

One Address, One Truth: The Invisible Infrastructure Behind Fairer and Better Public Service Delivery

PROJECT: WAMAS Modernization

CATEGORY: Data Management, Analytics & Visualization

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EXECUTIVE SUMMARY

A mistyped address might seem trivial—but in Washington state, it once meant lost education funding, inaccurate tax bills, and slower emergency response. The **Washington Managed Addressing Services** (WAMAS) initiative tackled this foundational flaw by treating accurate address data as critical data infrastructure and modernizing its enterprise-grade platform for address standardization, validation, and geocoding across state agencies.

WAMAS is now the quiet force unifying Washington's government services. Within the last biennium, WAMAS has matured into a core data service adopted by 40+ agencies, deeply integrated across agencies and leveraging contributions from local governments. WAMAS now offers a single, authoritative address reference layer through Washington's secure government network (SGN), allowing state agencies to correct and unify mismatched address records. The result: lower costs, better interagency coordination, and fairer, more effective public service delivery for residents.

What sets WAMAS apart is its **deep integration across jurisdictions**. Local governments—especially dispatch centers—supply ground-truth address data into the system, enhancing its accuracy and making it a shared public asset. This collaboration ensures that WAMAS benefits from and reinforces the work already done at the local level, while allowing state agencies to build smarter services on top of consistent, validated data.

WAMAS is much more than a data cleanup tool—it's invisible data infrastructure with visible impact:

- \$306 million in federal Title I funds were accurately distributed to school districts based on reliable student address data, ensuring support for disadvantaged children.
- **During COVID-19**, WAMAS enabled faster inter-agency coordination to protect vulnerable populations—connecting data from the Department of Health and Department of Social and Human Services and reducing the need to share personal identifying information.
- **Residents were taxed fairly** by fixing misassigned property locations—ensuring agencies and local governments used the correct jurisdiction for fees and taxes.
- **Reduces IT waste and redundancy** by eliminating the need for multiple address sources and geocoding services—streamlining procurement and integration.
- One correction benefits all, thanks to WAMAS's centralized model. A fix in one agency ripples through the ecosystem, improving data quality statewide.

PROJECT DESCRIPTION

What problem or opportunity does the project address?

Inconsistent address data across agencies led to costly inefficiencies, poor data quality, and uneven service delivery. Agencies separately purchased address correction tools and maintained incompatible datasets, resulting in overcharges for taxes, mismatches in service eligibility, and missed opportunities for federal funding.

The modernization of WAMAS in the past two years addressed this by creating a **centrally managed**, **authoritative address system**, reducing duplication and improving the accuracy of resident-level data

across government systems. The initiative enabled state programs to more confidently link and analyze data across silos—while protecting privacy—and provide consistent, location-based services to residents.

Why does it matter?

- \$306 million in Title I education funds depended on accurate address data for school-age children living in poverty.
- Misassigned addresses caused residents to pay incorrect vehicle or property taxes year after year.
- **During COVID-19**, the lack of a consistent address standard hindered outbreak response coordination in long-term care facilities.

Failure to act would have continued to burden residents, erode interagency trust, and increase IT spend. The business case for a shared address service was strong: improve service delivery, reduce waste, and increase data accuracy for critical public functions.

What makes it different?

WAMAS is not just a technical tool—it is a transformative, enterprise-grade **shared data service** built for **governance**, **sustainability**, **and integration** across the public safety and emergency management ecosystem. Unlike isolated or one-off data-cleaning efforts, WAMAS provides a continuously updated, authoritative address intelligence platform that supports coordinated decision-making at scale.

What sets WAMAS apart:

- Authoritative and Unmatched in Accuracy: WAMAS sets the gold standard for address data in
 Washington. It ingests high-fidelity information directly from local 911 dispatch systems and GIS
 teams, ensuring accuracy and recency. As of 2024, the system covers 90% of known
 Washington addresses, with updates typically completed within 48 hours for 911—a level of
 freshness and completeness unmatched by traditional state-level datasets.
- Scalable and Universally Accessible: Hosted within the State Government Network (SGN), WAMAS is available to state agencies through a consistent, documented API. This shared service model eliminates redundancy, reduces cost, and ensures data consistency across disparate systems—from emergency operations centers to public health and social services.
- Privacy-Preserving by Design: WAMAS enables secure, cross-agency data linkages through
 address-based matching, without requiring the exchange of personally identifiable
 information (PII). By focusing on place, not person, it provides a common data thread for
 coordination while safeguarding privacy and complying with legal and ethical standards.

