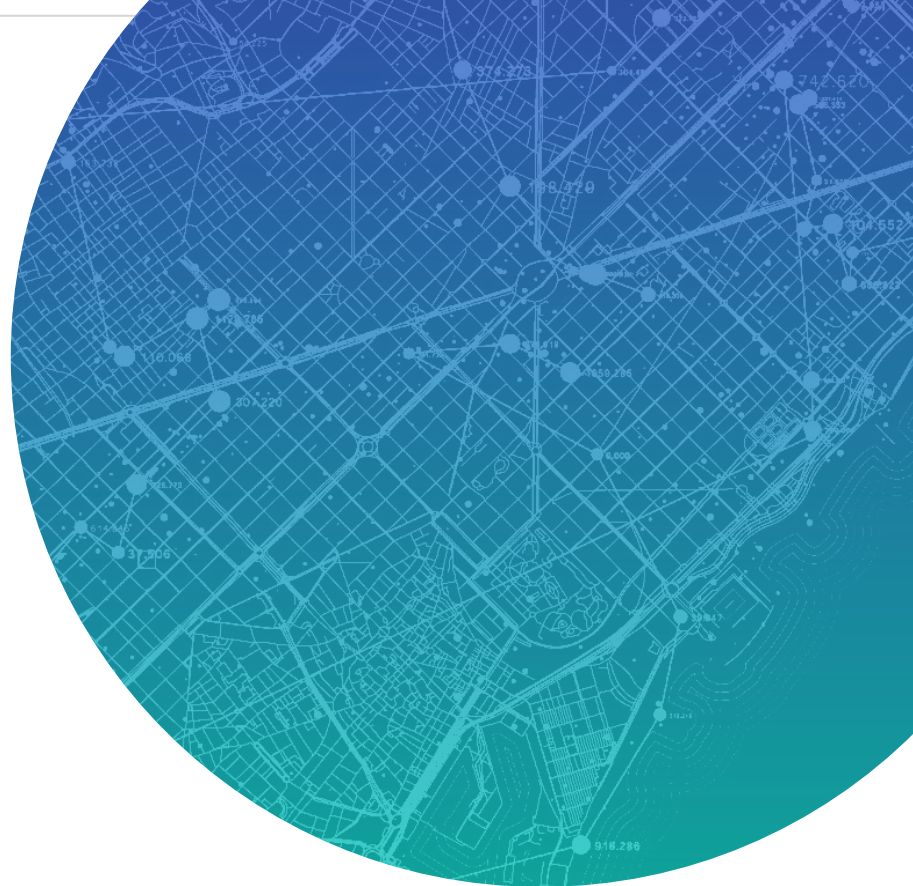




CGIA Community Forum: Overture Maps Foundation

July 7, 2026





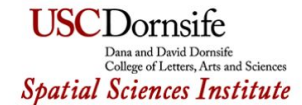
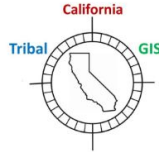
OVERTURE MAPS
FOUNDATION

Welcome

Overture Maps

Open, Interoperable Base Map Data for All of Us

Thank you
to our
Sustaining
Members:





CALIFORNIA GEOGRAPHIC
INFORMATION ASSOCIATION

*Facilitate Coordination, Collaboration, and Advocacy
for California's GIS Community*

Join CGIA



Why Join CGIA?



Advocate for California GIS

CGIA helps shape and support GIS standards, best practices, and legislation affecting California and the Nation. CGIA Awards recognize contributions and achievements of California GIS professionals.

Share best practices

CGIA members can access exclusive content including case studies, contract documents, strategy papers, position descriptions, policies, and standards.

Create peer networks

CGIA members connect with other professionals statewide through updates, events, and meetings focused on statewide issues.

Discover training, education, & jobs

CGIA maintains current education programs and training opportunities, and sponsors seminars and conferences. Find internship and job opportunities.

Become a CGIA Member: <https://cgia.org/about-cgia/membership-options/>



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CALIFORNIA GEOGRAPHIC INFORMATION ASSOCIATION



Join us for the CGIA Awards Social!

We're excited to announce the CGIA Awards, celebrating California's most innovative geospatial projects and ideas!

Join us for an evening of recognition and networking, complete with **complimentary food**, and **drink vouchers** for the first 75 guests.

Scan the QR code or [RSVP](#) and be sure to mark your calendars!



