

# Rideshare Reporting and State Partnerships

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Atlanta, Chicago, and Fort Worth.



## 2020 GHSA/Lyft Safe Road Use Grant Applications

GHSA received applications from 8 states. The total amount requested is \$99,500 in Lyft ride credits and \$60,500 in cash. The total amount available is \$50,000 (not to exceed \$10,000 cash for any state).

Below is a breakdown and page numbers for reference of each individual application.

<b><u>State</u></b>	<b><u>Amount Requested (\$)</u></b>	<b><u>Page</u></b>
<a href="#"><u>Colorado</u></a>	10,000 Lyft Ride Credits/10,000 Cash	2
<a href="#"><u>Connecticut</u></a>	10,000 Lyft Ride Credits/10,000 Cash	7
<a href="#"><u>Illinois</u></a>	20,000 Lyft Ride Credits	10
<a href="#"><u>Indiana</u></a>	10,000 Lyft Ride Credits/10,000 Cash	15
<a href="#"><u>Maryland</u></a>	10,000 Lyft Ride Credits/10,000 Cash	19
<a href="#"><u>New Mexico</u></a>	19,500 Lyft Ride Credits/500 Cash	22
<a href="#"><u>North Carolina</u></a>	10,000 Lyft Ride Credits/10,000 Cash	26
<a href="#"><u>Texas</u></a>	10,000 Lyft Ride Credits/10,000 Cash	30

## Colorado

### Contact Information

Sam Stavish, Senior Associate  
Colorado Department of Transportation  
2829 West Howard Place  
Denver, CO 80204  
303-330-7280  
[sam@cig-pr.com](mailto:sam@cig-pr.com)

### Impaired Road User Problem Statement

Each year in Colorado, more than 20,000 people are arrested for DUI — that's an average of 50 DUIs every day. In 2018 alone, more than 200 people died in alcohol-related crashes on Colorado roads, accounting for one-third of Colorado's traffic deaths. Between 2015-2018, there was a 25% increase in the number of alcohol-related fatalities in Colorado. In addition, more and more people are mixing alcohol with cannabis or other drugs and getting behind the wheel, a dangerous combination that significantly increases impairment. Between 2018-2019, Colorado law enforcement noted a 112 percent increase in DUIs involving cannabis or other drugs (polyconsumption).

CDOT is applying for this grant because we believe in providing resources and tools to help Coloradans make better choices when it comes to driving impaired by alcohol and/or drugs. We know that if we want to deter people from driving impaired, we must provide straightforward, accessible tools and alternatives to driving under the influence. This is why, for example, CDOT has worked for the past several years to increase awareness of the use of personal breathalyzers as a tool for curbing impaired driving. We've partnered with BACtrack since 2017 to provide Colorado residents unprecedented discounts and incentives to purchase mobile breathalyzers. From 2017-2018, BACtrack.com breathalyzer sales in Colorado were the highest in the nation.

CDOT also promotes safe ride resources and alternatives, including Lyft, year-round. Our agency has partnered with Lyft in the past as part of several impaired driving prevention campaigns and appreciates Lyft's commitment to making the communities it serves safer.

### **Describe your state's existing impaired driving campaign(s) and how this grant will complement or supplement this effort during the holiday season.**

Through our existing *The Heat Is On* campaign, CDOT facilitates 16 specific, high-visibility impaired driving enforcement periods centered on national holidays and events where alcohol consumption is prevalent. This includes a Holiday Parties DUI enforcement period in early-December. For each of these high-visibility enforcement periods, CDOT promotes the enforcement and safe ride alternatives through traditional media outreach to statewide news outlets, including Hispanic media, as well promotion of the DUI enforcement effort on CDOT and our partners' social media. CDOT's efforts are widely covered by the media — it is not uncommon to receive 10 million impressions or more and dozens of stories surrounding an enforcement period.

In addition to promoting DUI enforcement periods through traditional channels, CDOT also finds new and innovative ways to generate visibility for our impaired driving prevention efforts. In 2019, CDOT worked with Lyft, along with the City of Denver and AAA, as part of a polyconsumption-impaired driving

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campaign during the St. Patrick's Day DUI enforcement period. Together, this coalition combined efforts and resources to create and publicize a free ride promotion – offering Lyft ride credits to individuals who signed a pledge to never drive impaired by alcohol, drugs, or any combination of the two. With \$13,500 worth of Lyft ride credit — and amount representative of the average cost of a DUI in Colorado — our goal was to have 1,350 people sign the pledge and use a safe ride alternative over the St. Patrick's Day weekend. More than 4,200 people ultimately signed the pledge – and thanks to additional contributions from partners, the promotion provided more than \$18,000 worth of safe rides to people across Denver during the holiday weekend.

Over the years, we've also had police officers singing holiday carols at press conferences, and attended beer festivals, baseball and football games where we breathalyzed thousands of attendees to help make them more aware of how quickly their breath-alcohol content (BAC) can rise above the legal limit. This grant is directly aligned with CDOT's philosophy that providing safe and tangible alternatives to driving impaired is the most effective way to remove drunk drivers from our roads. We've seen how impactful offering a free, sober ride home is in protecting our community and are eager to work with GHSA and Lyft to reduce impaired driving this holiday season.

### **Describe the activities this grant would fund, the marketing channels that would be used, and your effort's anticipated reach.**

CDOT proposes using the grant funding towards a "Gift of Lyft" ride credit promotion surrounding the 2020 holiday season. We would encourage Coloradans to sign a simple, online pledge to not drive impaired by alcohol or drugs this holiday season in order to unlock access to a \$10 Lyft ride credit. We believe that getting the public to engage and take a deliberate (easy) action in the name of DUI prevention to earn the ride credit is more impactful than just giving away the credits. This model worked well for CDOT and our partners during the 2019 St. Patrick's Day campaign when a similar promotion was offered and far exceeded redemption expectations.

The promotion would begin ahead of the Holiday Parties DUI enforcement period beginning in early December and run through New Year's Eve, or until the credit is used.

Developed during last year's same Holiday Parties DUI enforcement effort, CDOT unveiled the "DUI Tree." For every 10 DUI citations issued during the enforcement period, a white bulb was swapped with a flashing red or blue light, representing police lights. This eye-catching display, installed at a downtown Denver shopping area, provided a reminder of the ongoing impaired driving enforcement. If awarded this grant, CDOT would reinstate the DUI Tree display with original messaging to promote the "Gift of Lyft" online pledge.

Depending on the state of COVID-19 this winter and the safety of social activities, CDOT may also incorporate an in-person component at a holiday gift market or venue popular among our target audience (males and females ages 21-34) where attendees would be invited to sign the pledge to receive the Lyft credit. The promotion would begin in conjunction with CDOT's The Heat Is On Holiday Parties DUI enforcement period on Dec. 4, 2020, and continue until ride credits run out.

The ride credit would be available to audiences statewide, but promotion efforts will be primarily focused in Denver County, El Paso County and Larimer County — the counties where DUI arrests during the Holiday Parties enforcement period have been the highest for the past two years. Denver County

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and El Paso County are part of separate media markets, giving us more opportunities for media coverage in each market.

CDOT will promote the “Gift of Lyft” pledge and ride credits through outreach to traditional news media, as well as CDOT’s social media and digital platforms such as website and newsletter. We will engage our law enforcement partners in the specified target counties to share the promotion on their social media channels. We’ll also include specific outreach to Spanish-speaking audiences through our relationships with local Hispanic broadcast media. Our PR team would pitch interviews on Denver and Colorado Springs television and radio news programs to further promote the effort.

CDOT has a robust PR team and excellent relationship with media markets across the state. The anticipated reach of this promotion would be 10 million media impressions from dozens of news stories. Both traditional and digital media outlets will feature the campaign.

**Explain how your state will structure the ride credits. For example, X dollars off X number of rides or X percent off X number of rides. Also address any location and/or time restrictions.**

CDOT proposes offering 1,000 ride credits valued at up to \$10 each with a limit of one per person. Rides using the credit must be redeemed between the hours of 4 p.m. and 4 a.m. (the time when most DUI arrests are made during the Holiday Parties enforcement period). There will not be any location restrictions. CDOT will plan to work with Lyft to develop a plan that makes the most sense for this campaign.

**Describe, in detail, the evaluation criteria your state will use to measure campaign reach and impact.**

Evaluation criteria will include:

- Redemption rates for the **\$10,000 in Lyft ride credit**.
- CDOT will track traditional media engagement using our media monitoring systems to establish approximate broadcast TV, online, social media and radio reach statewide and estimated publicity value.
- We will track reach and engagement of our owned social media channels, as well as impressions of our website and newsletter.
- At the conclusion of the promotion, CDOT will evaluate the number of DUI citations during the 2020 Holiday Parties enforcement period compared to previous years, especially in our target counties of Denver, El Paso and Larimer.

### Detailed Budget



### **GHSA/Lyft Safe Road Use Grants Budget**

**Tactic Overview** – CDOT proposes using the grant funding towards a “Gift of Lyft” ride credit promotion surrounding the 2020 holiday season. We would encourage Coloradans to sign a simple, online pledge to not drive impaired by alcohol or drugs this holiday season in order to unlock access to a \$10 Lyft ride

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credit. We believe that getting the public to engage and take a deliberate (easy) action in the name of DUI prevention to earn the ride credit is more impactful than just giving away the credits.

**CDOT will supplement the \$10,000 cash available through this grant with an additional \$12,500** in funding sourced through CDOT's Highway Safety Office and the existing *The Heat Is On* DUI education and enforcement campaigns using CDOT staff time and consultant allocated funding, staff and resources.

Activity	Estimated Cost	Details
Planning	\$2,000	<ul style="list-style-type: none"> <li>• Coordination meeting between CDOT, Lyft, GHSA, and consulting agencies</li> <li>• Develop tactic strategic plan</li> <li>• Outreach to stakeholders and law enforcement partners</li> </ul>
Creative Development	\$4,000	<ul style="list-style-type: none"> <li>• Develop a minimum of eight social images (four English, four Spanish)</li> </ul>
Webpage Development	\$2,000	<ul style="list-style-type: none"> <li>• Develop two cobranded webpages (one English, one Spanish), hosted on either CDOT or Lyft's domain. These webpages will host the online pledge form. Users will visit these webpages to access the promotion and Lyft ride credit after they commit to never drive impaired</li> </ul>
Implementation/Activation	\$2,000	<ul style="list-style-type: none"> <li>• If appropriate, CDOT will coordinate a public activation (DUI Tree) or in-person engagement opportunity</li> <li>• Location scouting</li> <li>• Convers staff time and project administration</li> </ul>
Media Relations, Stakeholder Engagement, Community Outreach	\$6,000	<ul style="list-style-type: none"> <li>• Develop four press releases promoting the enforcement period and Lyft credit promotion. Total of four press releases (two English, two Spanish)</li> <li>• Conduct media outreach and story pitching to English and Spanish media</li> <li>• Develop co-branded content for community partners to promote the pledge and ride credit</li> <li>• Coordinate media interviews with English and Spanish reporters</li> <li>• Ongoing media pitching</li> </ul>
Social Media Content	\$4,000	<ul style="list-style-type: none"> <li>• Create a minimum of 10 social posts in English and Spanish to be posted on CDOT and partner social channels during the pledge and ride credit promotion period</li> </ul>

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		<ul style="list-style-type: none"><li>Includes copy and images for Facebook, Twitter and Instagram</li></ul>
Social Media Ads	\$500	<ul style="list-style-type: none"><li>Funding allocated for social media ads (10 posts, \$50 each)</li></ul>
Report	\$2,000	<ul style="list-style-type: none"><li>Develop a final tactic summary report including, but not limited to, traditional and social media metrics, social media engagement, stakeholder outreach and the number of Lyft promotional credits used</li></ul>
<b>TOTAL</b>	<b>\$22,500</b>	

**Describe the additional resources your SHSO will provide to supplement this grant.**

CDOT will match the \$10,000 cash afforded by this grant with an additional \$12,500 funding provided by CDOT's existing The Heat Is On DUI education and enforcement campaign through consultant-allocated funding, staff and resources. Funds will be used to support the promotion and activities to be undertaken through this grant.