WAMAS represents a major departure from fragmented data silos. It is a **statewide digital utility**— designed not only to clean and connect data, but to fuel smarter, faster, and more equitable government response. Its robust governance model, commitment to interoperability, and operational excellence make it a blueprint for other states aiming to build an enterprise-wide address framework.

What makes it universal?

Every state must manage geospatially tied services—from benefits delivery to taxation to public safety. Accurate address data is foundational to these services and directly relates to several **NASCIO Top Ten Priorities**, including:

- Accessibility
- Cloud Services
- Enterprise Services and Infrastructure
- Digital Government/Digital Services
- Data Management and Analytics
- Identity and Access Management (as it relates to place-based identity verification)

WAMAS offers a model other states can replicate for enterprise-grade location data management.

IMPLEMENTATION

What was the roadmap?

The roadmap for WAMAS (Washington Managed Addressing Services) was strategically designed to transition from fragmented, duplicative address systems toward a unified, shared data utility that enables smarter, faster, and more collaborative decision-making across agencies. Over the past 24 months, the project has moved from concept to enterprise-grade operational service, following a phased implementation guided by data governance, stakeholder engagement, and measurable performance goals.

Key Milestones and Strategic Actions:

Next Generation 911 Integration

A cornerstone of WAMAS' advancement was the integration of **Next Generation 911 (NG911)** data, marking a critical leap in data fidelity. Local governments—particularly **public safety answering points (PSAPs) and dispatch centers**—now serve as primary contributors of "ground-truth" address data. This ensures that WAMAS reflects the most current, operationally verified information, closing the gap between data systems and real-world usage.

Cross-Agency System Integration

WAMAS was designed to serve as a **shared data utility**, interoperable with existing agency platforms. The team prioritized the onboarding of high value use cases in public safety, emergency response, health, and social services, building adoption momentum through demonstrable impact and ease of access via standardized APIs.

• Scalable Infrastructure and Shared Governance

The roadmap emphasized not just deployment, but **long-term sustainability**. Built into the State Government Network (SGN), WAMAS provides high availability and secure access to all eligible agencies. A multi-agency governance structure was implemented to guide data quality standards, access controls, and ongoing enhancement priorities.

Success Metrics and Continuous Improvement

Project success was measured by three core indicators:

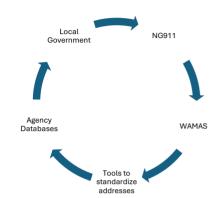
- Increased cross-system usage, evidenced by growing API consumption and integration into operational workflows.
- Reduction in third-party data spending, as agencies sunset duplicative address solutions and subscriptions.

o **Improved data quality and freshness metrics**, including regular updates and validation cycles that ensured the dataset reflected real-world conditions with minimal lag.

Through these milestones, WAMAS evolved from a technical initiative into a **mission-critical digital backbone** for Washington's enterprise data infrastructure. Its roadmap is not only a success story, but also a scalable model for other states seeking to build cross-sector address intelligence platforms rooted in operational data, shared investment, and strong governance.

Who was involved?

- Washington Technology Solutions (WaTech): Led the modernization and maintenance of hardware and software infrastructure.
- Washington State Department of Social and Health Services (DSHS): Developed the application and data frameworks along with the tools and API integrations.



- State Agencies (e.g., Department of Health,
 Department of Social and Health Services, Department of Revenue, Department of Fish &
 Wildlife): Actively supported the modernization of WAMAS by contributing agency-specific
 requirements, validating data for operational use, and integrating the service into their core
 business processes to enhance service delivery, reporting accuracy, and interagency
 coordination.
- **Local governments**: Provided authoritative address data, especially through dispatch/GIS sources.
- **Program champions**: Data stewards within each agency advocated for adoption and ensured address data was correctly maintained.

Buy-in was driven by real use cases (e.g., federal funding for at-risk children, COVID-19 outbreak response) and demonstrated ROI. The WAMAS team used presentations, agency briefings, and coordination with GIS and IT managers to increase visibility.

How did you do it?

- **Resources**: The initiative used existing state IT staff, federal funding tied to COVID-19 response, and in-kind contributions from agency partners.
- Architecture: WAMAS is hosted on state infrastructure, integrated into the SGN, and provides
 APIs for validation and batch processing. It includes geocoding, jurisdiction lookup, and spatial
 indexing.
- Why it matters: The system is built for scalability and trust, allowing multiple programs to benefit from a single correction—improving data quality and enabling analytics across programs.

