Transportation Modeling Forum

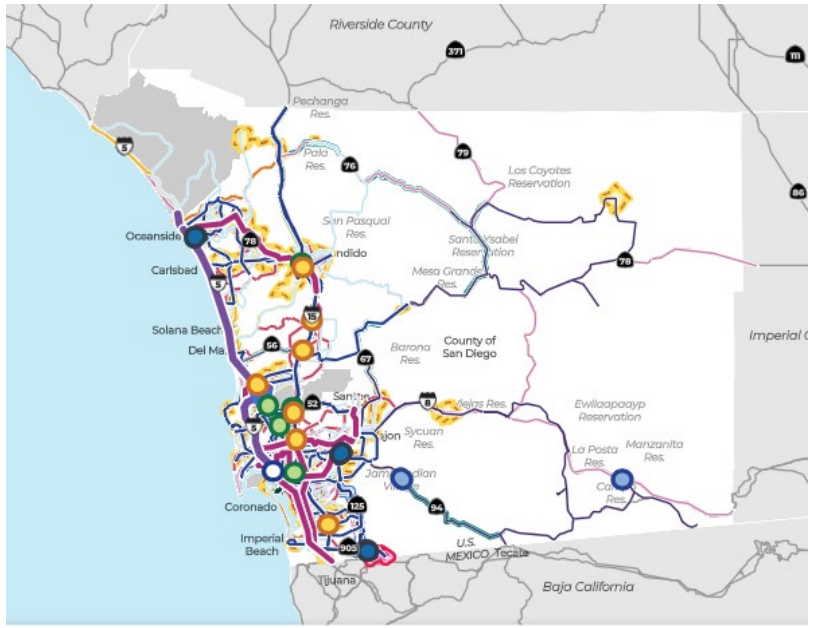
Transportation Analysis & Modeling | Data Science
March 10, 2026

Agenda

- Welcome
- 2025 Regional Plan
- Data Dissemination
- ABM3 Application
- ABM3 Development Update
- Questions & Discussion

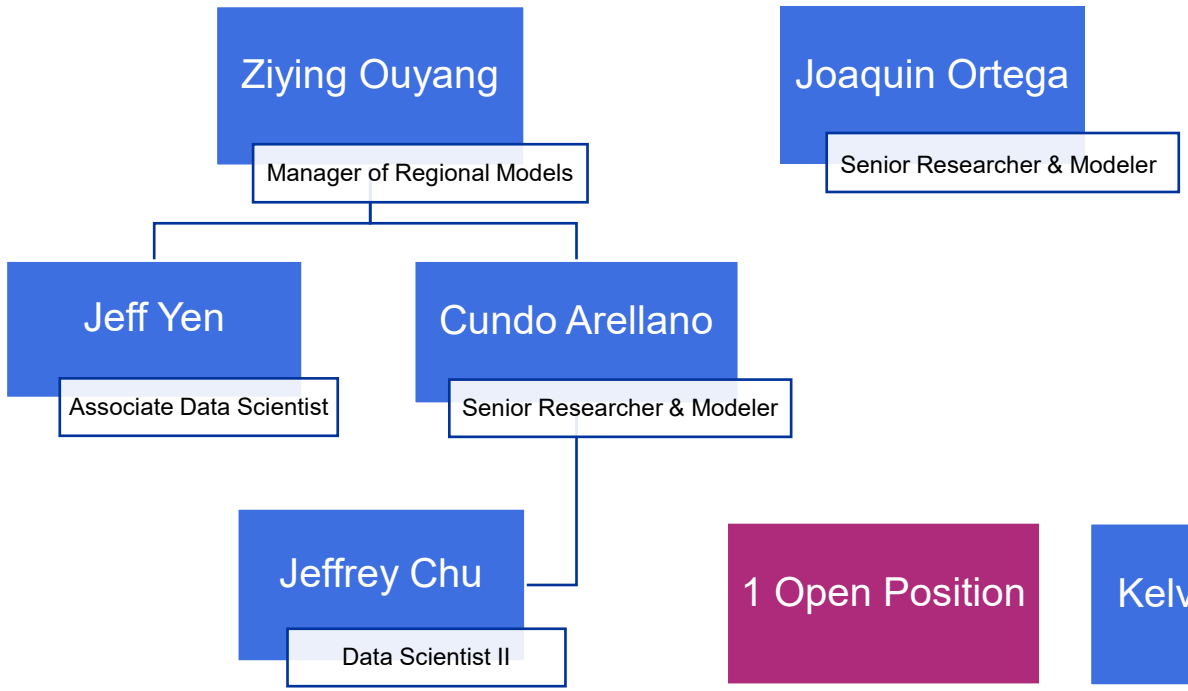
Welcome

- 26th Transportation Modeling Forum
- Grace Miño (Senior Director of Data Science and IT)
  - — Opening Remarks
  - — Data Science Dept. Updates

