



U.S. Department of Transportation



# U.S. DOT WORK ZONE DATA EXCHANGE (WZDX) DEMONSTRATION GRANTS PRE-SOLICITATION WEBINAR

August 22, 2019

# AGENDA

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- Ground Rules and Logistics
- Executive Welcome
- Work Zone Data Exchange (WZDx) Overview
- Anticipated Eligibility and Requirements
- Anticipated Submission Requirements
- Anticipated Dates and Reminders
- Questions

# GROUND RULES AND LOGISTICS

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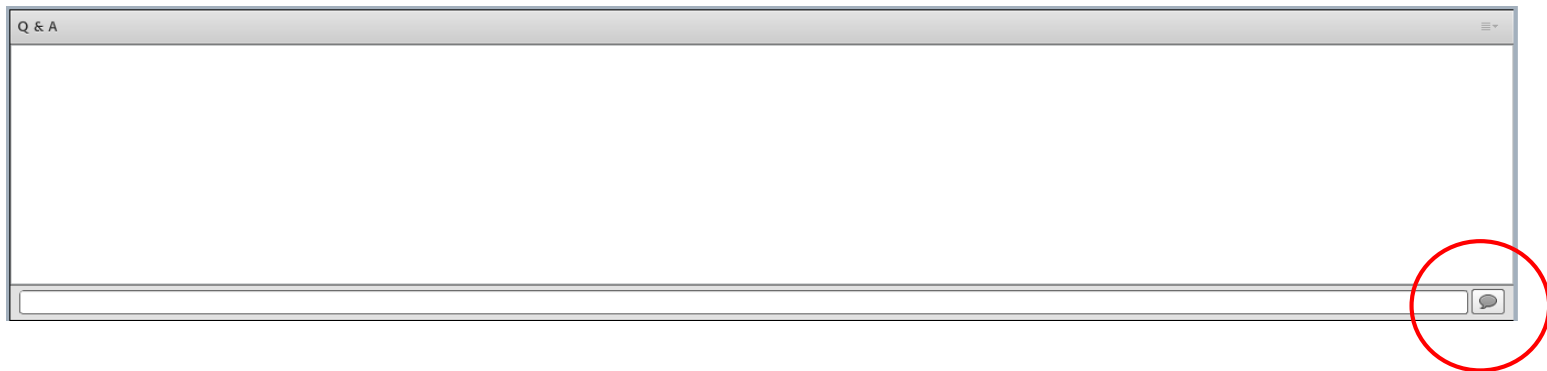
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- This webinar is being recorded and will be posted to the USDOT website.
  - Any statements or remarks made during the webinar shall not alter the terms of the solicitation.
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# SUBMITTING QUESTIONS

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- Use **Q&A pod** on the bottom of your screen.
- *Questions will be addressed after the last presentation, as time permits.*



Type your question and hit “send question”.



# EXECUTIVE WELCOME

**Martin Knopp**

Associate Administrator for Operations  
Federal Highway Administration

# WZDX OVERVIEW

# THE CHALLENGE

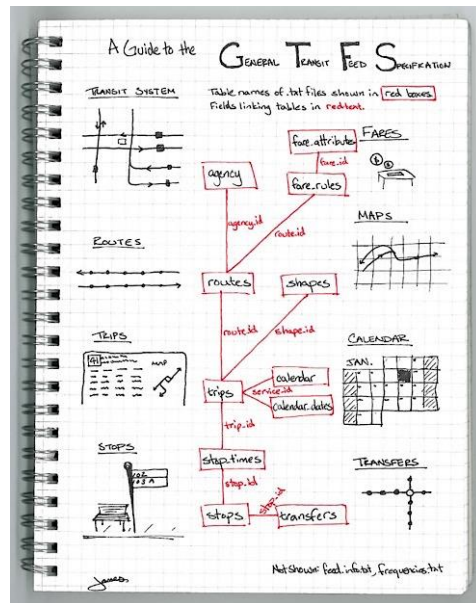
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- Up-to-date information about dynamic conditions occurring on roads—such as construction events—can help automated driving systems (ADS) and humans navigate safely and efficiently.
  - Many Infrastructure Owners and Operators (IOOs) maintain data on work zone activity. However, a lack of common data standards and convening mechanisms makes it difficult and costly for third parties—including original equipment manufacturers (OEMs) and navigation applications—to access and use these data sets across various jurisdictions.
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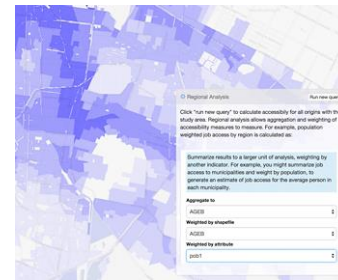