IMPACT

What did the project make better?

Category	Before WAMAS Modernization	After WAMAS Modernization
Address Data Consistency	Fragmented and inconsistent across agencies; conflicting geocoding vendor outputs.	Unified, authoritative source of address data used statewide—ensuring consistency and accuracy.
Geocoding Vendors	Multiple vendors with duplicative contracts and varied data fidelity.	Centralized service reduces reliance on third-party vendors and associated costs.
Spatial Analysis	No common framework for identifying jurisdictions, boundaries, or service areas.	Standardized spatial joins and jurisdiction lookups available to all users.
Data Integration	Manual or ad hoc efforts; limited by mismatches and lack of standardized identifiers.	Seamless, cross-agency integration enabled by a shared and trusted dataset.
PII Sharing Risks	Data-sharing hindered by privacy concerns when resolving mismatched addresses.	Address-based integration allows for collaboration without exposing PII, supporting privacy and compliance.
Operational Efficiency	Redundant workflows, delayed reporting, and high error rates.	Streamlined operations, improved service delivery, and reduced duplication.
Use Across Agencies	Siloed systems with minimal interoperability.	Shared enterprise service used across public health, taxation, emergency response, and more.

This transformation empowers Washington state with smarter, faster, and more equitable data-driven decision-making across programs and jurisdictions.

How do you know?

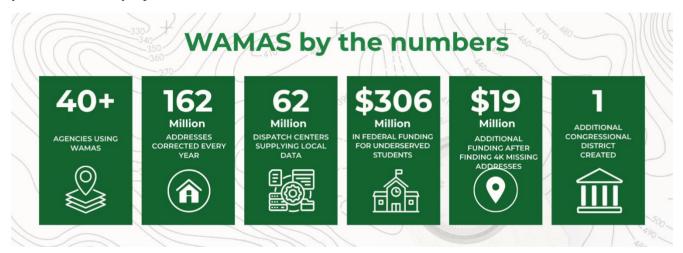
"We often invest in flashy innovations, but the true backbone of effective government lies in shared, reliable data infrastructure like WAMAS. It's a quiet force multiplier—supporting everything from emergency response to equitable school funding. A correct address can mean the difference between getting the help you need and falling through the cracks. WAMAS helps us honor that reality by bringing consistency, fairness, and accuracy to the way we serve Washingtonians—across every part of government." – Irene Vidyanti, State Chief Data Officer, Washington state

The value of WAMAS is not theoretical, it is already driving measurable improvements across state programs and services. Key indicators of its impact include:

- \$306 million in education funding was accurately allocated based on improved address verification, ensuring fair and equitable distribution of critical resources across school districts.
- During the COVID-19 pandemic, contact tracing and supply deployment in long-term care facilities were accelerated through consistent, up-to-date address data, supporting faster response and better outcomes.
- Tax jurisdiction errors, once corrected in WAMAS, now propagate automatically across all connected systems—reducing compliance gaps and ensuring uniformity in revenue management.

- More than 4,000 previously uncounted addresses were identified through WAMAS, enabling the state to secure an additional congressional district and unlock \$19 million in additional annual federal funding—a gain that will benefit Washington residents for the next decade.
- Agency adoption is growing steadily, with WAMAS now powering a wide array of internal systems, including:
 - Wildfire structure assessments.
 - o Public-facing mapping dashboards.
 - Public safety coordination and dispatch tools.

These real-world outcomes underscore the transformational role WAMAS plays as a digital backbone for location intelligence in Washington state—providing **operational accuracy, fiscal accountability, and public service equity** across sectors.



What now?

WAMAS is on track to become a cornerstone of Washington's enterprise data infrastructure. Over the next 24 months, planned enhancements will focus on three strategic areas:

ENTERPRISE INTEGRATION	 Adopt WAMAS as the statewide standard for authoritative address data. Integrate into the Washington Enterprise Data Platform, leveraging Databricks and GeoAnalytics Engine for large-scale spatial analytics. Pilot secure deployment within the Cloud Government Network to support cloudnative service access.
ENHANCED DATA UTILITY	 Enable summarization of address records by standard geographic references (e.g., legislative districts, school districts, census blocks). Implement unique, persistent identifiers for each address to improve system interoperability and reduce duplication.
AGENCY EXPANSION	 Partner with additional agencies to identify high-value business needs and expand operational use cases.

WAMAS has proven worthy of initial and continued investment by saving money, improving equity, and strengthening public trust. It exemplifies the power of central data services to quietly—but profoundly—improve government from the ground up.