## Connecticut

### Contact Information

Kathryn Overturf, CT Careers Trainee  
CT DOT Highway Safety Office  
2800 Berlin Turnpike  
Newington, CT 06131  
860-594-2340  
[kathryn.overturf@ct.gov](mailto:kathryn.overturf@ct.gov)

### Impaired Road User Problem Statement

Connecticut has seen troubling statistics related to impaired driving in recent years. According to NHTSA, of the 294 fatal crashes in the state in 2018, 39 percent, or 115, involved at least one driver with a blood alcohol level of .08 or higher. Only two states had higher rates. The national rate was 29 percent. While the Highway Safety Office (HSO) provides grant funding to approximately 75 municipalities in the state for impaired driving enforcement, this crash number clearly demonstrates a problem in Connecticut that must be addressed in new and different ways. Education and outreach paired with enforcement have long been proven to be crucial in reducing dangerous crash trends. The HSO has several programs for impaired driving education, but an innovative partnership with Lyft would provide an entirely new approach to curb impaired driving. Although the COVID-19 pandemic has altered the way people socialize, Connecticut has not seen a significant drop in impaired driving numbers. According to the UC Davis study, ridesharing can cause a 37% decrease in impaired driving. Considering the recent concerning statistics with impaired driving in Connecticut, a partnership with Lyft that includes a significant media campaign would open up a new avenue to promote ridesharing to curb this dangerous behavior.

### Describe your state's existing impaired driving campaign(s) and how this grant will complement or supplement this effort during the holiday season.

In Fiscal Year 2019, the HSO allocated nearly \$4,500,000 in funding to impaired driving enforcement grants. Of this funding, nearly \$3,300,000 was billed to target impaired driving enforcement. This included 75 municipalities in Connecticut, including the State Police. In partnership with this enforcement, the HSO executes significant statewide media buys which include television, radio, billboard and other advertisements to promote driving sober around the efforts of law enforcement in accordance with the NHTSA calendar. Additionally, the HSO makes a significant commitment to youth impaired driving. The HSO has a partnership with Mothers Against Drunk Driving to promote youth drinking education, and our 'Choices Matter' program visits 60 Connecticut high schools per year. This program reaches thousands of students and features an award winning speaker that shares his story of how impaired driving as a youth changed his life forever. Underage drinking grants are also made available to municipalities that demonstrate youth impaired driving being an issue, which includes targeted youth enforcement. Aside from these efforts, the HSO promotes the impaired driving message at concert venues, arenas, race tracks, ballparks and stadiums throughout the state. The HSO partners with minor league teams, high school athletic associations and others to have signage and impaired driving promotions at over 20 locations statewide. Though these avenues reach a significant audience, the HSO has yet to add a ridesharing promotion and opportunity into its cache. This opportunity to partner with Lyft would be a new and unique way to engage Connecticut's driving population and generate a shift towards using a rideshare service, especially with the change in social behaviors during



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the COVID-19 pandemic. It would not only complement the current HSO efforts but infiltrate the market with a new solution and reward for those who may take the risk of driving impaired. While restaurants, bars and nightlife may be more limited than previous years, people are still socializing with friends and family at personal residences. A discounted or free ride can be a large incentive for individuals to choose a rideshare service for their transportation home. Being rewarded for making this positive choice would demonstrate that a rideshare option is not only significantly safer than driving impaired, but that it is easy to do.

**Explain how your state will structure the ride credits. For example, X dollars off X number of rides or X percent off X number of rides. Also address any location and/or time restrictions.**

The HSO envisions offering up to \$10 in Lyft credits to each user that enters the coupon code. This would provide the opportunity for up to 1,000 rideshare users that have seen this specific campaign to be rewarded for their choice to find a sober ride. The promotion would run from 12/16/20 through 1/1/21, honing in on a major peak time for impaired driving. Because the goal of this campaign is to reduce impaired driving, the HSO plans to require that these rides occur between 5:00pm and 2:00am. This would stress that the promotion goes hand in hand with sober driving. The HSO also plans to geo-target this campaign to focus on Connecticut cities. Data shows that Hartford, Bridgeport, Waterbury, New Haven and Stamford have nearly 1,500 DUI-related crashes from 2017 through June of 2020. With this in mind, the geo-targeting would focus on these cities and their surrounding towns to ensure that the promotion is made available to those traveling in impaired driving problem areas. These urban locations typically have an increased number of rideshare drivers available, compared to more rural locations in the state.

**Describe, in detail, the evaluation criteria your state will use to measure campaign reach and impact.**

The campaign will be measured not only by the amount of Lyft credits redeemed, but also on the impressions on the social media sites. There will be a major emphasis on earned media and news stories and the additional reach this exposure provides. HSO staff will work with its contracted media consultant for this project to ensure that this partnership is featured in the media during the holiday season. Lyft ridership during this selected time in these targeted areas can also be measured against ridership from previous years to determine the impact on these communities. The amount of discount codes distributed can be tracked in an end of campaign report.

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### Detailed Budget

LYFT Holiday Promotion						December				January				TOTAL COST \$
						13				1				
Primary Target Audience: Adults 18-34														
Secondary Target Audience: All Drivers														
<u>1. Social Media Advertising</u>														
						Campaign 12/16/20 thru 1/1/21								\$10,000
<u>6. Public Relations/Social Media</u>						Added Value PR and Social Media								\$15,000 (Added Value)
<b>Grand Total:</b>														<b>\$10,000</b>

#### Describe the additional resources your SHSO will provide to supplement this grant.

The HSO will dedicate the required time of a program manager, law enforcement liaison and financial office staff to ensure this project is a success and properly executed. The program manager will work directly with Lyft on creative so the partnership runs in conjunction with current HSO holiday impaired driving efforts. They will also be responsible for creating detailed monthly reports. The law enforcement liaison can engage police in these respective communities to make them aware of the promotion and encourage them to support it and spread the word in their channels. Financial staff will ensure proper rules and regulations are followed upon project activation, including getting an MOU and providing a first invoice to GHSA to begin. HSO staff will promote this campaign during any outreach events leading up to and during this partnership with Lyft.

## Illinois

### Contact Information

Shannon Alderman, Impaired Driving Program Coordinator  
Illinois Department of Transportation  
2300 South Dirksen Parkway  
Springfield, IL 62764  
217-557-6670  
[shannon.alderman@illinois.gov](mailto:shannon.alderman@illinois.gov)

### Impaired Road User Problem Statement

The Illinois Impaired Driving Program's mission is: "Improve Illinois' alcohol-impaired fatality rate through the implementation of priority programs." Currently, Illinois' 3-year average alcohol-impaired fatality rate is 0.31 deaths per 100K VMT, placing it just below the national average of 0.32. A focused, effective, alternative transportation program is not currently being funded via the State Highway Safety Office and this Lyft/GHSA grant has proven a very good way to implement alternative transportation efforts into Illinois' comprehensive impaired driving countermeasure efforts during the holiday timeframe.

Motor vehicle crash data shows in 2018 there were 1,031 fatal crash fatalities and 309 of those involved an alcohol-impaired driver.

Of course, impaired driving is so much more than alcohol impairment. It involves significant drug impairment and/or impairment from a combination of alcohol and other drugs. As Illinois and the country continue to strive to gain a greater understanding and better data on drug-involved motor vehicle crashes and fatalities, there is still some definitive crash data that is quite telling in relation to cannabis use by drivers. In Illinois, crash data over the last decade shows a nearly 200 percent increase in drivers involved in fatal crashes testing positive for THC.

Finally, quite significant are Illinois' unique demographics and the effect they have on motor vehicle crash probability and location as well as the how they affect the decision regarding how best to utilize the Lyft grant ride credits. In short, Illinois' unique defining features, mean much of the motor vehicle crash fatalities and impaired driving crash fatalities occur on local roads and a very significant number of those in rural areas. For this reason, this proposal seeks to utilize Lyft rides within a portion of the state that have significant population but that perhaps don't have quite the number of alternative transportation options that are found in the greater Chicago area. This can also bring greater awareness to the safer opportunities that Lyft provides even in a smaller community.

### **Describe your state's existing campaigns related to impaired road users and how this grant will help complement or supplement your efforts during the holiday season.**

Enforcement has long been the number one impaired driving countermeasure for the Illinois Highway Safety Office's Impaired Driving Program. The Impaired Driving Program, administered by the Illinois Department of Transportation's (IDOT) Bureau of Safety Programs and Engineering (the Illinois SHSO), works diligently to maximize law enforcement participation in the wake of significantly reduced local and state law enforcement agency resources. This difficult reality has contributed to a drastic reduction in Illinois DUI arrests during the last decade. These factors and the fact that the annual alcohol-impaired

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fatality rate has increased in recent years in Illinois, stresses the importance of maximizing the deterrent effect of each enforcement hour funded with federal highway safety dollars. The Impaired Driving Program seeks to accomplish this by funding high-visibility enforcement details in key counties and cities and through a comprehensive media strategy.

IDOT provides federal highway safety funds for additional, highly-visible roadside safety checks (sobriety checkpoints) on non-holiday weekends throughout the year. IDOT's Sustained Traffic Enforcement Program (STEP) grantees integrate impaired driving and seat belt enforcement during six and up to eight major campaigns throughout the year (Halloween, Thanksgiving, Christmas/New Year's, Super Bowl, St. Patrick's Day, Memorial Day, Independence Day and Labor Day).

Illinois' integration of nighttime seat belt law enforcement into impaired driving crackdowns is a key tactic in IDOT's enforcement grant programs. The Illinois State Police (ISP) conduct numerous roadside safety checks during holiday campaigns and add significant saturation and nighttime patrols through various grant programs. ISP grant enforcement provides vital statewide coverage including the rural roads of Illinois.

IDOT has also begun allowing ARIDE and DRE officers to conduct daytime patrols because data shows an increased number of drug-involved motor vehicle fatalities during daylight hours.

In mid-FY 2016, the Illinois Impaired Driving Task Force was formed and has designed and developed the Illinois Statewide Impaired Driving Strategic Plan.

