



# ***Buckle Up Phone Down* in Jackson, Mississippi, and Sioux Falls, South Dakota**

## **Demonstration**

### *Background*

*Buckle Up Phone Down* (BUPD) originated within the Missouri Department of Transportation (MoDOT) in 2017 as a response to a rising number of motor vehicle fatalities in the State. MoDOT recognized that two contributors to the increasing trend were unrestrained drivers/passengers and distracted driving. Through BUPD, MoDOT encourages personal responsibility and community engagement. The statewide program has received much support from public and private sectors since its inception. Due to the growing interest in the program and lack of a formal evaluation, the National Highway Traffic Safety Administration demonstrated adaptations of BUPD in two locations from October 2022 to March 2023.

### *BUPD Demonstration Sites*

Demonstration sites were chosen based on various criteria including population, presence of local news station(s), laws, government support, and a willing site champion (see Table 1). They were Jackson, Mississippi, and Sioux Falls, South Dakota. These cities contrast in many ways, including geographic location, demographics, and climate. Suburban areas outside the city limits in the counties listed in Table 1 were not excluded from program efforts, as they belonged to the same media market, and the organic, peer-to-peer reach of the program was not geographically bounded.

**Table 1. BUPD Demonstration Site Characteristics**

Location	Population <sup>1</sup>	Distracted Driving Law <sup>2</sup>	2021 Seat Belt Use Rate <sup>3</sup> & Law Type <sup>4</sup>	Notes
<i>Jackson, MS</i>	<b>153,701</b>	<ul style="list-style-type: none"> <li>• Primary enforcement</li> <li>• No handheld ban</li> <li>• No young driver's cellphone ban</li> </ul>	80.0% Primary	<ul style="list-style-type: none"> <li>• Deep South region</li> <li>• Capital of Mississippi</li> <li>• Low median income in Jackson; quarter of population live in poverty</li> <li>• Suburbs have almost double the income level of Jackson</li> <li>• Warm climate with temperate winters</li> </ul>
Hinds, Madison, and Rankin Counties	487,822	<ul style="list-style-type: none"> <li>• Texting ban for all drivers</li> </ul>		
<i>Sioux Falls, SD</i>	<b>192,517</b>	<ul style="list-style-type: none"> <li>• Secondary enforcement</li> <li>• No handheld ban</li> <li>• Cellphone ban for learner's permit and intermediate license holders</li> </ul>	86.9% Secondary	<ul style="list-style-type: none"> <li>• Midwest region</li> <li>• State's largest city</li> <li>• Average median income and percentage of people living in poverty (compared to U.S.)</li> <li>• Extreme winters</li> </ul>
Lincoln and Minnehaha Counties	262,374	<ul style="list-style-type: none"> <li>• Texting ban for all drivers</li> </ul>		

<sup>1</sup> United States Census Bureau (2022)

<sup>2</sup> Governors Highway Safety Association (n.d.-a)

<sup>3</sup> National Center for Statistics and Analysis (2022)

<sup>4</sup> Governors Highway Safety Association (n.d.-b)

### *Site Champions*

Site champions were identified with the assistance of the respective State Highway Safety Offices. Mississippi Safety Services (MSS), a well-known traffic safety advocate in the State, was selected to serve as the site champion in Jackson. MSS is a provider of driver safety courses to Mississippi residents and conducts community service programs focused on traffic safety. The South Dakota Emergency Medical Services for Children (SDEMSC) was selected to serve as the site champion for BUPD in Sioux Falls. SDEMSC is a non-profit injury prevention initiative funded by the University of South Dakota. Site champions formed implementation teams in each location. These small groups developed the program's infrastructure and carried out program plans.

### *Demonstration Planning and Implementation*

Each site's approach to program implementation and program development varied. Local culture, trends, and characteristics of the geographical area also influenced program plans. Both sites developed program material including a website and/or phone application, logos, promotional items, informational items, and social media. Each site also hosted community events to promote the program and encourage pledges.

BUPD implementation teams kept a record of event dates, names of the businesses/organizations that conducted or hosted events, and the types of promotional items used and distributed at community events. Community sectors were categorized as Education (universities/colleges or high schools), Business, Government (State or local), Medical (hospitals or medical facilities), and Other (e.g., church, radio station, parade).

