Increasing Worker and Driver Safety through Access to Work Zone Data

Virtual Event
May 19, 2020
Housekeeping Items

- Your phone will be muted during the presentation.
- Type your question into the chat box. Q&A will occur at the end of the event.
- This virtual event will be recorded.
- Slides and recording will be available at:
  
  https://www.transportation.gov/av/data/wzdx
Introduction

• Co-Sponsored
  • U.S. Department of Transportation (U.S. DOT)
  • American Association of State Highway Officials (AASHTO)

• Purpose
  • To unite GIS and transportation professionals to discuss increasing worker and driver safety through the publication and consumption of work zone data.
Upcoming AASHTO Geospatial Events

• Geospatial Online Transportation Users Group (GOTUG)
  • Webinars held the first Wednesday of June, September, December, and March
    • The next batch of webinars will feature sessions from the 2020 GIS-T meeting
  • For more information and to sign up for notifications of webinar dates, times, and content, visit: https://gotug.transportation.org/

• Upcoming GIS-T Symposium
  • Minneapolis, Minnesota – April 2021
  • North Charleston, South Carolina – April 2022
  For more information, visit: https://gis-t.transportation.org/
Agenda

1. FHWA’s Work Zone Data Initiative (WZDI)
   Todd Peterson, Federal Highway Administration (FHWA)

2. Work Zone Data Exchange (WZDx): Improving Roadway Safety for Drivers and Automated Vehicles
   Amy Nelson – Office of the Secretary of Transportation (OST)

3. WZDx: MC-85 Project in Maricopa County
   Tomas Guerra – OZ Engineering

4. Panel Discussion

5. Interactive Q&A
FHWA’s Work Zone Data Initiative

Todd Peterson
Transportation Specialist, Work Zone Management
Federal Highway Administration (FHWA)
✉️ Todd.Peterson@dot.gov
Work Zone Data Initiative (WZDI)

Creating a **consistent language for communicating Work Zone Event Data** across organizational boundaries and throughout project life cycles

- Accelerate the adoption of Work Zone Data Exchange (WZDx) specification
- Advance development of agency processes and applications around availability of standardized data
WZDI Motivations

- Work zone management is increasingly data-driven
- Data describing work zone events are critical for emerging use cases
- Uniformity, accuracy, and portability will enhance development of tools and methods for next-generation work zone management.
Data and the Project Delivery Life Cycle

**Planning/Design**
- "Estimated" work zone events
  - Data is dynamic, ephemeral
  - Uses:
    - Project coordination
    - Lane closure permitting
    - Predictive travel times
    - Fleet routing
    - Anticipated capacity reduction

**Current**
- "Real-time" work zone events
  - Data is dynamic, ephemeral
  - Uses:
    - Traveler information
    - Work zone management
    - Situational awareness
    - Inspection
    - Asset management
    - Contract monitoring
    - AV navigation

**Post-Construction**
- "Historical" work zone events
  - Data is static, persistent ("read-only")
  - Uses:
    - Permanent record of prior activity, serving:
      - Performance management
      - Contract monitoring
      - Analytics & research
Components of Data-Driven Work Zone Mgmt.

**Data**
- Information about when, where, and how work zones are occurring - *Work Zone Event Data*

**System**
- Resources and business processes supporting the generation, validation, and distribution of Work Zone Activity Data, and its applied uses. – “Work Zone Data System”
WZDI Resources

Available on the WZDI Collaboration Site

https://collaboration.fhwa.dot.gov/wzmp/wzdi/Forms/AllItems.aspx
Work Zone Data Exchange (WZDx)

1. Simple, Open Specification
2. Broadly Adopted
3. Saves Lives

What is the WZDx Specification?

The Work Zone Data Exchange (WZDx) specification enables information exchange and operations (e.g., site updates, site inspections, etc.) between sites. It allows for data sharing in a way that ensures data are available to the public, exactly as planned, and in a format that allows for easy access to documents and accessibility to stakeholders. The primary goal of the specification is to ensure that data are not only accessible but also reusable for various projects and initiatives.

Why is WZDx being developed?

The adoption of the WZDx specification as a standard practice in the planning, design, and construction of transportation projects is a high priority for the USDOT. It promotes the sharing of data across different stages of project development and helps to ensure that the data are accurate, up-to-date, and interoperable.

https://github.com/usdot-jpo-ode/jpo-wzdx
Work Zone Data Working Group

Formalized under the Federal Geographic Data Committee, the objectives are to:

• Maintain the current WZDx Specification;
• Groom the backlog of potential future changes and sources of technical input;
• Use open development methods to foster community involvement and support;
• Identify and promote best practices for creating, publishing, consuming, mapping, and analyzing work zone activity data and the WZDx Specification.

