

## NOTE TO WYDOT PERSONNEL

WYDOT's executive team would like to thank all personnel who contributed to this report. We understand the difficulty of summing up a year's worth of work and achievements in a few short paragraphs, and your efforts are appreciated as they help to share WYDOT's story.

Although it is impossible to include all the many accomplishments of every crew, section, district, and program, we hope this report can at least highlight some of the various ways in which we all work together to go the extra mile for the citizens of Wyoming and all the users of our state transportation system.

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# WYOMING DEPARTMENT OF TRANSPORTATION

Compiled and edited by Management Services; Layout and design by Carlie Van Winkle, Public Affairs Office; Photos by Rick Carpenter, Public Affairs Office. Scenic photos are along the Arminto Scenic Backway route, west of Casper, on US 20/26.

## WYDOT PURPOSE, VISION, MISSION, VALUES & GOALS

#### Purpose

Support Wyoming's economy while safely connecting communities and improving the quality of life

## Vision

**Excellence in transportation** 

### Mission

Provide a safe and effective transportation system

### Values

Respect

Integrity

Dedication

Excellence

Safety

#### Goals

Ensure a vibrant, safe, and competent workforce

Acquire and responsibly manage resources

Provide safe, reliable, and effective transportation systems

Provide essential public safety services and effective communication systems

Create and enhance partnerships with transportation stakeholders

Encourage and support innovation Preserve our history and heritage

## GOVERNOR'S MESSAGE



I commend the Wyoming Department of Transportation (WYDOT) on its continued commitment to providing safe, convenient, and effective transportation for Wyoming. WYDOT's responsibilities range widely from roads, air service, and safety communications to an ever-changing transportation landscape, which now

Governor Mark Gordon

includes vehicles approaching zero emissions. WYDOT advances a host of other initiatives as well, such as the I-80 Connected Vehicle Pilot, Wyoming's pioneering work on wildlife crossings, ensuring modern and supported airports and air service.

Transportation is changing. Electric vehicle use is increasing across our nation. For Wyoming, this trend poses some unique challenges and opportunities. USDOT is working with state DOTs to roll out the \$5 billion National Electric Vehicle Infrastructure (NEVI) Formula Program. Wyoming stands to receive almost \$4 million. Our implementation plan must reflect what makes the most sense for our state, so WYDOT has conducted town halls to inform the public about the Zero Emission Vehicle and NEVI Implementation Plan and how it might look in Wyoming. WYDOT's job is to make sure the state's transportation infrastructure supports all motorists, regardless of what vehicle type they choose to drive. Tourism is Wyoming's second-largest economic driver, and visitors to our state need confidence that they can travel safely and easily to see all that our state has to offer. WYDOT is committed to doing its part to support this important industry.

Our highways – and particularly our interstate highways – are experiencing increased traffic leading to heightened safety concerns. Connected and autonomous vehicle technologies also present significant opportunities to improve transportation safety. Connected Vehicle (CV) technology allows vehicles to communicate with each other and with infrastructure along the highway to warn of potential collisions and other problems. In time, CV technology could be combined with autonomous vehicles, which car manufactures are developing, to significantly improve roadway safety.

I am proud that the USDOT selected WYDOT as one of three national projects to demonstrate the possibilities of CV technology. Experience gained by WYDOT's participation in the I-80 CV Pilot has led to many innovations within the transportation community, and Wyoming residents will continue to benefit from these advancements.

The CV Pilot is just one example of how Wyoming works with the

trucking industry to enable the delivery of products to Wyoming's communities safely and on time. WYDOT is dedicated to prioritizing safety for our truck drivers. But beyond technology, WYDOT is adding nearly 200 truck parking spaces along Interstate 80, split between the Quealy Dome and Ft. Steele areas, so trucks can safely park during severe winter weather events.

WYDOT also continues to improve route-based weather forecasting, especially regarding high winds. This past winter was one of the windiest in over a decade, creating significant blow-over hazards for lightweight trucks. One event last year clocked wind gusts over 100 mph. Truck blow overs are dangerous and expensive for everyone. We are taking the steps to provide the best information to professional drivers, so they can make informed decisions while traveling travel across the Cowboy State.

WYDOT and the Wyoming Highway Patrol are also working with the trucking industry and Truckers Against Trafficking to raise awareness of human trafficking. Professional drivers are uniquely positioned to identify human trafficking on our roadways, and I am certainly grateful to those who assist in this important endeavor. I thank all of you for keeping an eye out for any wrongdoing on our roads.

I want to thank all WYDOT employees for your hard work, forward-looking vision, and dedication over the past year. Again, I congratulate you for your extraordinary commitment, and I am looking forward to seeing many projects come to fruition over the coming years. Wyoming is a can-do state. You are the embodiment of the attitude Yogi Berra described when he said, "when you come to a fork in the road, take it." WYDOT is taking on new challenges even as it improves what we have. **\*** 



## DIRECTOR'S MESSAGE

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WYDOT employees continue to impress me with their ability to achieve our mission of providing a safe and effective transportation system in a challenging environment with limited resources. No matter the circumstance whether responding quickly to travel hazards, using our resources wisely and effectively, or improving customer service and outreach

Director Luke Reiner

– WYDOT personnel work together to provide Wyomingites and others a safe and efficient travel experience.

Safety – for our employees, our travelers, and our infrastructure – is always the top priority and remains at the forefront of our efforts. Whether responding to roadway rock slides, investigating highway collisions, training those who climb towers or inspect bridges, and for a myriad of other challenging tasks, WYDOT staff promotes workplace safety. For the traveling public, we use an ever-expanding array of technology and transportation assets to assist travelers in planning and executing safe trips. In July 2021, for instance, WYDOT tested a new safety design for a Teton Pass truck arrestor system and refined our winter authorized travel program. The Wyoming Highway Patrol works on the front lines to assist motorists and enforce traffic and other laws.

For our roads, WYDOT's engineering programs select, plan, and design projects that promote and improve our transportation system using the funds available. Using a federal grant and state matching funds, for example, we continued a project on Interstate 80 to improve freight efficiency and traveler safety by adding truck parking and passing lanes on a stretch of road known for mishaps and closures. We also continue to add towers to the WyoLink safety communications system, and we are in the planning stages to replace the state computer system used to track registration and licensing information for WYDOT – as well as other vital data for law enforcement and a variety of other government users.

These achievements are all the more impressive in the current fiscal climate in which WYDOT must focus on preserving existing transportation infrastructure with mostly static financial resources and diminishing staff in key law enforcement, engineering, and maintenance areas. We work to use every dollar efficiently and effectively and subject all initiatives to the following guiding principles before advancing them:

- Employees Always (our most important resource)
- Align type of expenditures with appropriate and available revenue source

- · Address identified critical life safety issues
- Preserve WYDOT assets (as appropriate)
- · Improve operational effectiveness and efficiency
- Minimize activities that negatively impact the public
- Align quality standards of highway (ride, pavement, and so forth) to traffic volume and type of traveler (local vs non-local) while still meeting established safety requirements
- Address mobility and capacity through system improvements and enhancements

In addition to applying these strategic concepts, we are using a variety of techniques to ensure that WYDOT is doing its best for Wyoming and its citizens.

Employee work groups continue to explore ways to improve job safety, work processes, and staff retention. Executive staff is prioritizing tasks and matching them to existing department talent and resources. In the coming year, we plan to move WYDOT forward and head forcefully into the future. We will continue to improve our agency and to care for all aspects of our valuable transportation system, which connects us to jobs, recreation, and each other. As you reflect on our achievements recorded on the following pages, please take a moment with me to imagine the great possibilities for the coming year. �



PAO had the honor of coordinating a memorial service for Shirley Samuelson, a WYDOT employee who died on the job in 2020. The ceremony was an important way to pay respect to our coworker and friend with her loved ones. Director Reiner and Col. Kebin Haller unveiled the memorial with Samuelson's name newly engraved on the stone.

