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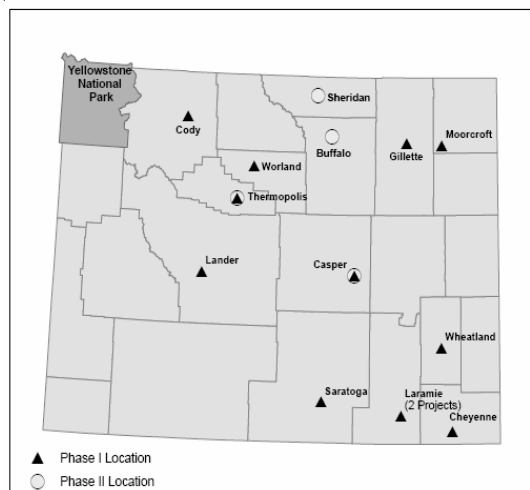
This *Tech Brief* summarizes the key findings of a recently completed WYDOT research study.

HIGHWAY CONSTRUCTION IMPACTS ON WYOMING BUSINESSES

Business owners are typically very concerned when a highway construction project is proposed near their businesses. Even though construction projects are only temporary situations, many business owners worry about the level of impact and the length and magnitude of the recovery period. Even though the long-term benefits to the project may be clear, this concern for the construction impacts often leads to resistance to the project. In response to this concern, the Wyoming Department of Transportation (WYDOT) and the University of Wyoming looked into the business impacts of past highway reconstruction projects. The first phase of the project looked at 12 past construction projects across Wyoming. The second phase took a more in-depth look at four construction projects that were currently being constructed. The projects studied ranged from simple sidewalk and curb replacements to complete pavement rehabilitations. Most of the projects took place near the center of town or in major travel areas with adjacent businesses. The exception to this was the Buffalo project that looked at the reconstruction of US 16 outside of town. While no businesses were adjacent to the project, the concern was that Buffalo businesses would be impacted by reduced tourism traffic using the highway.

The study looked at many data sources including traffic volume counts, reported

sales tax revenues, right of way acquisitions and easements, and surveys of business owners and field engineers. The survey data includes information on the impacts to the number of customers, sales revenue, parking and business access, and staffing levels as well as contractor and WYDOT performances during the construction.



The Phase I research project found that all of the projects experienced some form of impact during construction period. Projects with the majority of businesses in the tourism categories and those in cities over 5,000 seemed to have the greatest impacts during construction. The duration of the project appeared to have more impact than the type or scale of the project with longer projects incurring the greatest impacts. It was also found that

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most businesses experienced recovery within one year of the project.

Findings from this first phase included the recommendation that WYDOT establish early communications with potentially affected businesses. Another recom-



mendation was that the project durations be kept as short as possible even if it meant more construction impacts during the construction period.

Phase II of the research effort took a more in-depth look at four projects under construction during the study period. Similar data to Phase I was collected but this time two surveys were administered to see how perceptions changed during and after the construction period. In addition, traffic volumes were monitored more closely.

Results from Phase II showed that there were low impacts in traffic volumes except in the case of the Sheridan Main Street reconstruction where the road was closed during the construction period. For the other three projects the reduction in traffic volumes ranged from 0.1% to 6.8%. For the Buffalo Highway 16 project the study found no evidence of a shift in tourism traffic from US 16 to US 14 during the project. Once again the study showed that larger cities experienced more impacts than smaller cities. It is believed that this is because the smaller cities have a lack in alternative business areas.

Phase II looked at both the annual and summer impacts to business revenues and found that while many

businesses had reduced summer revenue their overall annual revenues increased. This may be the result in loss of tourism business but increased overall business due to the presence of construction workers.

Lastly, Phase II looked at the difference between the actual impacts, as measured by sales tax revenue, and the perceived impacts, as measured by the survey questions. All four projects found a statistically significant difference between the two measurements and in all cases the businesses owners were more pessimistic about the impacts than what actually occurred.

Recommendations from the second phase included the use of the research data to help lower the concerns of business owners for future projects. While the perceived impacts may not match the actual impacts it is still important to address the business owner's fears. Quantified data on the level of impacts experienced by other business owners along with data that shows the length and magnitude of recovery could be useful in addressing these fears.

A third phase of the research project is currently underway and is focused on the impacts to businesses in Dubois during the reconstruction of Togwotee Pass. This research phase is scheduled for completion in January of 2008.



Complete reports on Phase I and II of the research efforts are available from the Wyoming Department of Transportation. Contact Michael Patritch at (307) 777-4182 or Michael.Patritch@dot.state.wy.us.