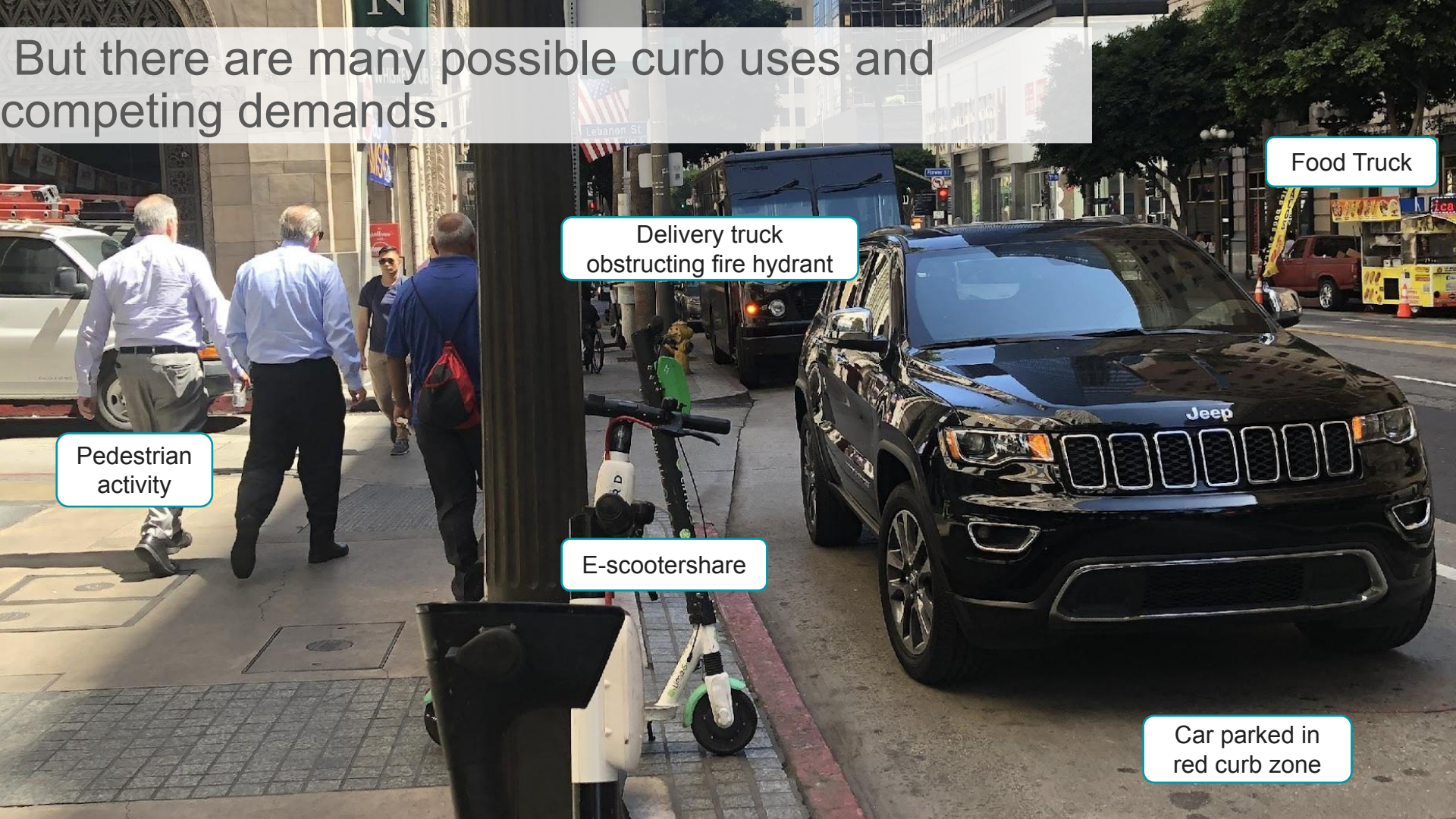
SCAG

Challenges at the Curb

Parking is the default curb use today.


And parking takes up a lot of space.
REPUBLIC OF TELEGRAPH
YI FANG
TAIWAN FRESH FRUIT
9DBN824

But there are many possible curb uses and competing demands.

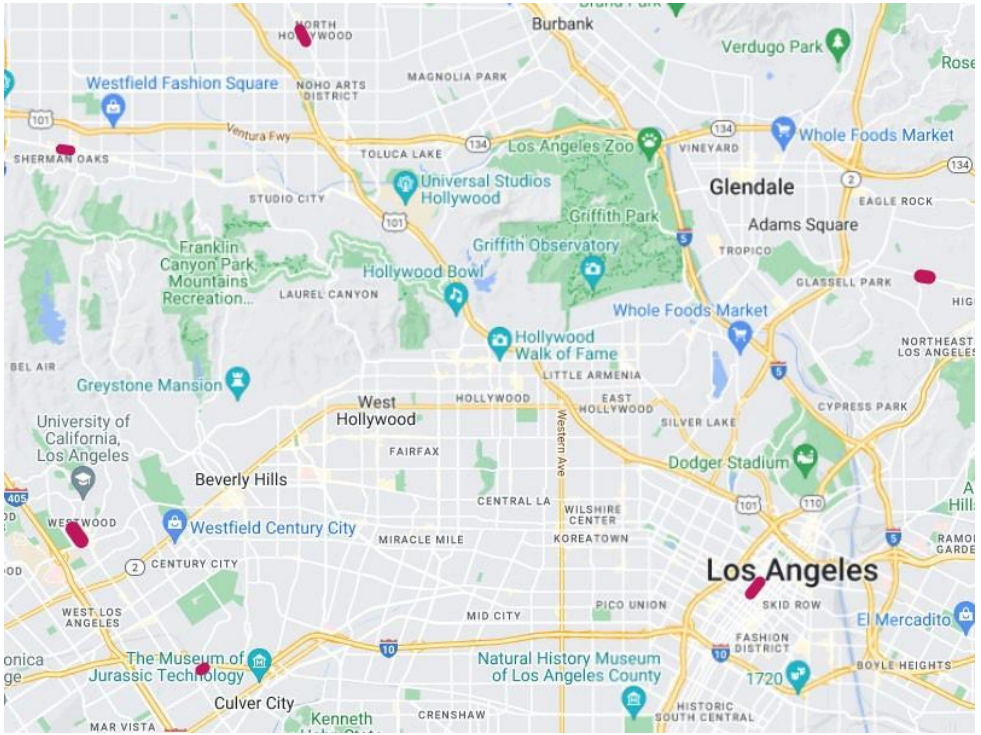


While policies and regulations exist, they are not always followed.