Rounding out a comprehensive program, IDOT utilizes federal impaired driving funds to support the following countermeasures: a SFST/DRE Coordinator Program; a Traffic Safety Resource Prosecutor Program; DUI Court; court monitoring via advocacy groups; DUI prosecutors; Law Enforcement Training; Judicial Training; Fraudulent ID programs; No-refusal, search-warrant programs and underage drinking prevention (enforcement and education).

As mentioned earlier, local law enforcement across Illinois, including every Illinois State Police district, step up enforcement during major holidays, including the end of year holiday timeframe. The stepped-up enforcement is supported with a comprehensive media buy and extensive earned media efforts. IDOT law enforcement grantees - local police and sheriff's departments and the Illinois State Police - conduct local earned media outreach in their individual jurisdictions. It's this aspect for which a Lyft alternative ride program could provide a good accompaniment with law enforcement "advertising" the program locally.

### **Describe the activities this grant would fund, the marketing channels that would be used, and your effort's anticipated reach.**

Illinois intends to utilize this grant to provide safe rides in Sangamon County, a downstate population center, during the holidays (Thanksgiving, through year's end).

To accomplish this, IDOT will use its network of state and local law enforcement agency grantees in these areas to create local interest and buy-in. By involving local law enforcement, motorists will not only be receiving safe transportation, but will also be shown that law enforcement cares about their safety and the safety of others with whom they share the road. Additionally, the message being delivered by law enforcement means individuals most at risk will be reminded that a Driving Under the

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Influence (DUI) arrest gets their driver's license taken away. In this way, the deterrent effect and the main reasons for getting a safe and sober ride are maximized. Messages being considered include... "We'll be everywhere during the holidays, but so is Lyft." or "We don't want to have to pick you up, let Lyft do that." The final incentive, of course, is a safe, free, clean ride!

Additionally, with the unique circumstances brought about by the pandemic it has meant less people at bars and restaurants. IDOT will continue to monitor this situation and adjust its messaging accordingly, perhaps encouraging more safe rides to and from smaller gatherings being held at private residences and other venues.

### Here is how the proposed program will work:

In Sangamon County, on November 25, the Wednesday before Thanksgiving, IDOT will issue a news release in conjunction with local law enforcement and begin utilizing social media outreach efforts to "steer" Twitter and Facebook followers to the social media channels of participating local law enforcement agencies and the Illinois State Police. Via Twitter and Facebook and law enforcement, the public will be told to look for a free ride from Lyft. IDOT will seek to put a limit on available ride codes so that they are still available during other key weekend times during the holiday period. This will be done because ride codes have quickly been "swept up" within hours. By spreading things out a bit more, an opportunity for more free rides and messaging during key times will be present. IDOT and law enforcement will again promote on social media the availability of ride codes on December 23 and again on December 30, prior to Christmas and New Year's Eve.

Lyft codes will be geo-fenced within Sangamon County and will work only between the hours of 3:00pm to 6:00am to further maximize the likelihood of providing a safe ride during the most likely times for an alcohol or drug-impaired driving crash. An advantage of operating the program in this fashion is that it encourages a direct, positive interaction between law enforcement and a potential impaired driver.

Given the smaller scope of this project, the small sample sizes, and the limited timeframe, it's not a fair assessment to measure this grant program in terms of crash reduction. A more reasonable measure is the effect this program can have on generating Lyft requests and whether it can increase the number of Lyft rides provided during the specified timeframes and within specific locations. Alternative rides only work if people use them, which makes the following goals the best possible outcomes of this program.

### The primary measurable goals of this program are:

1. To increase the number of Lyft requests generated, during specified timeframes and within specified jurisdictions in Illinois.
2. To increase the number of Lyft rides given, during specified timeframes and within specified jurisdictions in Illinois.

In this way, it can be shown (or discounted) that this program encouraged people to utilize safe transportation alternatives.

### **Explain how your state will structure the ride credits. For example, X dollars off X number of rides or X percent off X number of rides. Also address any location and/or time restrictions.**

IDOT is requesting the entire \$20,000 amount in Lyft credits and no cash funds. Specifically, Illinois foresees utilizing \$20 Lyft credits offered within Sangamon County from Wednesday, November 25 through Saturday, January 2, 2021 encompassing the last several weeks of 2019. The ride credits

## Illinois

should only work between the hours of 3:00pm and 6:00am to further maximize the likelihood of providing a safe ride during the most likely times of an impaired driving crash occurring. Finally, rides must start and end within the boundaries of Sangamon County.

### **Describe, in detail, the evaluation criteria your state will use to measure campaign reach and impact.**

The primary measurable goals of this program are:

1. To increase the number of Lyft requests generated, during specified timeframes and within specified jurisdictions in Illinois.
2. To increase the number of Lyft rides given, during specified timeframes and within specified jurisdictions in Illinois.

### **Detailed Budget**

Budget rules in the State of Illinois make it very difficult for a state agency to accept private grant funding. Therefore, instead of \$10,000 in cash and \$10,000 in ride credits, IDOT is requesting the entire \$20,000 amount in Lyft credits and no cash funds. To augment the remaining administrative and marketing costs of the alternative rides program, in-kind matching from IDOT, the Illinois State Police, and various local law enforcement agencies will be utilized.

As proposed, IDOT will administer the program by making Lyft ride credits available in select downstate population centers. To do this, IDOT law enforcement grantees will be utilized.

### ***Detailed Budget Request***

<b>Item</b>	<b>Cost</b>
<b>Lyft Ride Credits</b>	<b>\$20,000</b>
<b>Total Illinois In-kind Matching Funds</b>	<b>\$9,620</b>
<b>Administrative cost (IDOT, Impaired Driving Program Coordinator/LEL Program)</b>	
25 hours x \$40/hour	\$1,000
<b>Administrative cost (Illinois State Police, Social Media Officer)</b>	
10 hours x \$40/hour	\$400
<b>Marketing Costs (IDOT, Office of Communications)</b>	
25 hours x \$40/hour	\$1,000
<b>Local Marketing Costs (Illinois State Police, 1 Districts)</b>	
5 hours x \$72/hour	\$360
<b>Local Marketing Costs (Local police and sheriff's departments)</b>	
5 hours x \$65/hour x 20 Agencies	\$6,500
<b>Total Grant Request</b>	<b>\$29,620</b>

### **Describe the additional resources your SHSO will provide to supplement this grant.**

As mentioned in the budget section above, Illinois state agencies do not have a direct mechanism by which they can accept private grant funding. However, IDOT, as the Illinois SHSO, and its numerous law enforcement partners can more than make up for this with an in-kind commitment of effort that will add considerable value to the Lyft credits. These in-kind efforts are vital to this program's success.

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Shown below are more details regarding activities associated with the specific dollar values listed in the budget section above.

IDOT's Bureau of Safety Programs and Engineering (the Illinois SHSO) will provide various contributions to this program from its Impaired Driving Program Coordinator and from the Illinois Law Enforcement Liaison (LEL) Program that will directly interact with participating law enforcement agencies. Specifically, the Impaired Driving Program Coordinator and LEL Program will contribute administrative duties including direct interaction with law enforcement partners and development of the communications plan and social media messages. IDOT's Office of Communications is the public information arm of IDOT and will work closely with the SHSO on every public relations aspect of this program including distribution of news releases and social media messaging. Hourly rates are based on approximate straight-time wages for the IDOT employees involved.

Each of the Illinois State Police's 22 Districts have a Safety Education Officer (SEO) who can contribute directly to the public relations efforts of their respective district's enforcement, advertisement of the program, and assist with distribution of Lyft ride credits. Each Illinois State Police District has its own social media accounts. The SEO in the specific participating Illinois State Police Districts will help with the program.

In addition, a dedicated statewide social media officer who handles the corporate social media channels for all the Illinois State Police will assist with the program. Hourly rates for the Illinois State Police are based on average hire-back (time and one-half) wages for one district and also the central office social media officer.

Finally, local and county law enforcement agencies involved with the program will also contribute directly to the public relations efforts of their department's enforcement, advertisement of the program, and assist with distribution of Lyft ride credits. Hourly rates are based on a conservative average hire-back rate (time and one-half) for IDOT law enforcement grantees. Total in-kind estimates are based on the estimated participation of 20 law enforcement agencies.

## Indiana

### Contact Information

Robert Duckworth, Director  
Indiana Criminal Justice Institute  
101 West Washington Street, #1170  
Indianapolis, IN 46204  
317-232-1296  
[rduckworth@cji.in.gov](mailto:rduckworth@cji.in.gov)

### Impaired Road User Problem Statement

In 2018, there were 227 fatalities involving a driver or motorcycle operator with a BAC of .08 or above in Indiana, a 13.4% decrease from 2017. These fatalities accounted for 26.7% of Indiana's 851 fatalities in 2018. Reports from the Indiana Department of Toxicology indicate that in 2019, there were 5,850 blood submissions from drivers that returned a result of .08 or higher. Additionally, there have been more than 4,500 arrests or citations issued each year, since 2013, during DUI enforcement activities funded by NHTSA. This data indicates that Indiana still has work to do to, utilizing initiatives new to Indiana, to reach the goal of substantially reducing the instances of impaired driving occurring throughout the year. The month of December, during the holiday season when many people celebrate with family and friends and consume alcohol, is a high risk time period for impaired driving. In 2017, 2018, and 2019 there were 306, 257, and 301 alcohol impaired collisions respectively, during the month of December.

Pedestrian collisions are also a concern in Indiana, especially those that involve impaired drivers or pedestrians. In the previous year, an estimated 33% of fatal pedestrian collisions involved a pedestrian with a BAC of 0.08 or higher, and an estimated 16% of drivers involved in these crashes had a BAC of 0.08 or above. The vast majority (roughly 75%) of pedestrian fatalities occur after dark, which makes the winter months particularly dangerous. During December the sun sets around 5:30pm in Indiana, leaving several hours of darkness while people are still making their way home.

We believe that a grant to promote the use of Lyft as a safe alternative to impaired driving will help us reduce the number of arrests, collisions, and fatalities that occur each year during the holidays. Offering an alternative to individuals who want to enjoy drinking will encourage them to think ahead and plan for transportation that keeps themselves and others safe.

### **Describe your state's existing impaired driving campaign(s) and how this grant will complement or supplement this effort during the holiday season.**

Currently, Indiana operates several impaired driving campaigns that at different peak times throughout the year. These include; the DUI Taskforce Enforcement Project, a Summer Impaired Driving Enforcement Project, a youth focused Reduced Access to Impairing Liquors (RAIL) Project, a Portable Breath Test Equipment Project, a Law Enforcement Phlebotomy Program, and starting with the 2021 fiscal year, a new Alternative Transportation Project. These projects all work together to utilize high visibility enforcement (HVE), driver education, and prevention measures. The State Highway Safety Office has partnered with law enforcement agencies all across the state as well as other organizations and agency to provide a multi-faceted approach to the reduction of impaired driving.



## Indiana

Media Campaigns compliment the NHTSA paid media efforts largely through TV and Radio. The local level campaigns are only suggestive of changed behavior through the education of the dangers of impaired driving. The current campaigns lack the ability to track obverted and prevented actions of impaired driving, only tracking a reduction in crashes and arrests.