Monday, July 13, 2026



6:00 pm - 8:00 pm



Revel Revel, 868 5th Ave
San Diego, CA 92101



awards@cgia.org

www.cgia.org

CGIA Awards Ceremony at Revel Revel in San Diego

July 13, 2026
6-8 pm PDT

RSVP link is on the [CGIA.org](#) website.

Before We Begin



Recorded

The Presentations will be recorded and posted on YouTube and CGIA.org
<https://www.youtube.com/@calcgia>

Open discussion (last 30 minutes) will not be recorded.



Ask Anytime

Feel free to use the chat for questions and discussion

Notes will be posted on CGIA.org

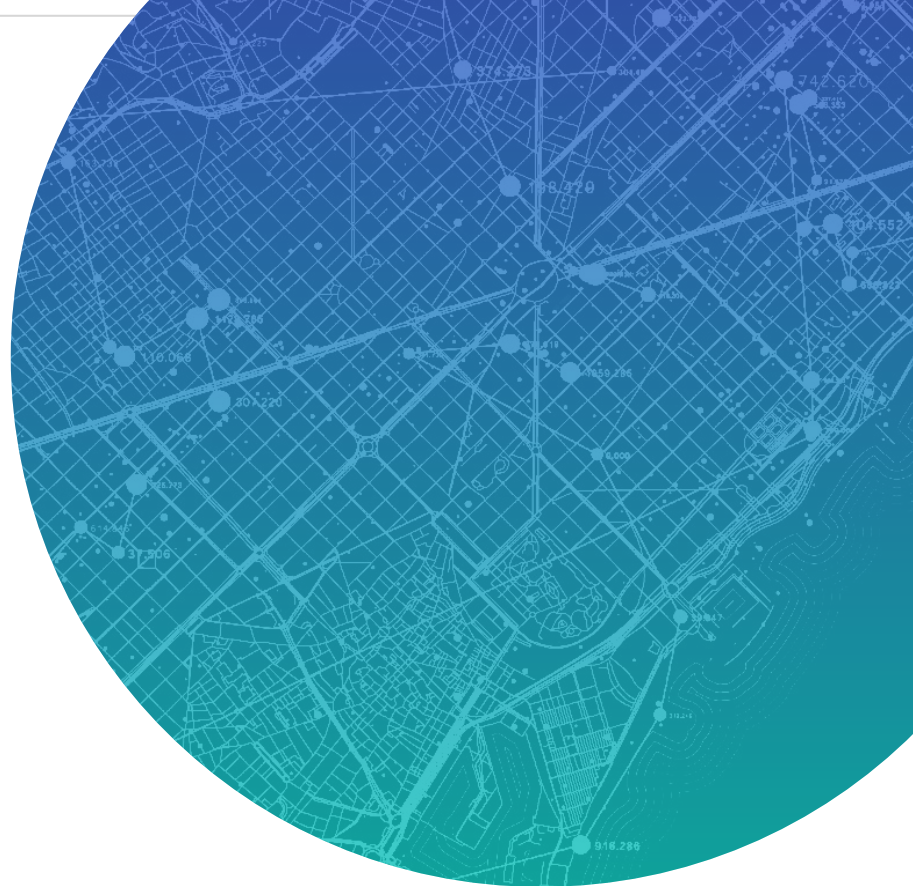


Sound off

Please stay on mute with camera off unless you are speaking

Agenda:

- Welcome
- Overture Overview
- Overture in practice
- Data + Demo
- Q&A + Discussion
- Resources



Will Mortenson

Executive Director for
Overture Maps



Ryan Lopez

Senior IT Analyst, Fresno
County Public Works



Steven Moore

Senior GIS Engineer,
Esri





OVERTURE MAPS
FOUNDATION

Overture Overview

What is Overture Maps?



Founded in 2022 by AWS, Meta, Microsoft, TomTom to create **reliable, easy-to-use, and interoperable open map data**



What's Included?

Map data: The best open data sources (government, crowdsourced, AI generated, ...)

