



Fast-Track Infrastructure and Development Projects

A Geographic Approach to Permitting

Spatial Analytics Improves Decision-Making
for Asset Lifecycle Management



The Need for Modern Permitting

Permitting, licensing, and right-of-way management are common workflows that bottleneck community development and construction projects. And with more federal funding made available to local governments, pressure is increasing for them to invest wisely in community improvements — from expanding broadband to replacing lead pipes, building affordable housing, and much more. Communities urgently need to streamline the processes that facilitate these investment projects, or they risk being left behind.

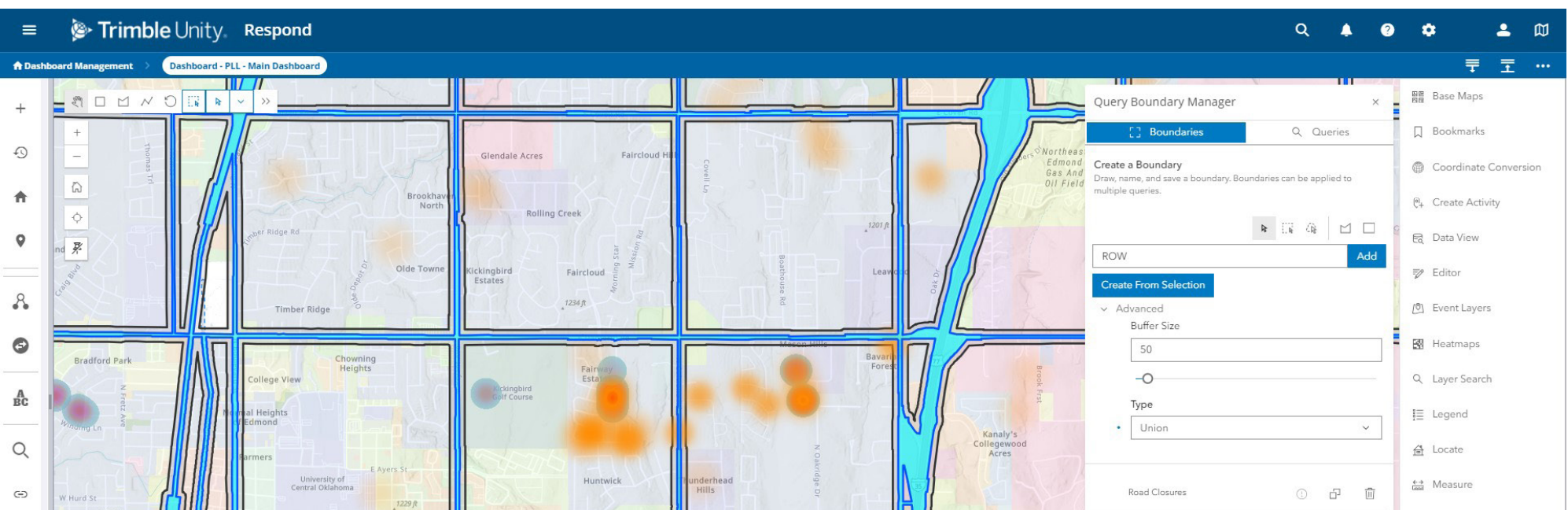


How effectively your community can approve a permit or license for an incoming investment and capitalize on it is a clear indicator to outside businesses and residents whether they should move into your community and continue to invest. It can be the differentiator for attracting the resources your community needs to continue to grow, bring jobs, and provide amenities that residents and businesses need.

Why a Geographic Approach?

At the core of permitting, licensing, right-of-way management, and related activities are questions about location. How often do infrastructure improvements take too long to occur in a certain part of your community? Where would be the best place to expand broadband infrastructure? How often does a major street get ripped up multiple times when coordinated efforts could have occurred simultaneously?

A geographic information system (GIS) can provide location information to help answer these questions. A GIS is the mission-critical, enterprise IT business system designed to turn location data into insights that drive better decisions and help deliver significant business value. Harnessing the insights from location analytics can improve process efficiency for permitting, licensing, and land management, helping to accelerate community development outcomes and the resulting benefits to society.



