

RESEARCH & INNOVATION

UPDATED DECEMBER 2025



Employee Safety Program used several studies and state DOT data over two years to guide its decision to implement green lights on top of WYDOT snow plows to reduce the recurring issue of snow plow strikes.



Office Services Program completed record research requests for 449 internal and 154 external requests, scanning and emailing 31,765 images.



Geology Program worked with University of Wyoming to complete research on the engineering assessment of drive point data for improving the prediction of geomaterials properties and pile foundation design and construction. This research will help improve predictability of pile driving refusal in various geologic formations statewide.

Research Advisory Committee (RAC) distributed about \$1.1 million to 5 research projects. Research projects are prioritized upon how the problem or issue affects operations of WYDOT, stakeholders, and Wyoming highways.



Drones scanned about 70 communications towers, and helped create training videos, assess roads, and inspect communication tower safety climbs for the Emergency Communications Program.

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RIS TRANSITION TO MAX SYSTEM

Background:

WYDOT's outdated Revenue Information System (RIS) for driver's license and registration data had been in place since 1986. WYDOT implemented the MAX system to replace RIS and offer more for their customers.

Process:

- Driver Services, Motor Vehicle Services, Compliance and Investigation programs provided valuable information and feedback to ensure MAX met employee and customer needs.
- Emergency Communications Program built rewires for the MAX upgrade and collaborated with Driver Services to migrate over 12 million documents to the new MAX Driver's License System while implementing a new ticketing system to track and escalate issues related to MAX.
- IT's Application Development team assisted with the data cleanup and conversion efforts from RIS to MAX. The Application Support team assisted with the driver's license exam station rollout efforts.

Result:

In October 2025, Driver Services implemented the new driver's license MAX system, including the self-service portal, oneWYO, to securely offer many online self-service options. MAX standardizes Driver Services' operations for employees, but also provides major quality improvements to the public, including:

- Issuing driver's licenses;
- Compiling driver records;
- Issuing disabled placards;
- Maintaining medical information for commercial drivers; and
- Managing driver privileges after legal actions from commercial driving penalties or convictions, like driving impaired.

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UPS INSTALLATIONS

Emergency Communications Program installed Uninterruptible Power Supplies (UPS) in WYDOT shops and WHP network connects for remote monitoring and power outage alerting.



IT's Financial Systems team completed a major PeopleTools upgrade, delivering a modernized user interface that provides more intuitive and streamlined navigation across PeopleSoft applications.

PEOPLETOOLS UPGRADE

ZABBIX MONITORING SYSTEM

Emergency Communications and GIS/ITS programs stood up the Zabbix Monitoring System for roadside networks.



WYO LINK

Emergency Communications completed the following WyoLink improvements:

- *Converted 89 radio sites to Ethernet to improve performance and reliability.*
- *Started adding direct fiber connections to sites for redundancy and reliability.*
- *Installed interoperability radio system connections to NE, SD, and MT to facilitate cross-border communications for first responders.*
- *Patched cellular (LTE) to WyoLink to allow radio communications via a smartphone.*

