

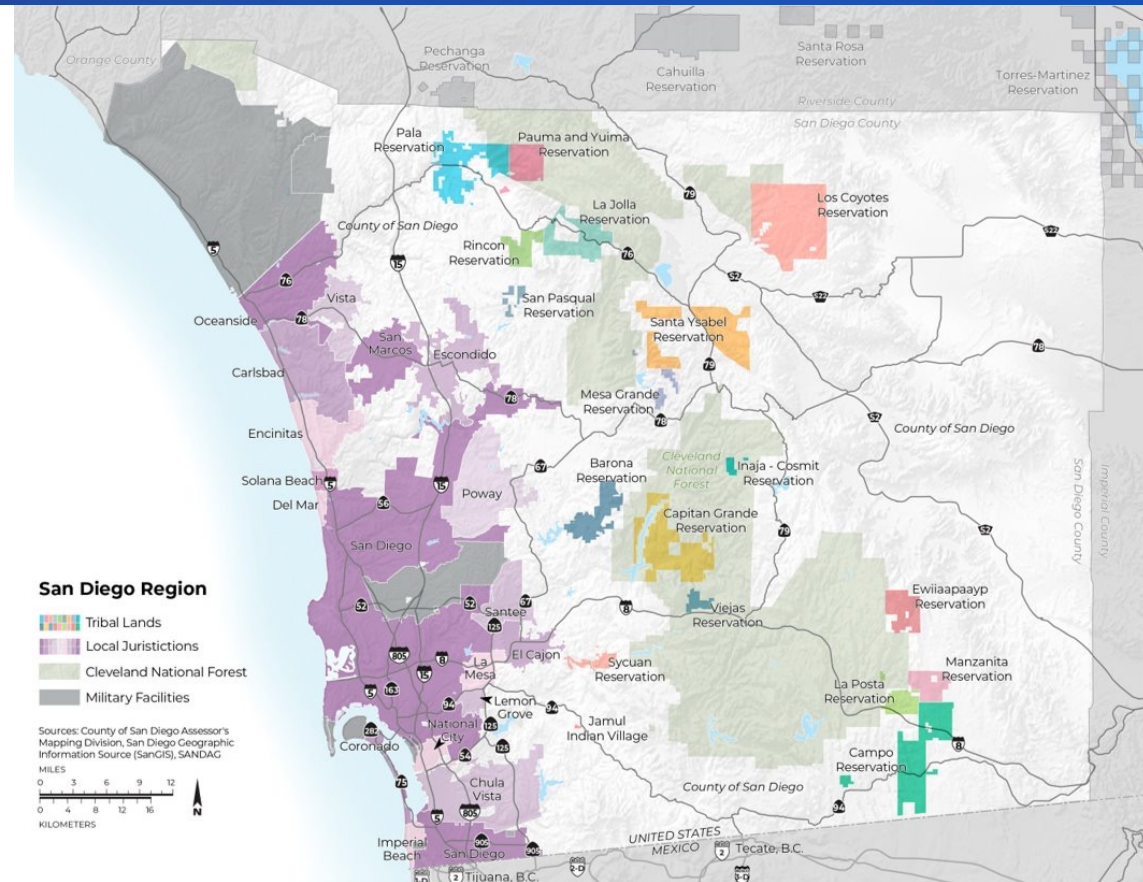


# SANDAG ActivitySim Update

Joe Flood, Senior Modeler and Researcher  
September 14, 2025

# SANDAG Region

- MPO for San Diego County, California
- 4,200 Square Miles  
— 11,000 km<sup>2</sup>
- 3.3 Million People
- 2.1 Million Jobs
- Includes 17 tribal governments



# Why ActivitySim?

- Founding member
- Collaborative Development
- Python codebase
- Flexible and extensible

# Development Timeline

July 2021-  
Dec. 2022

**Software  
conversion**

Some  
components  
added as  
extensions

Spring 2022-  
Spring 2023

**Household  
travel  
survey/  
cleaning**

Summer  
2023

**Estimation**

Fall 2023-  
Winter 2024

**Calibration**

Winter-  
Spring 2024

**Validation  
and  
sensitivity  
testing**

May 2024-  
Present

**Application**



# Release Schedule

**May  
2024**

**Initial ABM3  
release**

**September  
2024**

**Improved  
CVM**

**November  
2024**

**Miscellaneous  
improvements**

**August  
2025**

- **ActivitySim 1.4**
- **Settings manager**
- **Unity catalog**

# Technical Specs and Runtime Requirements

- 1 TB RAM Servers
- Memory is tight, but improvements will be made
- 37-40 hours total runtime
  - Resident model takes 3-4 hours
- 4947 zones
  - 24,333 microzones
- Full completed run is 260-270 GB
  - Emme files: ~190 GB
  - Skims: 40-50 GB
  - Resident outputs: ~18 GB

# Future plans

- Airport Model Updates
  - Airport transit connection study
- Sharrow
- Data Model

# Acknowledgements

## RSG

- Joel Freedman
- David Hensle
- Ali Etezady
- Hannah Carson
- Will Alexander
- Andrew Rohne

# Stay connected with SANDAG



Explore our website  
[SANDAG.org](https://SANDAG.org)



Follow us on social media:  
[@SANDAGregion](#) [@SANDAG](#)



Email: [joe.flood@sandag.org](mailto:joe.flood@sandag.org)

The SANDAG logo, featuring the word "SANDAG" in a bold, stylized font. The letters are primarily pink with blue and white highlights, giving it a modern, dynamic appearance.