Site Selection & Recommendation

Criteria

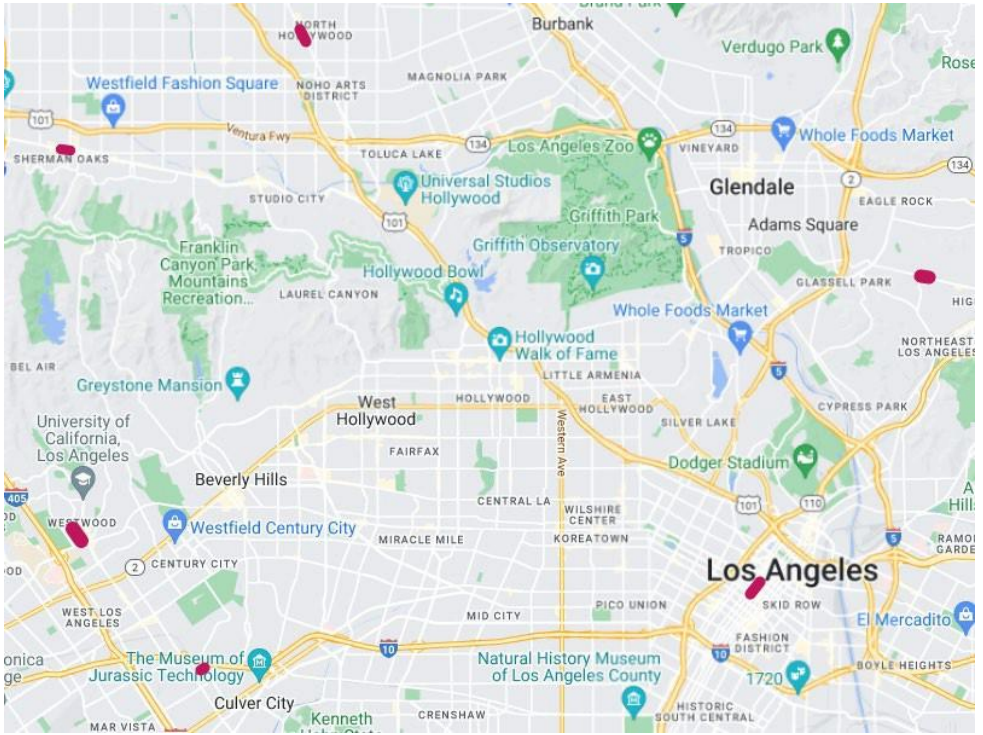
- Score on Parametric Model
- Hot Spot Map
- City Input
- Cycling Infrastructure
- On-Street Parking
- Transit
- Deliveries
- Parklets / Outdoor dining



Site Selection Candidates

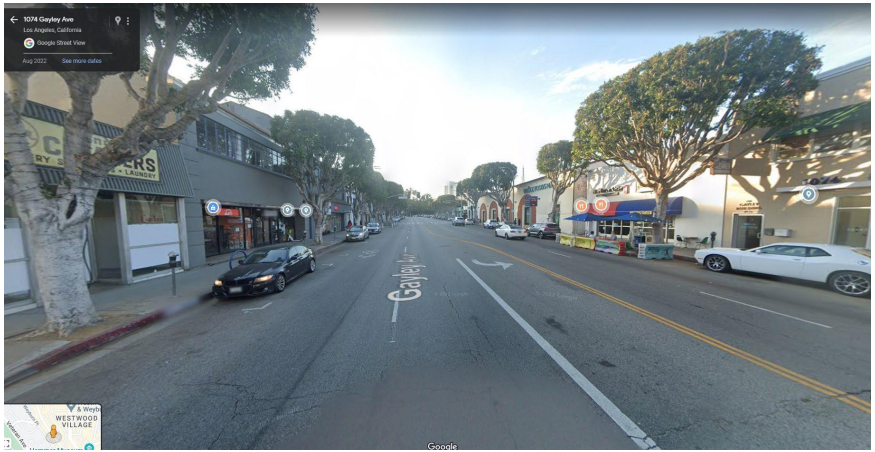
Total of 6 Sites in the following neighborhoods:

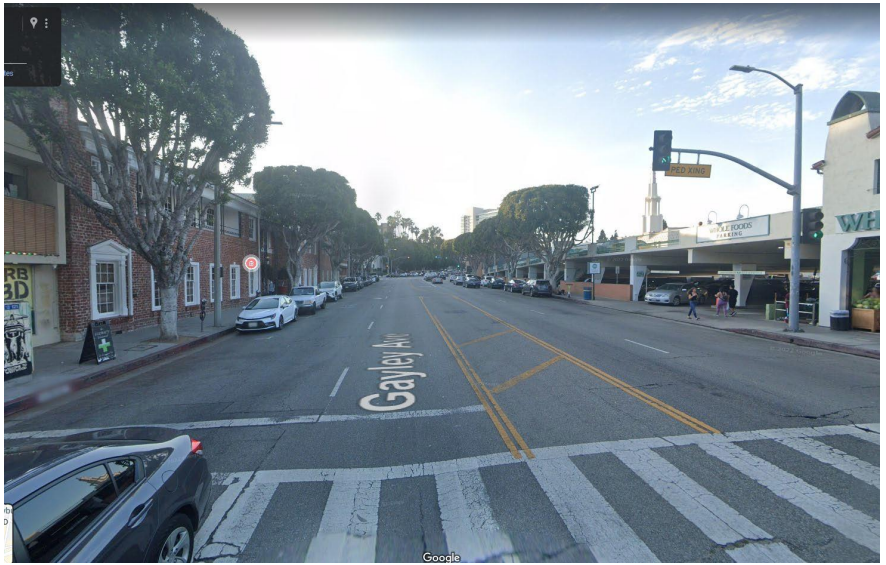
- Westwood
- Palms
- DTLA
- Sherman Oaks
- Highland Park
- North Hollywood



Site - Westwood

Criterion	Present?
High Score Parametric Model	
Hot Spot Map	✔
City Input	✔
Cycling Infrastructure	
On-Street Parking	✔
Transit	✔
Deliveries	✔
Parklets / Outdoor dining	✔





Recommended Pilot Concept: Flex Zones

Location: Galey From Wayburn to Kinross

Problem

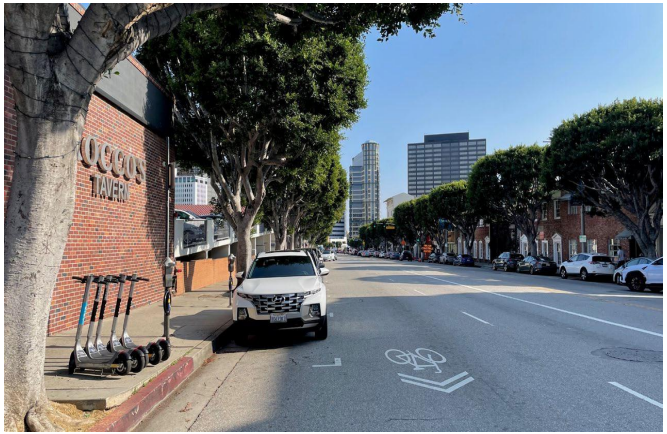
Mismatch in supply/demand: Use of various modes and high demand for passenger and commercial loading with limited curb space in a commercial area.

Concept

Flex Zones: Enable multiple uses such as deliveries, passenger PUDOs, short-term parking, and on-street parking with flex zones. Prioritizing different curb uses at different times of day or week will allocate more curb space for deliveries while preserving parking, enabling the highest and best use of the curb.