## 6 DIRECTOR'S OFFICE

#### **CIVIL RIGHTS** provides policy development, guidance, and oversight for civil rights programs to ensure regulatory compliance and advances diversity and inclusion in WYDOT's work.

The program continued advancing ADA facility upgrades through new awarding procedures for Transportation Alternatives (TA) grants and hired its first full-time ADA coordinator.

The annual DBE Program goal was set at 5.29 percent with actual accomplishments at 6.0 percent as the program continued to solicit participation from minority and women-owned firms.

## **CIVIL RIGHTS PROGRAMS**

- Title VI
- Prevailing Wage
- Americans with Disabilities Act (ADA)
- Internal/External Equal Employment Opportunity (EEO)
- Disadvantaged Business Enterprise (DBE)
- Federal Contractor Compliance

#### INTERNAL REVIEW (IR) delivers

critical information to decision makers to mitigate risk and confirm compliance and good stewardship of resources.

IR gathered information for WYDOT's annual Title 2 Code of Federal Regulations (CFR) 200 Single Audit. Further, personnel conducted striping and billing rate analysis, various risk assessments, an airport audit, and pass-through entity reviews.

Providing excellent customer service while complying with 48 CFR 31.201-31.205, IR developed a process for consulting firms

## **FYI: SINGLE AUDITS**

Audit results ensure WYDOT's eligibility to continue receiving federal funds including those passed to local communities to improve transportation systems.

For the Fiscal Year 2020 Single Audit, WYDOT received an unmodified opinion and zero findings for federal awards. to document loans from the Paycheck Protection Program and provided recommendations for how firms can apply credits upon loan forgiveness.

#### **MANAGEMENT SERVICES**

advises on maximizing federal funding and minimizing federal regulatory impacts while offering policy development and other essential services to WYDOT management and programs.

The program participated in American Association of State Highway Transportation Officials (AASHTO) activities related to surface transportation program reauthorization and COVID-19 financial relief and collaborated with surrounding states on advancing rural state policy priorities.

The team worked directly with Congressional staff on reauthorization bill priorities and amendments while also supporting state legislative activities.

Working with Grants and Contracts Policy and other internal programs, Management Services prepared, edited, and submitted grant applications and reports for awards totaling over \$46.7 million.

The program issued or rescinded 29 internal policies, including the agency's telework policy; prepared 6 rules for promulgation; and reviewed and edited various presentations, publications, and documents including biweekly staff call briefings.

#### MAJOR GRANT APPLICATIONS SUBMITTED

- Wyoming Pre-apprenticeship Pilot HCWP Program
- Coffeen Ave. Multi-modal Project and I-25/I-80 Interchange Design Phase RAISE Program
- Teton County Village Association Low-No Emission Program

### PUBLIC AFFAIRS OFFICE

**(PAO)** shares WYDOT's story through various outreach channels and collaboration with WYDOT programs and external partners to connect with and inform the public.

PAO coordinated with county, state, and military partners on public outreach to cover the historic Rally in the Rockies military training.

A nationwide labor shortage did not spare WYDOT, and PAO assisted Human Resources and the Department of Administration & Information with job recruitment campaigns including social media posts, multimedia advertisements, and recruitment videos.

PAO created and shared about 52 video news releases, which aired on social media and local news channels, with topics ranging from winter operations to new projects. PAO's efforts grew WYDOT's overall social media presence with posts garnering hundreds of thousands of views and reactions. �



PAO and district personnel collaborated on motorcycle safety billboards, similar to the above image, which were strategically placed along popular routes to the Sturgis Motorcycle Rally.

**BRIDGE** delivers high quality, cost effective hydraulic and structural solutions.

Bridge let a record \$63 million in work to contract and completed routine inspections on 1,558 structures (1,030 on-system and 528 off-system bridges). The program reviewed 191 sets of shop drawings, processed 733 overweight load permits, completed 129 bridge load ratings, and archived 101 completed projects.

Bridge established new standard details for bridge railing modifications and approach slab details. This improvement reduced project plan sheets and eliminated the need to collect field measurements that expose employees to hazards.

Operational efficiencies included switching to electronic shop drawing submittals,

### **THE EXTRA MILE**

WYDOT highlights Bridge personnel for their hard work inspecting 325 high mast light towers in Wyoming. Bridge engineers and technicians have designed and detailed a new 80-foot tall high mast light tower to replace all towers statewide.

The new tower and lighting rings are currently being wind tunnel tested to confirm additional system stability for Wyoming's extreme weather. checking, and transmissions; incorporating BRASS structural analysis software into the e-permitting software to evaluate bridges for overweight loads; and aligning BRASS customer billing to collect revenue within the fiscal year.

#### **CONTRACTS AND ESTIMATES**

**(C&E)** oversees contract bidding and award and creates engineer's estimates for the bidding and contracting process.

C&E oversaw 85 highway contracts awards, including many combined projects. The average number of bidders per project was 3.4 – higher than the previous year. The aggregate Engineer's Estimate was within 3.5 percent of total construction cost.

### **85 AWARDED CONTRACTS**

- 79 Federally Funded
- 6 State Funded
- 61 In-State Bidders
- 24 Out-of-State Bidders

Striving to reduce report production times and increase accuracy, C&E continued, with a developer, to improve web-based bidding software. Further, C&E temporarily adapted bid lettings to adhere to the Governor's COVID-19 guidelines.



A rock slide in Wind River Canyon was cause for repair on WYO 789/US 20.

### BRIDGE WORK & INSPECTIONS

7 Bridge Replacements
1 Bridge Widening
96 Bridge Rehabilitations
12 Box Culverts
1 Retaining Wall
10 Initial Inspections
31 Elemental Update Inspections
44 Fracture Critical Inspections
30 Overhead Sign Inspections
108 High Mast Light Tower Inspections
8 Bridge Damage Inspections



Road construction zones lined with traffic control on I-80 during a paving operation.

**GEOLOGY** provides construction support and technical assistance ranging from pile driving with dynamic testing, drilled shaft inspections for landslide repair and bridge foundations, and rock fall and landslide remediation.

Geology delivered 13 weeks of construction support for 10 projects. Two projects involved scaling loose rock from slopes along I-80, which required personnel to access slopes by ropes to reduce rock fall hazards.

For a unique landslide remediation in Wind River Canyon, Geology worked with the contractor to analyze and approve the value engineering proposal – ultimately saving around \$385,000 split between WYDOT and the contractor.

To support the districts in deciding funding priorities, Geology completed remediation strategies with estimated costs for 3 of the 16 statewide highway corridors subject to rock fall hazards along with analysis for 10

### **GEOTECHNICAL** FOUNDATIONS

- 874 Soil Samples Tested
- 97 Specific Soil Tests Completed
- 44 Geotextile Samples Tested



Using the three WYDOT drill rigs and backhoe, Geology completed 484 test holes and 8,362 feet of drilling and digging for subsurface investigations.

other corridors while finalizing remediation strategy reports.

#### HIGHWAY DEVELOPMENT

provides road design and engineering, manages consultant contracts, delivers surveying and mapping, and oversees utilities and license issuance.

#### PROJECT DEVELOPMENT DESIGN

completed 85 highway projects totaling \$330 million. The section saved \$203,000 using value engineering studies on two projects. Project Development, working with a consultant, also completed the I-25/I-80 interchange reconstruction grading plans to advance this historically large project.

#### ENGINEERING SERVICES -

**STANDARDS** continued developing the new approach guardrail transitions. Collaborating with the Texas A&M Transportation Institute (TTI), WYDOT successfully conducted seven full-scale crash tests on the new transitions at TTI's proving grounds.

#### ENGINEERING SERVICES – CONSULTANT SERVICES processed

1,117 payments on 102 agreements with 62 firms totaling \$14.5 million (a 15.6 percent increase from last year). Additionally, 72 change orders were executed, decreasing 10 percent from last year. Consultant Services issued 32 new consultant contracts (26 with in-state firms) increasing 52.9 percent from last year.