Esri and Trimble Leading the Way

To advance community development through streamlined processes and data-driven decision-making, it is essential to integrate two foundational systems: permitting and GIS. This integration helps organizations evolve from paper-based processes using siloed data to digital workflows using centralized, location-based data. The integration of these systems provides visibility into location and asset data as well as spatial analytics that enable a holistic understanding of the permitting process and its challenges. Through seamless integration, this geographic approach enables advanced mapping, visualization, analysis, and modeling that results in more efficient and informed decisions.

Industry leaders Esri® and Trimble® have joined forces to deliver the only GIS-centric permitting system that empowers today's organizations to take this game-changing geographic approach to permitting. As the global market leader in GIS, location intelligence, and mapping, Esri provides the world's most powerful GIS software platform, ArcGIS®. Since 1969, Esri has supported users with geographic science and analytics to enable a location-informed approach to solving critical problems across industries worldwide.



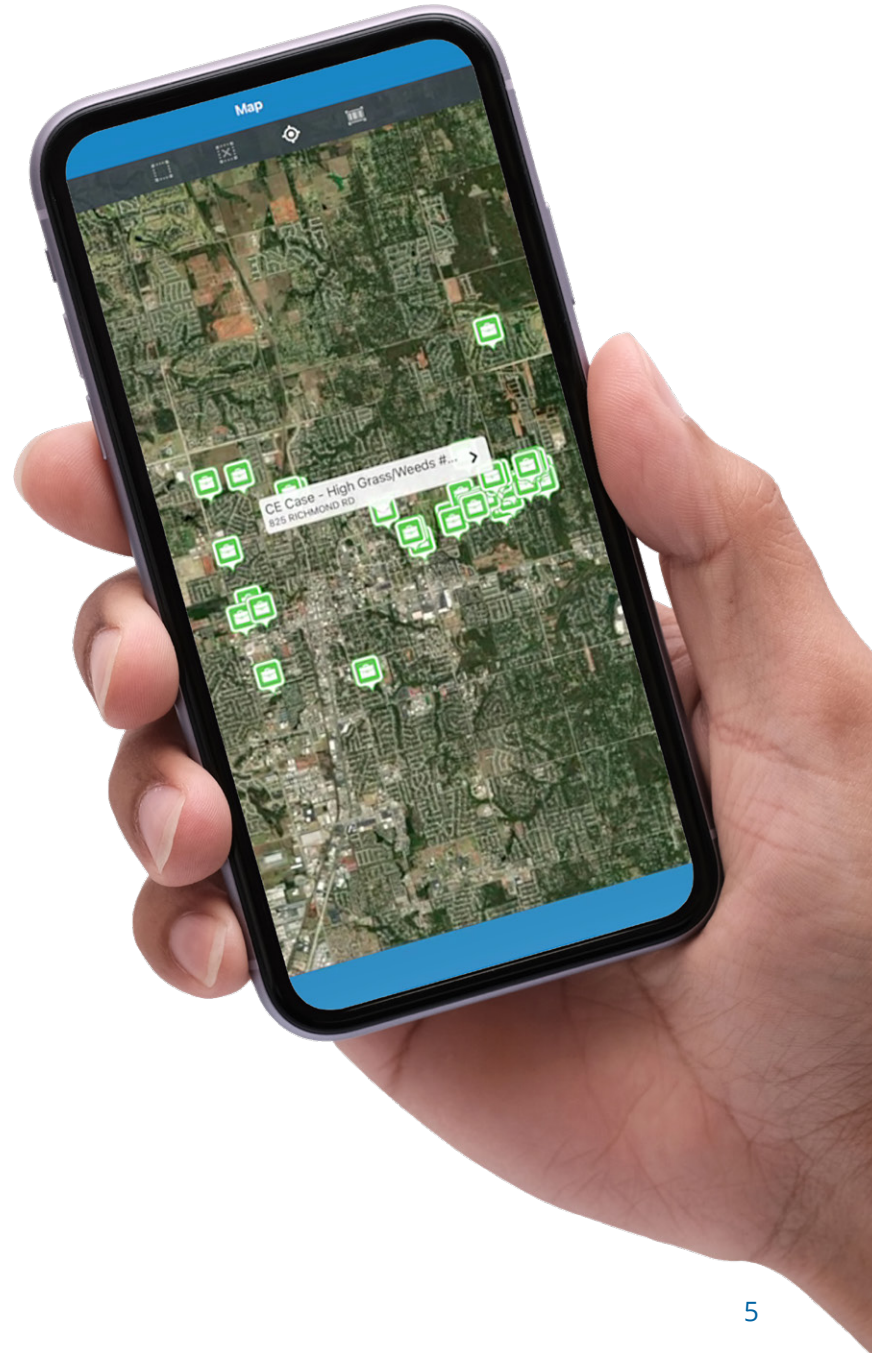
City of Rexburg

GIS-Centric Permitting Helps Build a Stronger Community

Rexburg, Idaho, a small but bustling college community, has experienced significant growth in recent years. To keep pace with community development and improve permitting processes, the City of Rexburg adopted **Esri's ArcGIS®** for spatial analysis, along with **Trimble Unity Permit** (formerly Trimble Cityworks PLL) — a holistic digital solution for permitting, licensing, and land management.

Before implementing the Trimble solution, the city managed permitting largely through paper-based workflows, which led to data silos, communication gaps, and processing delays. The transition to a GIS-centric digital permitting solution helped Rexburg's teams become more efficient and effective by sharing information seamlessly in real time, both in the office and in the field.

The City of Rexburg now has a streamlined system for managing permitting, applications, inspections, plan reviews, and community engagement. This modernized approach has boosted productivity, transparency, and public trust. It is also supporting sustainable growth and development.