Receiving this grant from GHSA and Lyft would allow Indiana to expand upon the Alternative Transportation Project planned for FY2021 through a partnership with Alliance Highway Safety and the Indiana State Excise Police. This grant would allow Indiana to offer ride-credits that without funding re currently not an allowable cost for the planned project. The redemption of ride credits allows for measurement of choices made through positive choices, actually measuring behavioral change and the outcome effects when comparing usage with actual crash events.

### **Describe the activities this grant would fund, the marketing channels that would be used, and your effort's anticipated reach.**

The program will be run in the largest metropolitan communities in the state, operating in the main downtown area of each city as identified as high pedestrian crash areas. Planned included cities include: Indianapolis, Fort Wayne, Evansville, and two cities to be identified in Northwest Indiana.

Grant funds would be used for specific geofenced social media campaigns via facebook and twitter within the area of eligible ride initiation areas. Anticipated reach of this campaign efforts are estimated from measured reach of the Click it or Ticket Media Campaign of FY19. Indiana projects the anticipated reach at 20% of the FY19 reach numbers use to the use of specific geofence implementation.

In FY19, the campaign served over 7.9 million impressions and earned 9,865 ad clicks through a combination of programmatic display and video, YouTube video, and Facebook display and video ads. Programmatic display earned 1.3 million impressions and 1,662 clicks, while programmatic video earned 456,000 impressions and had a 61 percent completion rate. YouTube performance served 309,000 impressions and had a 41 percent video completion rate. The Facebook social display and video campaign earned over 5.8 million impressions and reached over 267,000 people from May through July.

### **Explain how your state will structure the ride credits. For example, X dollars off X number of rides or X percent off X number of rides. Also address any location and/or time restrictions.**

Ride credits of \$5.00 dollars per ride as a set redemption limit will be available from Alliance beginning the Wednesday prior to Thanksgiving. Credits issued continuing after Thanksgiving may be used any Friday or Saturday evening between 5:00pm and 3:00am during the weeks from Thanksgiving through New Year's Eve. Credits issued within identified locations will be for rides initiating from the geofence area specific to the problem identified area of downtown Indianapolis and the similar areas of the selected cities. In Indianapolis, originating rides would be limited to final destination of no more than a 30 miles of Indianapolis. Many persons travel into the city from this distance from the contiguous counties of Indianapolis. Other selected cities within Indianapolis would be limited to a destination of not more than 20 miles. The only limitations will be those imposed by Lyft, with deference to their area of coverage.

### **Describe, in detail, the evaluation criteria your state will use to measure campaign reach and impact.**

Our evaluation process will be multi-faceted. Data will be collected on the number items distributed with credit codes distributed, as well as the number of credits actually redeemed. This items will

## Indiana

measure reach and impact of the program to influence positive decision making through program utilization. To measure safety impact success of the program, data will be collected on the number of DUI citations issued, and the number of impaired driving collisions occurring in those geographical locations during the six weekends that the credits will be available. A comparison of those same weekends from the previous three years will be conducted to evaluate whether the campaign demonstrated an impact difference in the number of impaired driving occurrences. Data collected on the number of credits used will also be analyzed to determine which weekends and which times were most popular to project opportunities for future narrow scoped focused for projects. Additionally, Alliance will provide data for contacts with persons and survey completions. These combined items also allow Indiana to determine which areas provide the most impact in future campaigns.

### Detailed Budget

<u>Alternative Transportation Project</u>					EXPENSES	
<b>TOTAL EXPENSES</b>			<b>Grant</b>	<b>Matching</b>	<b>Grant</b>	<b>Matching</b>
	<b>\$330,000.00</b>		<b>\$20,000.00</b>	<b>\$310,000.00</b>	<b>\$20,000.00</b>	<b>\$310,000.00</b>
<b>Costs</b>	<b>Grant</b>	<b>Matching</b>				
Ride Credits	\$10,000.00					
2,000 Credits @ \$5.00						
<b>Total</b>	<b>\$10,000.00</b>	<b>\$0.00</b>				
Advertising	Grant	Matching				
Social Media	\$5,000.00	\$0.00				
Radio Advertising	\$5,000.00					
<b>Total</b>	<b>\$10,000.00</b>	<b>\$0.00</b>				
State Funds	Grant	Actual				
Alt Trans Project	\$0.00	\$300,000.00				
NHTSA 402 Funds						
SHSO Management Costs		\$10,000.00				
<b>Total</b>	<b>\$0.00</b>	<b>\$310,000.00</b>				

## Indiana

### **Describe the additional resources your SHSO will provide to supplement this grant.**

ICJI will provide project management, data collection and analysis management support through assigned personnel of the SHSO. ICJI through the efforts of the Law Enforcement Liaison's will collaborate with involved law enforcement agencies for awareness of the program during the period of operation.

Alliance will design and maintain a website for the project to track visits and impressions for project data. The consistent marketing of the project domain will provide a reliable means of distributing ride codes near targeted holidays and will become a resource on all other days. The website will have general information about the program, safety ride resources, highway safety facts and figures, and resources for bar and restaurants. Using materials provided by GHSA, ICJI and Lyft, Alliance will work with the State Excise Police to distribute the materials to the establishments that are in areas with high rates of incidents. Combining server education training and alternative transportation education as an alternative enforcement process. Alternative Enforcement Programs are recognized proven countermeasure cited within NHTSA Countermeasures that work 7th edition.

Alliance will set up an interactive display in popular bar and restaurant areas. The display will promote the project and educate people on the resources that are available to them. Alliance will collect surveys and distribute ride certificates to the patrons of these establishment. Alliance will also collaborate with law enforcement to provide ride share app credits to those individuals following and engaging with selected law enforcement agencies on social media. Alliance will also use promoted posts to build a following of law enforcement agencies social media pages.

Alliance will use digital promotion and create a geofence around the targeted areas of the project. The digital ads will promote the website and encourage the use of the ride share app certificates at the peak holiday times.

## Maryland

### Contact Information

Nancy Camara, Impaired Driving Program Manager  
Maryland Highway Safety Office  
6601 Ritchie Highway  
Glen Burnie, MD 21062  
410-787-4078  
[ncamara@mdot.maryland.gov](mailto:ncamara@mdot.maryland.gov)

### Impaired Road User Problem Statement

During the five-year period 2015-2019, Maryland averaged 163 fatalities related to alcohol or drug impairment.

While only one in 45 crashes involving driver impairment resulted in a fatality in 2019, more than 30 percent of all fatal crashes involved alcohol and/or drugs. Impairment is often a factor when a fatality does occur. This relatively high rate of occurrence and correlation between impaired driving and fatal crashes and fatalities on Maryland roadways has made impaired driving a crucial focus point for traffic safety and law enforcement professionals throughout the State.

A National Roadside Survey of Alcohol and Drug Use by Drivers conducted by the National Highway Traffic Administration reports that the prevalence of drugs containing THC (the active impairing ingredient in Marijuana) in the driving population during the nighttime and on weekends increased by 48 percent since the same survey in 2007. This increase occurred while at the same time the number of drivers on the road with a blood alcohol concentration of 0.08 or more has declined significantly over the same time frame.

Maryland is applying for the GHSA grant to help raise awareness of services such as Lyft, and the need to plan for a sober driver.

### **Describe your state's existing impaired driving campaign(s) and how this grant will complement or supplement this effort during the holiday season.**

Death is not an acceptable consequence of driving on Maryland roads. For the first time ever, the Maryland Department of Transportation Motor Vehicle Administration's (MDOT MVA) Highway Safety Office is launching an all-encompassing highway safety campaign focused on safe driving behaviors, aptly named – Be the Driver. The animated campaign depicts common situations drivers, riders, and pedestrians often face and illustrates each road users' personal responsibility.

Elements of the Be the Driver campaign will debut over the next six months to address areas of highway safety concerns as identified in the Strategic Highway Safety Plan (SHSP) and will focus on the common contributing factors of fatal crashes. These areas include Occupant Protection, Aggressive Driving, Impaired Driving, Distracted Driving, Motorcycle Safety, and Pedestrian and Bicycle Safety. The ads will be featured year-round on local television, streaming music platforms, billboards, social media, and digital advertisement and be coupled with enforcement waves from state and local law enforcement agencies as part of a high visibility highway safety effort.

## Maryland

Maryland will run the Lyft grant campaign in conjunction with our Be the Driver impaired driving campaign. The two campaigns will complement each other by bringing awareness to easily accessing a Lyft ride by educating individuals on the dangers of impaired driving and the importance of planning for a sober ride.

### **Describe the activities this grant would fund, the marketing channels that would be used, and your effort's anticipated reach.**

The grant would fund a \$10,000 social media buy. The reach will be determined by current statewide impaired crash and arrest data to target high-impact areas. Our media company, as well as our communications office, will schedule and post all Lyft creative to Facebook, Twitter and Instagram accounts.

The Maryland Highway Safety Office will provide 1,000 - \$10 Lyft ride credit codes for free rides from the Thanksgiving holiday through January 1, 2021. Codes will be offered to individuals via the social media account of MHSO, participating law enforcement agencies and partners such as WRAP, MADD, and AAA.

### **Explain how your state will structure the ride credits. For example, X dollars off X number of rides or X percent off X number of rides. Also address any location and/or time restrictions.**

Maryland's five-year average for the highest total number of impaired crashes, serious injury crashes and fatal crashes, occur between the times of 6:00 PM and 3:00 AM. The Maryland Highway Safety Office will offer 1,000 - \$10 ride credits. The ride credits will be available in pre-determined, high-risk areas from 6:00 PM until 3:00 AM, as well as more metropolitan areas to maximize the number of potential rides.

### **Describe, in detail, the evaluation criteria your state will use to measure campaign reach and impact.**

Maryland will use the analytics pulled from our media company to evaluate the reach and impact during our campaign. The report will pull analytics including reach, impressions, shares, likes, comments, and hashtags.

Our marketing company will evaluate the results and impacts of our Be the Driver impaired driving campaign during that time as well. Maryland's Be the Driver campaign will utilize radio, television, billboards, digital and social media to reach residents across the state.

Maryland will also use Lyft data as an evaluation tool. This will help Maryland identify whether rides have increased accordingly during our targeted times. The additional Lyft data could potentially benefit our targeted areas during this and future campaigns.

## **Detailed Budget**

### **Maryland Highway Safety Office Proposed Lyft Grant Budget**

<b><u>Activity</u></b>	<b><u>Purpose</u></b>	<b><u>Requested Funding</u></b>
1,000 Lyft credits	The ride credits will be offered to individuals needing a sober ride home in pre-determined,	\$10,000

## Maryland

	high-risk areas from 6:00 PM until 3:00 AM, as well as more metropolitan areas to maximize the number of potential rides.	
Social Media Buy	<p>The social media buy reach will be determined by current statewide impaired crash and arrest data to target high-impact areas.</p> <p>Our media company, as well as our communications office, will schedule and post all Lyft creative to Facebook, Twitter and Instagram accounts.</p> <p>This activity will also include an evaluation of the impact Maryland's campaign on targeted areas. The evaluation will be conducted by our media company and Lyft reports.</p> <p>Activities will be conducted by Weber Shandwick and MHSO.</p>	\$10,000
	<b>Total</b>	<b>\$20,000</b>

**Describe the additional resources your SHSO will provide to supplement this grant.**

Provided in detailed budget attachment.