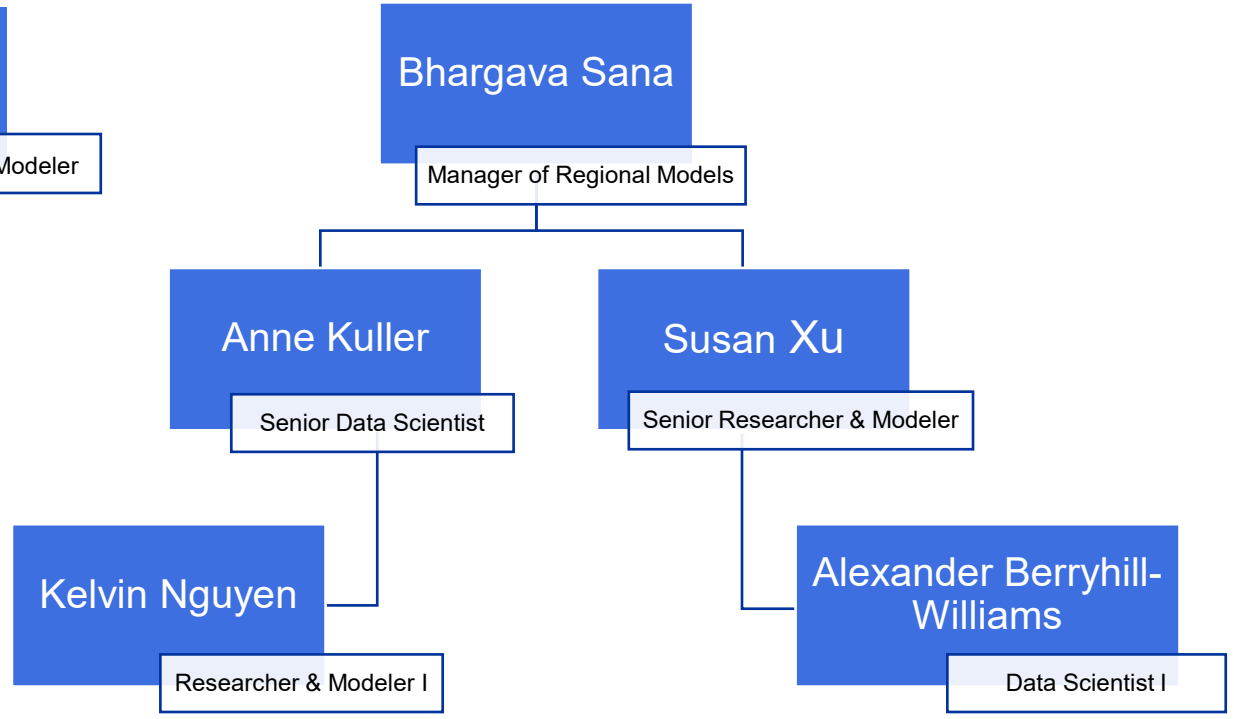


Welcome – Transportation Analysis & Modeling

TAM - Application



TAM - Development



2025 Regional Plan (RP) Sustainable Communities Strategies (SCS)

Ziying Ouyang

2025 RP SCS Adopted

SB375 Greenhouse Gas (GHG) Reduction Target*

Target Year	CARB Target	GHG
2035	19%	19.35%
2050	N/A	19.38%

*SB375 GHG emission reductions are from passenger and measured against the 2005 baseline.

GHG per capita reduction includes on model, off-model and induced demand adjustments

2025 RP Scenario Name Elements

- RP Models

	Final 2025 RP	Amended 2021 RP
ABM Model	ABM3 (ActivitySim)	ABM2+ (CT-RAMP)
ABM Version Release	15.3.1	14.2.2
Base Year	2022	2016
RP Years	2035, 2050	2025, 2035, 2050
Land Use Version	Series 15 Regional Growth forecast	Series 14 Regional Growth forecast

- TAZ & MGRA numbering different between Series 15 and Series 14
  - TAZ = Traffic Analysis Zone, MGRA = Master Geographic Reference Area

Data Dissemination

Jeff Yen

Data Dissemination

- **Transportation Forecast Information Center (TFIC)**
  - High-level traffic forecasts produced by the model at the roadway link level.
- **SB743 VMT Online Map Viewer**
  - Provide an estimate of personal vehicle travel by residents and employees within the San Diego region.
- **Mode Choice Report**
  - An estimate of demographics and travel mode choices for residents within each jurisdiction in the San Diego region.
- SANDAG GitHub Repository
  - SANDAG's Activity-Based Model code repository
- ABM3 Wiki / User Guide
  - A user guide of SANDAG's latest Activity-Based Model.