Priorities for 2020:

• Release WZDx Specification version 2.0 - announced January 2020
• Develop technical assistance for local agencies deploying WZDx feeds
• Develop version 3 of the WZDx Specification
WZDx Demonstration Grants

Planned one-time funding for public roadway operators to make unified work zone data feeds available

• **Total funding:** $2.4M
• **Number of Awards:** Up to 12
• **Potential Award Amounts:** Up to $200,000 each
• **Period of performance:** 14 months
• **Cost Share:** 20% Non-Federal Share
• **Federal involvement:** Performance monitoring, technical guidance, and participation in status meetings, workshops, and technical group discussions.
Work Zone Data Exchange (WZDx): Improving Roadway Safety for Drivers and Automated Vehicles

Amy Nelson
Deputy Geospatial Information Officer
U.S. Department of Transportation
Amy.Nelson@dot.gov
Next Steps

Three subgroups have been formed to enhance the Work Zone Data initiative

- Specification Update
- Worker Presence
- Technical Assistance
Specification Update

Objective: Enhance and improve the specification for Version 3

• Lead steward in making changes to v2 of the WZDx Specification and managing future development of the specification
• Review and recommend WZDx specification updates
• Focus on defining explicit, comprehensive, and consistent definitions of the features, attributes, and vocabulary needed to effectively model work zone activity data
Specification Update (con’t)

• Recommendations will be based on an evaluation of the issue log
• Improvements can be proposed through GitHub or directly to WZDWG members
• Recommendations may include expanding or narrowing the specification
• Modifications will support open scalable standards
• Expected publication date is 8/30/2020
Worker Presence Subgroup

Objective: Include real-time worker presence information in the WZDx feeds

• Data will be used to
  • Improve worker safety
  • Alert drivers to reduce speed
  • Alert automated driving systems that humans are present

• Key questions
  • How should we define worker presence?
  • How do we collect worker presence information?
  • How will this data be used?
  • What are the privacy, ethical, competitive, and liability issues with this data?
Worker Presence Subgroup (con’t)

Current Focus

• Surveying stakeholders and users to understand needs
• Conducting interviews
• Subgroup will make recommendations on worker presence data collection for the v3 spec
Technical Assistance Subgroup

Objective: Educate data producers and consumers on how to access the WZDx’s most recent specification and achieve data conformity

• Lead steward in developing and reviewing business rules and best practices for setting up WZDx feeds or updating current feeds as new versions of the specification are released

• Subgroup members will review and propose validation tools for setting up feeds and provide technical guidance to adopters
Technical Assistance Subgroup (con’t)

• Will provide step-by-step details on how early adopters implemented the v2 specification
• Will create a form through which WZDWG members can share questions and answers
Contact Information

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Work Zone Data Exchange (WZDx): MC-85 Project in Maricopa County

Tomas Guerra
Principal
OZ Engineering
tguerra@ozengineering.com
Work Zone Data Exchange (WZDx)
MC-85 Project in Maricopa County

Tomas Guerra
OZ Engineering
Introduction of Work Zone Data Activities

**Pilot**
- MCDOT/ADOT/U of A Connected Vehicle Work Zone Freight application
  - Freeway and Arterial
- MCDOT Arterial Smarter Work Zone
- ADOT Freeway Smarter Work Zone
- WZDx 1.1 work (Focus on MCDOT MC-85; arterial pilot)

**Current**

WZDx 2.0 (or later) work ADOT and MCDOT Pilot

**Future**
- Regional Expansion
WZDx – Why?

- Understand WZDx specification and applicability
- Provide feedback to US DOT on the specification
- Mainstream and broadcast to third parties for real-time use
Demonstration Pilot

Info Generators

- Construction
- TCP Plans
- Smart Work Zone
  - Dynamic Message Signs
  - Travel Times
  - Speed Warning
  - Camera Feed (TMC only)

Info Consumers

- 511 & ISPs
  - TMDD format
- Freight Vehicles
  - WZDx format
  - In-vehicle displays
Current GIS Processes (TMDD)

- GIS/API
- Gmail
- RSS
- Web Service

Next Steps:
Regional WZDx (Multiple Sources)
Project Area

- Major Freight Corridor
- Long Project Duration
- Available Alternate Routes
- Challenging Industrial Area
Traffic Control Plans