Quality & Validation: Open map data consolidated and validated to achieve market grade quality

ID system: Data tied to IDs for interoperability (e.g. append Overture data with proprietary attributes)



Built For

Companies building geospatial products

Public Sector needing interoperable map data for evidence-based decisions

Open Community developers and data providers participating in shared infrastructure



Governed by

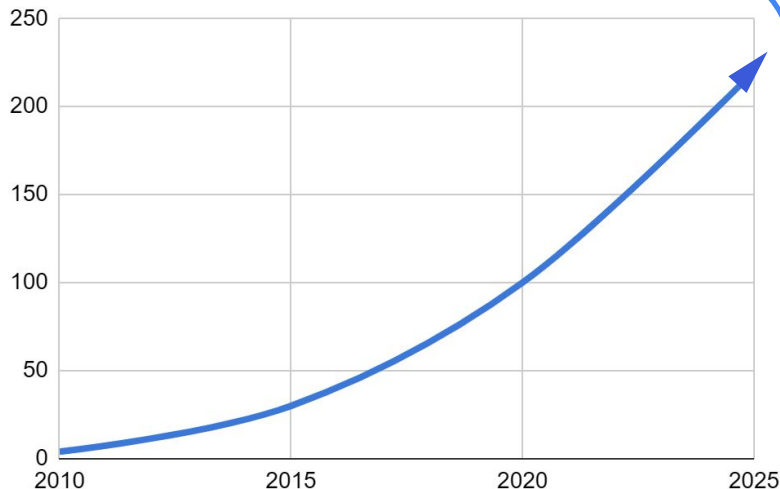
The **Linux Foundation**, ensuring neutral governance and collaboration

The Overture Community



Available Geospatial Data

Example: Available geospatial datasets in data.gov (in thousands)



What's the problem?



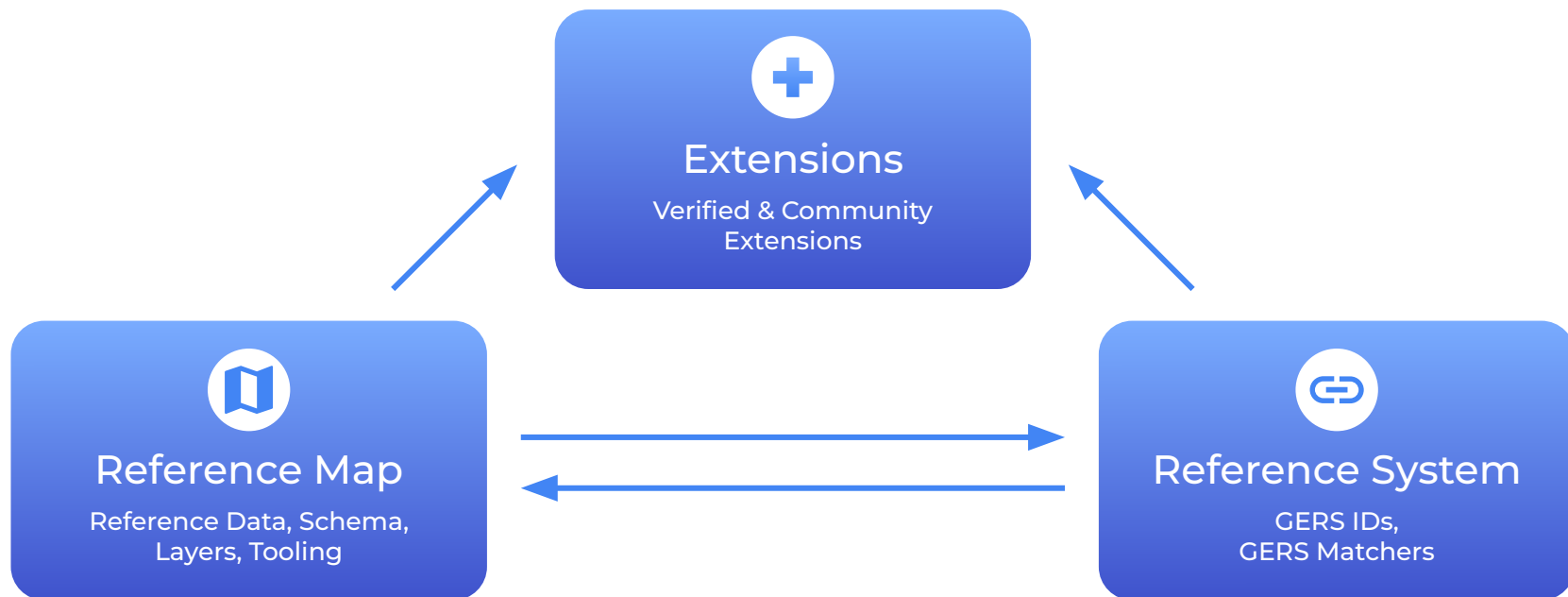
Data Explosion



Conflation Tax



No Single "Best Map"