### **NEW AGREEMENTS**

- 2 Preliminary Surveying Master Agreements
- 1 Land Surveying Master Agreement
- 2 Other Master Agreements
- 13 Project-Specific Road Design Agreements
- 2 Electrical Engineering Agreements
- 3 Planning Agreements

#### PHOTOGRAMMETRY AND SURVEYS

(*P&S*) administered 16 contracts with multiple consultants for mobile and aerial Light Detection and Ranging (LiDAR), utility potholing, and topographic

collection. The Photogrammetry crew flew 34 missions and collected aerial imagery for 19 projects and 16 geology slides. The crew also compiled mapping for 32 projects, completed 180 mapping updates, and collected systems photography in two counties. The Survey crew collected, edited, and processed data for 161 field surveys with conventional and global position system (GPS) surveying equipment on 42 projects and collected 289 terrestrial scans on 13 projects.

#### P&S SURVEY DATA COLLECTED

- 14 Urban
- 35 Rural
- 3 Bridge
- 3 Landslides
- 5 Pits/Quarries
- 1 Tunnel

**UTILITIES** worked on 86 projects and processed over 500 utility licenses. The section provided one-on-one online permitting system support to utility companies and WYDOT personnel and enhanced system performance to optimize user experience.

**HIGHWAY SAFETY** improves safety for all travelers by evaluating and funding safety projects, maintaining Wyoming's crash report database, and training motorcycle operators.

Highway Safety worked closely with federal partners, expending \$3.6 million in federal grants, to reduce traffic crashes, fatalities, and injuries through outreach, education, and enforcement.

## **SAFETY FIRST**

WYDOT spent more than \$525,000 in federal highway safety grants for targeted safety messaging covering seatbelt use, distracted and drunk driving, and winter safety. One new campaign involved placing billboards in key locations along I-80 warning drivers about blow-over risks during strong wind events.



To improve crash data analysis and enable public data access, the program updated the Safety Portal and shared crash data with safety partners for studies, research, planning, and more. Highway Safety also collaborated with law enforcement for correct and timely crash report submissions.

With WYDOT's safety partners, Highway Safety began updating the Strategic Highway Safety Plan.

**MATERIALS** uses management systems, design and testing to deliver innovative pavement solutions.

#### TESTING, INSPECTIONS, AND PROJECT MIX DESIGNS. Soils and

Surfacing evaluated 6 new aggregate sources and completed 51 construction mix designs. Pavement Design established a new test section on US 85 to determine pavement performance with added aramid fibers. This testing will evaluate four miles of roadway containing two different fiber types at different depths. The Concrete Section completed 34 new concrete mix designs, verified 59 referenced mix designs, and broke roughly 3,200 cylinders to test Quality Assurance for 93 mix designs. Independent Assurance performed 184 inspections statewide. Roadway Evaluation collected 1,308 cores and completed 62 bridge deck evaluations. The Finals Group issued final acceptance for 76 projects.

#### EXCELLENCE IN TRANSPORTATION

Pavement Management developed new pavement analytics related to federal requirements and reporting variables to create condition projections for all pavements statewide. This new analysis uses pavement age to analyze deterioration and preservation treatments based on system and will help expand suggested pavement treatments to optimize WYDOT roads.

**PAVEMENT MANAGEMENT** performed five smoothness verifications, accounting for about 40 percent of total mileage of new concrete construction and asphalt projects under smoothness evaluation in 2021.

The **RESEARCH CENTER** moved from Planning to Materials. The Center has 20 research projects in progress and is monitoring 5 pooled fund projects. Five research projects were completed and published in the National Transportation Library Repository and Open Science Access Portal.

**PLANNING** produces important planning documents and studies and provides environmental services and local government outreach to support transportation system improvements.



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*The Motorcycle Safety Program trained 671 students statewide.* 

**PROGRAMMING** produced the State Transportation Improvement Program (STIP) and reported STIP performance measures. The Mapping team modernized and geo-located maps. Asset Management obtained federal approval on the annual asset management consistency review and launched a new project scope statement process for project initiation. The section made datasets available department-wide through the State Planning and Operational Database.

SYSTEMS PLANNING administered funds to and assisted Metropolitan Planning Organizations and urban systems with planning efforts along with planning studies in five communities. The section completed the annual Highway Performance Monitoring System (HPMS) submittal, rail project field assessments, the State Rail Plan, and the Grade Crossing Action Plan. Systems Planning also maintained over 120 permanent traffic counter sites, collected statewide traffic count data for the online Vehicle Miles Book, and participated in adjacent states' passenger rail efforts, including the Front Range Passenger Rail Initiative.

#### ENVIRONMENTAL SERVICES (ES)

coordinated with the Federal Highway Administration (FHWA) to complete a memorandum of understanding with the U.S. Forest Service (USFS) to streamline National Environmental Policy Act (NEPA)

and right-of-way acquisitions. ES completed 13 Density Disturbance Calculation Tool analyses to comply with the Governor's Sage Grouse Executive Order, 94 consultations with the Wyoming State Historic Preservation Office, and 98 consultations with the Tribal Historic Preservation Office. ES also executed two memorandums of agreement for Section 106 mitigation. After meeting compliance obligations, over a dozen long-term wetland mitigation sites were released from U.S. Army Corps of Engineers oversight.

## **OUTREACH & EDUCATION**

ES staff co-authored two wildlife related presentations at the 2021 International Conference on Ecology and Transportation and represented WYDOT during the Platte Valley, Baggs, and Sublette mule deer migration corridor workgroup meetings.

### LOCAL GOVERNMENT

**COORDINATION** oversaw \$6.1 million awarded in pass-through funding to local public agencies (LPAs) through the TA, Congestion Mitigation Air Quality, and High Risk Rural Roads programs. Of the Relief and Economic Security (CARES) Act funding awarded, WYDOT expended an additional \$9.6 million for public transportation (FY20 CARES Act funds expended were \$4.9 million).

#### PROGRAM PERFORMANCE

facilitates timely STIP delivery with project and data management and executes, evaluates, and measures WYDOT's Strategic Plan.

**PROJECT DELIVERY** conducted 110 kick-off meetings and 29 work plan reviews, managed 95 projects let to contract, and placed 53 projects on the shelf. The team also developed, designed, and executed a project flow in WYDOT's design schedules for scope statement completion.

**STRATEGIC PLANNING** developed and presented 12 Metric Walks to evaluate and measure WYDOT's Strategic Plan. The team conducted five meetings with agency leaders to review and update WYDOT's 2020-2023 Strategic Plan. Additionally, the team helped coordinate and proctor 36 Employee Advisory Team meetings. The team began coordinating efforts to enhance Wyoming outdoor recreation including potentially use of WYDOT's right of way. This is an ongoing effort involving policy development, collaboration with other state agencies, and relationship building with stakeholders.



A crane puts a concrete section of a wildlife underpass in place at the Dry Piney Wildlife Connectivity project site.

*ES prepared NEPA documents for over 197 projects including a categorical exclusion for the Highway 22/390 bridge in Teton County and the Dry Piney Wildlife Connectivity project.* 

### RIGHT-OF-WAY ACQUIRED FOR SIGNIFICANT PROJECTS

Byron Streets (38 parcels) Sheridan 5th St. (23 parcels) Sheridan Coffeen Ave. (89 parcels) Thayne North (130 parcels)

**RIGHT OF WAY (ROW)** oversees the acquisition, management, and disposition of real and personal property for transportation purposes.

ROW acquired 220 parcels on 34 highway construction projects statewide. Notably, ROW negotiated and secured the Dry Piney Wildlife Connectivity project. ROW also abandoned, relinquished, traded, or sold six parcels of surplus land netting nearly \$39,000 for WYDOT. The program also presented at two LPA trainings on complying with federal regulations during acquisition.

