SAFELY NAVIGATE OUR WINTER

an employee-led outreach program targeted toward young drivers

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AGENDA

SAFELY NAVIGATE OUR WINTER

SNOW PLOW PRESENTATION

a general agenda for a 50-minute presentation

PLANNING THE PRESENTATION:

- Ask coworkers to see if they are interested in helping educate young drivers how to safely navigate our winter.
- Contact facility to determine how much time is available.
- Discuss presentation format and content with your contact to better tailor the presentation to your audience
    - Identify which activities or tools are appropriate/available. Examples: Pin the Parts on the Plow are better suited for younger audiences, the snow plow simulator may not be available, etc.
- Reserve parking area for equipment.
- Gather safety gear, handouts and giveaways.

THE DAY OF THE PRESENTATION:

- Arrive early check into facility and to arrange equipment.
    - Place cones in blind spots of the equipment, remove keys from cab and unplug the air horn.
    - Take a photo of the plow in front of the school. Don't capture children's faces for legal purposes.

PRESENTATION OUTLINE:

- **Introduction**
    - Discuss ITD as an organization
        - Introduce yourself
        - Explain ITD's mission and overview the state (with 511 map as a resource)
            - ITD maintains almost 13,000 lane miles of state highways
- ***Transition:*** *In the winter, keeping highway drivers safe requires the use of plows.* You can also choose a transition activity: Pin the Parts on the Plow, Kahoot to quiz on equipment identification, or soda can and hammer demonstration
- **Plow 101**
    - What we apply and why:

        - Plows are used to remove snow and to apply winter maintenance products
        - ITD strives to keep roads bare and wet 73 percent of the time during storms
        - Applying solid salt, liquid brine and/or magnesium chloride helps us meet that goal. If you have time, can briefly describe storm protocol.
        - Because we understand salt products can have affect vehicles and the environment, we use the minimum amount necessary to make roads safer.
- ***Transition:*** *Plow drivers use weather data to help determine what the minimum amount should be.*
- **Challenges for our drivers**
    - Being a plow driver isn't easy—we're out there in the worst conditions, responsible for the safety of others.
    - ***Transition:*** *Most people would think the biggest threat to our safety is the weather, and while that is true, another major threat is other drivers' behavior.*
    - Here's what you can do to help keep everyone on the road safe. Illustrate with social media graphics.
        - Safest spot is behind the plow
        - Don't crowd the plow
        - Plows take the whole lane
        - Watch for the wing
        - Know the blind spots
        - Plow drivers are people, too
    - ***Transition:*** *At ITD we want all employees to make it home safe.*
    - Here's what we do on the road to be safe. Discuss new yellow vests, including the importance of the "X" and any other relevant practices.
    - ***Transition:*** *Despite all that we do to be safe and help you be safe, sometimes drivers make poor decisions.*
- **Consequences of unsafe behavior**
    - Play the soundscape story, show a video compilation of plow-vehicle collisions, and/or tell one of your stories.
        - UDOT video on crash in Spanish Fork Canyon: https://www.youtube.com/watch?v=S9jrCEVOvrY.
    - ***Transition:*** *We've talked about why we plow and how to act around them, but now let's go outside to learn more about how they work.*
- **Plow demonstration**
    - If allowing audience to climb into the cab, begin with a safety share on the three points of contact.
    - General operation of the truck:

        - Discuss, but don’t go through, operators’ pre-trip safety inspection
        - Show controls in the cab
        - If proper supervision is available, move the wing and front plow into different positions
        - Point out the spinner / chute in the back.
    - After the demonstration, gather back inside to share handouts and giveaways.
- **Conclusion**
    - Time allowing, go over safety handouts. If not, offer them as a resource.
    - Handouts: updated fact sheet, vehicle checklist, 511, any HR materials
    - ITD works for your safety, mobility and economic opportunity every day. If you’d like to help us in that mission, we’re always looking for young men and women (recruitment pitch).
    - Share your #1 safety message, thank the audience and offer items from practical gadget list if available.