Transportation

Road networks described by
~760 million connectors & segments



Places

~76 million points of interest (POIs)
like shops, restaurants, landmarks



Divisions

Admin boundaries such as countries,
states, cities in 40+ languages



Buildings

2.6 billion unique
building footprints worldwide



Addresses

~500 million address point entities
across 17 countries

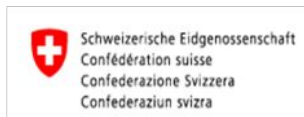
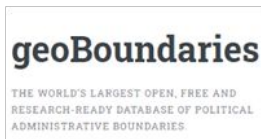


Base


Contextual layers for map visualization
incl. land & water data

Open Data Sources & Partners

Overture produces open data sets that conflate open map data from many sources. These are valuable sources of data and provide coverage and richness that would be impossible to attain otherwise. Overture gratefully acknowledges the work of these organizations in building, aggregating and organizing open map data.



Overture Buildings by Source

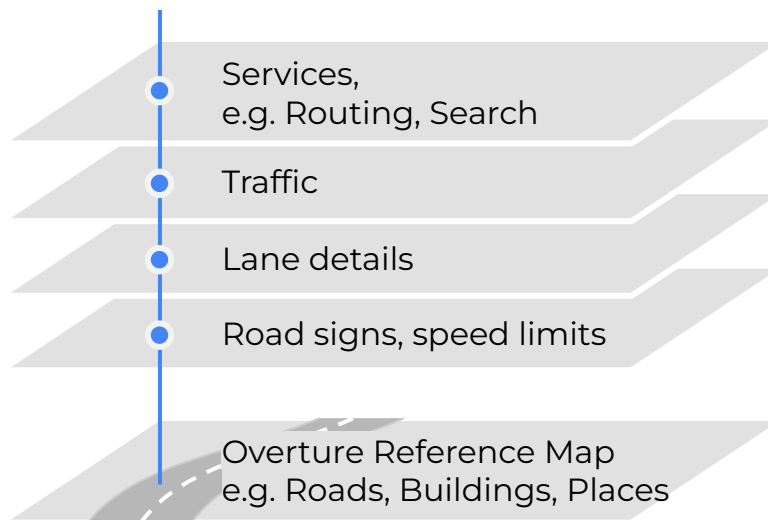


Esri Community Maps
Google Open Buildings
Microsoft ML Buildings
OpenStreetMap

Global Entity Reference System (GERS)

- Universal framework for **structuring & matching** map data across systems
- GERS IDs identify **real world entities** such as road segments
- Simplifies **integrating & exchanging** data layers

GERS ID






Interoperability by Design



Getting Value from Collaboration on Open Data

NOW

-  Open data platforms as a distribution channel
-  Access to private company data from AI, Sensors
-  Collaborative models for pushing data to citizens

NEXT

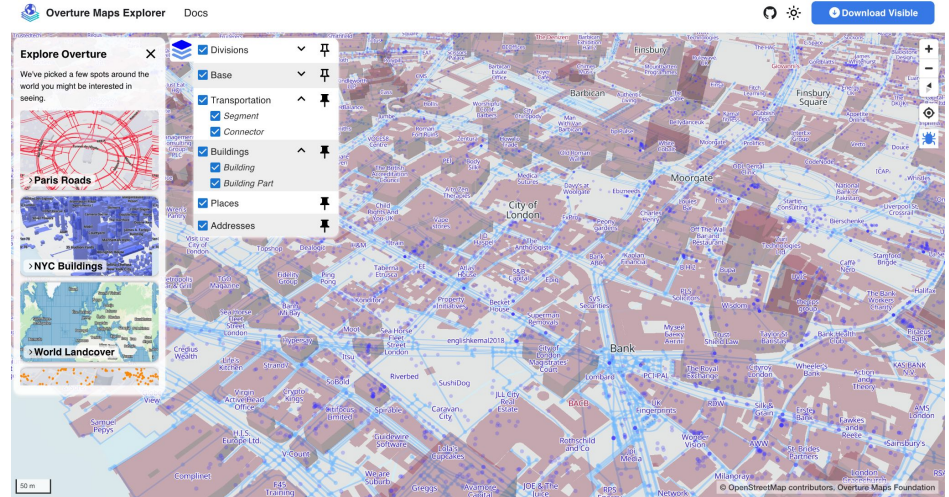
-  Transparent validation checks and results
-  Feedback loops to correct/improve data

More details on the data:

- [Theme definitions table](#)
- [Data explorer](#)

Resources

- [Docs](#)
- [Github](#)



Meet us at Esri UC Booth #233

Join Overture



Web overturemaps.org
GitHub github.com/OvertureMaps
Social [@OvertureMaps](https://twitter.com/OvertureMaps)

Newsletter



Ryan's Section

Fresno County: GERSify Your Data

Local authority, shared IDs, repeatable emergency-response workflows

Keep local authority

County and city datasets remain the source of truth for local operations, maintenance, and public accountability.