The land surveyor managed 10 land surveys to completion with total surveying consultant fees equaling just under \$128,900. ROW also completed 246 public and internal research requests.

ROW processed 5 new outdoor advertising permits and revoked 28 permits, bringing the total to 1,947 permitted signs.

The program processed 41 real estate leases with WYDOT as the lessee and 18 real estate leases with WYDOT as the lessor, bringing in \$214,134. The program oversees 56 telecommunication sites as the lessee and 16 cellular sites as the lessor with income totaling \$34,886. ROW also manages 9 railroad-only projects with another 18 in progress along with various road access and snow fence leases statewide. ◆

## JUNKYARD CONTROL PROGRAM

ROW regulates 51 junk/salvage yards in 15 counties. In FY21, ROW processed 25 encroachment applications along state highway system boundaries.

#### **DISTRICT 1**

**CONSTRUCTION** let about \$62 million of work, spending about 65 percent on I-80 alone. D1 completed several safetyfocused projects including traffic signal replacements and durable epoxy striping. Crews performed 30 bridge rehabilitations and replaced two I-80 bridges. To correct critical findings and ensure unrestricted industry use, D1 completed two emergency bridge projects. D1 also worked with local governments on several urban systems projects.

### SAFETY FIRST

D1 strove to create a safer work environment with positive results – compared to 2020, district-wide incidents decreased more than 27 percent, and injuries significantly declined.

**EQUIPMENT** shops, despite limited personnel, diligently serviced and repaired aging equipment. Shops worked together by sharing information and assisting with repairs.

**MAINTENANCE** placed 21,900 tons of plant mix across the district. Responding to rapid roadway deterioration, weather, and COVID-19 disruptions, D1 extended paving operations into October. Fortunately, the overall milder winter provided some relief to the D1 snow control budget compared to the 5-year average. Unfortunately, significant turnover continues to impact D1 maintenance.

**TRAFFIC** expended 86 percent of its 2021 budget. Urban Striping painted 11,623 square feet of roadway and used 7,930 gallons of paint and 69,450 pounds of reflective glass beads. Rural Striping painted 2,256 pass miles of highway using 33,059 gallons of paint and 278,600 pounds of reflective glass beads. Electrical maintained 89 traffic signals and repaired and installed numerous traffic devices. Signing replaced 174 sign posts and installed 10,161 square feet of new signs.

#### **DISTRICT 2**

**CONSTRUCTION** let some \$66 million on 17 projects; notably, D2 completed WY 59 widening north of Douglas and several I-25 improvements. Other projects, which sometimes included coordination with LPAs, focused on pavement and bridge preservation as well as pedestrian facility safety improvements.

**EQUIPMENT** maintained and repaired the hot plant along with 882 pieces of equipment. The hot mix plant silo was relined to ensure good working order for the multiple districts that depend upon it. To ensure equipment readiness, D2 performed some 1,900 preventive maintenance inspections and services.



District forces collaborated with the military to land a C-130 on US 287 north of Rawlins.



D2 completed inspections on all facilities to identify workplace hazards and implement solutions.

**MAINTENANCE**, while keeping roadways safe and working in inclement weather to clear snow and ice, worked tirelessly to ensure fences, pipes, bridges, guardrails, and facilities functioned properly. D2 forces placed almost 23,000 tons of hot plant mix district-wide – with almost 10,000 tons produced by WYDOT's hot mix plant and the rest purchased from local vendors.

**TRAFFIC** maintained signing and electrical systems, including helping other districts with electrical system repairs and upgrades. Responding to supply chain issues, D2 and the other districts implemented an emergency plan that salvaged striping operations – prioritizing the most heavily traveled roads to combat uncertain material delivery schedules.

### WYDOT FAMILY

D2 Signing was instrumental in the successful dedication of the Bryan P. Gross Memorial Bridge in Douglas.

The ceremony took place on the 10th anniversary of Deputy Gross's passing and recognized his sacrifice while rescuing a small child.

#### DISTRICT 3

**CONSTRUCTION** let 15 projects for about \$112 million. Interchange Road was the most significant and included a bridge replacement over I-80 for higher vertical clearance, eastbound and westbound ramps with continuous acceleration and deceleration lanes to Dewar Drive, and a rail overpass for industrial park access.

**EQUIPMENT** conducted repairs on more than 800 units and performed nearly 1,850 preventative maintenance inspections and services, including upgrading five heavy-

### THE EXTRA MILE

D3 crews, along with contract crews from Interstate Highway Construction, were awarded the 2021 Excellence in Concrete Pavement Award in the Rural Divided Highways Division.

The project encompassed the 5.3 mile stretch of I-80 westbound lanes between Green River and the Granger interchange and featured:

- Roadway reconstruction
- Bridge deck replacement
- Bridge rehabilitation on two additional bridges
- Placing 126,000 yards of 11-inch thick concrete pavement

duty diagnostic scanner platforms to improve efficiency. Despite staffing issues, D3's dedicated crews maintained fleet uptime by flexing workloads and personnel beyond normally assigned duties.

**MAINTENANCE** faced retention challenges and strove to train new employees. The Jackson crew worked with the USFS on Teton Pass (WY 22) safety improvements and on reducing delays from avalanches. Together, D3 and USFS identified short-term and long-term solutions to balance highway and recreational uses and local interests.

**TRAFFIC** reviewed and approved 35 access permits, issued 38 special event permits, and performed 4 speed studies and one districtwide wildlife speed/crash study. Crews installed temporary signals in Evanston to alleviate seasonal traffic congestion off the interstate. While working with Teton County and the Jackson Hole Wildlife Foundation, crews installed new, unique wildlife signs on WY 390 and doubled the number of "reduced speed ahead" signs to address local concerns. Crews also responded to public concern regarding the school signs for Munger Mountain and Wilson Elementary schools south of Jackson.

#### DISTRICT 4

**CONSTRUCTION** let 14 projects totaling about \$50 million. Notable projects include the bridge over the BNSF Railroad and US 14 connector in Sheridan County (the largest project at about \$12 million) and the Reno Junction to Gillette passing lane extensions in Campbell County (about \$4 million). To further improve highway integrity and safety, other projects included mill and overlays improving about 83 roadway miles district-wide, bridge rehabilitations and repairs, spot safety improvements, rumble strip installations, chip and crack sealing, electrical upgrades, and signal improvements.

**EQUIPMENT** mechanics kept busy with major and minor snow removal equipment

### D4 MAINTENANCE WORK HOURS BY ACTIVITY

- Major Fence Repair: 7,754 hours
- Delineation Repair: 5,653 hours
- Irrigation/Drainage Repair: 3,907 hours
- Shoulder Repair: 5,114 hours
- Erosion Repair/Control: 2,411 hours
- Daily Litter Control/Carcass Removal: 12,791 hours



D3 partnered with city and county agencies on Interchange Road, and the project is slated for 2023 completion.

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repairs – addressing electrical, emissions, and wiring issues. Annual inspections and necessary repairs were completed. D4 mechanics attended training sessions, including factory training on new equipment.

**MAINTENANCE** placed 30,990 tons of locally supplied hot mix asphalt. Despite vacancies, crews diligently repaired and improved assets in declining condition and cleared debris from highway rights of way to increase public safety.

**TRAFFIC** expended 86.52 percent of its budgeted program. Although D4 received only 84 percent of its usual paint because of global shortage, D4 used carryover paint from last year to complete almost all of its regular pavement marking schedule. D4 completed most of the season's workload with an undersized staff; fortunately, good weather and minimal equipment breakdowns combined with hard work allowed crews to complete annual work plans. Access permits hit an all-time high with the construction of many new subdivisions.