CASE STUDY: CITY OF REXBURG

Benefits of GIS-Centric Digital Workflows

GIS technology is foundational to Rexburg's permitting, application, and inspection processes. Using a GIS-centric approach, the city can analyze location-based data on historical and current licenses, applications, and inspections.

"We have an expansive source of historical location-based permitting data that we can easily access, reference and analyze to understand trends and make improvements," said Faron Young, Asset Management System Administrator at the City of Rexburg. "We can pull up data on everything done in a specified area to understand a property's history and existing conditions, such as conditional use permits, sunset clauses, or restrictive lot covenants. Without this easily accessible map layer, it would require a great deal of research to uncover the information."

► **Read the full story: [Digital Permitting: Centralizing Asset Data to Build a Stronger Community](#)**

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"Moving away from paper-based workflows was critical in creating the best experience possible for our residents and contractors, supporting our staff, eliminating confusion, and streamlining our workflows."

Faron Young, Asset Management System Administrator, City of Rexburg



CASE STUDY

Salt Lake City Department of Public Utilities

Reaping the Benefits of GIS-Centric Permitting and Asset Management

Salt Lake City Department of Public Utilities (SLCDPU) provides essential services to Salt Lake City and the surrounding areas. The department manages and operates an intricate infrastructure network composed of 1,324 miles of water distribution lines, 679 miles of sewage networks, and 360 miles of stormwater assets. SLCDPU is also responsible for a range of permitting activities, from inspections and planning to community development and capital improvement projects.

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“Our use of Trimble solutions and Esri’s ArcGIS has significantly enhanced departmental visibility and communication.”

**Tammy Wambeam, GIS/IT Administrator,
Salt Lake City Department of Public Utilities**



CASE STUDY: SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES

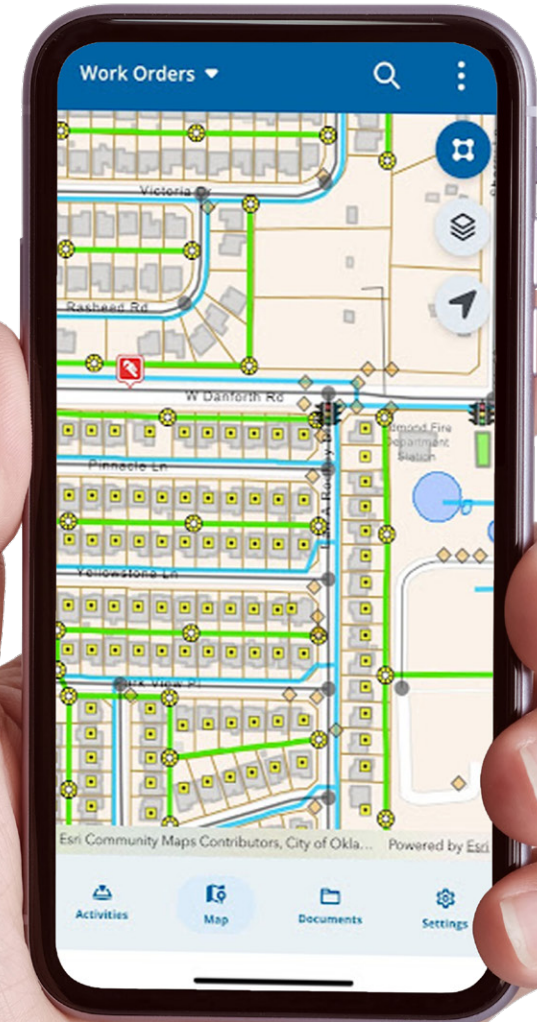
A GIS-Centric Approach Drives Connected Insights