The type of publicity and outreach events were also categorized into three types: Presentations, Promo/Pledge Events, and Promo Item/Information Distribution. A presentation involved a BUPD team member speaking to an audience about the BUPD program (e.g., school classroom or auditorium, coalition, or town hall meeting). Promo/pledge usually involved setting up a table or booth and distributing promotional items or information about the program. Promo item/information distribution were events where BUPD team members distributed bulk promotional items and no verbal interaction about the program took place (e.g., cheerleaders tossed BUPD foam balls to a crowd at a sporting event, team members tossed promotional items in a parade, BUPD promotional items were dropped off at a school that agreed to distribute the material to the student body).

During the 6-month implementation period, across both sites, 83 events were held and over 50,000 people were reached with the BUPD message. Jackson hosted 15 presentations, 14 promo/pledge events, and 5 promo item/info distribution events. Sioux Falls held 6 presentations, 10 promo/pledge events, and 33 promo item/info distribution events.

### *Lessons Learned*

Team members from both programs provided lessons learned from challenges they faced during the demonstration. Having clear roles and responsibilities and spreading the workload evenly were critical. Both sites felt that a program duration longer than 6 months, similar to Missouri's year-round program, could help garner the momentum needed to see long-term behavior change. Last, considerations should be made for weather, which can have an impact on the types of outreach events and community engagement.

## Evaluation

### Background

The implementations of BUPD in Jackson and Sioux Falls were accompanied by process and outcome evaluations. The process evaluation involved interviews with the implementation teams in Jackson and Sioux Falls to understand the planning and implementation process, including any challenges encountered. The outcome evaluation included an observational survey of seat belt and cellphone use in the two implementation cities and in two matched control cities, Beaumont, Texas, and Fargo, North Dakota.

### Methods

The process evaluation assessed the implementation of BUPD in Jackson and Sioux Falls. Interviews with implementation team members were used to gather information on program planning, implementation, business/organization engagement, individual engagement, media and outreach, and factors of success. The outcome evaluation involved a pre- and post-campaign observational survey of seat belt and cellphone use using a matched site sample design. The implementation cities were matched with control cities featuring similar State laws for seat belt and handheld phone use, demographics, and baseline seat belt and cellphone use rates. In each data collection period (pre- and post-campaign) and in each city (Jackson, Sioux Falls, Beaumont, and Fargo), 5,000 drivers were observed, for a total of 40,000 observations.

### Results

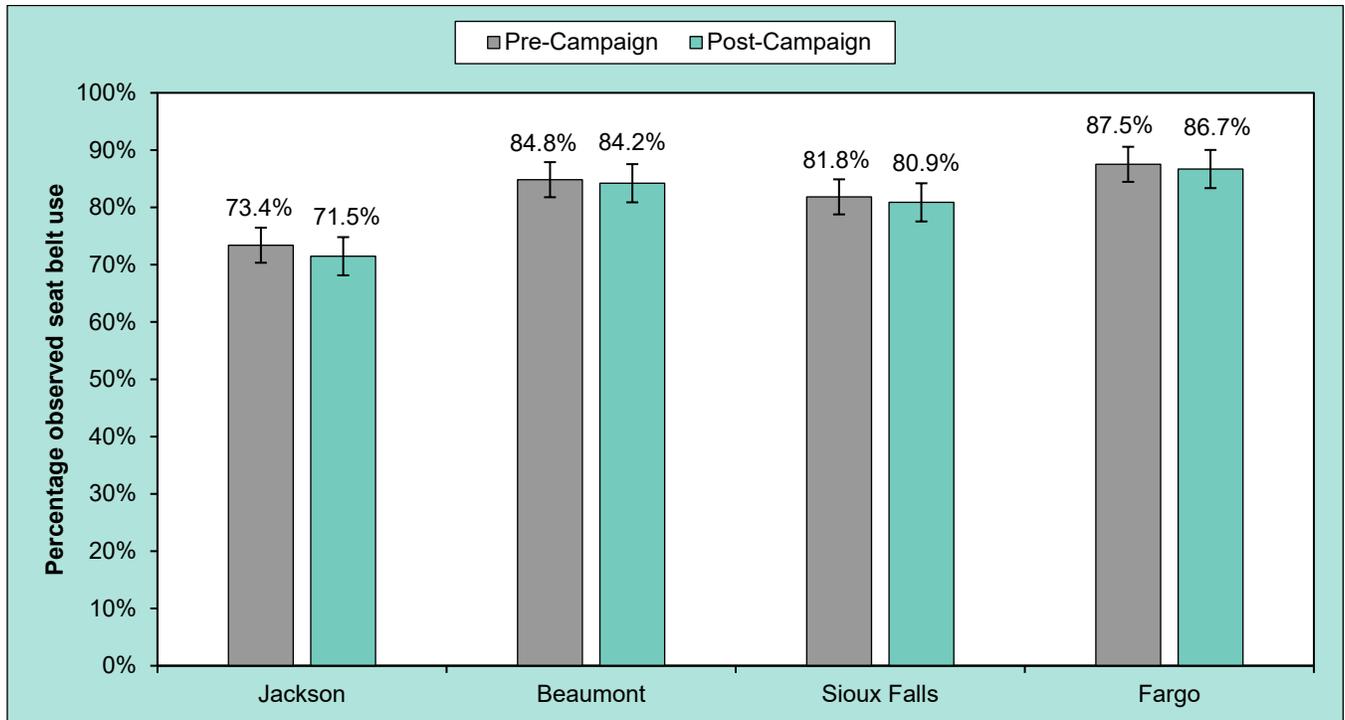
Interviewees in the process evaluation identified time, leadership, networking, and community familiarity as critical factors for program success. They stressed that BUPD implementation requires a significant investment of time and resources, including experience with outreach and coalition building, existing connections with local stakeholders, media resources (including social media skills and connections with traditional media outlets), and items such as window clings for giveaways. These findings of the independently conducted process evaluation corroborate those obtained during program implementation by the contractor assisting in the implementation, as summarized in “Lessons Learned” above.