#### **DISTRICT** 5

**CONSTRUCTION** accepted bids of more than \$52.4 million for 19 projects, including concrete repairs, pavement improvements, and ADA enhancements in Lander (US 287) and Riverton (US 26); asphalt pavement preservation along US 16, US 287, WY 210, US 14/16/20, and US 26; wildlife friendly right-of-way fencing installation; bridge rehabilitation; and contract chip sealing. To plan for future wildlife-vehicle collision prevention on US 26/287, D5 and

#### D5 CONSTRUCTION HIGHLIGHTS

- Placed 11,000 flexible delineators district-wide
- Finished ADA and surfacing upgrades in Cody (US 14/16/20)
- Started slide mitigation and rockfall scaling in Wind River Canyon (US 20/WY 789)
- Repaired DIP slide and repaved roadway across Chief Joseph Scenic Highway (WY 296)

## **SAFETY FIRST**

District 5 completed its 12th year of a Highway Safety federal grant/ marketing program on the Wind River Reservation encouraging pedestrian safety and seatbelt use and discouraging drinking and driving.

the Wyoming Game and Fish Department completed a wildlife analysis and mitigation plan.

**EQUIPMENT** crews maintained the district fleet, and mechanics attended training.

**MAINTENANCE** placed 4,384 tons of warm mix asphalt, chip sealed 79 miles, and rejuvenator-sealed 14 miles. Crews assisted with snow removal in other districts. D5 helped contractors with emergency soil nailing projects on Togwotee Pass and repairing and holding gabion baskets on Chief Joseph Scenic Highway. D5 also opened a new remote fueling facility between Shoshoni and Casper.

**TRAFFIC** completed annual inspections on all traffic signals, and the Signing crew completed annual sign upgrades. Signing and Electrical crews removed and replaced roadway luminaries knocked over or damaged by vehicles. Both striping crews dealt with a paint shortage requiring them to modify annual striping programs. Overall, crews striped 33,000 gallons of yellow and white paint on highways, and crews focused on repairing and replacing thermoplastic pavement markings. Access permit requests increased because of new development and a housing boom within the district.

**CONSTRUCTION** improves project administration and coordination with the contracting industry.

Construction held joint WYDOT/AGC (Associated General Contractors of Wyoming) meetings for the Highway and Traffic Control committees.

The program conducted working group meetings to develop a new flagger certification program, fencing item changes, price escalation and material shortage issues, traffic control issues, contract management system enhancements, and iCX software training to address industry and agency priority items.

Construction pre-qualified 190 prime contractors, processed and approved 544 subcontracts, reviewed 367 bid envelope submittals, and assisted development of 206 special provisions.

**EQUIPMENT** purchases and manages all WYDOT vehicles and equipment.

The program purchased 330 pieces of equipment totaling \$11.7 million.

Vehicle purchases included 84 Highway Patrol vehicles and 5 platform lift trucks. Equipment also purchased one Hamm HD 140IVV 84-inch steel wheel roller.

For snowplow trucks, the program purchased 24 Freightliner tandem-axle truck chassis and one Freightliner single-axle truck chassis.

#### FACILITIES MANAGEMENT

addresses work order repairs and maintenance needs, so WYDOT facilities function safely and effectively.

Personnel completed 1,172 reactive and 3,374 preventive maintenance work orders. For efficiency, the program combined all facility condition evaluation and report data into one program by merging the Capital Forecast Database with Asset Essentials. Further, the program fully implemented a mobile application of Asset Essentials at the work order level.

Responding to COVID-19, custodial services performed extra cleaning tasks, including response to 141 requests for workspace sanitation, to reduce and prevent virus spread and support employee safety.

Notably, Facilities completed several significant repair projects, such as scale pit concrete repair at the I-80 port of entry near Cheyenne, Planning and Highway Patrol building roof replacement, car barn roof repairs, and Planning building stair and ramp rebuild. For the Driver Services building, Facilities oversaw the HVAC system renovation design. Work continues on the statewide arc fault evaluation project.

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## THE EXTRA MILE

Contributing to a statewide COVID-19 response, Maintenance provided vital assistance to the Wyoming Department of Health by facilitating COVID-19 vaccine and medical equipment deliveries to counties.

#### **MAINTENANCE** manages the

maintenance budget and AgileAssets, trains personnel, and coordinates activities with the districts and outside agencies.

Maintenance equipment trainers provided training and commercial driver's license (CDL) testing for WYDOT personnel statewide.

Staff provided statewide AgileAssets support, snow fence repair contract management, Maintenance Quality Control Program management, and response to public information requests. Maintenance also partnered with other state agencies on environmental, wildlife, and emergency management issues.

**TRAFFIC** provides high quality traffic control systems to ensure the traveling public's safe and efficient use of Wyoming's highways.

The **SIGN SHOP** manufactured 5,799 signs. The section also reached agreement with the National Park Service to begin replacing the Oregon, Mormon, California, and Pony Express trail signing on the state highway system.

**ELECTRICAL DESIGN** completed 25 projects, for \$6.8 million in electrical work statewide. Traffic also installed door switches statewide to enable instant notification of an open signal cabinet. Additionally, the program standardized signal conflict monitors statewide.

Traffic completed 83 projects, for \$194 million, which contained permanent

signing and/or work zone traffic control and provided numerous operational sign layout requests.

The program executed purchasing contracts for 337,720 gallons of paint and 2.52 million pounds of glass beads for highway striping operations. Material shortages, though, limited delivery to only 78.36 percent (264,650 gallons) of contracted supplies.

Traffic collected and provided turning movement analysis, capacity analysis, and striping details for numerous projects statewide. \*



#### **BUDGET** compiles and reports on WYDOT's budget to assure transparency and provides responsible stewardship of WYDOT's resources.

Budget coordinated and complied the WYDOT FY22 Operating Budget while also diligently updating the annual budget presentation.

## THE EXTRA MILE

The FHWA Resource Center is using Wyoming's project closeout process as a best practice for all states thanks to the expertise and hard work of the Budget Program's Projects Section.

The **PROJECTS SECTION** obligated \$273.1 million and de-obligated \$15.8 million. Working with other programs, the section budgeted grants for transit, aeronautics, and highway safety and authorized reimbursement to granted entities, awarded contractors, and engineering consultants.

The program assisted internal and external auditors and reported budget data to the state, FHWA, and the federal Office of Management and Budget.

Additionally, Budget allocated agency resources, estimated and managed all budgeted revenue and expenditure streams, and maintained funding streams available to the agency.

**FINANCIAL SERVICES** provides WYDOT management and employees with accurate, timely financial information to assist them in performing agency duties.

Financial Services prepared financial statements, used by management and external stakeholders, reporting the full costs of preserving, improving, and enhancing Wyoming's transportation system.

## EXPENDITURES OVERVIEW

- \$5.8 billion in highway, bridge, and communication infrastructure assets
- \$185.6 million in capital assets
- \$29.9 million in inventories



Operations

\$112,733,925

\$24,195,186 / Planning/ Administration \$28,579,500

WYDOT and Financial Services received

an unmodified audit opinion on financial

Financial Services accounted for and

and expenditures of \$661.2 million.

2021.

statements for the year ended September 30,

reported on FY21 revenue of \$737.5 million

### **FYI: FUEL TAX REVENUES**

The Fuel Tax Program distributes fuel tax revenue to cities, towns, counties, airports, and the State Highway Trust Fund. These revenues are then used to preserve and enhance Wyoming's transportation system.

## FINANCE 15

## 16 FINANCE

#### FUEL TAX ADMINISTRATION

administers all fuel tax laws to ensure accurate fuel tax collection and timely revenue distribution to appropriate entities.

The program diligently collected fuel taxes and distributed the revenue to Wyoming localities, airports, and the Highway Trust Fund as required by law.

Fuel Tax personnel performed approximately 230 monthly desk audits. These audits encompassed fuel suppliers and distributors of all types of combustible gases and liquids used to propel motor vehicles on public roadways.