# LEARNING FROM OPEN TRANSIT DATA

A simple specification...



...with a wide range of uses



Route	Stops	Transfers
101	12	3
102	6	6
103	36	31
104	32	37
105	31	37
106	308	24
107	5	0
108	8	0
109	14	3
110	1	0
111	3	0
112	3	0
113	0	0
114	0	0
115	0	0
116	0	0
117	0	0
118	0	0
119	0	0
120	0	0
121	0	0
122	0	0
123	0	0
124	0	0
125	0	0
126	0	0
127	0	0
128	0	0
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149	0	0
150	0	0



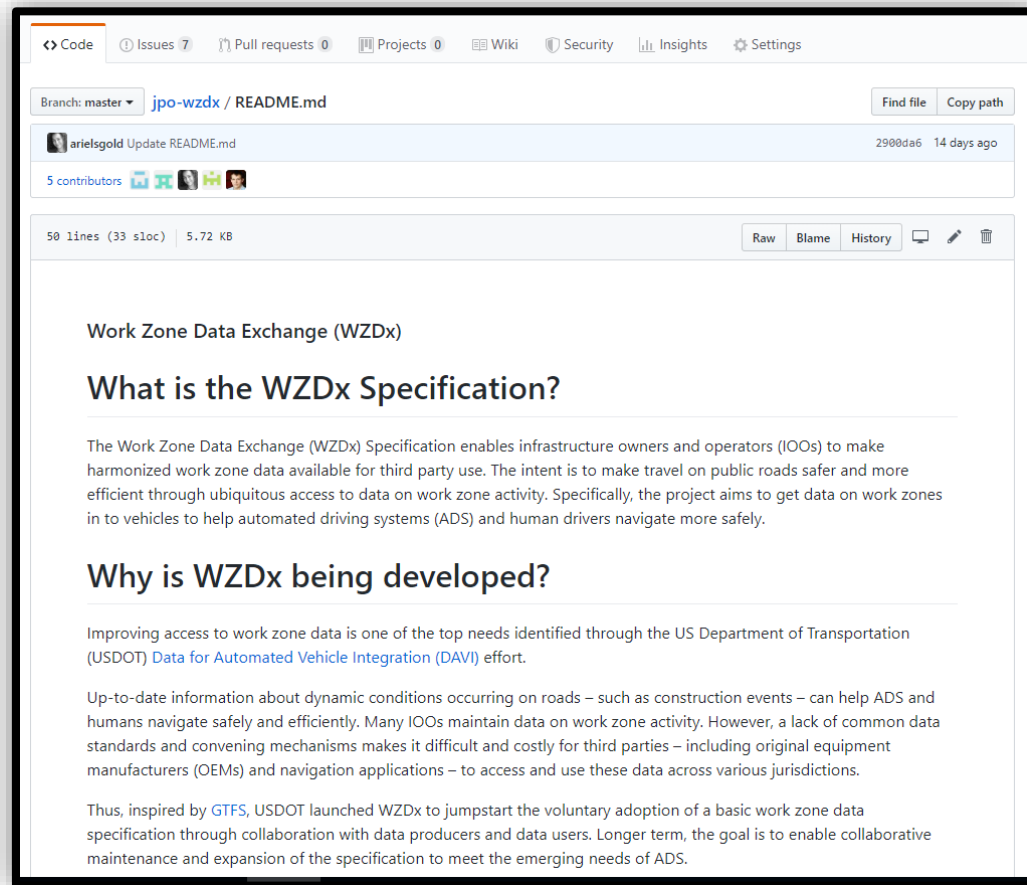
# THE WORK ZONE DATA EXCHANGE (WZDX)

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# THE WORK ZONE DATA WORKING GROUP

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The screenshot shows a GitHub repository page for the 'jpo-wzdx / README.md' file. The repository is on the 'master' branch. The commit history shows a recent update by 'arielsgold' on '2900da6' 14 days ago, with 5 contributors. The file is 50 lines long (33 sloc) and 5.72 KB in size. The README content includes the title 'Work Zone Data Exchange (WZDx)', a section 'What is the WZDx Specification?', and a section 'Why is WZDx being developed?'.