Search by address/keyword

Functional Class is any of

0 Selected

Model Year is

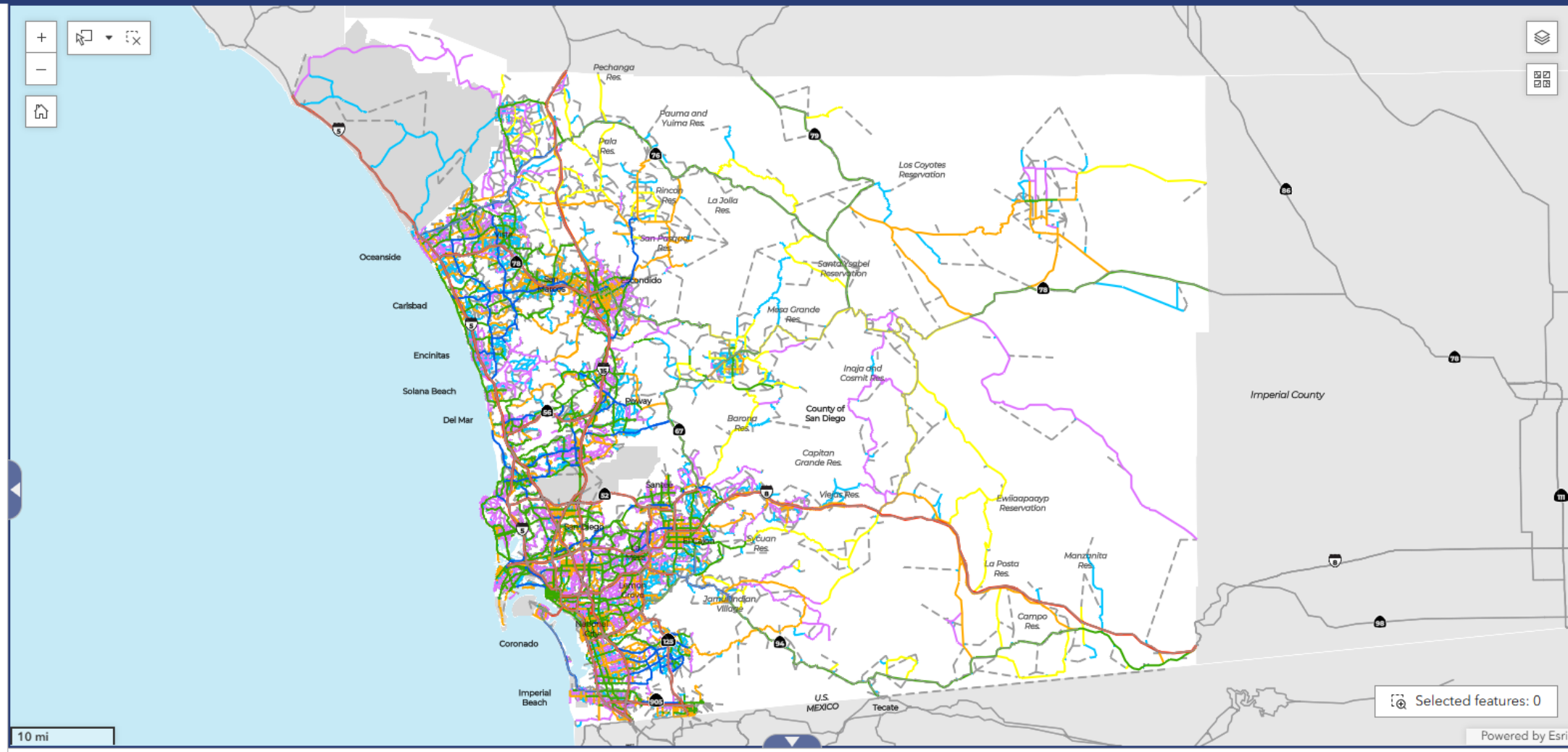
2022

Enter a single TAZ number between 1 and 4947

Search TAZ

TFIC Viewer Map

- 1: Freeway
- 2: Prime Arterial
- 3: Major Arterial
- 4: Collector
- 5: Local Collector
- 6: Rural Collector
- 7: Local (non-circulation elem
- 8: Freeway Connector Ramp
- 9: Local Ramp
- 10: Zone Connector