### **GRANTS AND CONTRACTS**

**POLICY** verifies available discretionary grant match and oversees WYDOT's contract processes.

The program worked with the Attorney General (AG) to ensure WYDOT contracts were submitted to Cobblestone<sup>\*</sup> for AG review. The program oversaw 28 work groups that submitted 1,411 documents for review.

Additionally, personnel worked with Management Services to coordinate the discretionary grant applications that Management Services submitted.

#### **PROCUREMENT SERVICES**

acquires necessary materials, supplies, equipment, services, and more at the best value for taxpayer dollars.

Procurement Services facilitated six requests for proposal (RFPs); the most significant include:

### PROCUREMENT HIGHLIGHTS

- Solicited 288 competitive bids for buying equipment, materials, supplies, services, and public works
- Issued 2,542 purchase orders totaling around \$64.9 million
- Issued 122 blanket purchase orders totaling around \$5.1 million
- Attained about \$1.2 million in revenue for WYDOT through surplus property sales

## **Anticipated Revenue FY 2022**



Commercial Motor Vehicle Electronic Permitting System Contract issued to ProMiles Software Development for \$1.7 million. This system enables electronic permit issuance and enhances efficiency by providing commercial drivers with online permit purchasing and issuance.

Safety Management Software System Contract issued to VelocityEHS for \$77,552. This system assists with accident and incident reporting and other employee safety processes.

WyoLink Radios Contract issued to Motorola Solutions for \$1.8 million. This RFP supplied multiple models with optional, selectable features to provide state and local agencies flexibility when choosing radios for WyoLink while meeting their needs and budget. �



End users are assessed a fuel tax already incorporated into the price per gallon on their fill-up.

## SUPPORT SERVICES

## COMPLIANCE AND

**INVESTIGATION** regulates vehiclerelated industries; assists businesses in complying with relevant requirements; and provides training for businesses, county clerks and treasurers, and law enforcement agencies.

Investigators trained vehicle dealers and county officials and received a 99 percent overall satisfaction rating from trainees. The program also conducted Peace Officer Standards and Training (POST) certified fraud training for law enforcement.

Personnel participated in working groups for Transportation Information System modernization, Ignition Interlock System grant project, WYDOT Leadership Academy, and Autonomous Vehicles.

Compliance also prepared information for the Joint Transportation and Military Affairs Committee regarding 2021 bills and interim studies relating to vehicles and presented to the Wyoming County Treasurer Association and Wyoming Association of County Clerks.

#### VEHICLE-RELATED INDUSTRIES REGULATED BY COMPLIANCE

- Vehicle Dealers
- Salvage Yards
- Towing Companies
- Wyoming-Based Commercial Trucking Companies
- Ignition Interlock Device Service Centers

### COMPLIANCE INVESTIGATIONS

- Assisted the Evanston Policy Department with a title brand fraud case involving a licensed Wyoming dealer.
- Helped the Natrona County Clerk with a title alteration case and educated the involved parties regarding secure document alteration.
- Investigated an odometer fraud case resulting in a Wyoming dealer's license revocation.
- Tested and provided feedback on the installer inspection and compliance aspects of the Ignition Interlock System project.

**DRIVER SERVICES** manages and maintains Wyoming's driving records system; administers the driving privileges withdrawal and reinstatement processes; and tests, issues, and processes all license classes.

Driver Services completed approximately 215,000 transactions encompassing driver's license and identification card issuance, driving records, disabled placards, reinstatement fee collections, and other transactions.

In October 2020, with the assistance of WYDOT's Information Technology (IT) and Intelligent Transportation Systems (ITS/ GIS) teams, Driver Services launched the first phase of a queuing system to enhance customer flow in larger offices. This system enables customers to sign up in the exam station, receive an estimated wait time, and provide a contact number for the examiners to text when the customer is next in line. The public has provided very positive feedback, and Driver Services anticipates developing additional customer convenience opportunities.

#### DRIVER SERVICES STATISTICS

As of December 1, 2021:

- 44,338 Licensed Wyoming Drivers
- 29,926 CDL or Commercial Learner's Permit (CLP) Holders
- 18,603 license renewals by mail
- Driver Services processed and entered around 46,000 citations.

To ensure federal regulatory compliance, the program monitored multiple extensions and waivers affecting commercial drivers that the Federal Motor Carrier Administration issued.

The program worked with the Wyoming Optometric Association to facilitate legislative changes to allow WYDOT to move existing vision requirements from statute to the agency's rules and regulations. This move provides flexibility in the standards if needed. Driver Services also updated its system and processes to accommodate a new transportation information computer system and voter identification processes as required by the legislature.



www.dot.state.wy.us

**EMPLOYEE SAFETY** strives to improve WYDOT's safety culture, so employees can do their jobs safely and effectively.

WYDOT added new district safety representatives with duties including work location visits, improvement recommendations, and co-worker collaboration to find safety solutions.

The program introduced the VelocityEHS electronic system to provide current, relevant, and timely safety incident appraisals. The system helps drive operational efficiency by simplifying and automating WYDOTs total safety management system. The program also launched an electronic Safety Data Sheet inventory system for agency-wide chemical inventory tracking by location.

Employee Safety conducted partnership visits to over 500 WYDOT facilities with a significant number of locations showing dedicated employee safety involvement and improvement from previous visits.

Personnel processed 172 employee prescriptive protective eye wear requests, ensuring employees had appropriate personal protective equipment. The program

## **SAFETY TRAININGS**

*Employee Safety delivered 111 trainings to 1,195 employees:* 

- CPR/First Aid/AED
- Hazard Waste Operations
- Hazardous Materials
- Confined Spaces
- Fall Protection
- Hazardous Communication
- OSHA 10/30 General Industry Standards
- OSHA 10/30 Construction Standards
- Employee Safety coordinated the training and fielding of eight new WYDOT CPR/First Aid instructors. This money and time saving initiative eliminates the need for third party instructors and provides flexible training opportunities to WYDOT programs.

also developed and released WYDOT's first Fall Protection Program, which is designed to protect employees from the leading workplace hazard—slips, trips, and falls. As part of the new program, Employee Safety standardized fall protection equipment throughout WYDOT, including issuing the initial set of fall protection arrest systems.

### WYDOT SAFETY COMMITTEE

The committee meets monthly to pursue solutions to WYDOT's most serious safety challenges. FY21 accomplishments include: • Approval to add airfoils to snowplow blades for increased driver visibility and safer snow removal.

• Coordinated efforts to eliminate paperwork and streamline processes to reduce work zone speed limits to a maximum of 45 mph for a safer working and traveling environment for WYDOT employees, contractors, and the traveling public.

#### MOTOR VEHICLE SERVICES

(MVS) consolidates vehicle titling and registration from the county, licenses vehicle dealers and manufacturers; produces license plates; assigns specialty plates; issues commercial vehicle registration under the International Registration Plan (IRP); collects and distributes jurisdictional (states and Canadian provinces) fuel taxes under the International Fuel Tax Agreement (IFTA); and issues Wyoming operating authority.

MVS collaborated with Mathtech to describe data and data processes to lay the groundwork for a new title and registration information system.

Production Staff produced and distributed 254,494 Green River license plates, about 2.2 million license plate validation stickers, and about 66,000 decals for IFTA, Mobile Machinery, and others. An additional 461,940 license plates were produced and stored for 2023 delivery.

MVS collected about \$41.8 million in state registration fees and facilitated the transfer of 1.1 million vehicle registration and 267,132 title transactions from the county systems to the state. Vehicle identification number (VIN) searches and State Assigned

### **MVS LICENSE PLATES**

*MVS collected \$214,066 for the following specialty plates:* 

- 3,337 Prestige
- 569 University of Wyoming
- 707 Embossed
- 856 Veteran
- 382 Disabled Veteran
- 787 Wildlife
- 2,600 Other

VINs generated over \$50,000 in revenue, and dealership and rental licenses netted \$489,700. Further, license plate sales and renewals increased the Wildlife Conservation Fund by \$205,720 with donations adding \$169,072 for a total of \$374,792.

