



Accomplishments in First Year of Transportation Innovation MOU between DOI and DOT

On November 17, 2021 Department of the Interior (DOI) Secretary Deb Haaland and Department of Transportation (DOT) Secretary Pete Buttigieg [signed](#) the DOI-DOT Memorandum of Understanding (MOU) Regarding Transportation Innovation in the National Park System. The [MOU](#) strengthens the collaboration between the NPS and DOT to continue working together to proactively address emerging mobility. It outlines initiatives to guide the Departments' efforts to build world-class transportation systems that provide enhanced, equitable access for car-free trips.

In the year since the MOU signing, the Departments have worked together, leveraging funding from the [Bipartisan Infrastructure Law](#) (BIL) to enhance sustainable, equitable access. The NPS, through its [Emerging Mobility Program](#), continues to advance demonstration projects across different park contexts and emerging mobility topic areas. The NPS, in collaboration with DOT, has made progress in each of the project initiatives outlined in the MOU:



Figure 1: An electric bus used in a demonstration at Zion National Park during project planning. NPS photo

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- **Innovative Technology Pilots**

- The NPS, with technical assistance from the [DOT Volpe Center](#), evaluated the two 2021 automated shuttle pilots at Yellowstone National Park and Wright Brothers National Memorial, and published evaluation reports in June 2022 ([summary report](#)). In addition to analyzing vehicle data and survey results, the [full report](#) documents lessons learned related to infrastructure requirements, contracting, planning, communications, technology, evaluation, visitor experience and management, and accessibility.
- Following the success of these first two emerging mobility pilots in 2021, the NPS Emerging Mobility Program is expanding to identify 5-10 pilots at parks across the country to launch over the next two years. BIL provides opportunities to fund this prioritized set of emerging mobility pilots.
- Building upon the partnership between DOI and DOT, the [NPS and State of Michigan signed an MOU](#) in April 2022 and are currently working with five NPS park units in Michigan, as well as state agencies and local stakeholders, to identify opportunities for emerging mobility pilots.
- The NPS is focusing on 10 park units over the next year that have surrounding, underserved communities to consider new transportation connections and services.



- **Shared Mobility Integration**

- The NPS convened a group of NPS and DOT subject matter experts to focus on ridehailing and micromobility. The NPS met with ridehailing service providers and is currently providing technical assistance to appropriate parks to assist them in setting up ridehailing pick-up/drop-off areas.
- The NPS is developing regulations that would govern the use of micromobility devices, such as e-scooters and Segways, in park areas. NPS and DOT subject matter experts are working together to prepare a proposed rule that the NPS intends to publish in early 2023 for public review and comment. More information can be found at [reginfo.gov](https://www.reginfo.gov).

- **Electrification of Major Transit Fleets**

- Zion National Park continues advancing its [transit fleet electrification](#), with \$33 million awarded by DOT’s Nationally Significant Federal Land and Tribal Projects (NSFLT) program in 2021. The new transit fleet will include 26 battery-electric buses and 27 charging stations to replace the current propane-powered transit fleet.
- The NPS applied for \$56.8 million in BIL funding through an NSFLT grant in October 2022 to address Grand Canyon National Park South Rim shuttle bus fleet replacement needs and electrification upgrades, implementation of electric bus charging infrastructure, and construction of a modernized bus maintenance facility.

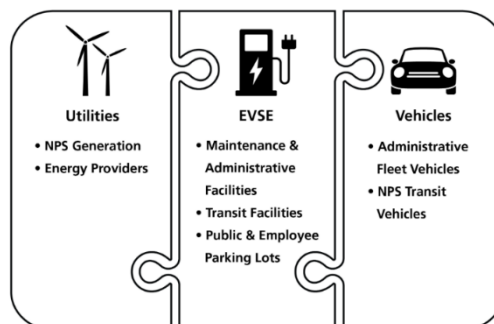


Figure 2: Components of EV Systems.

- **Electric Vehicle (EV) Charging Stations**

- The NPS developed an Electric Vehicle 5-Year Work Plan outlining current activities and challenges, planned activities related to EV policy and guidance, infrastructure and utilities, charging stations, fleet electrification, asset management, workforce development, and financial analysis. The NPS is now working to implement the Work Plan.

- **Advanced Traveler Information Systems**

- The NPS is developing a system to send real-time roadway information to visitors through NPS.gov, the NPS app, state-level 511 systems, and navigation apps.
- The NPS is using DOT’s [Work Zone Data Exchange \(WZDx\) specification](#) and is the first WZDx data producer that is not a city, state, or metropolitan area. The NPS piloted the WZDx roadway closure feed to inform visitors of updated road closure details and update information as Mojave’s roads opened up during the recovery in [Mojave National Preserve](#) in

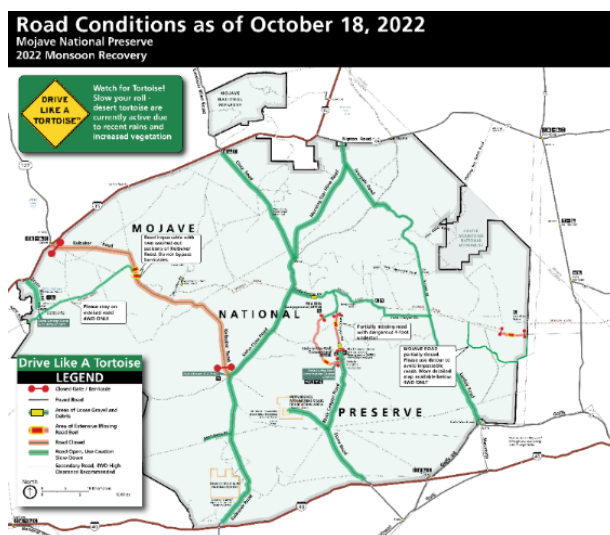


Figure 3: Mojave National Preserve provides real-time updates on road closure status on their webpage, and the NPS tested pulling this information into an automated data feed during monsoon recovery for display on navigation apps.

September 2022. The feed provided opportunities to reach more visitors with the latest road closure details and update information as Mojave’s roads opened up during the recovery.