ACTIVITIES

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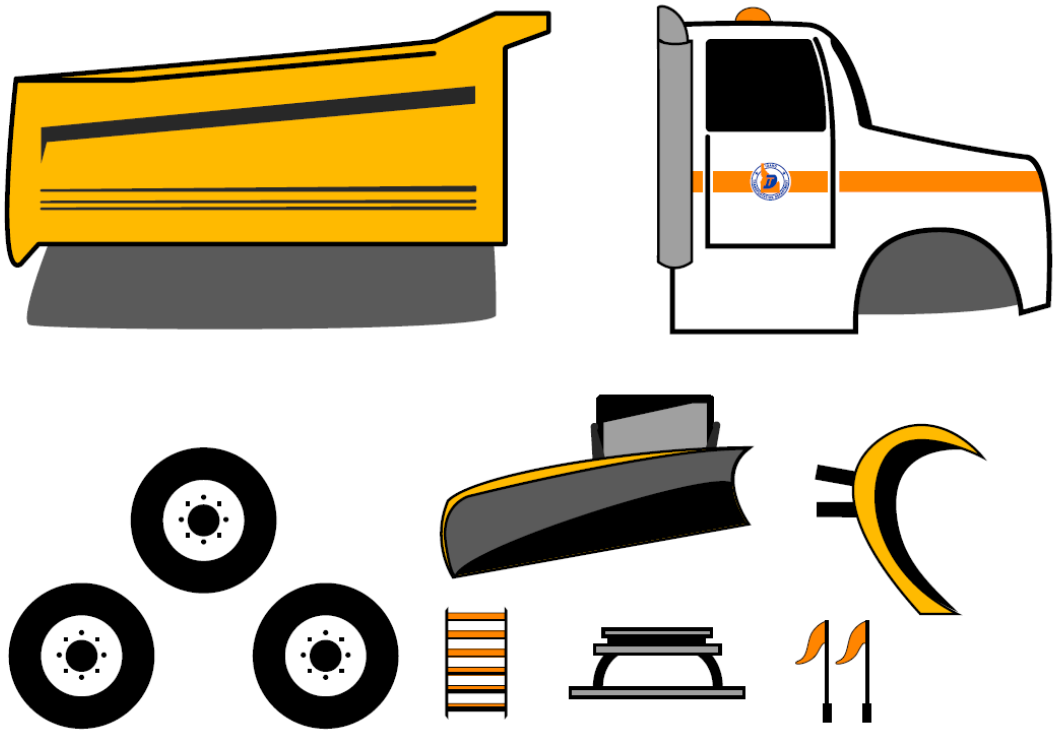
PIN THE PARTS ON THE PLOW

a spin-off for a younger audience



Combined with a snow-frosted woodsy background, this activity works well for a medium-sized audience of younger children. Invite students to take turns assembling the parts onto the background while explaining each part's function.

Your district coordinator will have the parts laminated and connected to magnets for easy assembly.

KAHOOT QUIZ

practice identifying equipment





SCAN ME


Building on James Bennett's (D4 engineering) innovation, the team developed a quiz to help students identify standard heavy equipment. The quiz was developed with Kahoot, an internet- and cellphone-based educational program.

To start the quiz, scan the QR code, press play and take note of the game pin. Then invite students to go to Kahoot.it, enter the game pin and type in a nickname. At last, have the students select answers with their phones and start playing!

This works best if there is a computer and large screen available; students must also be able to use their cellphones.

If that is not possible, contact your district coordinator for a paper version of the quiz (along with a key) to get students talking about heavy equipment.

MISCELLANEOUS

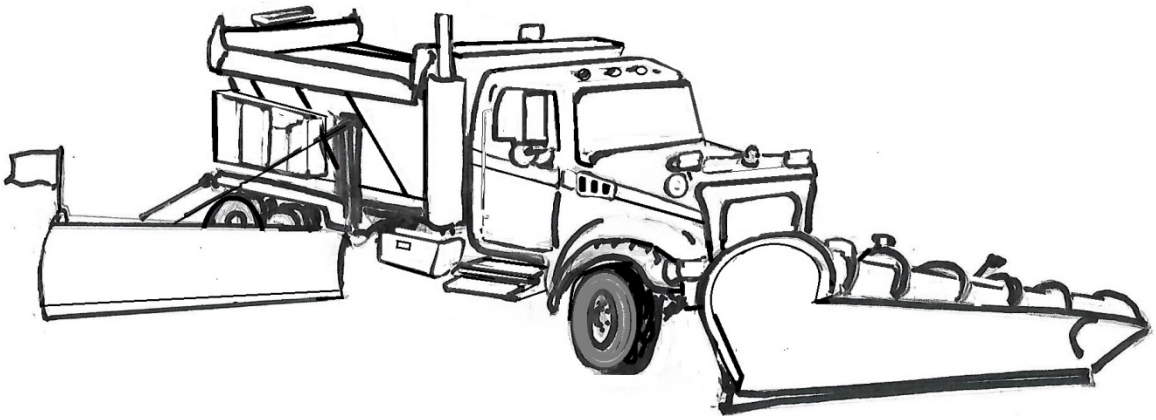
other activities, some still under construction

SNOW PLOW SIMULATOR:

- The simulator is managed by D4 training specialist Mike Stowell and allows users to test drive snow plows with virtual reality.

