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| **UTC Project Information** | |
| Project Title | MPC-652 – Reducing Shrinkage Cracking in Bridge Decks Using the Single and Double-Ring Test Methods |
| University | University of Wyoming |
| Principal Investigator | Jennifer Tanner, Ph.D. |
| PI Contact Information | Associate Professor  Dept. of Civil and Architectural Engineering and Construction Management  University of Wyoming  Phone: (307) 766-2073  Email: tannerj@uwyo.edu  ORCID: 0000-0003-2433-2897 |
| Funding Source(s) and Amounts Provided (by each agency or organization) | USDOT, Office of the Assistant Secretary for Research and Technology  $45,999  Wyoming Department of Transportation  $117,691 |
| Total Project Cost | $163,690 |
| Agency ID or Contract Number | 69A3551747108 |
| Start and End Dates | May 7, 2021 to July 31, 2023 |
| Brief Description of Research Project | The condition of concrete on bridge decks is one of the most costly parts of Wyoming Department of Transportation’s budget and the cost of maintenance can result in inadequate roads or costly premature repairs. This proposal evaluates critical factors relating to early age shrinkage and proposes combining multiple mitigation methods to reduce early-age cracking that contributes to early degradation. |
| Describe Implementation of Research Outcomes (or why not implemented)  Place Any Photos Here | Results will be presented to WYDOT and compared to future research evaluating a similar suite of testing on limestone based aggregates. |
| Impacts/Benefits of Implementation  (actual, not anticipated) | This is expected to impact the WYDOT specification for concrete placed in new bridge decks. |
| Web Links   * Reports * Project Website | * MPC Research Report – [Evaluation of Concrete Bridge Deck Mixtures Using Shrinkage-Ring Tests](https://www.ugpti.org/resources/reports/details.php?id=1107) |