To address Salt Lake City's rapid expansion, increasing community development projects, ongoing water conservation efforts, and the general challenges of maintaining infrastructure in a uniquely complex service area, SLCDPU underwent a digital transformation to modernize its previously paper-based permitting and community development workflows using a GIS-centric approach.

By adopting multiple **Trimble solutions** — including the software that powers **Trimble Unity Permit** — to complement its long-term use of **Esri's ArcGIS®**, SLCDPU is able to use GIS-centric workflows to ensure efficient services to the community while supporting sustainable growth and development. The GIS-centric approach has significantly enhanced departmental visibility, streamlined permitting and capital improvement processes, and enabled the visualization and tracking of assets and work activities using Trimble mobile technology.

Leveraging Trimble solutions alongside Esri's ArcGIS has helped create an end-to-end **connected data environment** and a comprehensive system of record that supports a proactive, cost-saving approach to managing assets across the entire lifecycle, from permitting and construction to ongoing operation and maintenance.

► **Read the full story: Salt Lake City Department of Public Utilities: Reaping the Benefits of Digitized Permitting and Asset Management**

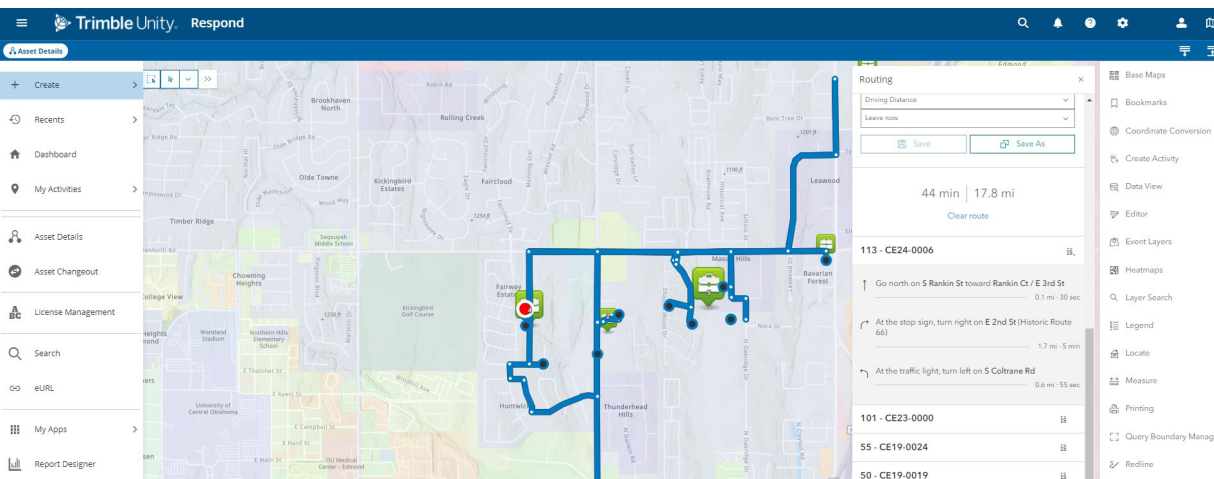


Trimble Unity Permit, Built on Esri's ArcGIS

Trimble Unity Permit, powered by Trimble Cityworks, is the leading solution for permitting, licensing, and land management built on Esri's ArcGIS®, the world's most powerful GIS software.