IDEAS TO BE DEVELOPED:

- Create a video game for driving around plows and in winter conditions
- Use fact sheet to have kids match numbers/units to earn a prize
- Work with students to produce a mock PSA
- Revamp coloring book, with volunteer D1 transportation technician Clint Roney
    - Talk to district coordinator to view coloring book with team's notes.



RESOURCES

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PLOWING BY THE NUMBERS

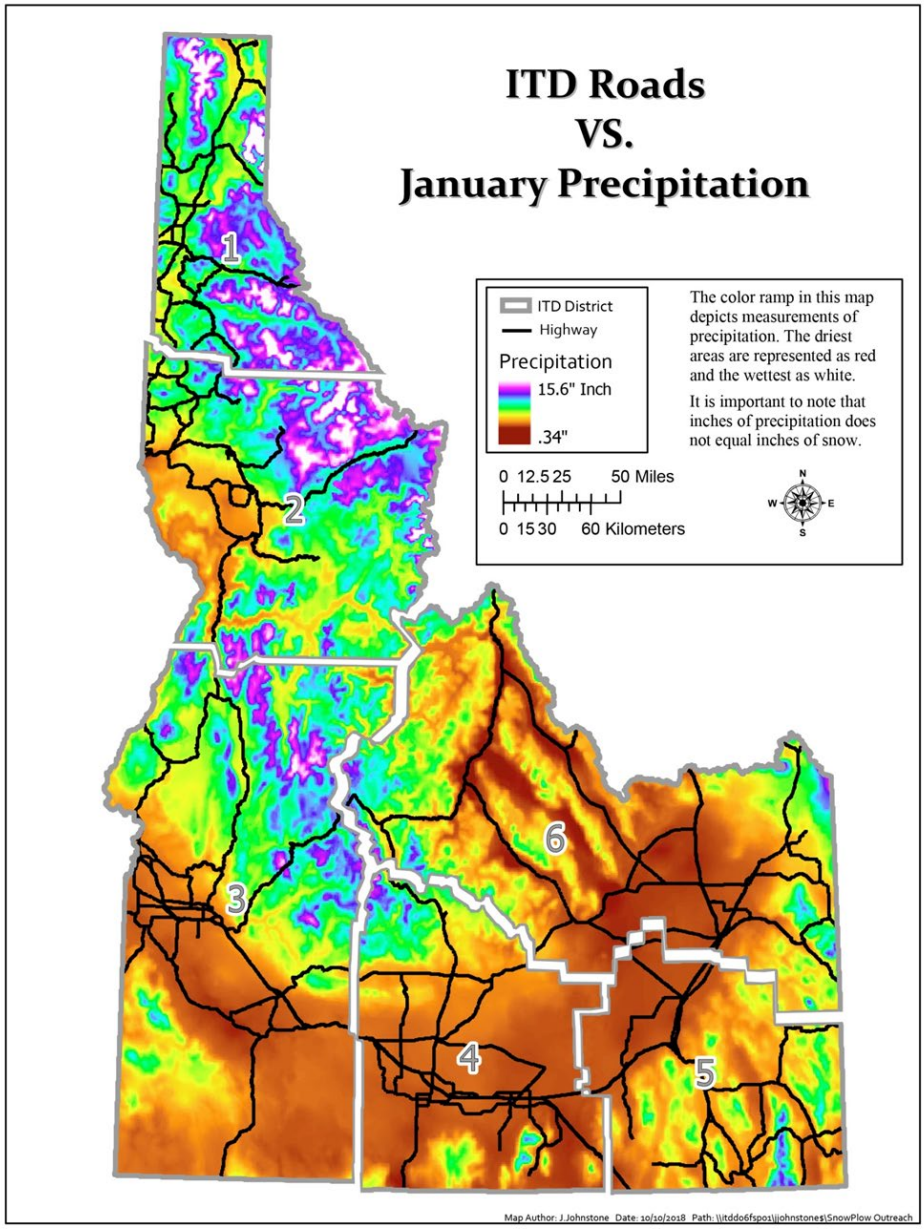
a factual overview of winter operations

- 550 = operators in the state
- 409 = plow trucks in the fleet statewide
- 58,000 pounds = the weight of a fully loaded snow plow
- $230,000 = the cost of a snow plow truck and sander
- 12 feet = typical width of the plow on the front
- 10 feet = typical width of the wing plow
- 20 feet = how wide of an area a truck can plow (not 22 feet because operators plow at an angle)
- 37 feet = typical width of one bound of a divided highway (two lanes 12 feet wide, shoulder 10 feet wide, and shoulder on the left toward the media 3 feet wide)
- 40 feet = combined width of two trucks plowing in tandem