## New Mexico

### Contact Information

Jeff Barela, NM DOT Traffic Safety Division Director  
1120 Cerrillos Road  
Santa Fe, NM 87504  
505-660-7676  
[Jeff.Barela2@state.nm.us](mailto:Jeff.Barela2@state.nm.us)

### Impaired Road User Problem Statement

Statewide in New Mexico in 2018, there were 2,090 alcohol-involved crashes, 152 alcohol-involved fatalities and 168 serious injuries; 40.2 percent of all fatal crashes were alcohol-involved. Alcohol-involved fatal crashes increased by 7.6 percent compared to 2017 and fatalities rose by 3.4 percent.

The highest number of alcohol-involved drivers in crashes in 2018 were aged 20-34 (55.6%) and predominantly male. At the other end of the spectrum, the number of alcohol-involved drivers aged 55 to 74 in crashes increased by 29 percent between 2015 and 2018.

The NMDOT is applying for the 2020 GHSA/Lyft Safe Road Use Grant to help address the high numbers of alcohol-involved crashes in Doña Ana County, particularly in the city of Las Cruces and the communities surrounding Las Cruces. Las Cruces is the largest city in Doña Ana County and New Mexico's second largest city by population.

There are currently 40 establishments with active liquor licenses in Doña Ana County, with 21 of these in the focus area for this grant.

Between 2014 and 2018, Doña Ana County had the second highest number of alcohol-involved crashes in the State, and the city of Las Cruces had the second highest number of alcohol-involved crashes.

In 2018, the highest number of alcohol-involved crashes in Doña Ana County and in the city of Las Cruces occurred between 4 p.m. and 2 a.m. and accounted for 72-76 percent of all alcohol-involved crashes.

The city of Las Cruces ranked 3rd in the State for DWI arrests in 2018; 36.2 percent were repeat arrests; 66.2 percent occurred on Friday, Saturday and Sunday.

In a 2020 NMDOT Attitude & Awareness Survey of drivers, 28 percent of Las Cruces area respondents said they had used a ridesharing service like Lyft in the past year compared to 40 percent of Albuquerque (New Mexico's largest city by population) respondents and 42 percent of Santa Fe/North Central NM respondents. The majority of Las Cruces area respondents (82%) said they thought it likely they would be arrested if found to be driving after drinking. Respondents aged 16-44, and Hispanic and Native American respondents were much more likely to believe they would be arrested for driving drunk. This grant would increase knowledge about and access to ride-sharing services, particularly among a high-risk demographic.

Currently, Lyft offers ride services in Las Cruces and in the surrounding communities of Mesilla, Doña Ana, University Park, Sunland Park, Mesquite, Fairacres and San Pablo. Although Doña Ana County/Las Cruces residents have access to Lyft ridesharing services, there has not been a concerted effort highlight

## New Mexico

the availability of or increase the access to these services. Should New Mexico receive the GHSA/Lyft grant, the majority of the funds would be used exclusively for Lyft ride credits, which will serve to highlight the ride sharing service and to increase access to those services.

### **Describe your state's existing impaired driving campaign(s) and how this grant will complement or supplement this effort during the holiday season.**

New Mexico's primary impaired driving campaign is branded as ENDWI. The campaign focuses on highlighting the tragic consequences of DWI for the intoxicated driver and for his or her loved ones. From mid-November until after New Year's Day, the NMDOT conducts its Winter Superblitz campaign that includes high-visibility enforcement, and paid and earned statewide radio, television, social media and outdoor messaging in both English and Spanish. This year, the winter campaign will run from November 13, 2020 through January 2, 2021. The NMDOT would integrate the GHSA/Lyft Safe Road Use grant activities with the Superblitz enforcement mobilization to increase the impact of the messaging and prevention efforts.

The NMDOT contracts with five law enforcement agencies in Doña Ana County to conduct DWI enforcement patrols and checkpoints with a special focus during the Superblitz period. Agencies include Las Cruces PD, Anthony PD, Sunland Park PD, Doña Ana County Sheriff's Office and the New Mexico State Police. The Doña Ana Sheriff's Office was able to provide screen shots of Lyft drivers at bars, casinos and hotels during afternoon and evening time periods to confirm an adequate number of available drivers in the areas of focus. Doña Ana and the Las Cruces police officers report that since ride services became available in their area seven years ago, the services are well-used and active especially in late afternoon and evening periods.

The GHSA/Lyft grant will complement and support our holiday season impaired driving campaign by providing the public with an incentive to use a ride sharing service to get them and their friends and family home safely after enjoying their holiday celebrations. The ride credits provide a substantial incentive for the public to use Lyft services and avoid the tragic consequence of drinking and driving. The area of focus for the campaign will be Doña Ana County's largest city of Las Cruces, and the communities surrounding the city of Las Cruces. The NMDOT also promotes the use of ridesharing services on its ENDWI website and has links to a number of safe ride home alternatives for drivers to use instead of driving a vehicle after drinking.

Currently due to COVID-19 statewide restrictions, restaurants, bars, wineries and breweries can serve customers via outdoor seating only, and with limited capacities. Even with these restrictions, we anticipate there will be holiday promotions and events at bars and restaurants in our target areas, and high need and desire for ride sharing options. Should it become necessary for the State to modify these restrictions over the holiday period to ban any bar or restaurant services, we would have a contingency plan to focus our messaging on house-based parties and celebrations where extended family or friends can plan ahead for a safe ride home.

### **Describe the activities this grant would fund, the marketing channels that would be used, and your effort's anticipated reach.**

Over the holiday period, the NMDOT will conduct a public awareness campaign coordinated with enforcement activities to emphasize the personal and financial consequences of DWI. As part of the public awareness campaign, the NMDOT will develop campaign materials and messages to promote Lyft



## New Mexico

as a safe and less expensive alternative to drinking and driving, and highlight the Lyft ride credits in the Doña Ana County area.

The NMDOT will send out press releases to relevant local television, radio and print media outlets. The NMDOT will also utilize social media to promote Lyft ride credits, and will work with local law enforcement to post the promotion on their social media sites. We have set aside \$500 in the attached budget to pay for social media push notifications regarding the Lyft credits. This strategy has proven to be a very effective way to increase the reach of the message at a low cost output.

In addition, should eating and drinking establishments be open to customers, we will work with Lyft to obtain their creative posters and distribute them in the target areas prior to each holiday period. The NMDOT will work with traffic safety partners such as MADD, Safer NM Now, and local, State and Tribal law enforcement agencies to spread the message about the Lyft holiday ride services credits and to encourage all to take advantage of this opportunity.

**Explain how your state will structure the ride credits. For example, X dollars off X number of rides or X percent off X number of rides. Also address any location and/or time restrictions.**

New Mexico would run the campaign during each of the fall/winter holiday periods: Thanksgiving, Christmas, New Year and the Super Bowl, with a certain number of ride credits allocated for each of the holiday periods. Should it be determined that the Super Bowl not be played due to COVID-19 restrictions, we would increase the number of credits available for each of the Thanksgiving, Christmas and New Year periods. The credits would be offered in the City of Las Cruces and in communities around Las Cruces. Credits for rides would be valid from noon the day before the holiday day until 3:00 a.m. the day after the holiday day. We would offer a single ride credit of up to \$10.00 (tips not included/no cash back on trips under \$10).

**Describe, in detail, the evaluation criteria your state will use to measure campaign reach and impact.**

Success will be measured primarily by the number of rides taken. We will work with Lyft to obtain overall credit redemption numbers and any aggregated statistics. If we can obtain historical data from Lyft regarding the number of rides they provided during the same time periods in the previous year, we can compare 2020 to 2019 and note any differences in the number of rides taken. We will also compare 2019 and 2020 law enforcement data on the number of DWI arrests made during the relevant holiday periods. Social media analytics will be provided in the final report on campaign impact.

### Detailed Budget

#### **GHSA/Lyft 2020 Safe Road Use Grant – NMDOT Detailed Budget**

<b>Activities</b>	<b>Funded by Grant</b>
Thanksgiving Campaign 11/26/2020 300 Lyft Ride Credits	\$3,000
Christmas Campaign 12/24/2020 & 12/25/2020 800 Lyft Ride Credits	\$8,000

## New Mexico

New Year's Eve Campaign 12/31/2020 450 Lyft Ride Credits	\$4,500
Super Bowl Campaign 2/7/2021 400 Lyft Ride Credits	\$4,000
Campaigns Social Media Push Notifications	\$500
<b>Total</b>	<b>\$20,000</b>
<b>NMDOT In-Kind</b>	
One NMDOT Traffic Safety Division staff member will coordinate, track and monitor campaign activities in Doña Ana County, City of Las Cruces and surrounding communities, and develop and issue the final report on the outcomes and impact of the GHSA/Lyft campaign.	<b>Funded by NMDOT</b>
Three NMDOT Office of Communications staff time to develop and distribute press releases and any campaign materials and marketing concepts through relevant television, radio and print media and social media prior to and during each campaign period.	<b>Funded by NMDOT</b>

### **Describe the additional resources your SHSO will provide to supplement this grant.**

The NMDOT/ Traffic Safety Division staff will manage and monitor the implementation of the grant activities.

Staff will work with Doña Ana County and local law enforcement and local media sources to implement and promote the grant activities. The NMDOT Communications Office staff will coordinate and issue the press releases for each of the event periods. Communications staff will also coordinate messaging on social media sites and collate relevant analytics. NMDOT staff will prepare and issue the final report on the outcomes and impact of the campaign.

## North Carolina

### Contact Information

Cheryl Leonard, Assistant Director  
North Carolina Governor's Highway Safety Program  
750 North Greenfield Parkway  
Garner, NC 27529  
984-365-1329  
[cleonard2@ncdot.gov](mailto:cleonard2@ncdot.gov)

### Impaired Road User Problem Statement

The impaired driver problem in North Carolina is evident in all 100 counties. During 2018, 421 persons were killed in crashes in North Carolina involving a driver or motorcycle operator with a BAC of .08 or above. Mecklenburg County, the proposed site of the GHSA/Lyft grant, is the largest county in North Carolina with over 1.1 million people. Not surprisingly, it also has the most alcohol-involved fatalities during the past four years of any county in the state, with 179 alcohol-related fatalities from 2015-2019. In fact, Mecklenburg County's impaired driving accounts for 8.4% of all North Carolina's alcohol-related fatalities. In addition, according to statistics from the Charlotte area DOT/Hospital Consortia, 51-65% of trauma, and fatal road victims, as measured by blood draw, are impaired, not only by alcohol but marijuana and opioids as well.

Rideshare programs such as Lyft offer a creative solution to the impaired driver. The North Carolina Governor's Highway Safety Program (NCGHSP) wishes to use this grant to fund \$15 Lyft ride discounts for riders in specific areas of Charlotte, distribute face coverings with a project logo design, and push online social media ads geofencing to reach those in the targeted areas in Charlotte. These targeted areas- Plaza Midwood, North Davidson (NODA), South End and Montford Drive- represent parts of Charlotte with several bars and restaurants and a concentration of rideshare availability. The targeted areas per zip code are identified in the attached map illustrating the impaired driving issue.