Trimble Unity Permit simplifies processes from start to finish with capabilities to:

- Consolidate disparate systems of data (e.g., asset, land, permitting, and more) into one system
- Minimize the time it takes to proceed from permitting to a shovel-ready project by automating tasks
- Ensure communities consider all factors (e.g., environmental, health, and safety impacts) that improve decision-making.
- **Allow users to attach a permit or license to any location, not just addresses or land parcels.**
- Aid in disaster response by providing real-time infrastructure data when most needed.
- Deliver insights and spatial analyses for better future planning.
- Offer self-service apps that applicants can use to submit, pay, and track applications online.

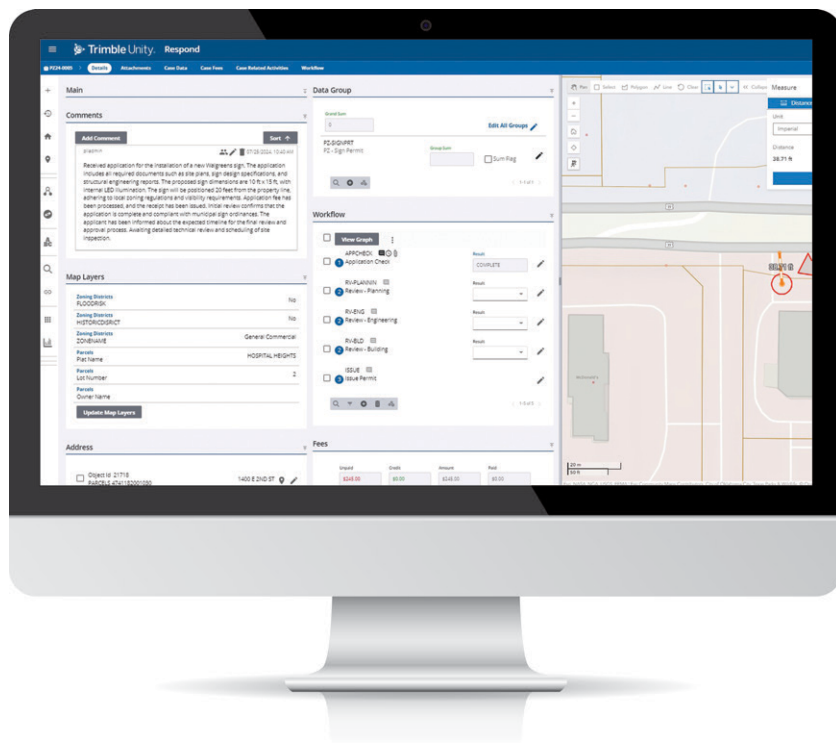


Journal Pre-proof

In addition, when different systems are used for related tasks such as permitting, licensing, inspections, asset management and maintenance, the result is an inevitable loss of efficiency because information cannot be readily shared from one system to another. Data gets lost or duplicated, or is simply inaccessible by the teams that need it. Information gaps and communication delays result in stalled projects, rework, and higher operational costs.

A laptop screen displays a comprehensive data dashboard. The top left features a 'Active Projects' section with a large '89' and a bar chart showing 'Submitted via Public Portal' with 'False' and 'True' categories. Below this is a 'Active Cases' map showing red location markers. The top right has a bar chart for 'Open Cases by Status' with categories like 'APPROVED', 'BLANKET', 'SOLICIT', and 'PENDING'. The bottom right is a large map with a heatmap overlay. A central table, 'All Cases by Type', lists various case types and their counts. The laptop is on a wooden desk with a spiral notebook and a pen nearby.