CURB SPACE ALLOCATION INVENTORY

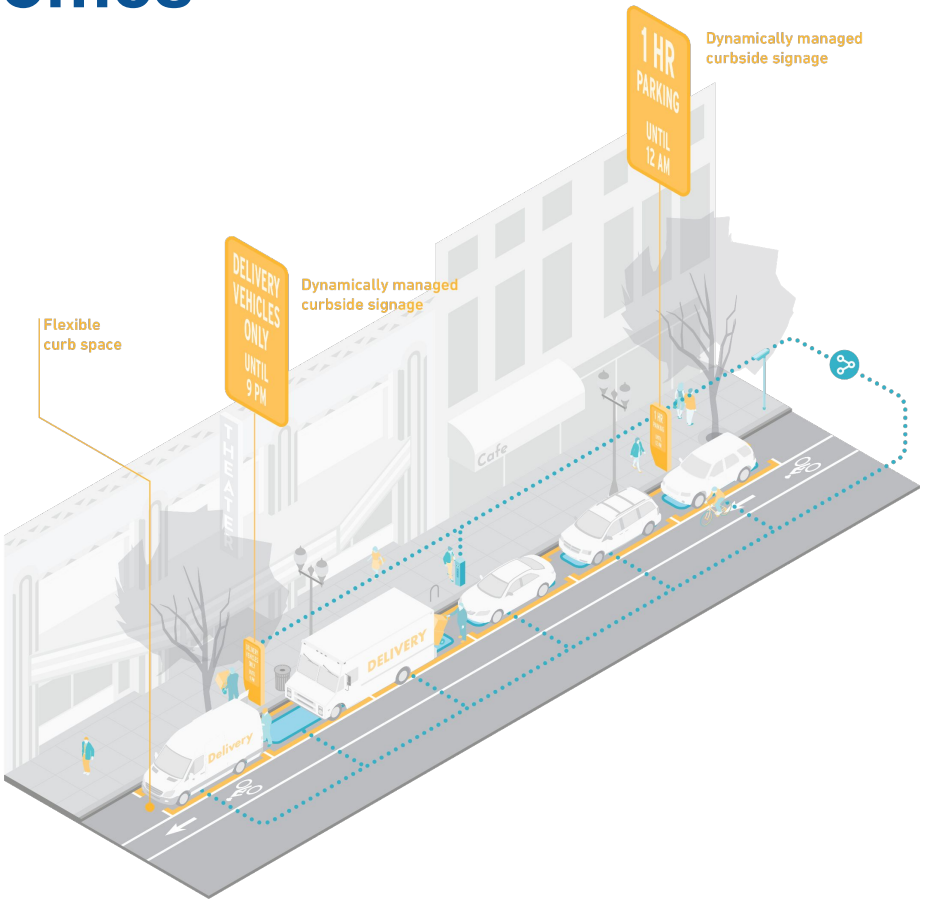
Regulation	Number of Spaces
Paid Parking (Daytime)	37
Free Parking (Evening)	37
Passenger Loading	1
No-Stopping	11
Fire Hydrant	1
Emergency Vehicle Access	1
Curbside Patio	1
Driveway/Curb Cut	12
Undesignated	3
TOTAL	67



Lessons Learned

Lessons Learned & Outcomes

- Data Collection needed for inventory to inventory the pilot location as well as best practices
- Demand data needs to be integrated with
- Considerations for new technologies and how best to apply them for a Curb Space Management program
- Insights from this project will inform future pilots with similar objectives



Questions?

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San Gabriel GoSGV E-Bike Share Program

San Gabriel Valley Council of Governments

SCAG Toolbox Training: Innovative Technologies and Smart Cities Projects & Pilots
October 8, 2024

Caitlin Sims

Manager of Local Programs

Background

- In August 2017, the SGVCOG received $4.554 million in Greenhouse Gas Reduction Fund-Active Transportation Program (GGRF-ATP) funds from the California Transportation Committee (CTC) to launch a regional e-bike share program in the San Gabriel Valley.
  - Funded the infrastructure & program start-up
- Conducted competitive procurement & contracted with Gotcha Mobility to launch and operate the dock-less program
- Program impacted by Covid-19
  - Launched in Summer/Fall 2020 in South El Monte & Baldwin Park
  - Gotcha dissolved & ceased all operations in late 2020/early 2021

SGVCOG
San Gabriel Valley Council of Governments

GoSGV Opportunities

- Opportunity to re-imagine the program to better serve the San Gabriel Valley
- Collaborated with stakeholders to establish new approach
  - Longer-term bike “check-outs”
  - Station locations at spaces off of the public right-of-way
  - Focusing on partners that would be most likely to use the program (colleges/universities; large businesses/campus environments)
- Anticipate greater impacts on vehicle miles travelled (VMT) reduction & reduced operational costs

SGVCOG
San Gabriel Valley Council of Governments

GoSGV Re-Launch

- Launched in September 2022
- Two different types of e-bikes
  - 828 standard pedal-assist e-bikes
  - 12 cargo e-bikes
- Local non-profit selected as Program Operator through a competitive procurement process
  - ActiveSGV

Program Overview

- San Gabriel Valley residents can sign-up online for a monthly subscription
  - Users receive e-bike; battery charger; lock
- Users pay deposit and monthly subscription cost
  - Classic Commuter Bike = $69/month
  - Cargo Bike = $149/month
  - Reduced monthly membership rates for students, seniors, & income-qualified
- Users can pick-up bikes from ActiveSGV Offices or have the e-bikes delivered for a fee

SGVCOG
San Gabriel Valley Council of Governments

Challenges & Opportunities

- No funding for operations or outreach
  - Membership fees were only available funding
- Limited understanding of VMT impacts
- Ensuring funding eligibility
  - Travel Demand Management (TDM)
  - Greenhouse Gas (GHG) Emissions Reduction/Air Quality Management District (AQMD)

SGVCOG
San Gabriel Valley Council of Governments

Sustainable Communities Program

- Applied for and received assistance through 2021 Sustainable Communities Program (SCP) Smart Cities & Mobility Innovation (SCMI)
- SGVCOG Goals:
  - Evaluate and understand VMT and GHG impacts of GoSGV
  - Implement innovative outreach strategies to encourage GoSGV membership
- SCAG contracted with Alta Planning to complete this work

SGVCOG
San Gabriel Valley Council of Governments

GoSGV Engagement & Evaluation Project Goals

- Better understand landscape:
  - Literature and Best Practices Review
  - Baseline & Existing Conditions
- Better understand program usage:
  - Data Collection & Evaluation
- Enhance participation
  - Targeted Outreach to Businesses & Universities to Build Partnerships
- Collapsed into Final Report

SGVCOG
San Gabriel Valley Council of Governments

Challenges: Data Collection & Evaluation

- No passive mechanism of collecting trip information
  - Tile devices were only GPS devices on e-bikes
  - Reliance on participant surveys for trip tracking
- Limited resources for incentives to encourage participation

SGVCOG
San Gabriel Valley Council of Governments

Successes: Outreach & Engagement

- Increased outreach and engagement
  - Participation in 10+ community events
- Building partnerships with additional partners
  - California Institute of Technology
  - MetroLink
  - Initiated engagement with other partners

SGVCOG
San Gabriel Valley Council of Governments

Looking Ahead

- Received funding for expansion
  - Purchase 65 additional e-bikes for fleet
  - Purchase of enhanced GPS tools
  - Subsidized memberships for income-eligible residents
  - E-bike rebates for income-eligible residents
- Continuing evaluation work with

Questions?