TFIC Viewer Map | TAZ15

Search

Name	Forecasted Volum...	Functional Class	Posted Speed	Lanes (bi-directional)	Way (1 or 2)	Median Type	Vehicle Miles Trav.
ROSE	8.3	Collector	30	2	2	No Median	435
W 15TH	1.5	Local (non-circulation ele...	25	2	2	No Median	143

Total: 40,720 | Selection: 0

2025 Regional Plan SB743 VMT Map

Disclaimer

Search by keyword

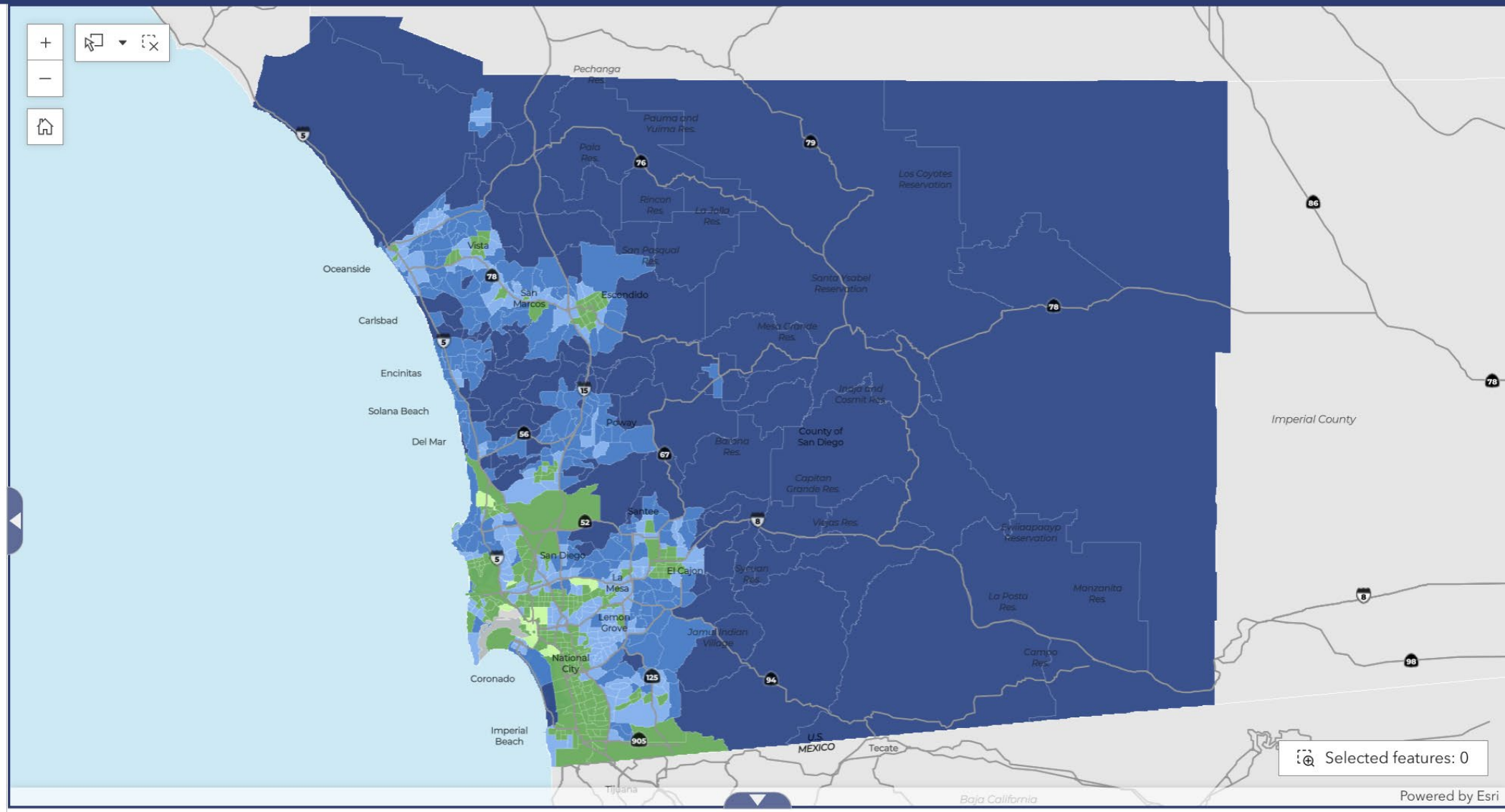
Geography Type is
Census Tract

Model Year is
2022

Resident or Employee VMT
Resident

San Diego Region SB743 Vehicle Miles of Travel (VMT)