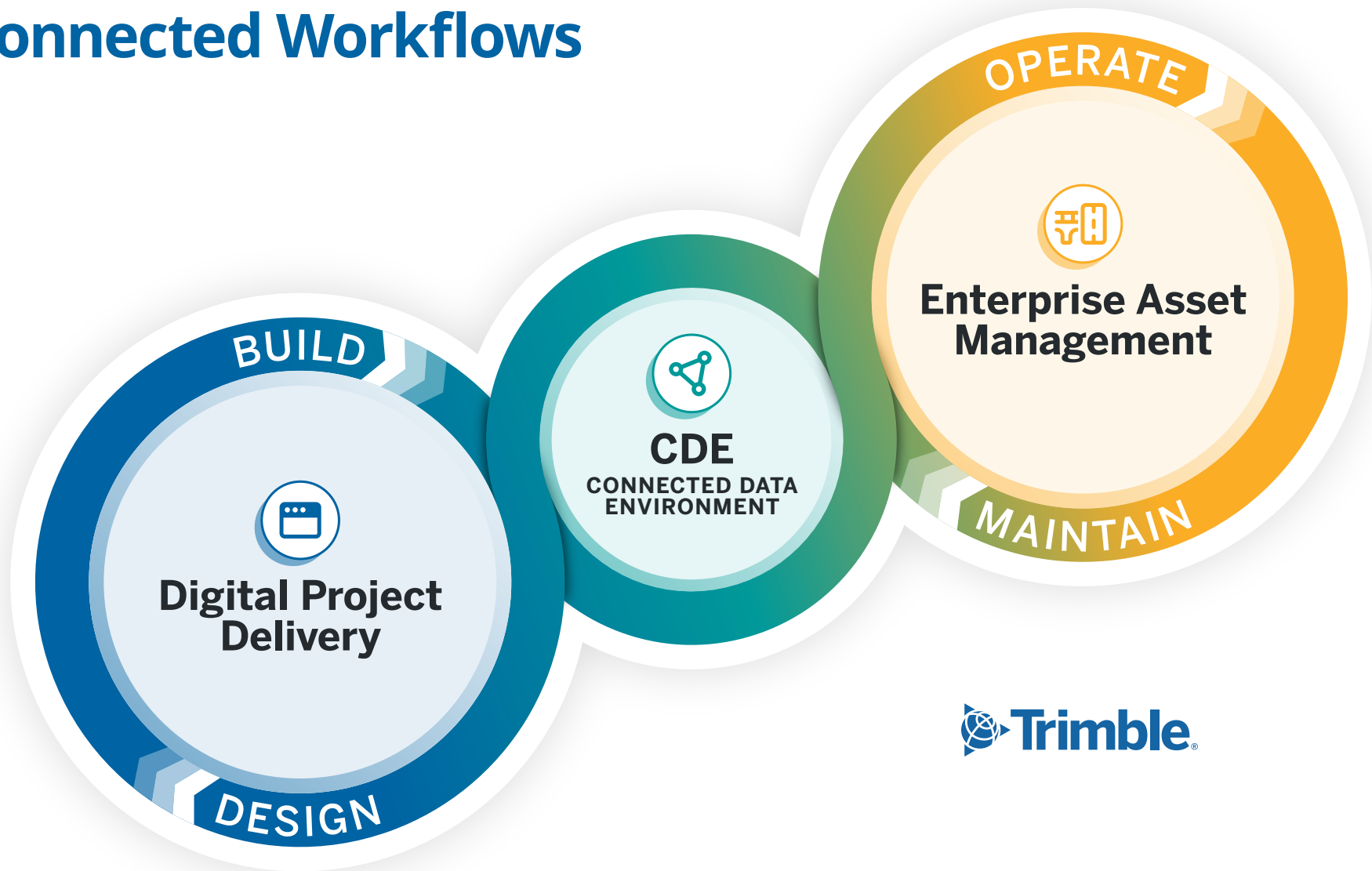
GIS Data Across the Asset Lifecycle



Trimble Unity Permit solves the problem of disconnected data because it is built directly on Esri's ArcGIS, providing a single, reliable GIS-centric system that supports permitting, licensing, and land management tasks. In addition, this centralized GIS database supports all other functions across the asset lifecycle through the **Trimble Unity** suite. That means teams can use the same, reliable GIS data to manage their assets from planning, design and construction through operations and maintenance.

This holistic approach to asset lifecycle management, made possible by GIS-connected workflows, provides the transparency that drives well-informed decision-making at every lifecycle phase. In turn, data-driven decisions help improve efficiency, performance, and cost savings across the lifecycle.

Using GIS and Connected Workflows





Start Your Digital Transformation

As localities compete for community investment opportunities, residents and businesses expect their local government to have the technology and processes to support efficient, sustainable development. A geographic approach to permitting, licensing, and asset management using Esri and Trimble solutions helps agencies optimize processes, make data-driven decisions, and improve service delivery.

To start your organization's digital transformation, **contact Trimble to request a demo or chat with a Trimble team member.**



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