- 13,000 lane miles = approximately how many lane miles ITD maintains
- 3.3 million miles = how far plows traveled around the state during the 2017-2018 winter
- $20.1 million = total cost of removing ice and snow from roadway, including material, labor and equipment maintenance
- 7.4 million gallons = anti-icing salt brine used for the 2017-2018 winter
- 14 cents = cost per gallon to make and distribute anti-icing salt brine
- 117 tons = granular salt distributed by sanders on plow trucks during the 2017-2018 winter

Last updated September 2018.

STATE MAP

a look at precipitation on state highways



The color ramp in this map depicts measurements of precipitation. The driest areas are represented as red and the wettest as white.

It is important to note that inches of precipitation do not equal inches of snow.

INFOGRAPHIC

a visual representation of selected facts

For Your Safety, Your Mobility, and Your Economic Opportunity

ITD maintains almost **13,000** lane miles.

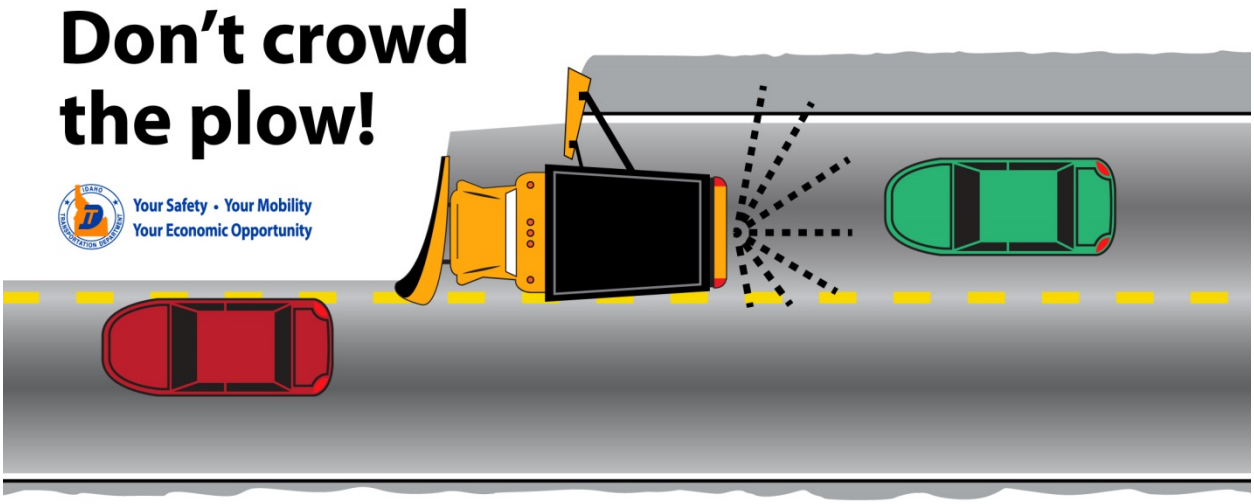
Our **550** Operators use more than **400** plows.

When fully loaded, the trucks weigh **58,000** pounds.

