

## FY2021 MoDOT Research Projects

The following are the projects that MoDOT intends to research through contracting with external organizations. They are organized by broad topic. In most cases, a Request for Proposal will be developed and posted, depending on funding availability and internal staffing levels. Given that MoDOT may have higher interest levels in one aspect or portion of a submitted research idea, some externally submitted ideas for research may be reflected in part or in combination with other similar ideas. Please note, some of the topics listed below had multiple Problem Statement submissions.

There will most likely be a few more projects that will be added to the list. We are still seeking further information before determining if we will move forward on a few of the project ideas.

### Asphalt

- (Will be determined when current projects are nearing completion)

### Bridge

- P/S I girder camber
- GFRP reinforced barrier curbs
- NBI Item 36 update: bridge inspection rating manual
- Intermediate bents-calculation of restraint factor at top of intermediate bent

### Concrete

- Fiber reinforced concrete for bridge decks and overlays
- Non-Proprietary Ultra High Performance Concrete (UHPC) for thin bonded bridge overlays

### Construction

- Lightweight Deflectometer (LWD) for acceptance of unbound materials
- Establishment of a MoDOT test road facility

### Environmental

- Pollinator habitats along right of way
- Impact of silt and clay particles to freshwater mussels

### Geotechnical

- Development/Update pile load database

### Human Resources

- Methods for preparing new supervisors

### Multimodal

- Airport Design/Build bid documents

### Traffic Safety

- Safety Evaluation of Flashing Yellow Arrows (FYA)
- Investigation of work zone speed management techniques

### Worker Safety

- Leading and lagging indicators for workplace safety
- Sensors and backup cameras for big trucks

### Multiple Areas

- Validation of asset management cycles