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| **UTC Project Information** | |
| Project Title | A Data Driven Safety Assessment of Various Left Turn Phasing Strategies |
| University | Washington State University |
| Principal Investigator | Ali Hajbabaie |
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| Funding Source(s) and Amounts Provided (by each agency or organization) | University of Washington PacTrans $40,000  Washington State Department of Transportation $40,000 |
| Total Project Cost | $80,000 |
| Agency ID or Contract Number | DTRT13-G-UTC40 |
| Start and End Dates | December 16, 2016 – January 31, 2018 |
| Brief Description of Research Project | Protected-permissive left turn phases have potential to improve traffic operations by allowing more vehicles to complete their left turns during the permissive phase especially in off-peak hours; however, their safety is perceived to be less than protected-only left turn phases. As such, assessing the safety of protected-permissive left turn phases with FYA is needed before implementing them in the field.  This research will use a data-driven methodology to assess the safety of the aforementioned signalization strategies. The results of this research will help decision makers to select a more suitable signal phasing plan/display under various operational conditions. Specific objectives are:  1-Compare the safety of protected left turns to protected-permissive left turns with FYA  2-Compare the safety of doghouse displays to four section vertical displays with Flashing Yellow Arrow (FYA)  3-Assess the safety of including FYA phases in protected-permissive left turns at different times of the day to identify if it creates driver confusion. |
| Describe Implementation of Research Outcomes (or why not implemented)  Place Any Photos Here |  |
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| Impacts/Benefits of Implementation (actual, or anticipated) |  |
| Web Links   * Reports * Project Website |  |