Analyses of outcome evaluation data were conducted via before-after evaluation with comparison groups (see Hauer, 1997). It was found that, overall, BUPD as implemented in Jackson and Sioux Falls did not have a significant effect on either seat belt or cellphone use,  $ps > .05$ . When segmenting by demographic factors, the only demographic in which the results were statistically significant was that of young adults. Within this demographic, observed seat belt use was 33 percent lower during the post-program observation period. No other significant effects for age, sex, race/ethnicity, or vehicle type were found.

**Figure 1. BUPD Implementation (Jackson, Sioux Falls) and Control (Beaumont, Fargo) Sites**

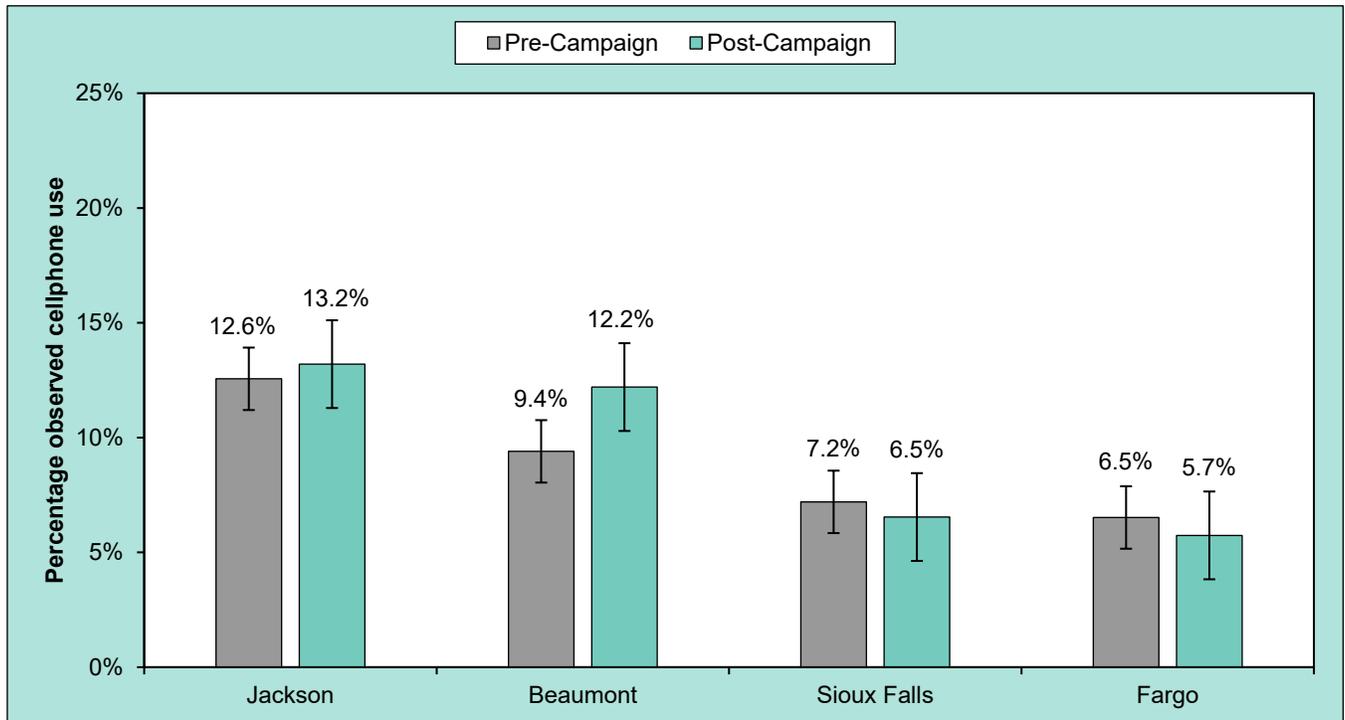


**Figure 2. Pre- and Post-BUPD Campaign Driver Seat Belt Use**



N = 5,000 per site. Error bars represent +/- 1 standard error.

**Figure 3. Pre- and Post-BUPD Campaign Cellphone Use**



N = 5,000 per site. Error bars represent +/- 1 standard error.

## Discussion

The evaluation of BUPD as implemented in Jackson and Sioux Falls revealed that the program did not significantly alter seat belt or cellphone use behaviors in the cities where it was implemented, compared with matched control cities. This may be attributed to limited stakeholder engagement, difficulties attaining media coverage, resource constraints, or issues with the program's underlying theory of behavior change. A retrospective theory-based assessment of BUPD accompanied the process and outcome evaluations, indicating that, absent an education or enforcement component, BUPD capitalizes on social drivers of behavior change such as social influence and norms. Maximizing the reach and visibility of the program's social components—for example, by securing participation from high-profile program champions and prominent local institutions, as accomplished by Missouri in