Attach stable IDs

GERS creates a durable reference link to the same real-world feature across Overture releases and partner systems.

Build together

Agencies, vendors, and communities can compare, enrich, trace, and improve shared map data without a rip-and-replace.

Link, don't replace: the local dataset stays authoritative while Overture gives it a stable shared reference.

Local government is where the map becomes operational

Authoritative local data

Addresses, roads, structures, parcels, facilities, and local names are maintained by the agencies closest to the ground.

Public safety depends on it

Emergency response, planning, delivery, utilities, and resident services all inherit the same base-map assumptions.

Systems cross boundaries

Local work feeds regional, statewide, national, and commercial systems that rarely use the same schema.

The GIS problem is not that local data is missing. The problem is that every downstream system asks us to translate it again.

The schema burden is bigger than one county

The pressure

- NG911, addressing, transportation, emergency management, and reporting all ask for slightly different translations.
- Small GIS teams have to keep local services moving while also feeding regional and statewide systems.
- Each translation creates another place for geometry, names, or identifiers to drift.

The constraint

- Agreeing on the same real-world feature is often harder than agreeing on the attributes.
- Conflation and schema mapping steal time from data maintenance and field validation.
- The problem shows up across California and national GIS groups, not just Fresno.

GERS links local authority to a shared basemap



The adoption story is trust first

GERSification should show where the match came from, what source records support it, and what changed between releases.

The Garnet Fire made the value concrete

Fresno County used Overture building data around Wishon Village and Dinkey Creek during the Sierra Nevada wildfire analysis.

59,844

acres reported by CAL
FIRE

100%

contained

Oct. 23, 2025

2

local areas reviewed

Wishon + Dinkey Creek

CA

statewide relevance

not Fresno-only

What changed in the room

Overture surfaced structures other available sources missed, giving responders and analysts a broader, traceable starting inventory.

The output stayed reviewable and traceable

The workbook was not just a map graphic. It preserved counts, source datasets, source record IDs, and the Overture release context.

221

building records

147

Dinkey Creek
Campground

74

Wishon Village

2025

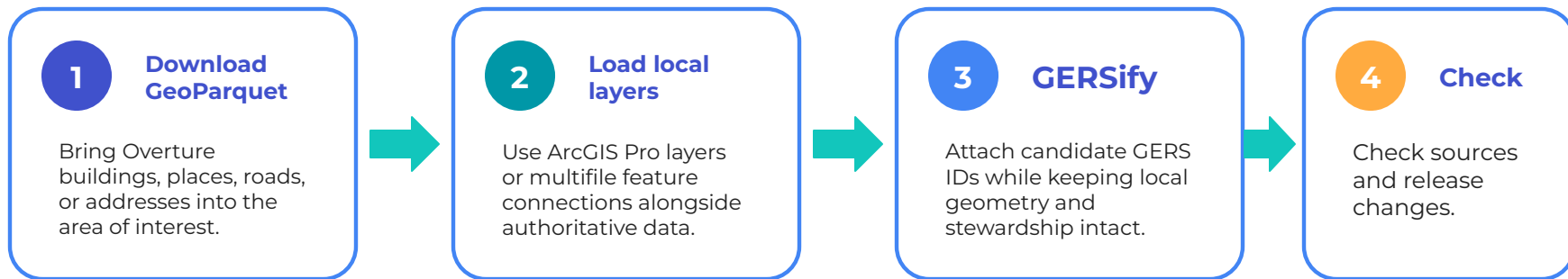
release context

2025-08-20.1

Source trace in the table

184 records traced to OpenStreetMap and 37 to Microsoft ML Buildings, with record IDs retained for review and follow-up.

ArcGIS Pro turns this into a repeatable workflow



No rip-and-replace

The add-in should make trust visible: match confidence, source records, before/after release comparisons, and cartography that can be repeated.

Public agencies should help steer the basemap we build on

Overture gets stronger when local-government needs are represented early.

TRY

Use Overture in one real local workflow

Explore Overture data in your existing stack. Match one authoritative layer to GERS. Compare what connects across releases.

SHAPE

Bring emergency-response, business, and resident needs

Join the community, test assumptions, and help guide the shared basemap public agencies can continue building upon.