The IRP Section collected \$60.6 million in registration fees and distributed \$5.1 million to 57 IRP jurisdictions and \$6.6 million to the counties, netting \$48,821 million for WYDOT.

The IFTA Section collected \$3.7 million in fuel tax, license fees, and decal sales from Wyoming based carriers and distributed \$123,317 to other IFTA jurisdictions and Wyoming customer refunds, netting \$3.6 million.

## **FYI IRP AND IFTA**

Under IRP and IFTA agreements, portions of registration fees and fuel taxes go to other jurisdictions where Wyoming apportioned vehicles travel. Other jurisdictions remit registration fees and fuel tax revenues to Wyoming when companies from their jurisdictions travel into Wyoming. Wyoming has 1,333 IRP carriers (9,288 truck plates and 3,983 trailer plates issued) and 1,338 IFTA carriers (12,985 decal sets issued).

**OFFICE SERVICES** provides timely, economic printing designed to meet unique program needs; a range of mailing services including mailing events; and microfilming, scanning, central files, research, and retention guidance.

## SUPPORT SERVICES 19

**PRINTING SERVICES** produced over 2.6 million color copies and 1.5 million black and white copies for over 4.2 million total copies.

### THE EXTRA MILE

Printing Services accomplished significant jobs to facilitate important WYDOT communications, including:

- Interchange (37,632 copies)
- Airport Directories (1,000 copies)
- Highway Safety Calendars (750 copies)
- Miner's Hospital Benefit Brochures (500 copies)
- 2021 Spec Book (352 copies)
- Construction Manuals (150 copies)

**RECORDS** scanned 101,480 total pages. Notably, staff developed quality control tracking for Environmental Services' NEPA binder and folder scans and wetland projects. The research analyst scanned 135 new as-constructed projects and 114 projects from aperture cards into the Falcon Document Management System (Falcon), fulfilled 589 internal requests and 14 external requests, and sent 31,052 scanned images to customers. The research analyst also assisted the PAO front desk receptionist. The central files specialist indexed 438 new agreements and 113 new contracts along with managing 267 checked out agreements and contracts. Correspondence totaling 5,977 pages were filed, and 489 projects were completed and closed out. Imaging specialists assisted Planning by entering metadata for 6,277 folders in Falcon's as-constructed environment, scanned annual and biennial reports from 1968 to 1982 for Management Services, and scanned Spec Books from 1936 to 2010 for Construction.

**MAILING SERVICES** sent out 290,110 pieces of outgoing mail and shipped 4,692 packages. Personnel processed 22 presort jobs to save WYDOT \$9,984 in postage. One of the larger presort jobs was the 5,000 Every Door Direct postcard mailing for PAO, regarding the Parsley Boulevard bridge replacement project. Mailing Services provided document folding and inserting to address customer needs with 163,610 documents folded and inserted before mailing.

#### TRAINING SERVICES has evolved

its program to offer a mix of assigned learning and open training.

Training Services worked on vocational learning plans for Traffic and re-launched the Maintenance Learning Plan with significant changes.

Completions for WYDOT University's instructor-led training decreased from 1,113 in FY20 to 1,002 in FY21. Of the 1,002 completions, 365 employees participated. When focusing on WYDOT's overall engagement in online learning, participation numbers across WYDOT have increased from 5,391 eLearning completions (FY20) to 8,979 eLearning completions (FY21). Approximately 98 percent of completions resulted from assigned learning plans. In total, well over half of WYDOT's employees participated.

## THE EXTRA MILE

Training Services worked on several issues from the 2020 Training Needs Assessment and Frontline Supervisor Assessment, including implementing Department Policy 43: Employee Development, revising WYDOT's Learning Management System (WELL), updating and assigning WY Supervise to new supervisors, and developing WY Lead Leadership Academy.

#### EMPLOYEE TRAINING FEEDBACK

#### WYDOT University

- Content Effectiveness (out of 5): 4.40 (FY20) vs. 4.45 (FY21)
- Instructor Effectiveness (out of 5): 4.35 (FY20) vs. 4.39 (FY21)
- Accommodation (out of 5): 4.25 (FY20) vs. 4.39 (FY21)

#### Know WY New Employee Onboarding

• Average Learning Gain: 31% (FY20) vs. 58% (FY21)

#### WY Supervise

• Average Learning Gain: 31% (FY20) vs. 41% (FY21)

#### EMPLOYEE DEVELOPMENT IMPACT





*Employees in attendance at a WYDOT University class.* 

Employees rated WYDOT University development opportunities positively, though a bit down from the previous year, with employees rating instructor-led WYDOT University classes favorably (above 4.0 out of 5). Employees who completed an after-training questionnaire reported improved performance from their completed training, and supervisors agreed. **\*** 

## D TECHNOLOGY

#### EMERGENCY COMMUNICATIONS supports

critical, reliable emergency communications technology to advance public safety and transportation efficiency.

The WyoLink radio base repeater replacement project is underway along with radio site power plant replacements. For the WyoLink microwave upgrade project, the program completed phase one to achieve redundancy and increase bandwidth from



Personnel completed 13 high-frequency radio communication installations at 11 locations statewide to provide critical communications if a disaster limits traditional communication methods. Emergency Communications Program technicians service this passive reflector "tower" on Dome Peak. It bounces microwave signals from Sheridan to the Duncan Lake/Burgess Junction area.

### **WYOLINK SITES**

New WyoLink sites went live at Alva, Alcova, Blairtown, Greybull, and Lusk. Construction began at 14 Mile (north of Rock Springs along US 191) and Meadowlark. Remaining sites – Northern Goshen, Newcastle, Evanston, Big Horn County, and Bondurant – scheduled to break ground in spring or summer 2022.

Cheyenne to Casper. Phase two planning is underway and scheduled for the first quarter of 2022. To allow WYDOT and other agencies to purchase new WyoLink radios at sharply discounted prices, the program finalized a three-year contract with Motorola.

To aid the traveling public, upgrades such as fiber optics, redundant links, and licensing frequencies—improved reliability and enhanced communications for roadside devices. Technicians and field staff completed all annual inspections of the 105 WyoLink sites including buildings, towers, and electronics equipment. Collaborating with Enterprise Technology Systems, the program sought solutions for providing fiber optic connections to WYDOT locations and WyoLink sites.

The program coordinated with state and local entities to complete the Next Generation 911 state plan. Education and outreach remain objectives while working with 911 community stakeholders. Additionally, the program enhanced safety and technician training to provide employees the knowledge and resources to complete their duties with fewer risks while increasing tasks completed with in-house resources.

#### GEOGRAPHIC INFORMATION SYSTEMS/INTELLIGENT TRANSPORTATION SYSTEMS

**(GIS/ITS)** enhances travel safety and efficiency by providing timely, accurate information.

GIS/ITS continued the final phase of the I-80 Connected Vehicle Pilot and planned for the loss of radio spectrum by using satellite communication with vehicles.

The program expanded and improved the Wyoming Travel Authorization Program while the Transportation Management Center adapted to a socially distanced work environment.

The GIS team worked on a road and highway project for linear referencing system (LRS) modernization, which will allow more employees to use GIS to improve job tasks.

#### INFORMATION TECHNOLOGY

*(IT)* delivers a stable computing environment, knowledgeable support, and IT solutions to support WYDOT's mission.

As indicated by positive customer feedback, IT enhanced responsiveness and customer service by employing modern technologies, like virtual meeting software, during ongoing COVID-19 challenges.

Personnel performed several software and system upgrades, such as updating Jahia to the newest version, upgrading ERP to Oracle 19c, and beginning implementation of an upgrade plan for the ERP Financial applications.