Caitlin Sims
Manager of Local Programs, San Gabriel Valley Council of Governments
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SGVCOG
San Gabriel Valley Council of Governments

Program Bike: Standard E-bike

- Manufactured by Trek
- One-size fits most
- UL certified
- Bosch mid-drive, “pedal-assist” motor
- Max assisted speed 18 mph
- 3 gears
- 4 levels of assist
- 30-60 mile range
- 828 bikes

Program Bike: Cargo E-bike

- Manufactured by Urban Arrow
- One-size fits all
- UL certified
- Bosch mid-drive, “pedal-assist” motor
- 30-60 mile range
- 12 bikes (up to 3 month share period)

Pricing (monthly)

- Regular Member
  - Introductory - $69
  - Standard - $79
- Student rate - $49
- Income Qualified - $29
- Cargo E-bike - $129 - (3 month maximum period)
- Group Rates (for Universities, Schools, Businesses)

All bike pricing includes a battery charger and bicycle lock

Repair Fees

- **Repairs** per fixed price list:
  - Broken spoke - $50
  - Flat repair - $30 - $50
  - Brake adjustment - $15
  - Derailleur adjustment - $15
  - No charge for normal wear-and-tear on parts
- **Deposit**
  - $250 for standard bike; $500 for cargo bike
  - Valid payment method on file throughout the program

Repair

- Around the Cycle (Pasadena)
- The Cubhouse (San Marino)
- Jimmy’s Bikes (Baldwin Park)
- Stans Bike Shop (Azusa)
- Jeff Seymour Family Center (El Monte)
- …more pending

Mobility Technology Plan

Southern California Association of Governments
Toolbox Tuesday Webinar
October 8, 2024

Christopher Macon
City Manager
City of Laguna Woods

City of Laguna Woods

- Located in South Orange County
- Land Area: ≈3.3 square miles
- Population: 17,644 (2020 U.S. Census)
- Median Age: 74.9 years (2020 U.S. Census)
- 91% of residents are at least 60 years (2020 U.S. Census)

Mobility Technology Plan

- Interest in exploring ways to address needs of seniors and individuals with varying abilities using automated vehicles and other emerging transportation technologies

- Funded through SCAG's 2020-2021 Sustainable Communities Program – Smart Cities & Mobility Innovations

- Arcadis (now Arcadis IBI Group, Inc.) was selected to prepare the Mobility Technology Plan

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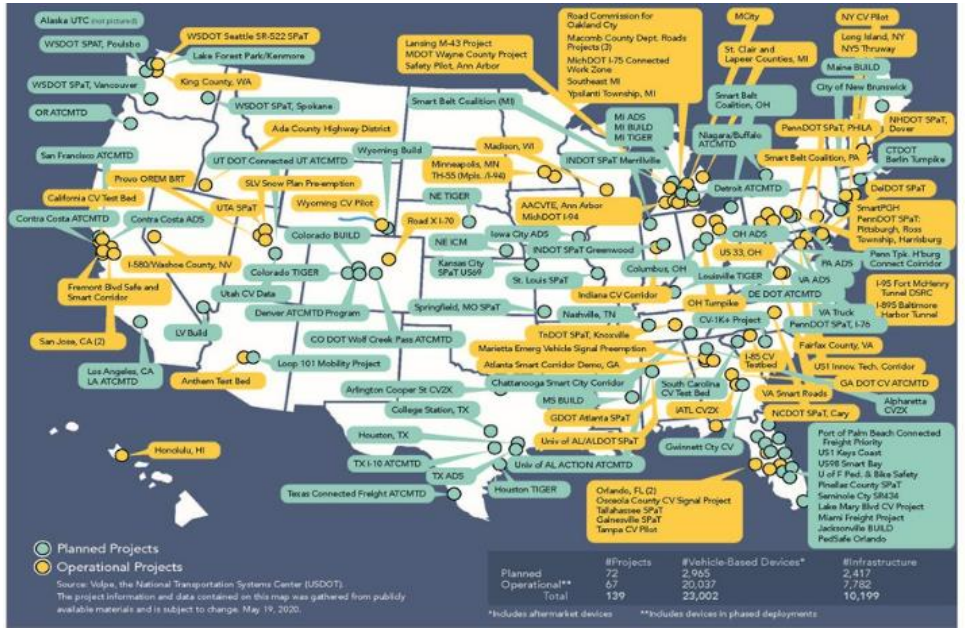
Public Outreach and Engagement

- Advocacy Group (8+CLW/SCAG): Local social service providers and potentially impacted government agencies

- Resident Group (14): Diversity of age, abilities, and familiarity with/use of existing transportation options

- City Council: Three public meetings, each with an opportunity for public comments

State of the Industry and Best Practices



New Autonomous Shuttle Connects Detroit Seniors with Local Hospital

For the first time, a self-driving, accessible, paratransit shuttle is being deployed to transport senior citizens and the underserved to and from appointments and other needs at a Detroit hospital.

Recommendations

- Phase I (Readiness): Infrastructure and programmatic improvements that benefit future public or private automated vehicle use irrespective of Phases II/III

- Phase II (Autonomous vehicle pilot): Local fixed-route shuttle service to test Phase 1 and prove the concept

- Phase III (Continued or expanded program): Focus on closing first/last mile connections; regional partnerships

Near-Term Challenges

- Even if the concept is proven, customer feedback from a pilot undertaken now is likely to skew negative

1) Customers value first/last mile connections and spontaneity of travel that would likely not be possible in a pilot

2) Customers may not perceive a benefit versus taxicabs or ridesharing as long as in-vehicle staffing is required

-- Level 4/5 automated vehicles are not currently available
-- Varyingly-abled populations may require assistance

Current Efforts

- The City of Laguna Woods is continuing to monitor advancements in the automated vehicle sector.

- With automated vehicles perceived as an inevitability regardless of whether the City operates its own shuttle, future capital improvement programs may seek to construct improvements identified in the Plan.

    1) Roadway surface markings
    2) Vehicle-to-Infrastructure (“V2I”) readiness

Resources for SCAG Jurisdictions

- Considerations for:

  1) Senior and varyingly-abled populations
  2) Data sharing and cybersecurity
  3) Physical transportation infrastructure

- Key performance indicators by category (e.g., efficiency, safety, user experience, and utilization)

- Technical memoranda that expand on concepts discussed in the Mobility Technology Plan

Thank you!