### [Attachment 1](#)

North Carolina was the first state in the nation to test the Booze It & Lose It campaign concept over 25 years ago, and that model has become a national standard. This year, NCGHSP is working with the Insurance Institute for Highway Safety (IIHS), UNC's Highway Safety Research Center (HSRC) and others to create a "Booze It 2.0" that updates this campaign with innovative tools and messages. Rideshare is one of those tools being considered in this reboot. This Lyft project gives us an opportunity to test that partnership in our state's major city and take the lessons learned from this project and apply statewide in this "Booze It" reboot design.

Lastly, it is important to note, although the NCGHSP is submitting this grant proposal, there will be many partnerships that will be endorsing their support in using Lyft as a safe alternative.

Partnerships include the City of Charlotte Neighborhood Services and City of Charlotte DOT, state, county and local law enforcement agencies, local hospitals "injury centers" (Atrium Injury Center), Charlotte Center City Partners and University City Partners, Junior League, United Way and Chamber of Commerce to name a few.

## North Carolina

### **Describe your state's existing impaired driving campaign(s) and how this grant will complement or supplement this effort during the holiday season.**

The North Carolina Governor's Highway Safety Program (NCGHSP) has two impaired driving efforts occurring in the 2020 holiday season. First, NCGHSP will be conducting our Holiday Booze It & Lose It statewide high visibility enforcement and communications campaign from December 14, 2020 to January 3, 2021. The statewide campaign will include over 300 law enforcement agencies (state, local, and county), including dozens of agencies in Mecklenburg County alone, to conduct high visibility enforcement patrols and sobriety checkpoints as part of the Holiday Booze It & Lose Initiative. Secondly, NCGHSP will also conduct a public awareness campaign in ten counties, including Mecklenburg County, using distance floor stickers to publicize impaired driving prevention messages. That campaign begins in early September and runs through early January.

The NCGHSP campaigns' will complement the GHSA/Lyft grant during this holiday season. The goal of the proposed GHSA/Lyft partnership grant is to reduce impaired driving in our state's largest city. We will accomplish this task by integrating the rideshare opportunities into our Holiday Booze It & Lose It campaign and floor sticker campaign in Mecklenburg County by providing a tangible prevention tool to prevent impaired persons from getting behind the wheel of an automobile. The project would work with bars, restaurants, grocery stores and other merchants in the targeted areas to provide a \$15 off Lyft rides for customers in specific areas that research indicates have high impaired driving rates. Lyft coupon codes will be geo-targeted to specific establishments who have been linked to DWI arrests and crashes, and areas with high-impaired crash rates. This grant would also provide an opportunity to expand our messaging and working relationship with merchant associations, hospitals, city governments and others.

### **Describe the activities this grant would fund, the marketing channels that would be used, and your effort's anticipated reach.**

This grant would fund \$15 Lyft ride discounts for riders in specific areas of Charlotte, face coverings (COVID-19 response protocol) with a project logo design, and online social media ads geofenced to target those in the targeted areas in Charlotte.

NCGHSP would use existing social media platforms, and the social media platforms of our partners, to encourage ride share users to download the Lyft application and use the promotional code for riders to plan ahead before going out. Some of the marketing channels and partnerships to assist in spreading the messaging are listed below:

- ✓ City of Charlotte Neighborhood Services and City of Charlotte DOT- will share posts and media
- ✓ Law agencies (Charlotte-Mecklenburg Police Department, Huntersville Police Department, Matthews Police Department, Mint Hill Police Department, Pineville Police Department, Cornelius Police Department, Alcohol Beverage Control Commission, Alcohol Law Enforcement and Mecklenburg County Sheriff's Office)
- ✓ Local hospitals "injury centers" will participate in education components
- ✓ Atrium Injury Center (coordinator of two safety coalitions) will help share messaging, secure partners, and locations of outreach
- ✓ Charlotte Center City Partners and University City Partners will coordinate communications efforts among retail, establishments
- ✓ Junior League, United Way and Chamber of Commerce

## North Carolina

NCGHSP would also publicize the GHSA/Lyft project through social media radio interviews, news stations, and social media outlets during the campaign period to educate the public on driving while impaired and the LYFT credit option. In addition, the NCGHSP Director and Charlotte leaders will also conduct radio interviews to promote the program and stress the importance of planning and not driving while impaired. Finally, we will integrate this campaign into our public awareness efforts of the statewide kick off *Holiday Booze It & Lose It* campaign (press conferences, press releases, social media). See attachment regarding the number of media outlets in the Charlotte and surrounding area to be contacted. [Attachment 2](#)

All activities in promoting ride share will be conducted during the period in which the NCGHSP schedule the annual statewide kick off *Holiday Booze It & Lose It* campaign, December 14-January 3, 2021.

**Explain how your state will structure the ride credits. For example, X dollars off X number of rides or X percent off X number of rides. Also address any location and/or time restrictions.**

The North Carolina Governor's Highway Safety (NCGHSP) plans to offer \$15 discount off approximately 665 Lyft rides for participants in the area of high incidence of impaired driving including Plaza Midwood, NODA, South End and Montford Drive, and possibly downtown. Additional focus areas may be added as people may begin to telework less and travel to their place of employment. NCGHSP will geo-target specific establishments who have been linked to DWI arrests and crashes, and areas with high-impaired crash rates.

In working with Lyft (using their logo), we will print \$15 Lyft "passes." These "passes" will provide a promotional code for ride share users. Through our marking social media platforms, we will encourage rideshare users to download the Lyft application and use the promotional code for riders to plan ahead before going out. As riders venture out to dine out or pick up food/drink, we are encouraging restaurateurs to provide meal discounts to those using a Lyft ride. We will purchase face coverings as part of the NC response and the Governors' Executive Order for COVID -19, (\$5K), illustrating the Lyft and NC Logo, and distribute to restaurant owners and patrons using Lyft ride share, as well as to law enforcement personnel to promote the ride share program.

Code Availability: The coupon code for a Lyft would be valid for the following time frame:

Dates: December 14, 2020 – January 3, 2021

Time: 7:00pm – 3:00am

We estimate that a \$15 discount offered for 21 days would allow for approximately 31 shared rides for each day, with more rides likely on the weekends.

**Describe, in detail, the evaluation criteria your state will use to measure campaign reach and impact.**

The NCGHSP will create a comprehensive program evaluation in January 2021. This evaluation will include use data such as the number of Lyft downloads. In addition, we will also track the number of impressions from GHSP social media platforms such as Instagram and Facebook. We will also measure the number of impressions from social media messages created and shared by other Mecklenburg County project partners as listed previously. We will evaluate earned media impressions such as the number of interviews (TV, radio, and podcasts). We will compare crash data from the campaign time-period and compare with crash data from the same period in previous years.

## North Carolina

### Detailed Budget

Item	Cost
<b>Lyft Ride Credits</b>	<b>\$10,000</b>
<b>Face Coverings (COVID-19 response protocol)</b>	<b>\$5,000</b>
<b>Social Media Advertising (geofenced advertising)</b>	<b>\$5,000</b>
<b>Total Grant Request</b>	<b>\$20,000</b>
<b>Value of NC GHSP In-kind Matching</b>	<b>\$9,075</b>
<b>Administrative cost (Impaired Driving Program Coordinator/LEL Program)</b>	
<i>25 hours x \$40/hour</i>	<b>\$1,000</b>
<b>Administrative cost (GHSP Staff, Dir, Asst Dir, Comms)</b>	
<i>10 hours x \$40/hour</i>	<b>\$400</b>
<b>Marketing Costs (Office of Communications)</b>	
<i>25 hours x \$40/hour</i>	<b>\$1,000</b>
<b>Local Marketing Costs (Community Partnerships)</b>	
<i>5 hours x \$72/hour x 5</i>	<b>\$1800</b>
<b>Local Marketing Costs (Law Enforcement Agencies)</b>	
<i>5 hours x \$65/hour x 15 Agencies</i>	<b>\$4,875</b>

#### **Describe the additional resources your SHSO will provide to supplement this grant.**

The North Carolina Governor's Highway Safety Program (NCGHSP) will use staff time as in-kind match to coordinate the project as well as social media marketing. NCGHSP and partnership staff time, totaling \$9,075, will be utilized to design the campaign, create Mecklenburg County partnerships, create and post social media advertising and perform local marketing activities. In addition, NCGHSP resources will be used to hold press events and press interviews and will also use NCGHSP finance staff to help with project expenses and recordkeeping. See budget outlining In-Kind matching cost estimates in question 6.

## Texas

### Contact Information

Matthew DeLeon, Traffic Safety Specialist  
Texas Department of Transportation  
7600 Washington Avenue  
Houston, TX 77007  
325-939-1658  
[matthew.deleon@txdot.gov](mailto:matthew.deleon@txdot.gov)

### Impaired Road User Problem Statement

Texas consistently leads the United States in crashes and fatalities therefore it is no surprise it also leads in impaired driving as well. In 2018, Texas had 1,439 alcohol-impaired driving fatalities with the highest concentration in Harris County at 171. Due to this high number of lives lost, Texas is investing at a myriad of different initiatives to bring these numbers down. One of these initiatives was to understand the driver's obstacles in taking a sober ride home after drinking. In studying this situation, it was discovered that cost was a considerable deterrent for these drivers to take the safe option. Costs included transportation to their home, transportation back to their car, and potentially cost of the parking ticket or retrieving their car from the tow company. To combat this, we believe providing discount codes for Lyft is a great option to entice drivers to make the decision to leave their vehicle at home when going to drink or at least help them make the safe decision when leaving the bar. For this reason, we are applying for this grant as it provides us with exactly what we need to promote a safe alternative to drinking and driving. Furthermore, we intend to focus our efforts with this grant in Harris County as it is the county with the highest DWI fatalities in our state.

### Describe your state's existing impaired driving campaign(s) and how this grant will complement or supplement this effort during the holiday season.

Texas has a multipronged statewide impaired driving campaign that targets different demographics and seasons. Our campaign targets underage drinking, college & young adult impaired driving prevention, driving while intoxicated, and, the faces of drunk driving that highlights the victims. To focus on high drinking holidays, our campaign targets the football, Christmas/ New Year's Eve, Spring Break, Spring Holidays, July 4th, and Labor Day holiday season. All together our campaign hits the many different market segments of impaired drivers which gives us higher engagement vs only targeting one segment. We believe this grant will help amplify our efforts by helping us provide ride discount codes to make it easier for drivers pick a safe alternative to drinking and driving. We see this being highly useful for the winter holiday season where there are many celebrations and significant holidays. Our strategy is to infuse this with our New Year Eve push in Harris County to encourage drivers to plan their ride before celebrating the new year. We also will be working with STEP law enforcement agencies to promote high visibility enforcement in December to let drivers know law enforcement is monitoring roads more than usual.

### Describe the activities this grant would fund, the marketing channels that would be used, and your effort's anticipated reach.