its seminal BUPD implementation—is therefore likely paramount. BUPD was implemented in the current demonstration project with as much fidelity as possible given resource and time constraints. However, no significant increase in seat belt use or decrease in cellphone use was found. It remains possible that other BUPD implementations could successfully influence driver behavior.

## References

- Governors Highway Safety Association. (n.d.-a). *Distracted driving*. [www.ghsa.org/state-laws-issues/distracted-driving](http://www.ghsa.org/state-laws-issues/distracted-driving)
- Governors Highway Safety Association. (n.d.-b). *Seat belt use*. [www.ghsa.org/state-laws-issues/seat-belt-use](http://www.ghsa.org/state-laws-issues/seat-belt-use)
- Hauer, E. (1997). *Observational before-after studies in road safety*. Pergamon.
- National Center for Statistics and Analysis. (2022, May). *Seat belt use in 2021 — Use rates in the States and Territories* (Traffic Safety Facts Crash•Stats. Report No. DOT HS 813 307). National Highway Traffic Safety Administration. <https://crashstats.nhtsa.dot.gov/Api/Public/Publication/813307>

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## Related Reports

- Elliott, K. R., Solomon, M. G., & Chaudhary, N. K. (2025, December). *Demonstration of Buckle Up Phone Down in Jackson, Mississippi, and Sioux Falls, South Dakota* (Report No. DOT HS 813 757). National Highway Traffic Safety Administration. [doi:10.21949/58b1-j628](https://doi.org/10.21949/58b1-j628)
- Raymond, P., Redden, C., Benson, A., Womack, K., Park, E. S., King, K., Johnson, N., & Tucker, A. (2025, December). *Evaluation of Buckle Up Phone Down in Jackson, Mississippi, and Sioux Falls, South Dakota* (Report No. DOT HS 813 761). National Highway Traffic Safety Administration. [doi:10.21949/65rr-xk43](https://doi.org/10.21949/65rr-xk43)



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