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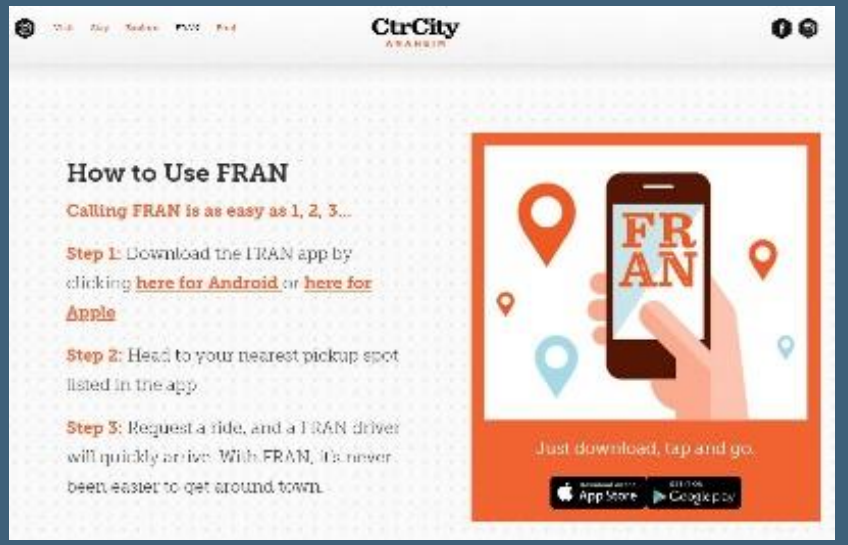
FCPP AND SCP SCMI PROGRAM CONCLUSIONS

FCPP and SCP SCMI lessons learned and key takeaways.

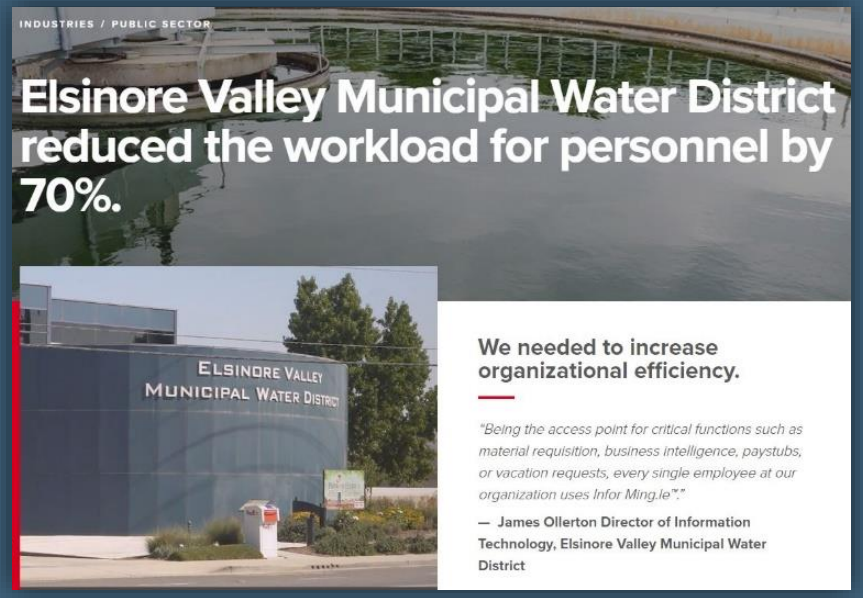
City of Anaheim's Smart Center City Project

- Partnered with the Anaheim Transportation Network (ATN)
- Integrated real-time parking guidance for Center City Anaheim and its transit planning and ride hailing mobile application (Free Rides Around the Neighborhood, FRAN)
- Directed drivers to available parking via real-time wayfinding signage and ATN's FRAN application
  - Reduced neighborhood parking complaints
  - Served over 160,000 customers annually
  - Reduced VMT generated by cars circling parking structures and neighborhood streets searching for parking spots



City of Cerritos' Remote Services Enhancement Project

- Automated numerous community development-related and business license applications online, eliminating the need to physically travel to City Hall
  - Removed over 68,000 VMT annually
  - Reduced over 2,800 trips annually
- Estimated to have saved two full-time positions' salaries
- Was widely used as it launched during the Covid-19 pandemic
- Increase in submissions due to ease of platform



City of Los Angeles' BlueLA Electric Carshare Project

- Aimed to verify VMT impacts and benefits of carshare services by documenting the transportation behavior of participants in LADOT's Carshare Pilot Program
  - Combination of survey data and origin-destination data provided the VMT performance
  - LADOT could then encourage enrollment in carshare strategies and via outreach with housing developers
- Saved $6.7M in fuel annually
- BlueLA program reflected a shift in community transportation preferences
  - 90% of members remained in the program

City of Ontario's Smart City Rapid Validation Hub

- Developed a Smart City Rapid Validation Hub
  - Real-world technology testing zone
  - Smart bin commercial refuse pilot
  - Final-mile micromobility program
- Covid-19 pandemic provided unexpected opportunity to utilize the suite of smart city transportation modality characterization sensors beyond its original use
  - Allowed the City to see impacts of public policy in near-real-time
- Removed over 100,000 VMT annually
- Serviced over 400,000 customers annually
- Fostered high community engagement in smart city events, signifying a robust public interest in sustainable urban development

City of Glendale's Route Optimization Program

- Optimized and redesigned City refuse collection routes using advanced software analytics
- Trash and recycling routes had a 13% overall decrease in VMT
  - 49 fewer journeys to the dump each week, significant reduction in air pollution
- The program maximized the existing fleet to reduce the need for additional staff or trucks
  - Positive key performance indicators for resource utilization and efficient municipal operations
  - City and employees no longer need to work overtime

GOVERNING

THE STATES AND LOCALITIES

FINANCE | HEALTH | INFRASTRUCTURE | MGMT | WORKFORCE | POLITICS | PUBLIC SAFETY | URBAN | EDUCATION | DATA | PUBL

MAGAZINE | NEWSLETTERS | PODCASTS | EVENTS | PAPERS

INFRASTRUCTURE & ENVIRONMENT

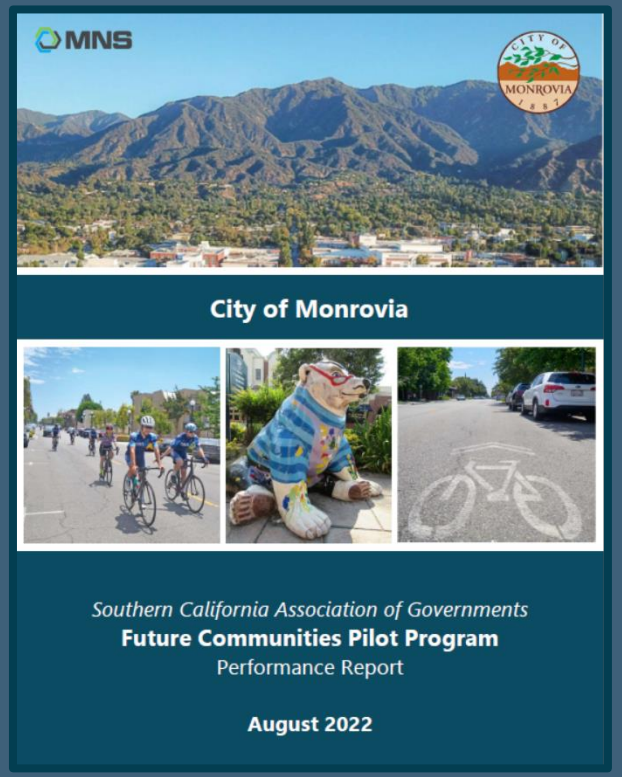
A Quiet Revolution in Trash Trucks

Garbage trucks get as little as 3 miles per gallon, making them prime targets in cities' efforts to trim costs and curb greenhouse gas pollution.