- January 2019 to June 2020, to widen MC-85 to a total of 5 lanes; storm drains, sidewalk, lighting, irrigation.
- Minimum of 1 lane in each direction open, shifting all traffic to opposite side of road, first south half, then north half.
- 24 x 7 restrictions, workers on-site M-F 8 AM to 5 PM.
Smart Work Zone Components

ITS Components:
- Detection (Speed, Occupancy, Volume)
- ARID readers calculate travel times
- Displayed DMS content varies depending on travel times
- Excessive speed feedback signs
- CCTV Cameras
- RSU
USDOT WZDx v1.1

- Work Zone Data Exchange (WZDx)
  - Common Core Data Specification Reference Document
  - https://www.transportation.gov/av/data
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<th>Value</th>
<th>Notes/Comments</th>
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<td>Maricopa.gov.2019012001</td>
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<tr>
<td>subidentifier</td>
<td>TT0345;TCP_12;eastbound</td>
<td>Use Project # and TCP #. A single TCP could generate two restrictions, one in each direction.</td>
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<tr>
<td>StartDateTime</td>
<td>startDateTime-ver: 2019-01-20T06:35:00-07:00</td>
<td>By convention, we will include timezone value (-07:00) since AZ does not recognize DST; could also use UTC (Z). Suggest this be a convention for all.</td>
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<tr>
<td>EndDateTime</td>
<td>endDateTime-est: 2019-08-20T23:59:59-07:00</td>
<td>How would day-time construction (8 AM to 5 PM, M-F) be represented? Make five entries?</td>
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<td>BeginLocation</td>
<td>roadName: MC-85 (Buckeye Rd)</td>
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</tr>
<tr>
<td></td>
<td>roadDirection: eastbound</td>
<td></td>
</tr>
<tr>
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<td>latitude-est: 33.435795</td>
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<tr>
<td></td>
<td>longitude-est: -112.259716</td>
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<tr>
<td></td>
<td>crossStreet: 91st Ave</td>
<td></td>
</tr>
<tr>
<td>EndLocation</td>
<td>latitude-est: 33.437151</td>
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</tr>
<tr>
<td></td>
<td>longitude-est: -112.224501</td>
<td></td>
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<tr>
<td></td>
<td>crossStreet: 79th Ave</td>
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<tr>
<td>wz_status</td>
<td>active</td>
<td>Could this field include a separate Date/Time field if Work Zone will only be set up during off-peak hours during an extend time period?</td>
</tr>
<tr>
<td>totalLanes</td>
<td>2</td>
<td></td>
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### Sample WZDx Data Frame (con’t)

**Traffic Control Plan #12 Eastbound (Continued)**

<table>
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<th>Value</th>
<th>Notes/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>openLanes</td>
<td>shift-left (yes)</td>
<td>Trying to describe the case where all lanes are actually blocked and one lane of traffic is shifted over into the opposing traffic lane. Used shift-left since it means “all open lanes shift to the left”. Could also use left-lane? Note, discrepancy in WZDx_final01.xsd, line 185: “shift-left”, vs “left-shift-lanes” in reference document.</td>
</tr>
<tr>
<td></td>
<td>left-lane (also good?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>alternating-flow-lane (no)</td>
<td></td>
</tr>
<tr>
<td>closedLanes</td>
<td>right-lane</td>
<td>Shared two-way left turn center lane not available or closed; no left turn allowed. Other: How would one represent a center two-way left turn lane on an arterial? See next slide.</td>
</tr>
<tr>
<td>closedShoulders</td>
<td>Both</td>
<td></td>
</tr>
<tr>
<td>workersPresent</td>
<td>True</td>
<td>This could require a Date/Time field separate from the Project Start/End Date/Time fields if the closure is always present but workers are only present during certain work hours/days</td>
</tr>
<tr>
<td>Description</td>
<td>Eastbound lanes reduced to one lane and shifted to opposing side of roadway on MC-85 (W. Buckeye Rd) from near 91st Ave to near 75th Ave, for approx. 7 months. Westbound traffic also reduced to 1 lane.</td>
<td>Where would real-time ITS information such as travel times / speeds, and DMS message text be represented? Consider embedding within this field, or provide a URL link in this field to another data page, other?</td>
</tr>
<tr>
<td>issuingOrganization</td>
<td>Maricopa County DOT</td>
<td></td>
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<tr>
<td>timestampCreation</td>
<td>2019-01-20T06:35:00-07:00</td>
<td></td>
</tr>
<tr>
<td>timeStamUpdate</td>
<td>2019-03-29T14:42:00-07:00</td>
<td></td>
</tr>
</tbody>
</table>
Representing Left Turning Lanes