- More than 125% of Regional Mean
- 100% to 125% of Regional Mean
- 85% to 100% of Regional Mean
- 50% to 85% of Regional Mean
- Less than 50% of Regional Mean
- Not Enough Data
- No Resident or Employee



San Diego Region SB743 VMT

Year	Geography	Name	Persons	VMT per Capita	Percent of Mean
2022	Census Tract	1	2,878	15.94350338	95.2%

Filters (2)
Clear All

Year: 2022

Jurisdiction: San Diego

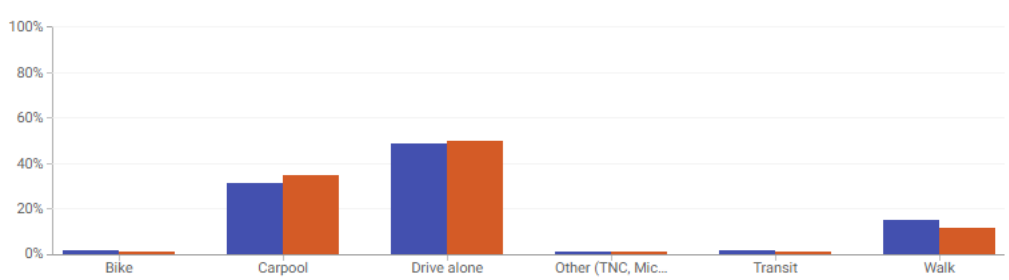
Selected Jurisdiction

Demographics

Metric	Amount
Population	1,374,790
Households	516,414
Employees	1,128,965

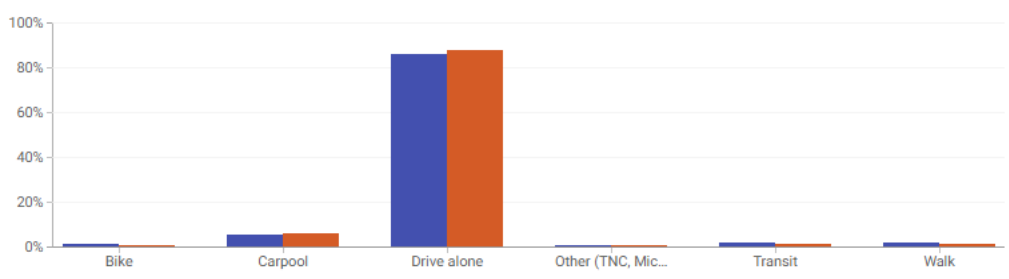
1 to 3 of 3

Daily Mode Choice



Click and drag to pan the chart

Peak Commute Mode Choice



Click and drag to pan the chart

ABM3 Application

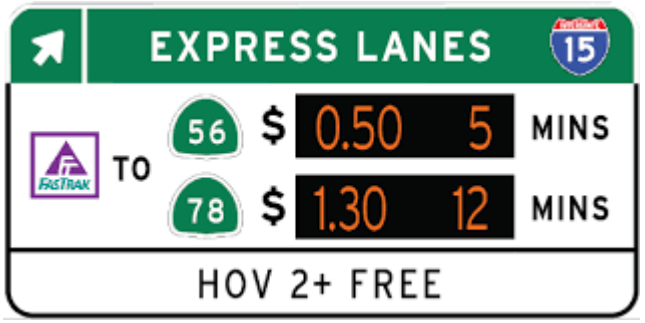
Cundo Arellano

ABM Applications

CoSD Plan: https://www.sandiego.gov/planning/work/general-plan

Otay Mesa: https://www.sandiego.gov/sites/default/files/planning-work-programs.pdf

SAN Logo: https://www.san.org/



I-15 Express Lanes: https://511sd.com/

Requests & Custom Modeling

- Member Agency Modeling Requests
  - Handled by Service Bureau
  - Email car@sandag.org
- ABM3 Wiki
  - Available at: https://sandag.github.io/ABM/
- Off-the-Shelf Data Requests
  - Handled by Data Request Form
  - or data@sandag.org
- Land Use Converter for ABM3
  - Under development

SANDAG 2025 Regional Plan
Modeling Data Request Form

ABM3 Development Update

Bhargava Sana

What's Next for ABM?

- Update San Diego International Airport model
- Convert remaining Java programs
- Improve computational efficiency & runtime
- Upgrade to ActivitySim v1.5.0
- New base year for 2029 RTP
- Enable use of VMs on Azure

Questions & Discussion

Survey Response

- Bi-National Border Transportation Model
  - ABM3 Crossborder Model
- Schedule for providing land use inputs for next model iteration
- Availability of city-level VMT data from ABM3 / 2025 RP

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