2018 Regional Planning Progress Report

Regional Planning Committee  |  December 7, 2018

San Diego Forward: The Regional Plan

Performance Monitoring Indicators (Appendix S)

- Supporting a healthy environment
- Creating a more vibrant economy
- Incorporating innovative mobility and planning
## Regional Plan Monitoring Indicators

### Healthy Environment and Communities

<table>
<thead>
<tr>
<th>Indicator</th>
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<tbody>
<tr>
<td>Habitat conserved within designated preserve areas</td>
</tr>
<tr>
<td>Beach widths</td>
</tr>
<tr>
<td>Impaired waterbodies</td>
</tr>
<tr>
<td>Air quality</td>
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</tbody>
</table>

### Fatalities/Serious injuries per Vehicle Miles Traveled

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Share of new housing units and jobs located in Smart Growth Opportunity Areas</td>
</tr>
<tr>
<td>Share of new housing units within County Water Authority water service boundary</td>
</tr>
<tr>
<td>Water consumption</td>
</tr>
<tr>
<td>Diversity of water supply</td>
</tr>
<tr>
<td>Diversity of energy supply and use</td>
</tr>
<tr>
<td>Electric and natural gas consumption by sector</td>
</tr>
</tbody>
</table>

*BOLD = new indicator*

### Vibrant Economy

<table>
<thead>
<tr>
<th>Indicator</th>
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<tbody>
<tr>
<td>Travel times to jobs</td>
</tr>
<tr>
<td>Real per capita income, compared with California and the United States</td>
</tr>
<tr>
<td>Regional poverty rate, compared with California and the United States</td>
</tr>
<tr>
<td>Percent of households with housing costs greater than 35 percent of income</td>
</tr>
<tr>
<td>Annual income needed to afford fair market rent</td>
</tr>
<tr>
<td>Regional crime rate</td>
</tr>
</tbody>
</table>

*BOLD = new indicator*
### Regional Plan Monitoring Indicators

#### Innovative Mobility and Planning

<table>
<thead>
<tr>
<th>Indicator</th>
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<tbody>
<tr>
<td>Travel times and volumes for all modes</td>
</tr>
<tr>
<td>Commute mode share</td>
</tr>
<tr>
<td>Annual transit boardings</td>
</tr>
<tr>
<td>Border wait times</td>
</tr>
<tr>
<td>Border crossing volumes</td>
</tr>
<tr>
<td>Alternative fuel vehicle ownership</td>
</tr>
</tbody>
</table>

*BOLD = new indicator*

### Regional Performance Indicators

- Moving in the right direction
- Areas for improvement
Water Supply

Water supply diversification by source, 2005–2017 with 2020 target

Air Quality

Number of days air quality index more than 100, 2005–2016
Poverty Rate

Percent of residents living in poverty in San Diego, California, and United States, 2005–2017

Income Needed to Afford Rent

Annual income needed to afford fair market rent, 2005–2017
Transit Boardings

Annual transit boardings, 2005–2017

Zero Emission Vehicles

Zero-emission vehicle ownership, 2005–2016
Lessons and Takeaways

- Challenges facing the region
- Change takes time
- Similar issues facing California and United States
- Identify course corrections in San Diego Forward: 2019-2050 Regional Plan
- Continue to monitor progress

Next Steps

- Release Draft Regional Plan Performance Monitoring Report
- Final Report to Board of Directors
Recommendation

The Regional Planning Committee is asked to approve the release of the draft 2018 Regional Plan Performance Monitoring Report for public review.
To meet projected electric vehicle demand in 2025, the region needs at least 6-8 times more EV charging stations than we have today.
SANDAG EV Efforts

Converting to Plug-in Electric Vehicles

**PEVs come in two types...**

- **battery electric**
  - runs entirely on electricity

- **plug-in hybrids**
  - have both an electric battery and a gas engine

There are plenty of PEV models available, and plenty of incentives to invest in them. Work is underway to deploy a network of charging stations in the region and the state.
Electric Vehicle Chargers

**Home, Public and Workplace Chargers**
- “Level 2” chargers
- All EVs can use
- ~8-24 miles/hour of charge

**Quick Stop and Corridor Charging**
- “DC Fast” Chargers
- Some EVs can use
- 80% charge < 30 minutes

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Public Chargers in the Region

Source: USDOE, Alternative Fuels Database, Aug. 2018
San Diego Regional Public and Workplace Charger Needs by 2025

- Quick Stop and Corridor Fast Chargers: 896 (Chargers Today), 114 (2025 Conservative Estimate)
- Public & Workplace Level 2 Chargers: 1217 (Chargers Today), 7812 (2025 Conservative Estimate)

Source: CEC CA PEV Infrastructure Projections 2017-2025, March 2018

SANDAG Charging Program

**Regional Plan Actions**
- Develop charger incentive program
- Bring program to Board prior to next Plan
- Commit $30 million from 2020-2050
- Support future Regional Plan development

**Caltrans SB1 Planning Grant**
- $600,000 grant over 2018-2020
- Phase 1 – best practices and program coordination (2018)
- Phase 2 – design program framework (2018-19)
- Phase 3 – program build out (2019-20)
Research Report: Existing Practices from across the Country

Oversight & Administration
- Eligible technologies & incentive amounts
- Program participation
- Allocation/distribution of funds
- Metrics & Monitoring
- Outreach
- State/federal involvement

Next Steps
- Coordinate on state and regional charging efforts
- Initiate SANDAG program design
  - Interview subset of existing programs
  - Engage partners
- Return this summer with recommend draft program
SANDAG Roadmap Program
Project Highlight: City of Carlsbad

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SANDAG Roadmap Program: Overview

- SDG&E Energy Efficiency Funding: Local Government Partnership (LGP)
- SDG&E LGPs: Cities of Chula Vista and San Diego, County of San Diego, Port of San Diego, SANDAG
- SANDAG LGP:
  - SANDAG Roadmap Program
  - 16 SANDAG member agencies without LGPs
  - Began in 2010 with energy efficiency
  - Integrated climate action planning in 2015
  - Current agreement through 2020
Roadmap Program – Project Highlight: City of Carlsbad

- **2014**
  Carlsbad Energy Roadmap* completed
- **2015**
  Carlsbad Climate Action Plan adopted
- **2018**
  Carlsbad Feasibility Study* completed

* Prepared by the SANDAG Roadmap Program

City of Carlsbad Project Objectives

- Energy cost savings
- Reliability and resiliency
- Climate Action Plan implementation
- Innovation and clean technology
Feasibility Study: A Layered Approach

- **Energy Efficiency:**
  - Interior and exterior lighting retrofits
  - Boiler replacement
  - Controls for air conditioning units for advance scheduling and programming

- **Demand Side Management:**
  - Advanced building management
  - Solar panels
  - Battery energy storage
  - Microgrid

SANDAG Roadmap Program Next Steps

- City of Carlsbad continue to pursue funding to implement feasibility study identified projects and opportunities

- SANDAG Roadmap Program will continue to offer energy and climate action planning activities primarily funded through the Local Government Partnership with SDG&E through 2020 and will explore additional funding opportunities to support these activities for member agencies in the future.
Microgrid Capabilities