- Shared two-way left turn center lane
- Center two-way left turn lane on an arterial
MCDOT WZDx JSON API (v1.0)
(https://api.mcdot-its.com/WZDx/Activity/Get)

```
{...
  "workZoneActivity": {
    "identifier": "maricopa.gov.2019020902",
    "subidentifier": "RTA45;TCP_111;eastbound",
    "startDate": "2019-02-08T06:35:00-07:00",
    "endDate": "2019-02-08T23:59:00-07:00",
    "beginLocation": {
      "roadName": "WC-65 (Buckeye Rd)",
      "roadNum": "WC-65",
      "roadDirection": "eastbound",
      "latitude": 33.437795,
      "longitude": -112.259716,
      "crossStreet": "91st Ave"
    },
    "endLocation": {
      "latitude": 33.437795,
      "longitude": -112.254480,
      "crossStreet": "78th Ave"
    },
    "wsStatus": "active",
    "totalLanes": 2,
    "mainLanes": "shift-left",
    "closedLanes": "right-lane",
    "closedShoulders": "both",
    "workersPresent": "true",
    "description": "Eastbound lanes reduced to one lane and shifted to opposing side of roadway on WC-65 (W. Buckeye Rd) from near 91st Ave to near 78th Ave. for approx. 7 months. Westbound traffic also reduced to 1 lane."
  },
  "issuingOrganization": "Maricopa County DOT",
  "timeStampEventCreation": "2019-02-08T06:35:00-07:00",
  "timeStampEventUpdate": "2019-02-08T23:59:00-07:00"
}
```
In-Truck Demonstration

• Drivewyze uses WZDx API and defines geo-fenced events within their product
• Swift Trucking company in-vehicle ELD automatically receives workzone notifications
The following changes were made to the WZDx Specification in version 2:

- Adopted a relational data model approach to eliminate nested tables and make the specification more scalable.
- Required feeds to be published in GeoJSON to facilitate data consumption and use.
- Simplified road closure impact reporting to indicate whether a road is partially closed, fully closed, or fully open.
- Captured lane-level restrictions (when available) to specify work zone impacts for each lane of a roadway.
MCDOT WZDx JSON API (v2.0) - GeoJSON
Next Steps Regional WZDx

- GIS/API
- Gmail
- RSS
- Web Service

- Next Steps: Regional WZDx (Multiple Sources)
Thank You!

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Panel Discussion

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Tony Leingang
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Washington State DOT
✉️ LeingaA@wsdot.wa.gov
## Work Zone List

### Create New

<table>
<thead>
<tr>
<th>Region</th>
<th>County</th>
<th>State Route</th>
<th>Start Date</th>
<th>End Date</th>
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<tbody>
<tr>
<td>Olympic</td>
<td>All</td>
<td>All</td>
<td>05/14/2020</td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Status</th>
<th>SR</th>
<th>Direction</th>
<th>Milepost</th>
<th>Common Name</th>
<th>Contract No</th>
<th>Start Date</th>
<th>End Date</th>
<th>Action</th>
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<tbody>
<tr>
<td>5th St to S H St Paving and ADA Compliance</td>
<td>Contract</td>
<td>Active</td>
<td>101</td>
<td>Eastbound</td>
<td>87.49 - 91.51</td>
<td>Hoquiam &amp; Aberdeen</td>
<td>009491</td>
<td>2/18/2020</td>
<td>10/30/2020</td>
<td>View Edit Duplicate</td>
</tr>
<tr>
<td>70th St Bridge (SR-167 Extension Stage 1A) Week of 05/11/2026</td>
<td>Contract</td>
<td>Active</td>
<td>107</td>
<td>Both Directions</td>
<td>136.5 - 136.5</td>
<td>I-5 NB near 70th St Bridge</td>
<td>5033</td>
<td>5/13/2020</td>
<td>5/14/2020</td>
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</tr>
<tr>
<td>Agata Pass Bridge - Bridge Painting</td>
<td>Contract</td>
<td>Active</td>
<td>005</td>
<td>Northbound</td>
<td>6.82 - 7.95</td>
<td>Agata Pass Bridge</td>
<td>009499</td>
<td>3/10/2020</td>
<td>10/30/2020</td>
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<tr>
<td>Asphalt Repair</td>
<td>Maintenance</td>
<td>Active</td>
<td>103</td>
<td>Both Directions</td>
<td>133.9 - 139.9</td>
<td>Skunk Creek</td>
<td>512/2020</td>
<td>5/14/2020</td>
<td>5/14/2020</td>
<td>View Edit Duplicate</td>
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<tr>
<td>Asphalt Repair</td>
<td>Maintenance</td>
<td>Active</td>
<td>101</td>
<td>Both Directions</td>
<td>120 - 120</td>
<td>Skunk Creek</td>
<td>512/2020</td>
<td>5/14/2020</td>
<td>5/14/2020</td>
<td>View Edit Duplicate</td>
</tr>
</tbody>
</table>