Work Zone Data Exchange (WZDx)

## What is the WZDx Specification?

The Work Zone Data Exchange (WZDx) Specification enables infrastructure owners and operators (IOOs) to make harmonized work zone data available for third party use. The intent is to make travel on public roads safer and more efficient through ubiquitous access to data on work zone activity. Specifically, the project aims to get data on work zones in to vehicles to help automated driving systems (ADS) and human drivers navigate more safely.

## Why is WZDx being developed?

Improving access to work zone data is one of the top needs identified through the US Department of Transportation (USDOT) [Data for Automated Vehicle Integration \(DAVI\)](#) effort.

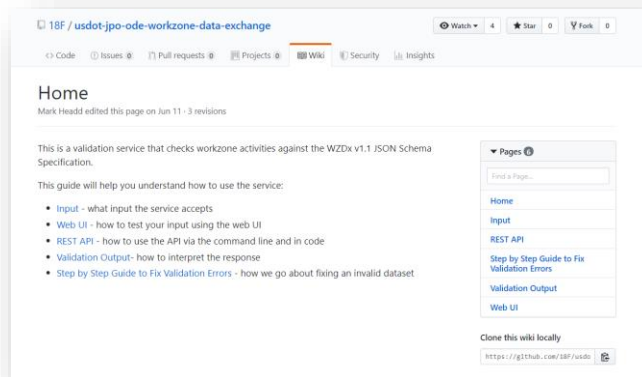
Up-to-date information about dynamic conditions occurring on roads – such as construction events – can help ADS and humans navigate safely and efficiently. Many IOOs maintain data on work zone activity. However, a lack of common data standards and convening mechanisms makes it difficult and costly for third parties – including original equipment manufacturers (OEMs) and navigation applications – to access and use these data across various jurisdictions.

Thus, inspired by [GTFS](#), USDOT launched WZDx to jumpstart the voluntary adoption of a basic work zone data specification through collaboration with data producers and data users. Longer term, the goal is to enable collaborative maintenance and expansion of the specification to meet the emerging needs of ADS.

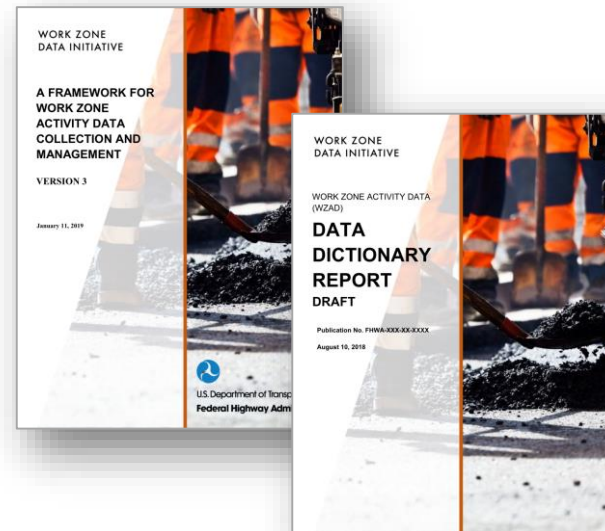
[WZDx Specification and Project Page](#)

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# RESOURCES & REFERENCES



[WZDx Prototype Validation Tool](#)



[FHWA Work Zone Data Initiative](#)

# WZDX DEMONSTRATION GRANTS

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# ANTICIPATED ELIGIBILITY AND REQUIREMENTS

# BASIC AWARD INFORMATION

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- **Total funding:** \$2.4M
- **Number of Awards:** Up to 12
- **Potential Award Amounts:** Up to \$200,000 each
- **Period of performance:** 12 months
- **Cost Share:** 20% Non-Federal Share
- **Federal involvement:** Performance monitoring, technical guidance, and participation in status meetings, workshops, and technical group discussions.