With this grant, due to COVID-19, we plan utilize \$10,000 cash for digital ads on social media, local radio, TV, and print websites and \$10,000 in Lyft credits in the Harris County/ Houston area. Additionally, we are expanding on the partnerships we have created here in Harris County/ Houston area by including

## Texas

alcohol businesses in the promotion of our campaign as well as inviting some to contribute to increase the number of ride discount codes we will distribute. Our agency is currently in talks with some of these businesses to also place paper collateral in their stores next to the alcohol. Our law enforcement will also distribute paper collateral during traffic stops as well as showing high visibility enforcement. A press conference will be scheduled in the beginning of December to announce these partnerships in force amplifying our campaign this year. Through our network of law enforcement, public officials, local agencies, and nonprofits, our social media reach is over 500,000 users. With the paid ads, we are looking to generate over 1.2 million impressions over the course of the December period not including the news stories across all major local news outlets.

**Explain how your state will structure the ride credits. For example, X dollars off X number of rides or X percent off X number of rides. Also address any location and/or time restrictions.**

We plan to utilize the grant's \$10,000 Lyft ride credits in addition to the \$20,000 ride credits we plan to purchase through our partner agencies such as the Harris County District Attorney's Office to total 3000 \$10 discount codes for the New Year's Eve holiday period. The timeframe we are planning to release these codes will be from Thursday, December 31 at 7:00 AM to January 1st at 7:00 AM within Harris County. We plan to promote the campaign from December 1st to January 1st.

**Describe, in detail, the evaluation criteria your state will use to measure campaign reach and impact.**

a. We will be evaluating this campaign in multiple metrics from digital to paper to DWI crashes/ fatalities and convictions. For digital metrics, we will be measuring impressions, likes, shares, reach, and the number of news stories across all major local news outlets over the course of December and the New Year's Eve holiday period. For paper metrics, we will be measuring the number of paper collateral distributed per law enforcement agency and the number of paper collateral at local alcohol businesses. For DWI metrics we will measure the number of crashes, fatalities, and convictions during the December period and the New Year's Eve holiday period and compare it to previous years.

### Detailed Budget

## TxDOT's Detailed Budget for the GHSA/ Lyft Grant

Below is the proposed budget TxDOT will implement in Harris County in December specifically for the GHSA/ Lyft Grant. Currently TxDOT is in the final stages of selecting the ad agency for its statewide impairment campaign therefore budget information for this campaign is not available at this time to show further contribution to the impairment efforts in Harris County in December.

Digital Advertisement	Funding Source	Notes	Cost
Social media (FB, Inst, Twitter, etc)	GHSA/ Lyft	437,000 imps	\$3,500
Display ads	GHSA/ Lyft		
Behavioral targeting	GHSA/ Lyft	375,000 imps	\$3,000
Local radio, TV, print websites	GHSA/ Lyft	437,500 imps	\$3,500
<b>Total</b>			<b><u>\$10,000</u></b>
Paper Advertisement	Funding Source	Notes	Cost
Info cards x 7000	TxDOT		\$200
Posters x 100	TxDOT		\$100



## Texas

Custom info card tags x100	TxDOT		\$100
<b>Total</b>			<b><u>\$400</u></b>
<b>Ride Credits</b>	<b>Funding Source</b>	<b>Notes</b>	<b>Cost</b>
Lyft ride credits	GHSA/ Lyft		\$10,000
Lyft ride credits	TxDOT Partners		\$20,000
<b>Total</b>			<b><u>\$30,000</u></b>
<b>Labor</b>	<b>Funding Source</b>	<b>Notes</b>	<b>Cost</b>
Ad Agency	TxDOT		\$1,000
<b>Total</b>			<b><u>\$1,000</u></b>
<b>Grand Total</b>	<b>Funding Source</b>	<b>Notes</b>	<b>Cost</b>
GHSA/ Lyft	GHSA/ Lyft		\$20,000
TxDOT & Partners	TxDOT & Partners		\$21,400
<b>Grand Total</b>			<b><u>\$41,400</u></b>

## TxDOT's Activity List for the GHSA/ Lyft Grant

Below is the proposed activities TxDOT will implement in Harris County in December specifically for the GHSA/ Lyft Grant. Currently TxDOT is in the final stages of selecting the ad agency for its statewide impairment campaign therefore activity information for this campaign is not available at this time to show further contribution to the impairment efforts in Harris County in December.

<b>Activity</b>	<b>Date of Activity</b>
Pressconference kicking of the campaign	December 1st
Social media post sharing for kick off	December 1st
Law enforcement will distribute info cards during traffic stops	December 1st - January 1st
Local alcohol businesses will place posters in their establishments	December 1st - January 1st
Digital impairment ads promoting sober rides	December 1st - January 1st
Digital impairment ads promoting the discount code	December 31st - January 1st
Social media post sharing for NYE	December 31st
Media interviews for promotion of the discount code	December 31st
Local alcohol businesses will distribute discount code through their channels	December 31st

### Describe the additional resources your SHSO will provide to supplement this grant.

We plan to dedicate our traffic safety specialist in the Houston district to manage this local effort for the statewide campaign. In addition, we are plan to print paper collateral from our campaign and through our partnership contributions, promote the campaign and increase the number of Lyft discount codes we will be distributing.

## Rideshare Volume and DUI Incidents in Target California Communities

Developed for National District Attorneys Association (NDAA)

by

Casanova Powell Consulting and Dr. Ryan C. Smith

September 28, 2020

### Introduction

Although alcohol-impaired fatalities have decreased over the last 40 years, these preventable deaths continue to account for approximately 30 percent of all motor vehicle fatalities ([NCSA, 2020](#)). Alcohol-impaired driving laws are established in each state in the U.S. where it is illegal to drive with a BAC at or above a specified level (0.05 or 0.08 depending on the state).

Additionally, zero tolerance laws (e.g., for drivers under the age of 21) have been established where any measurable amount of alcohol detected when driving is illegal. Even though these laws are well known, alcohol-impaired drivers continue to get behind the wheel and alcohol-impaired driving continues to be a significant public health issue on U.S. roadways.

According to the National Highway Traffic Safety Administration (NHTSA), in 2018, 10,511 motor vehicle fatalities involved an impaired driver which represents 29 percent of all U.S. traffic fatalities ([NCSA, 2020](#)). This accounts for 29 deaths a day and one death every 50 minutes. NHTSA also reported that night and weekend alcohol-impaired driving fatalities continued to be higher than other days and times of the week as in prior years. The 2018 rate of alcohol impairment among drivers involved in fatal crashes at night was 3.4 times higher than during the day (31% versus 9%) and twice as high on weekends (14% versus 28%). In addition, the type of crashes where these fatalities most often occur involve a single vehicle (31% of fatal crashes where the driver was impaired compared to 13% in multiple vehicle fatal crashes). Specific to California, data from the Center for Disease Control and Prevention report that 9,288 people were killed in crashes involving an alcohol-impaired driver in California 2009-2018 ([CDC, 2020](#)).

The number of rides conducted by an impaired driver prior to arrest is astounding. Research conducted by Beitel et. al found that only a small percentage of impaired drivers are detected and arrested. This was estimated at approximately 1 in 200 drivers ([Beitel, Sharp, & Glauz, 2000](#)). Another study estimated that there were 112 million alcohol-impaired driving episodes in 2010 and only one percent of drivers involved in those episodes were arrested ([Bergen, Shults, & Rudd, 2011](#)).

When considering percent contribution of annual impaired driving fatalities and the number of trips conducted by impaired drivers, rideshare platforms offer a promising countermeasure to address this harm by providing potential impaired drivers with an easily accessible alternative method of transportation. Rideshare companies such as Lyft and Uber, are companies that match passengers with drivers of vehicles for hire through websites and mobile apps. Rideshare companies are often more convenient and accessible than public transportation and often charge lower rates than taxi services, however, the idea that rideshare platforms have a direct impact on reducing impaired driving crashes and fatalities has been met with some skepticism. The research on the topic of ridesharing's impact on impaired driving is limited and varied



regarding study design and approach. Contributing to this skepticism, rideshare companies have been criticized for being confined to urban areas with limited access in rural areas. Recent research findings conducted by NHTSA regarding the prevalence of crash fatalities may provide argument for the contrary:

- Half of crash fatalities (50 percent) occur in urban areas (UAs).<sup>1</sup>
- Almost 80 percent of fatalities occur in UAs and the 5 surrounding miles (79 percent).
- Fifty-nine percent of rural crash fatalities occur within 5 miles of UAs ([Webb, 2020](#)).

State highway safety office (SHSO) countermeasures and strategies to reduce alcohol-impaired driving often include messaging to designate a “sober ride” home. These messages encourage those intending to “go out and drink” to designate a sober driver or to use alternative transportation including rideshare companies. For example, in 2018 during the holiday season, the Governors Highway Safety Association (GHSA), a 501(c)(3) nonprofit representing the state and territorial highway safety offices that implement federal grant programs to address behavioral highway safety issues, partnered with Lyft to combat impaired driving during this peak time of the year when impaired driving numbers tend to increase. Through this partnership, five grants were awarded to state highway safety offices in California, Illinois, Louisiana, North Dakota, and Washington to distribute Lyft ride coupons and deliver educational and awareness campaign messaging on both social media and paid media platforms ([GHSA, 2019](#)).

The California Office of Traffic Safety conducts an annual “DUI Doesn’t Just Mean Booze” awareness campaign in tandem with its “Go Safely California” traffic safety effort to raise awareness of the dangers and consequences of driving under the influence of alcohol, drugs or medications. A digital promotion in Sacramento, San Francisco, Los Angeles and San Diego encourages individuals to plan a sober ride home by using the Lyft app and a special code for a discounted ride to get them home safely ([GHSA, 2019](#)). As a result, these five state agencies were effective in generating public awareness and encouraging residents to use Lyft as an alternative to driving impaired when participating in holiday festivities.

Several studies have examined the relationship between rideshare companies and other alternative transportation and the incidence of impaired driving incidents with varying results. In 2015, MADD reported that the presence of Uber’s rideshare service in Oregon was associated with a 10% decrease in DUI arrests ([MADD, 2015](#)). A study conducted in 2016 by Brazil and Kirk examined the potential association between the availability of Uber’s rideshare services and total, drunk-driving related, and weekend- and holiday-specific traffic fatalities in the 100 most populated metropolitan areas in the United States. This study concluded there was no association between the deployment of Uber services and the number of subsequent traffic fatalities for aggregate or specific to drunk-driving fatalities or fatalities during weekends and holidays ([Brazil and Kirk, 2016](#)). Another study conducted by Frank Martin-Buck in the

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<sup>1</sup> To qualify as an urban area, the territory identified according to criteria must encompass at least 2,500 people, at least 1,500 of whom reside outside institutional group quarters.

same year reported that rideshare reduces fatal alcohol-related auto crashes by 10 to 11.4%, dependent upon transit usage. This study also reported that rideshare reduces DUI arrests by 8.7% to 9.2% in cities with low to moderate transit usage but has no effect in cities where transit usage is very high ([Martin-Buck, 2017](#)). A study released in 2017 conducted by the City University of New York found that in four boroughs of New York City, excluding Staten Island, there was a 25 to 35% reduction in alcohol-related car crashes since Uber launched in New York City in 2011, as compared to other places where ride-hailing company do not operate ([Peck, 2017](#)). Dills and Mulholland conducted a more recent study and found that Uber's presence in the cities examined lowered the rate of DUIs and fatal crashes ([Dills & Mulholland, 2018](#)).