| Chehalis River Bridge Structural Rehabilitation & Painting | Contract | Active | 107 | Both Directions | 6.74 - 16 | Chehalis River Bridge | 009350 | 10/30/2020 | 9/30/2020 | View Edit Duplicate |

| Crack Seal | Maintenance | Active | 101 | Northbound  | 361 - 353 | | 5/18/2020 | 5/21/2020 | View Edit Duplicate |

|itching | Maintenance | Active | 101 | Both Directions | 229 - 231 | | 5/12/2020 | 5/14/2020 | View Edit Duplicate |

| E. of Elgin Clifton Rd To SR16 - Remove Fish Barriers, Paving, ADA & Bridge | Contract | Active | 102 | Both Directions | 10 - 11 | Miner Cr. | 9446 | 11/1/2020 | 5/15/2020 | View Edit Duplicate |

| E. of Elgin Clifton Rd To SR16 - Remove Fish Barriers, Paving, ADA & Bridge | Contract | Active | 102 | Both Directions | 10 - 11 | Miner Cr. | 9446 | 10/18/2020 | 5/22/2020 | View Edit Duplicate |

| Gaa Tech Boring | Other | Pending | 308 | Both Directions | 3.3 | | 5/25/2020 | 5/29/2020 | View Edit Duplicate |

| Heron Sl Bridge Filling | Maintenance | Pending | 012 | Eastbound  | 0.08 - 0.13 | Heron Bridge | 5/13/2020 | 5/14/2020 | View Edit Duplicate |

| Interstate 5 / Port of Tacoma Road Interchange - Phase 1 | Contract | Active | 005 | Both Directions | 135.91 - 136.62 | JBL | 5/14/2020 | 5/22/2020 | View Edit Duplicate |

| JBLM | Contract | Active | 006 | Both Directions | 120.01 - 124.45 | JBLM | 9123 | 11/10/2019 | 10/30/2020 | View Edit Duplicate |

| Killaw Harbor Remove Fish Barrier | Contract | Active | 116 | Both Directions | 4.15 - 4.95 | Killaw Harbor | 9447 | 11/10/2020 | 5/15/2020 | View Edit Duplicate |

| Killaw Harbor Remove Fish Barrier | Contract | Active | 116 | Both Directions | 4.15 - 4.95 | Killaw Harbor | 9447 | 11/10/2020 | 5/15/2020 | View Edit Duplicate |

| Killaw Harbor Remove Fish Barrier | Contract | Active | 116 | Both Directions | 4.15 - 4.95 | Killaw Harbor | 9447 | 11/10/2020 | 5/15/2020 | View Edit Duplicate |

| Landsat Assoc Geo-Tec Boring | Maintenance | Pending | 003 | Both Directions | 48.3 - 48.8 | Geo Tech Boring | 5/10/2020 | 5/22/2020 | View Edit Duplicate |

| Large hollow fill | Maintenance | Active | 181 | Both Directions | 0.11 | river rd SR 167 | 5/13/2020 | 5/14/2020 | View Edit Duplicate |
### SR 510 Interchange Reconstruct Interchange

#### Project Information

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<tr>
<th>Region</th>
<th>Counties</th>
<th>Work Zone Type</th>
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<tr>
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<td>Contract</td>
<td>8297</td>
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<td>05/08/2020 01:16 PM</td>
<td>05/08/2020 01:16 PM</td>
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#### Location

<table>
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<tr>
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<th>Direction</th>
<th>Start Milepost</th>
<th>End Milepost</th>
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<tbody>
<tr>
<td>005</td>
<td>Northbound</td>
<td>110.000</td>
<td>112.000</td>
<td>Marvin Rd.</td>
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#### WSDOT Contacts