# AWARD CATEGORIES

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In order of priority, USDOT intends to fund projects that will result in:

- A. Publication of a new WZDx-compliant data feed;
- B. Increased jurisdictional coverage of an existing WZDx-compliant data feed; OR
- C. Addition of optional field(s) to an existing WZDx-compliant data feed

Applicants will likely need to specify one project category in their applications.

Applicants may be allowed to submit multiple applications to address multiple project categories; USDOT would then consider applications consistent with the priorities indicated above.

# CHALLENGE AREAS

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Applicants will likely be asked to identify one or more challenge areas to address in their projects. Applicants may be able to propose a challenge not explicitly described in the NOFO.

- The IOO and/or the entities performing work on their roadways do not produce one or more data elements in the specification, do not produce them at a sufficient level of quality or granularity, and/or do not produce work zone data on all roadways within or across local jurisdictions; **(Challenge Area 1)**
- The IOO's data generation and acquisition processes (e.g., permitting systems, lane closure management systems) do not exist or rely on manual steps which delay data publication and/or reduce data quality; **(Challenge Area 2)**
- The IOO's backend data system architecture makes it difficult and/or expensive to share data in different formats for different uses, both within and across an organization. **(Challenge Area 3)**

# EXAMPLE MILESTONES AND DELIVERABLES

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<b>Milestone/Deliverable</b>	<b>Timing</b>	<b>Payment</b>
<b>Final work plan</b>	Within 1 month of award	\$80,000
<b>Publication of new WZDx-compliant feed</b> - or - <b>Increasing jurisdictional coverage of existing compliant feed</b> - or - <b>Addition of optional field(s) to existing compliant feed</b>	Within 12 months of award	\$100,000
<b>Travel support for TA/spec development activities</b>	N/A	\$20,000



# ELIGIBILITY

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Eligible Applicants must be one of the following types of organizations:

- State and local governments
- Tribal governments
- Transit agencies and authorities
- Metropolitan planning organizations
- Other subdivisions of State or local governments (including public port authorities/districts)
- Multi-jurisdictional group\* applying through a single lead Applicant (a combination of eligible Applicants comprised of at least two members, each of whom is an eligible Applicant under the terms of this paragraph. One Applicant must be identified as the lead entity to serve as prime awardee in the event an award is made.)

Private companies and private universities are NOT eligible Applicants. However, private companies and private universities may be a sub-recipients or subcontractors.



**ANTICIPATED  
SUBMISSION REQUIREMENTS &  
APPLICATION PROCESS**

# ANTICIPATED SUBMISSION REQUIREMENTS

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FHWA anticipates requiring submission of the following items:

- A. Narrative and Technical Approach
- B. Management Approach, Staffing, and Capabilities
- C. Work Plan
- D. Budget Detail (Excel or PDF)
- E. Application Standard Forms and Organizational Information

# APPLICATION PROCESS

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- The anticipated NOFO will be posted on grants.gov ([www.grant.gov](http://www.grant.gov))
- Applications must also be submitted through Grants.gov
- To submit, applicants must:
  - Obtain a Data Universal Numbering System (DUNS) number:
  - Register with the System for Award (SAM) at [www.sam.gov](http://www.sam.gov).
  - Create a Grants.gov username and password, and
  - E-business POC at the applicant's organization must respond to the registration email from Grants.gov and login to authorize the POC as an Authorized Organization Representative.
- Note: The Grants.gov registration process usually takes 2-4 weeks to complete; late applications that are the result of failure to register or comply with Grants.gov applicant requirements will not be considered.

# ANTICIPATED DATES & REMINDERS



# NOTIONAL TIMELINE

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Milestone	Date
FY20 NOFO Released	Expected in Fall 2019
Administrative and Technical Questions Due	TBD
FY20 Applications Due	45 days after release of NOFO
Awards Processed	Winter 2020

# Questions?

## Contact Us:

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