The trucks cost close to **$230,000.**

SOCIAL MEDIA GRAPHICS

visuals for drivers




Watch the Wing
IDAHO TRANSPORTATION DEPARTMENT
Your Safety • Your Mobility • Your Economic Opportunity


The safest spot is behind the plow!
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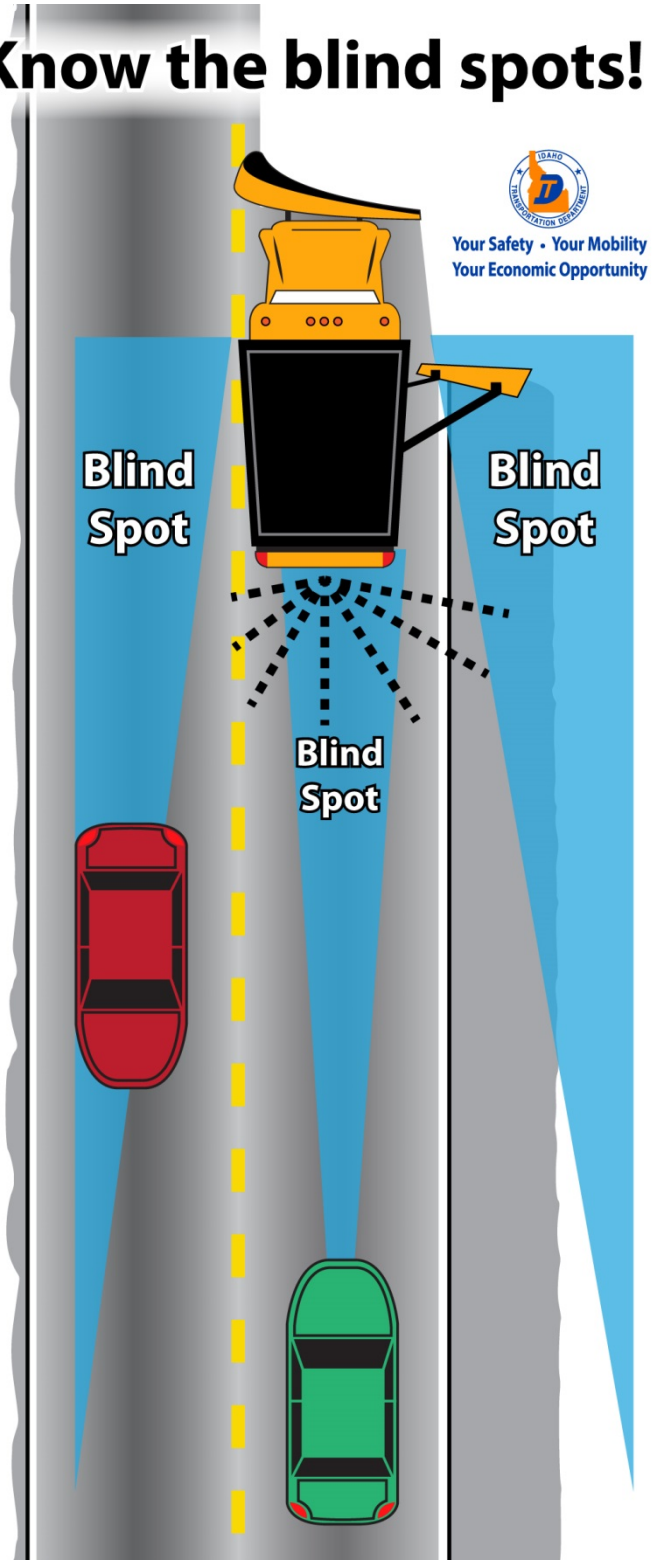
Know the blind spots!




Drivers are people, too.
IDAHO TRANSPORTATION DEPARTMENT
Your Safety • Your Mobility
Your Economic Opportunity

MISCELLANEOUS

other resources, some still under construction

OTHER RESOURCES*:

- *Soundscape:* Developed by the team to give the audience a realistic story of an operator's day. Talk to a district coordinator to get the audio file.
- *Crash photos:* Stockpiled on the team's website.

*Coming to shared location soon.

GIVEAWAYS:**

- USBs with handouts already uploaded
- Mini flashlights: wind up or battery powered
- Tire pressure gauges
- Seat belt cutter/window breakers
- Safety blankets
- Retro-reflective tape
- Reflective triangles
- Car jacks
- Fire extinguishers

**To be developed.

CONTACTS

SAFELY NAVIGATE OUR WINTER

THE SUMMIT TEAM

combining operations, communications and innovation

OPERATIONS:

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Special thanks to team champion Sue Higgins and facilitator Laura Meyer.

Soundscape recorders included: D.J. Price (operations), Carl Horn (operations), Matt Lyons (operations), Walter Gallon (operations), Amanda Regnier (training), and Alex DeSmet (NOAA). Other helpers included Clint Roney (operations), Mike Stowell (training), Jared Tuttle (communications), Rik Hinton (communications), Megan Stark (communications) and Matthew Conde (AAA).