BY DANIEL C. VOCK | JULY 10, 2014

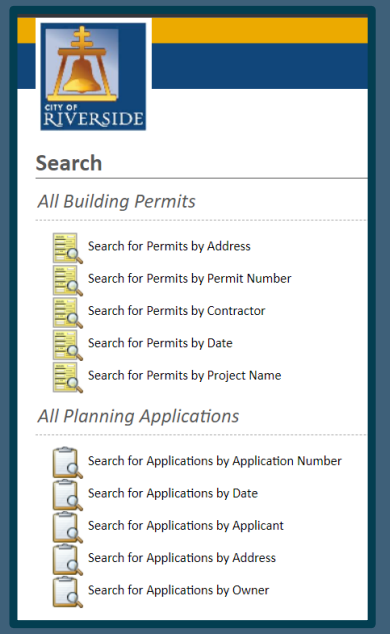
City of Monrovia's "Biking for Bucks" Bikeshare Program

- Incentivized bicycle ownership for City residents and employees
- Assisted 503 applicants, including 44 low-income applicants, with purchasing bikes or critical accessories
  - The program had the capacity for 564 participants with a resource utilization rate of 89%
- The applicants were then asked to complete surveys and track their bicycle trips using an Activity Tracker
- Removed over 24,000 VMT/year
- Users each saved $1k annually
- The program provided valuable insight into bikeshare preferences and behaviors, plus best practices for future programs



City of Riverside's Integrated Electronic Plans Solution

- Developed online software that allows all community development-related permits and applications to be submitted online, eliminating the need to physically travel to City Hall
  - Removed over 146,000 VMT/year
- Use of online services at the City skyrocketed after implementing the new portal
- Each online application submittal removed, on average, three trips to City Hall
  - Reduced over 11,700 trips annually
  - Reduced driving hours by 4,900
- Staff hourly labor reduction of $41,702.93 annually

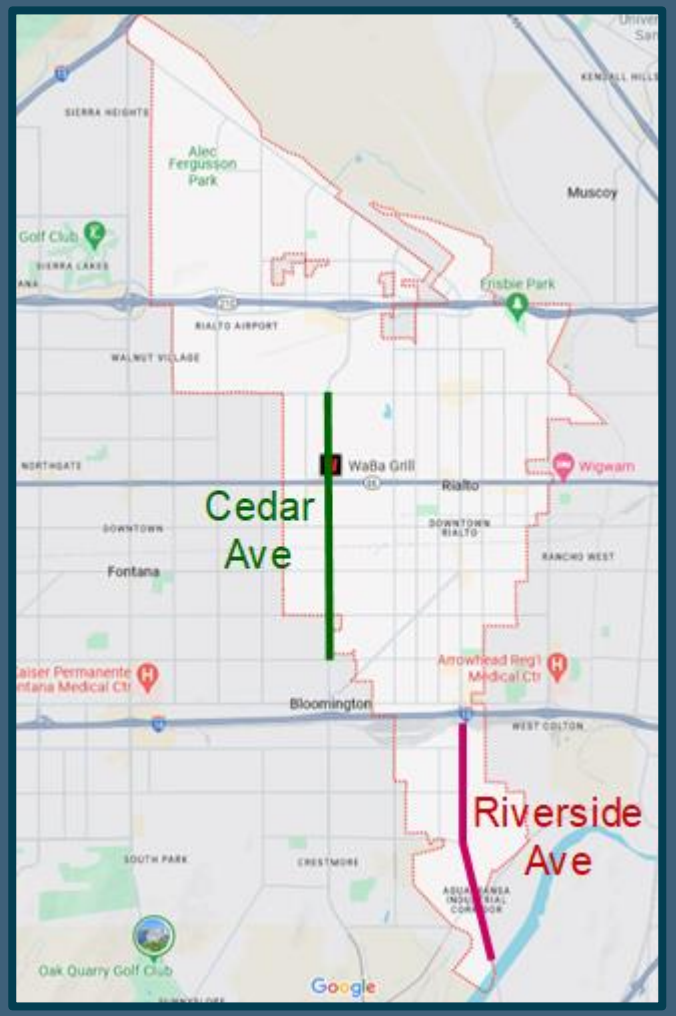


San Bernardino County's Remote Electronic Warrants Program

- Developed software program for officers and judges to remotely submit, review, and sign warrants reducing the need to travel for court approval
  - Prior to online warrant submission platform, sheriffs were required to travel far distances to county courthouses
- As the geographically largest county in the US and California, VMT savings are significant
  - Removed over 400,000 VMT in less than two years
  - Reduced over 24,200 trips annually
- Saved 6,000 hours of police time annually

City of Rialto: Smart Cities Plan for Warehousing and Logistics

- Studied existing warehousing and logistics conditions, defined and quantified costs and benefits, and evaluated technological and policy solutions
- Focused on the City's adopted truck routes, residential areas along those routes, and warehousing hubs,
  - Intended to address changes that can be made in the first and last miles of trips
- Produced an implementation plan of a pilot project that includes goals, policies, and programs for regulatory changes and investment in intelligent transportation infrastructure
  - The pilot seeks to:
    - Reduce traffic congestion for all
    - Reduce pavement degradation
    - Improve traffic safety around intersections
    - Reduce air pollution
    - Save fuel and fuel costs



Cities of Los Angeles, Long Beach, and Stanton Curb Bundle

- Builds off SCAG's 2022 Curb Space Management Strategy
- Study conducted to collect, digitally manage, and assess curb space inventory and usage to address challenges and opportunities in three focus cities in the SCAG region
- Includes a pilot project and associated workplan for each of the three cities to implement within their jurisdictions based off the data and input collected for the study
- Study Objectives:
  - Assess curb occupancy and usage
  - Develop and demonstrate digital curb zone inventory
  - Complete an inventory and field study of the street network
- Recommended Pilot Projects
  - **City of Los Angeles:** Westwood Neighborhood Flex Zone
  - **City of Long Beach:** Automated Enforcement Pilot Program
  - **City of Stanton:** Permit Parking Program Update