Steve's Section



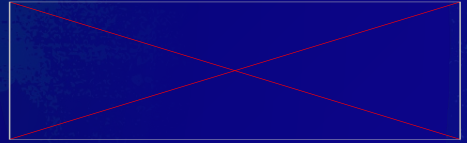
Overture and Esri

Steve Moore

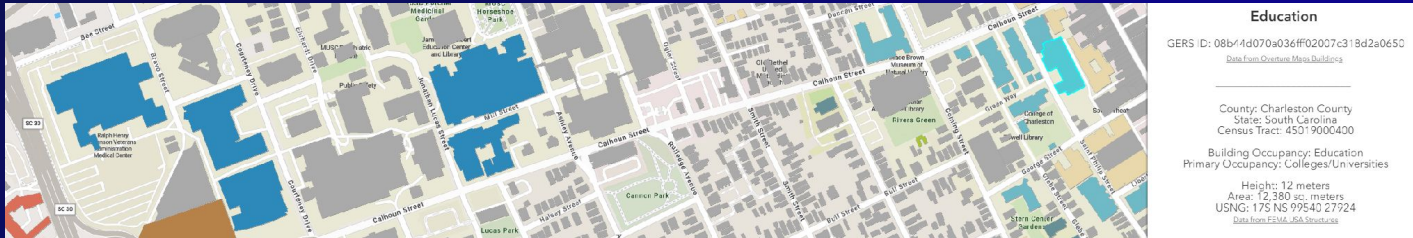
2026 ESRI USER CONFERENCE

Overture Maps Foundation

Multi-member open data initiative designed to support map service developers



- **Global Open Map Data Initiative launched in Dec 2022**
 - Founded by AWS, Meta, Microsoft and TomTom (Esri joined in Feb 2023)
 - Several more members joined since (Maxar(Vantor), Nearmap, Safegraph, Uber)
 - Designed for developers who build map services or use geospatial data
- **Collection of Map Data Layers now available (Mostly in GA)**
 - Buildings, transportation, boundaries, places, base, and address themes
 - Data provided in a stable schema, each entity has a persistent global ID (GERS)
 - Data released as geoparquet



Esri Goals with Overture

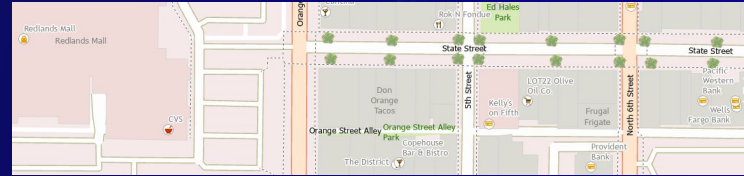
- Help create a global open database that supports Esri and our User Community
 - Base data for visualization
 - Addresses, Places for geocoding
 - Feature data for analysis
- Help integrate authoritative GIS data into Open Data used by many orgs
 - Buildings, addresses, roads
- Expand our partnerships with other member companies