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<tr>
<th>Name</th>
<th>Primary Phone</th>
<th>Alt. Phone</th>
<th>Email</th>
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<tbody>
<tr>
<td>1</td>
<td>(360)</td>
<td>See Crew Manager</td>
<td>wsdot.wa.gov</td>
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<tr>
<td>2</td>
<td>(360)</td>
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<tr>
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<td>(360)</td>
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### Traffic Impacts

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<tbody>
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<td>111.500</td>
<td>Marvin Rd. Interchange</td>
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<td>5/15/2020</td>
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</table>

**Description of Work**

Constructing Compost Vegetated Filter Strips in the NB I-5 median shoulder night time Monday thru Friday.

**Description of Traffic Control Required**

No traffic impacts expected during day time hours Monday thru Friday.

**Monday Night** 8 pm to 5 am: NB I-5 left lane closure MP 110.5 to 111.5

**Tuesday Night** 8 pm to 5 am: NB I-5 left lane closure MP 110.5 to 111.5

**Wednesday Night** 8 pm to 5 am: NB I-5 left lane closure MP 110.5 to 111.5

**Thursday Night** 8 pm to 5 am: NB I-5 left lane closure MP 110.5 to 111.5

**Friday Night** 9 pm to 8 am: NB I-5 left lane closure MP 110.5 to 111.5.

<table>
<thead>
<tr>
<th>State Route</th>
<th>Direction</th>
<th>Start Milepost</th>
<th>End Milepost</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>610</td>
<td>Both Directions</td>
<td>0.000</td>
<td>0.400</td>
<td>Marvin Rd. Interchange</td>
</tr>
<tr>
<td></td>
<td>Priority</td>
<td>Weather Permitting</td>
<td>Yes</td>
<td>Work Days</td>
</tr>
<tr>
<td></td>
<td>Contract</td>
<td>Start Hour</td>
<td>End Hour</td>
<td>Mon Tue Wed Thu Fri</td>
</tr>
<tr>
<td></td>
<td>End Date</td>
<td>5/11/2020</td>
<td>5/15/2020</td>
<td></td>
</tr>
</tbody>
</table>

**Description of Work**

Monday thru Friday day time; No work scheduled

**Description of Traffic Control Required**

Monday thru Friday day time; No traffic impacts expected

**Comments**
Questions & Answers

Please type your question into the chat box
# Call to Action

<table>
<thead>
<tr>
<th>Call to Action</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Visit the WZDI and WZDx Websites</strong></td>
<td>WZDI Website: <a href="https://collaboration.fhwa.dot.gov/wzmp/wzdi/Forms/AllItems.aspx">https://collaboration.fhwa.dot.gov/wzmp/wzdi/Forms/AllItems.aspx</a></td>
</tr>
<tr>
<td></td>
<td>WZDx Website: <a href="https://www.transportation.gov/av/data/wzdx">https://www.transportation.gov/av/data/wzdx</a></td>
</tr>
<tr>
<td><strong>Access WZDx Data Feeds</strong></td>
<td>TxDOT’s v2 and MCDOT’s v1.1 feeds: <a href="https://data.transportation.gov/Roadways-and-Bridges/Work-Zone-Data-Exchange-WZDx-Feed-Registry/69qe-yiui">https://data.transportation.gov/Roadways-and-Bridges/Work-Zone-Data-Exchange-WZDx-Feed-Registry/69qe-yiui</a></td>
</tr>
<tr>
<td><strong>Join the Work Zone Data Working Group (WZDWG)</strong></td>
<td>To participate in the working group, contact <a href="mailto:avdx@dot.gov">avdx@dot.gov</a></td>
</tr>
<tr>
<td><strong>Leverage WZDx Technical Support</strong></td>
<td>Technical Assistance and Help Desk – <strong>Coming Soon!</strong></td>
</tr>
</tbody>
</table>

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Post Event Activities

• Provide feedback on today’s virtual event
  • A survey will be distributed to all participants

• Access the presentation and recording on the WZDx website

• Attend future AASHTO Geospatial Events
  • Geospatial Online Transportation Users Group (GOTUG)
  • Learn more at: https://gotug.transportation.org/
  • Upcoming GIS-T Symposium
    • Minneapolis, Minnesota – April 2021
    • North Charleston, South Carolina – April 2022

For more information, visit: https://gis-t.transportation.org/
Thank you for your participation!