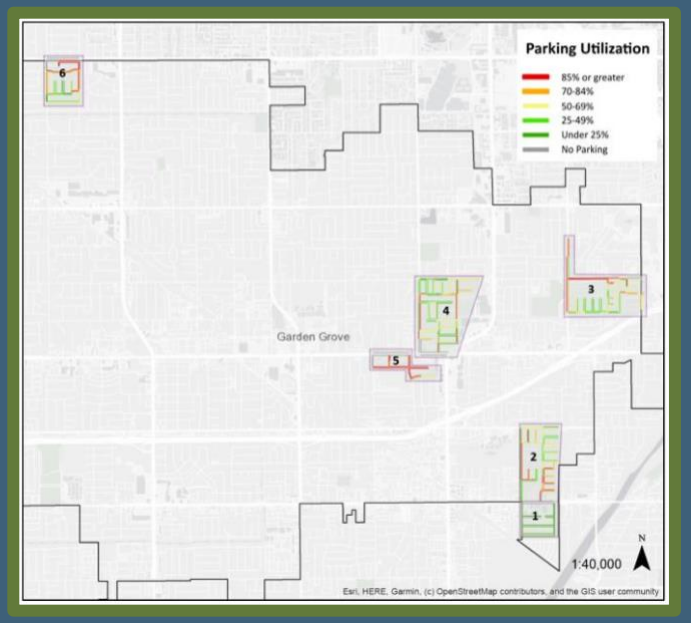
San Gabriel Valley Council of Governments: GoSGV Engagement & Evaluation

- Assessment and analysis of the current GoSGV Bikeshare Program
- Project aims to study, evaluate, and quantify VMT reductions and aggregated location-based data to identify opportunities for Program and/or bike infrastructure expansion
- Identify and recommend changes to increase GoSGV adoption as well as its effectiveness in reducing VMT
- Implemented innovative community engagement campaigns geared towards residents
  - Dedicated GoSGV pop-up events
  - Ongoing tabling/pop-ups
  - Bike month special promotion
  - Outreach to local universities, colleges, and vocational schools
  - Outreach at City Council meetings
  - Ongoing social media presence
  - Distribute printed promotional materials at local libraries and community centers
  - Community surveys

City of Desert Hot Springs: Downtown & Light Industrial Parking Plan

- Analyzed current parking and access needs for the Downtown and Industrial Cannabis Area districts to plan for future growth
- Focused on parking supply and demand quantification, land use patterns, and available shared mobility services
- Short-term and long-term strategies include:
  - Repeal minimum parking requirements
  - Facilitate shared/public parking and discourage unshared parking
  - Invest in new parking technologies
  - Create a parking benefit district
  - Prepare and expand the management of public parking

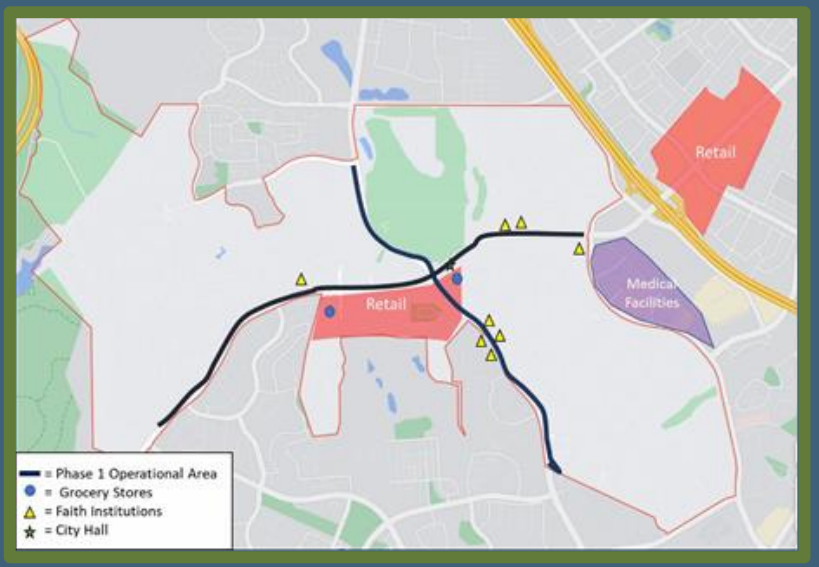
City of Garden Grove: Curb Data Study



- Analyzed and quantified current residential parking and access challenges, needs, and opportunities in six study areas
- Many areas in the City have a street parking utilization that exceeds 85%, indicating accessibility obstacles and the need for parking demand management interventions
- Menu of planning and policy options to address existing and future parking issues included:
  - Continuing efforts to increase enforcement of existing parking regulations
  - Exploring a process for establishing Residential Parking Permit (RPP) districts only after current regulations are enforced and realistic RPP goals and limitations have been agreed to and communicated
  - Facilitating shared parking agreements
  - Establishing transportation demand management (TDM) requirements for new residential developments of a certain size
  - Implementing a comprehensive Traffic Reduction and Transportation Improvement Fee for new developments

City of Laguna Woods: Mobility Technology Plan

- Serves as a roadmap for an autonomous vehicle (AV) pilot program with opportunities to apply the same framework to other municipalities
- Plan identifies innovative technology to support lifelong mobility, particularly for older adults and persons with disabilities
  - **Phase 1 (Preparation for Mobility Improvements):** Physical modifications, infrastructure improvements, and digital modifications to operate an AV service in the study area
  - **Phase 2 (AV Pilot):** Creation of a replicable and comprehensive AV pilot and framework to prepare for program expansion (larger scales or additional locations)
  - **Phase 3 (AV Pilot Expansion):** Expansion to include additional use cases and serve as a model for other cities
- Includes recommended transportation and communication infrastructure for the AV pilot, key performance indicators, best practices, and information on communication and sensor attacks



Key Take-Aways

- Online portals are incredibly popular and growing in demand, with many opportunities
- Route optimization projects are impacted by available resources and constraints (mileage and costs can be greatly influenced by the addition or removal of a single truck)
- Bikeshare and parking programs have the potential for significant VMT reduction
- Curb use demand continues to increase and understanding existing use needs is critical
- Technology continues to be an effective tool in managing parking, increasing accessibility, and inventorying assets
- SCAG, vendors, and consultants alike are navigating a new procurement space regarding emerging technology (see SCAG's Technology Guiding Principles, pg. 23)
- Pilots and projects have been successful in meeting program goals and helping us understand the benefits and challenges with each technology
- Final products complement release of Connect SoCal 2024 and prepare for the next SCP funding cycle (estimated to begin summer 2025)

Smart Best Practices

- **Cross-Agency Task Forces**
  - Steering committees, technical advisory committees, and agency working groups comprised of relevant staff from across multiple agencies offer a holistic, collaborative approach
- **Comprehensive Regulatory Framework**
  - Create a clear and adaptable regulatory framework that addresses the safety standards, data governance and privacy requirements, liability concerns, and environmental impacts that relate to projects
- **Public-Private Partnerships**
  - Critical for public agencies to engage with private companies when it comes to innovative, clean, and emerging technologies to address funding, technology deployment, and technical expertise
- **Infrastructure Investments**
  - Allocating sufficient resources to the development and maintenance of smart infrastructure to ensure technology projects will be capable of supporting the connectivity requirements of emerging technologies

Smart Best Practices

- **Community Engagement and Education**
  - Engaging with community-based organizations, stakeholder groups, SoCal residents, and other public agencies is critical for addressing community concerns, securing public support, and ensuring equity is integrated from the ground-up
- **Pilot Test Beds and Hubs**
  - Creating spaces to test newer technologies on smaller scales in real-world environments can help address the feasibility, safety, and public acceptance of mobility solutions
- **Research Institutions**
  - Local, county, and regional governments alike can foster partnerships with research institutions and universities to leverage their expertise and maximize impact
- **Monitoring and Evaluation**
  - Regional agencies can monitor pilots across multiple agencies, environments, and communities. Similarly, agencies can then provide information to the region to make informed decisions on scaling, modifying, or discontinuing specific technologies.