Overture Data in ArcGIS

Monthly updates

•2D Basemaps

- Esri Hosted Vector Tile Basemap
- Currently supports 11 Map Styles



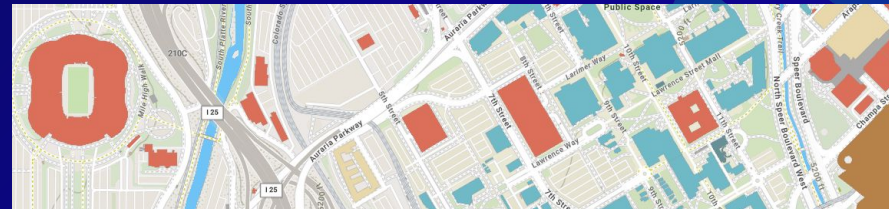
•3D Basemaps

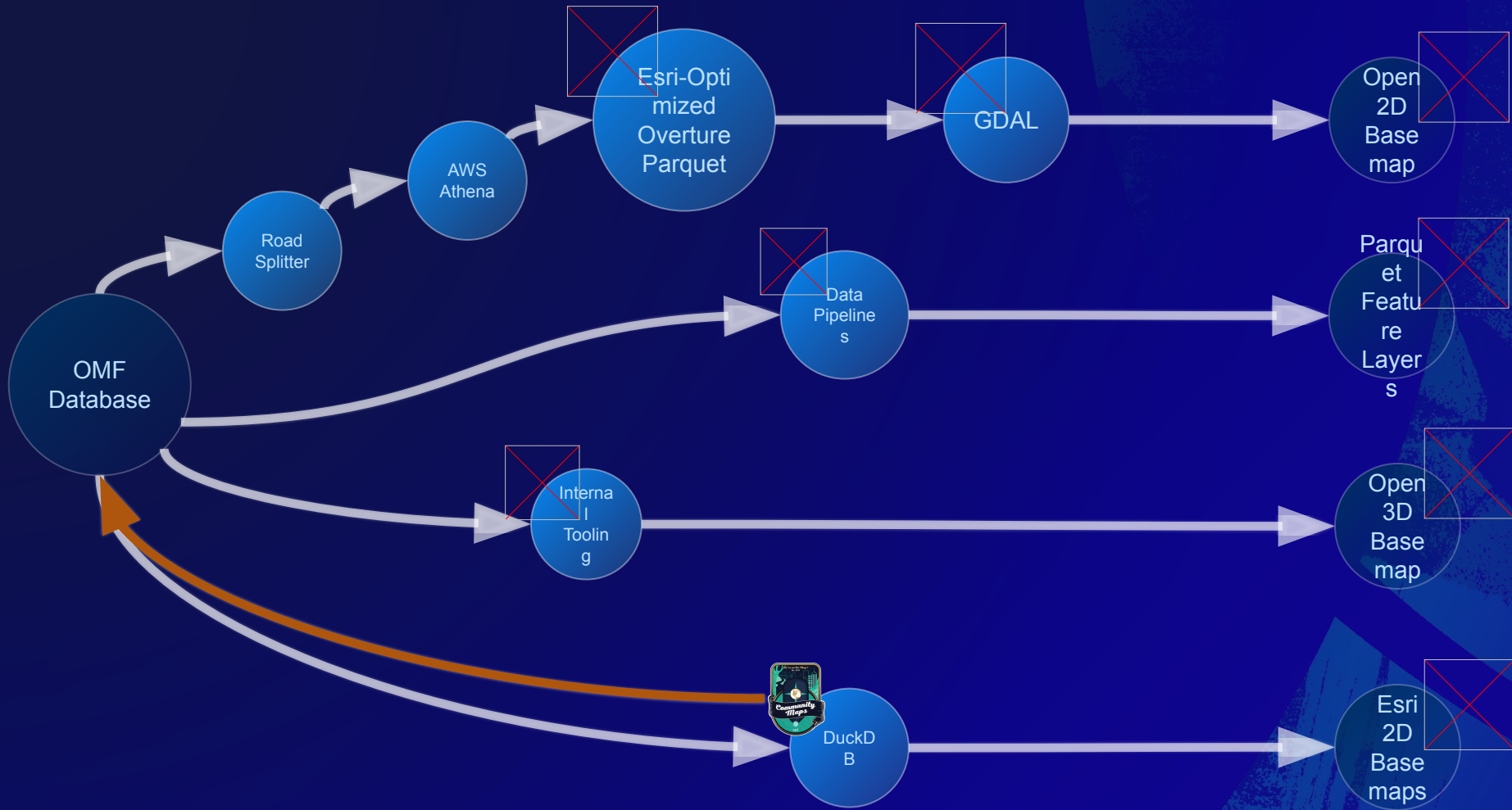
- Esri Hosted Scene Layers to Support 3D Basemaps
 - New 3D Buildings layer
 - New 3D Trees and Labels layers



•Parquet Feature Layers

- Esri Hosted Layers for Key Themes & AOs
 - e.g. Global places, regional buildings/roads
- User Hosted Layers for their Priority AOs