IT worked with Maintenance, Materials Lab and AgileAssets staff to test and implement HPMS and LRS updates to the AgileAssets system. The team also researched, identified, and began implementing the replacement for the WYDOT reporting tool.

IT performed development work to migrate old JSP applications to the modernized APEX framework while further developing and improving several APEX applications such as guardrail, project scoping, the state planning and operations database, oversize restrictions, specialty plates, and ignition interlock.

IT imaged and replaced 436 personal computers (PCs), ELO terminals, and tablets through Ivanti LanDesk as a part of this year's technology replacement plan. �

## **SAFETY FIRST**

IT supported the new Computer-aided Dispatch and Record Management System for WHP to include new system updates and worked on a body cam solution for troopers. Currently, IT is evaluating solutions and will assist in identifying and implementing the most optimal solution for troopers.

## AERONAUTICS

#### AIR SERVICE DEVELOPMENT

assists Wyoming airports in retaining and growing commercial air service.

The program helped fund 7 air service agreements statewide, which provided air service for more than 70,000 passenger enplanements and yielded approximately \$15 million in direct economic impact in the state.

The Wyoming Capacity Purchase Agreement (CPA) for commercial air service through SkyWest Airlines operating as United Express helped participating airports maintain scheduled airline service throughout COVID19 challenges.

#### AERONAUTICS EFFICIENCIES

Air Service Development – the CPA provided additional passengers while expending fewer state dollars, lowering overall costs per passenger.

Engineering & Construction – administered \$2.8 million in group pavement maintenance projects resulting in an estimated \$600,000 cost savings from economies of scale.

Flight Operations – pilots worked with Air Traffic Control to plan and fly efficient flight profiles that netted an additional \$10,300 in savings last year.

Black Cat Aviation Database development for air service projects and data continued. The new database will help improve project tracking, data retention, and data dissemination for air service stakeholders.

After a pause for a runway reconstruction project, Cheyenne air service successfully resumed in the fall with daily flights to Denver International Airport. The resumed service has already produced higher enplanements per month than in the similar pre-pandemic period (2019).

## ENGINEERING AND

**CONSTRUCTION** oversees airport design, construction, equipment acquisition, and pavement maintenance; administers marketing, procurement, and maintenance projects; and manages airport asset management and mountain weather station network maintenance. Work continued on a statewide GIS-based airport pavement management program. The program also conducted safety data inspections at 11 Wyoming airports.

The program provided oversight for 50 design, construction, and equipment acquisition projects; 19 navigational aid maintenance projects; 8 aviation encouragement projects; and 4 marketing projects.

**FLIGHT OPERATIONS** provided on demand air service to 25 state agencies, commissions, public boards, and elected officials with 2 aircraft, 6 pilots, and 3 support staff.

The program flew 266 flight segments (about 95 percent in state) and transported 874 passengers. The program flew 180 flight hours and covered 60,000 miles.

Flight Operations noted a substantial decline in travel patterns resulting from the pandemic and subsequent shutdowns. Overall, FY21 showed a 30 percent reduction in hours flown and a 35 percent reduction in number of passengers flown.

The program operated and maintained its own hangar facility at the Cheyenne Regional Airport, including a fuel farm that enables the program to take advantage of buying fuel at wholesale cost instead of retail pricing—saving \$85,000 during 2021.

#### AIRPORT IMPROVEMENT & COVID-19 RELIEF PROJECTS

Planning and Programming – administered Airport Improvement and COVID-19 relief grants to 219 projects across 35 airports. Major projects were awarded in Big Piney, Cheyenne, Cody, Gillette, Jackson, Pinedale, and others. The majority of grants were for COVID-19 relief, and the remainder included projects for safety (34 projects), maintenance/security (39 projects), and enhancement/planning (18 projects).

#### PLANNING AND PROGRAMMING oversees airport

planning, environmental and land acquisition projects, the continuous statewide airport system plan, and Wyoming Aviation Capital Improvement Plan development and administers the Wyoming Aeronautics Commission Loan Program.

The division administered \$8 million in state funds and \$49.4 million in federal funds for airport improvements. Additionally, the program managed seven master planning and land acquisition projects.

Staff also managed BlackCat Aviation database development.

The Statewide Aviation Economic Impact Study—an effort to define aviation's impact and role within the state economy—was concluded. Personnel conducted extensive efforts to inform the public (through the media) and interested stakeholders about the results. The study concluded that aviation generates over \$2 billion in annual economic impact to the state.

## **UNMANNED AIRCRAFT SYSTEMS (UAS)** develops and oversees UAS policy for Wyoming.

A department task force formed in 2020 continued integrating drone (UAS) use at WYDOT.

WYDOT has identified and approved many opportunities for potential drone deployment, which will increase employee safety and productivity while decreasing costs. Multiple WYDOT programs have already successfully implemented drones.

Additionally, the program provided statewide UAS education and implementation guidance as well as advocated for safe integration of drones into the National Airspace System. �



Unmanned aircraft are a useful, safe and economical tool in surveying roads, landslides or rockfall areas.

## 22 WYOMING HIGHWAY PATROL

### WYOMING HIGHWAY PATROL

(WHP) troopers patrol Wyoming highways to enforce highway safety and state statutory law and provide criminal interdiction, public outreach, education, and partnerships. WHP provides protective services to the Governor, the first family, and elected

## WHP – HERE TO HELP

- Assisted 19,982 Motorists
- Recovered 30 Stolen Vehicles
- Instructed 100 Defensive Driving Classes (with 995 students attending)
- Assisted 5,029 Other Agencies
- Handled 2,088 Abandoned Vehicles
- Responded to 4,779 Crashes
- Arrested 720 Impaired Drivers

officials. Collectively, 2021 was a productive year for WHP's Sworn, Ports of Entry, Commercial Carrier, Dispatch, Records, Evidence, Equipment and Technology, and Professional Standards sections despite COVID-19 protocols that forced operational changes.

WHP fielded 159,532 calls for service through the dispatch center, including 2,981 Report Every Drunk Driver Immediately (REDDI) Reports, 1,387 Safe2Tell (anonymous tip reporting system) tips, and 9,016 calls for towing services.

WHP contacted 1,028,132 commercial vehicles, of which 417,654 were weighed with 33,952 found to be overweight. WHP issued 204,411 permits for oversize/ overweight vehicles generating \$10.2 million dollars in collected fees. Personnel performed 14,293 commercial vehicle inspections with 3,316 out-of-service violations found. WHP stopped 78,955 vehicles and issued citations for speeding (29,506), driving while license suspended (1,369), no insurance (2,319), no child restraint (484), and no seatbelt (2,649). Patrol issued 56,162 warnings for traffic violations and faulty equipment. WHP also initiated 237 felony and 1,189 misdemeanor drug cases.



Troopers taught 187 safety presentations at schools, businesses, fairs, and safety events.



Wyoming Department of Transportation – 2021 Annual Report

## WHP Drug Seizures 2021



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**AERONAUTICS COMMISSION** – comprised of seven Governor-appointed representatives—administers airport improvement projects, approves grants to Wyoming airports, encourages travelers to use Wyoming airports, and supports fly-ins and air shows statewide each summer.



The Aeronautics Commission is comprised of five districts overseen by seven commissioners.

### PUBLIC SAFETY COMMUNICATIONS

**COMMISSION (PSCC)** – comprised of eleven Governorappointed representatives from public safety agencies, professional associations, and state agencies – recommends strategies to improve Wyoming's wireless interoperability, determines WyoLink network standards, identifies and creates short-term and longterm technological and policy solutions to develop and implement Wyolink, and recommends legislation or other state action to promote wireless interoperability in Wyoming.

#### **TRANSPORTATION COMMISSION** – comprised of seven Governor-appointed representatives – adopts rules and regulations, oversees policy, revises department budgets, and awards contracts for any improvements undertaken with monies from the State Highway Fund.



The Transportation Commission is comprised of seven districts overseen by seven commissioners.