SCAG'S SMART CITIES PROGRAM, TOOLS, AND RESOURCES

Upcoming and Ongoing Projects

- Clean Technology
  - Goods movement fleet conversion efforts (LMFP, etc.)
  - Zero Emission Truck Infrastructure (ZETI) study
- Clean Cities Coalition
  - Clean Cities Strategic Plan annual update
  - Alternative fuel vehicle, price, and station tracking
  - Annual progress report
  - Various partnerships and educational events
- FY25 Presidential Priorities
  - Transit recovery
  - Clean technology
  - Goods movement
- Smart Cities Strategic Plan (coming soon!)
- Future SCP Calls for Projects (est. summer 2025)

Upcoming RFP for SCAG's Smart Cities Strategic Plan

- Technology has rapidly evolved and advanced since SCAG's 2017 FCF
- The Plan will outline and advance SCAG's efforts in smart technology integration, transit and multi-modal integration, clean transportation, and broadband
- Plan Objectives
  - Evaluation of emerging technologies, current trends, and research
  - Establishment and management of a working group or technical advisory group
  - Recommendations for partnerships, policies, and actionable next steps
  - Alignment with SCAG's long-term planning objectives and strategies
  - Development and implementation of an EV Incentive Program (EVs and EV Charging Stations)

Smart Cities Strategic Plan Working Group (TBD)

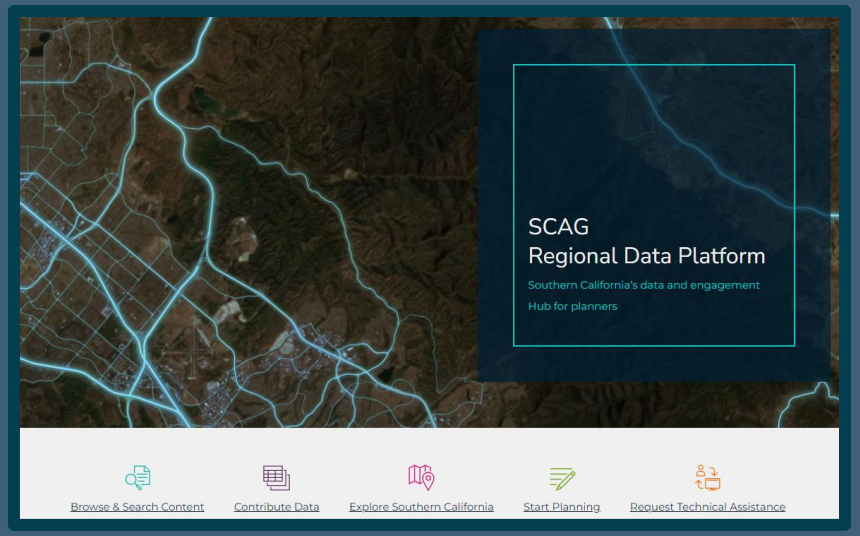
- Anticipated to include stakeholders and representatives from diverse backgrounds
- Will be responsible for providing additional context and insight related to smart technologies and the upcoming strategic plan
- Can help identify and target barriers that impact the deployment of electric vehicles (EVs) and its supportive charging infrastructure
- Two opportunities to collaborate:
  - Working group will participate in one workshop and may help form the vision for additional focus group sessions (strategic plan)
  - Can meet quarterly or as-needed as regional forum for open collaboration and education

Future Regional EV Incentive Program

- Supports the expansion of EV charging infrastructure and accelerates the acquisition of EVs within the SCAG region
- Intended to complement existing incentive programs
- Regional EV Incentive Program
  - EV Incentives
    - Strategically address the needs of multiple users (i.e., fleet operators, individuals, governments, transit agencies, etc.)
  - EVCS Incentives
    - Focused on MUDs, particularly in priority equity communities, neighborhoods with limited existing EV charging infrastructure, and for lower-income households
- Serves as an actionable roadmap for SCAG to implement

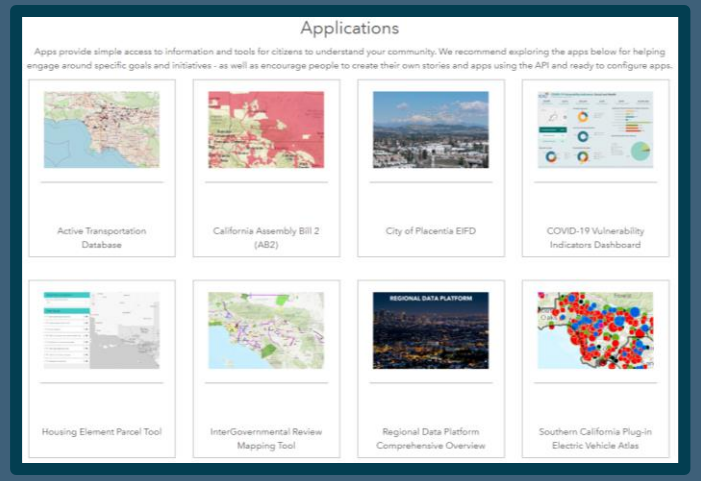
Additional Tools and Resources

- SCAG Regional Data Platform
  - SCAG empowers local jurisdictions by providing enhanced data, advanced tools, and extensive resources to support stronger and more integrated local planning and a healthier, equitable, safer, and more sustainable region
- SCAG Scenario Planning Model
  - Web-based scenario development, modeling, and data organization tool developed to facilitate informed and collaborative planning among counties/subregions, local jurisdictions, other stakeholders, and the public



Additional Tools and Resources (cont.)

- SCAG GIS Open Data Portal
  - Allows users to search, view, query, and download data residing in SCAG's Enterprise Geodatabases.
  - Data categories include land use, planning, modeling, and transportation.
- SCAG Local Investment Dashboard
  - Shows SCAG-funded efforts in support of shared regional goals included in the Connect SoCal Regional Transportation Plan/Sustainable Communities Strategy.
  - Can view various coordinated efforts throughout the region that are meeting both regional goals and community needs.



Additional Tools and Resources (cont.)

- Clean Technology Compendium
- Emerging Technology Guiding Framework
  - SCAG's Technology Guiding Principles
- SCAG's Clean Transportation Technology Policy, established by Regional Council Resolution No. 23-654-5
- Electric Vehicle Charging Station Study
- Plug-in Electric Vehicle Atlas
- Zero Emission Truck Infrastructure Study
- Last Mile Freight Program
- Emerging Technologies Committee
- Clean Cities Coalition Website
- Clean Cities Strategic Plan FY24

THANK YOU!

For more information, please visit:

https://scag.ca.gov/post/future-communities-pilot-program
https://scag.ca.gov/sustainable-communities-program

Questions? Contact:

Marisa Laderach (laderach@scag.ca.gov) or Shannon McAlpine (mcalpine@scag.ca.gov)

Tell us how we did!

Take a quick 2-minute survey to help us improve future Toolbox Tuesdays!