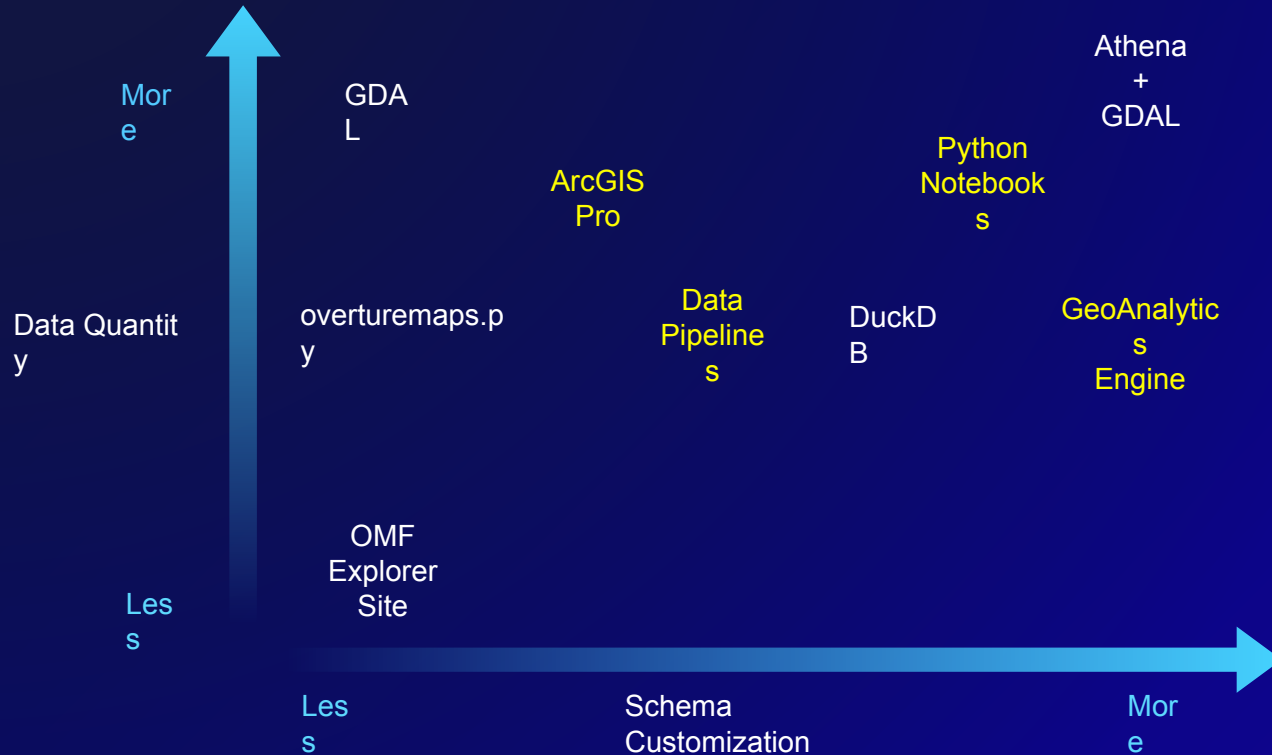


Enhancing Overture with Esri User Community Data

Authoritative data from Esri Community Maps Contributors

- ECM data is being contributed to Overture
 - Over 17m buildings from 240 contributors
- Contributing translations from Esri's localization team
 - Localized place names in Esri's 40 supported languages
- Buildings datasets from distributor customers
 - IGN Spain – Esri Spain
 - City of Vancouver – Esri Canada

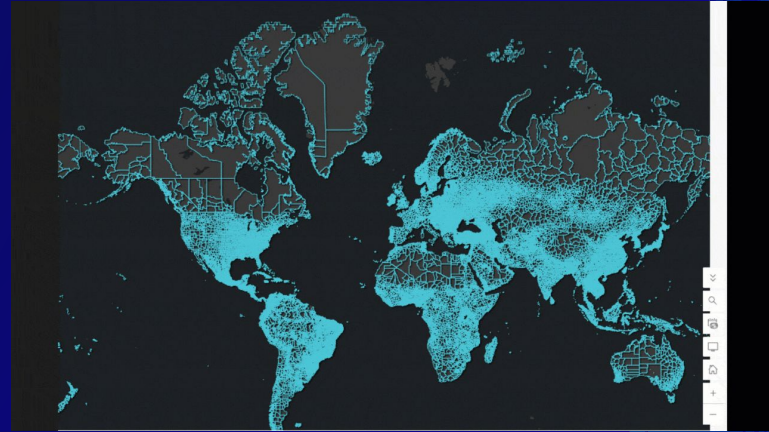
Functionality Matrix



Parquet Feature Layers

New ArcGIS Layer type

- Brings Parquet performance to maps and apps
 - Fast queries of only the data you need
 - Scales very well with large datasets
- Currently in Beta
 - Supported in JSAPI and ArcGIS Online
- Use Data Pipelines to create
 - Outputs an optimized version of geoparquet
 - Multi-scale geometry for display performance



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FACILITATING COORDINATION, COLLABORATION, AND ADVOCACY FOR CALIFORNIA'S GIS COMMUNITY

Grateful for our Speakers! & Thank you for attending!

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UC SANTA BARBARA
Geography



USC Dornsife
Data and Health Through
College of Letters, Arts and Sciences
Spatial Sciences Institute



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Thank you

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