A study by Moll Group, who also focused specifically on Uber, conducted a pre-post Uber launch study in 10 cities. When reviewing the California results, this study found that after Uber's launch in San Diego in June 2012, DUI arrests fell by 32%. This research also showed that arrests in San Francisco have been on a steady decline since 2010, with the exception of a slight uptick in 2011. Additionally, the Moll Group reported that Los Angeles drunk driving arrests decreased by 14% since 2012, however, the largest drop occurred between 2014 and 2016 when the number of DUIs was nearly cut in half ([Moll Law Group, 2020](#)).

A recent study by Fell et. al found that the most successful alternative transportation programs typically have social acceptance, a high level of public awareness, are low cost, have year-round availability, provide rides to and from drinking venues, have several sponsors that provide funding, and are convenient and are perceived to be safe ([Fell et. al, 2020](#)). These are also characteristics of ridesharing services.

While there are indications that rideshare services are related to a reduction in impaired driving incidents, further research is needed to document this trend and demonstrate the effectiveness of rideshare applications.

## Background & Scope of Work

The National District Attorneys Association (NDAA) contracted with Casanova Powell Consulting and Dr. Ryan C. Smith to examine the relationship between rideshare volume and driving under the influence (DUI) incidents in three cities within California in support of their existing partnership with Lyft.

Founded in 1950, the National District Attorneys Association (NDAA) is a national, non-partisan non-profit membership association that provides training, technical assistance, and services to prosecutors around the country in support of the prosecution profession. As the oldest and largest association of prosecutors in the country with over 5,000 members, our mission is to be the voice of America's prosecutors and to support their efforts to protect the rights and safety of the people by providing its members with the knowledge, skills, and support they need to ensure justice is attained. NDAA, located in Arlington, VA represents state and local prosecutors' offices from both urban and rural districts, as well as large and small jurisdictions. NDAA serves as a nationwide, interdisciplinary resource center for research, training, knowledge building and accountability as it works to promote a fair and equitable administration of justice (NDAA, 2020).



Lyft was founded in 2012 by Logan Green and John Zimmer to improve people's lives with the world's best transportation and is available to 95 percent of the United States population as well as select cities in Canada. Lyft is committed to effecting positive change for our cities and making cities more livable for everyone through initiatives that bridge transportation gaps, and by promoting transportation equity through shared rides, bikeshare systems, electric scooters, and public transit partnerships (GHSA, 2020).

## Objectives

This study has three main objectives:

1. Obtain and format traffic safety data related to Lyft rideshare volume and DUI incidents in target study locations (Los Angeles, San Diego, & San Francisco).
2. Determine the relationship between Lyft rideshare volume and DUI "incidents" in these locations.
3. Evaluate changes in DUI trends pre and post-Lyft introduction in these locations.

## Method

The general analytic approach was to examine changes in impaired driving outcomes with the introduction of ridesharing in three California cities: The City of Los Angeles, San Diego, and San Francisco. Each of these cities provided data to Lyft in response to a Freedom of Information Act request. There was significant variability in the data provided by these locations, including format, level of aggregation, time periods covered, and DUI outcomes. Data were provided by Lyft on monthly Lyft rideshare volume in each of those locations.

Individual analyses of each location were conducted to account for the variability in DUI outcome measures. Initial analyses at each location focused on descriptive statistics and changes in DUI outcomes following the introduction of Lyft ridesharing in the city. Next, correlations were calculated to understand the strength of the relationship between Lyft rideshare volume and DUI outcomes. Finally, trends in DUI outcomes before and after the introduction of Lyft ridesharing were examined. Specifically, these analyses focused on whether or not trends in DUI outcomes improved in these locations following the introduction of Lyft.

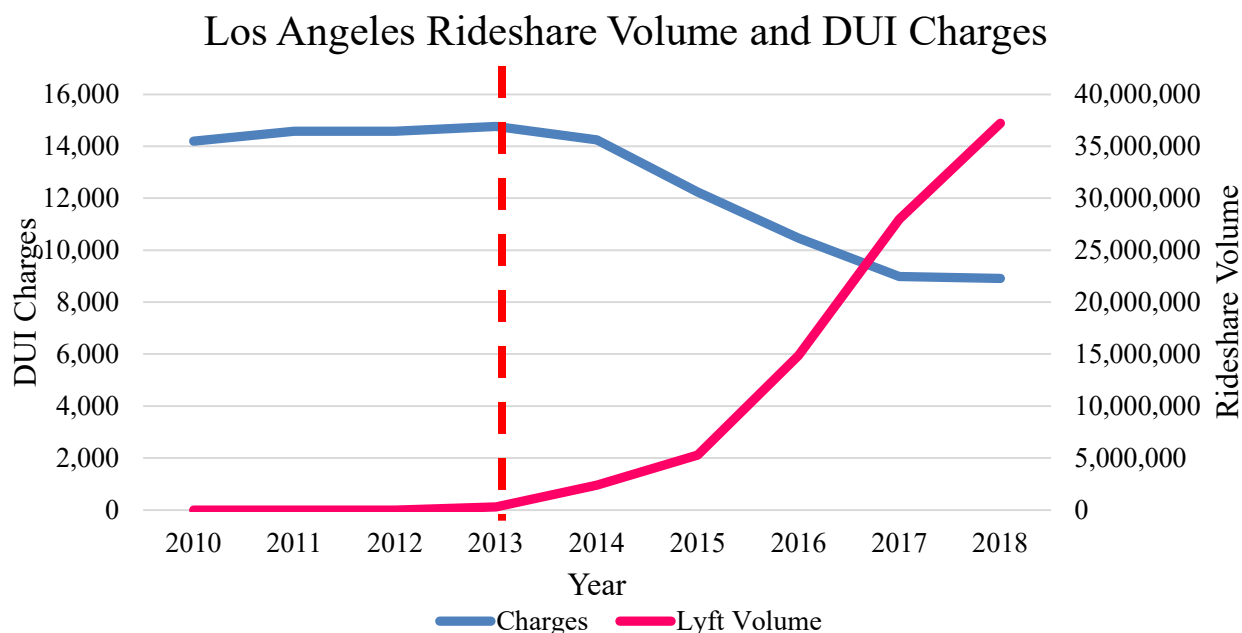
## Results

### Los Angeles

The most detailed data were provided by the city of Los Angeles. This included incident-level DUI records from January 1<sup>st</sup>, 2010 through July 13<sup>th</sup>, 2019. Data were only provided on DUI charges (i.e., not crashes or fatalities). Specific charge details were provided including the charge code and whether it was a felony or misdemeanor. All charges were included in the analysis except for 655(B)HNC, DUI Boat or Watercraft. There was only one such charge in this dataset, and this specific charge code was not likely related to ridesharing effects.



DUI records were examined for all years with complete data (i.e., January 1<sup>st</sup>, 2010 through December 31<sup>st</sup>, 2018). Figure 1 shows the change in both DUI incidents and Lyft rideshare volume over this time period. The dotted red line demarcates the year Lyft was introduced into Los Angeles (i.e., 2013). During the period prior to rideshare from 2010 through 2013 there was a 4.1% increase in DUI incidents from 14,193 to 14,774. Following the initiation of rideshare in Los Angeles there was a 39.6% decline from the 14,774 incidents in 2013 to 8,918 incidents in 2018. The correlation between charges and rideshare volume was  $-0.95$ ,  $p < .01$ .



*Figure 1. DUI Charges and Lyft Rideshare Volume in Los Angeles from 2010 through 2018*

### San Diego

San Diego provided data from 2008 through 2017. This included data on three DUI-related outcomes: arrests, collisions, and fatalities. Specific data are provided below in Table 1. Lyft ridesharing began in 2013 in San Diego.

*Table 1. Annual DUI Outcomes for San Diego*

Year	Arrests	Collisions	Fatalities
2008	4159	888	22
2009	4069	783	21
2010	4156	714	14
2011	3705	713	8
2012	3770	831	2
2013	3680	801	12
2014	3391	732	3
2015	2587	727	10
2016	2369	669	29
2017	2772	651	11

The relationship between these DUI outcome variables and ridesharing volume were calculated using bivariate correlations. The correlation matrix is provided in Table 2. As can be seen, rideshare volume is significantly negatively correlated with both arrests and collisions. There was also a significant positive correlation between arrests and collisions which indicates that both variables are related metrics of impaired driving outcomes in San Diego. Fatalities were not significantly correlated with any of the variables. This is likely due to the small sample size and, relatedly, the variance in this outcome. The relationship between rideshare volume, arrests, and collisions are further examined below.

*Table 2. Means, Standard Deviations, and Correlations between Study Variables in San Diego*

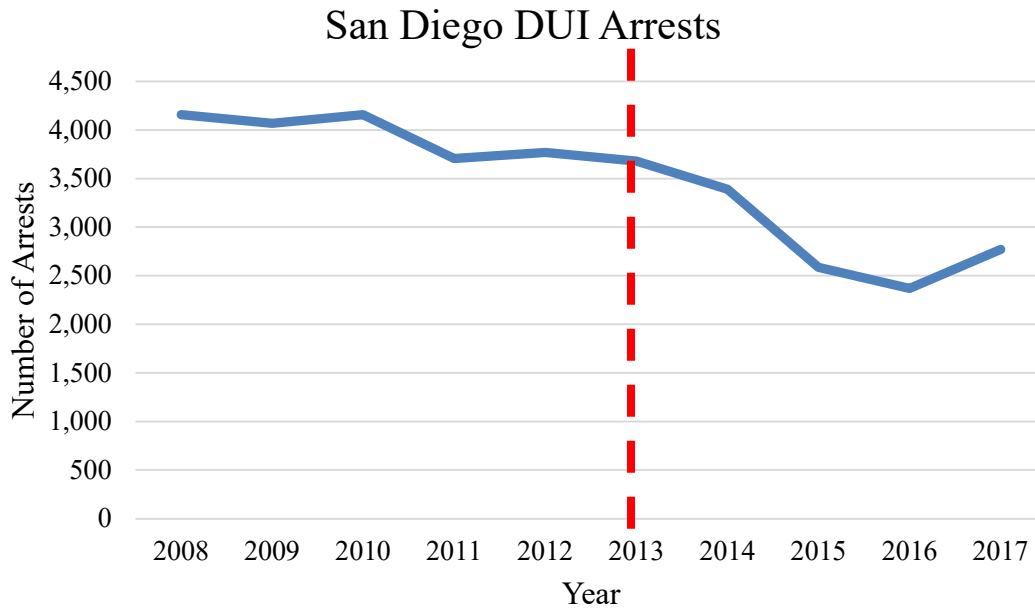
Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Volume	1,523,540	2,645,260.7			
2. Arrests	3,466	665.0	-.77*		
3. Collisions	751	73.9	-.69*	.67*	
4. Fatalities	13	8.6	.19	-.11	-.02

\* $p < .05$

\*\* $p < .01$

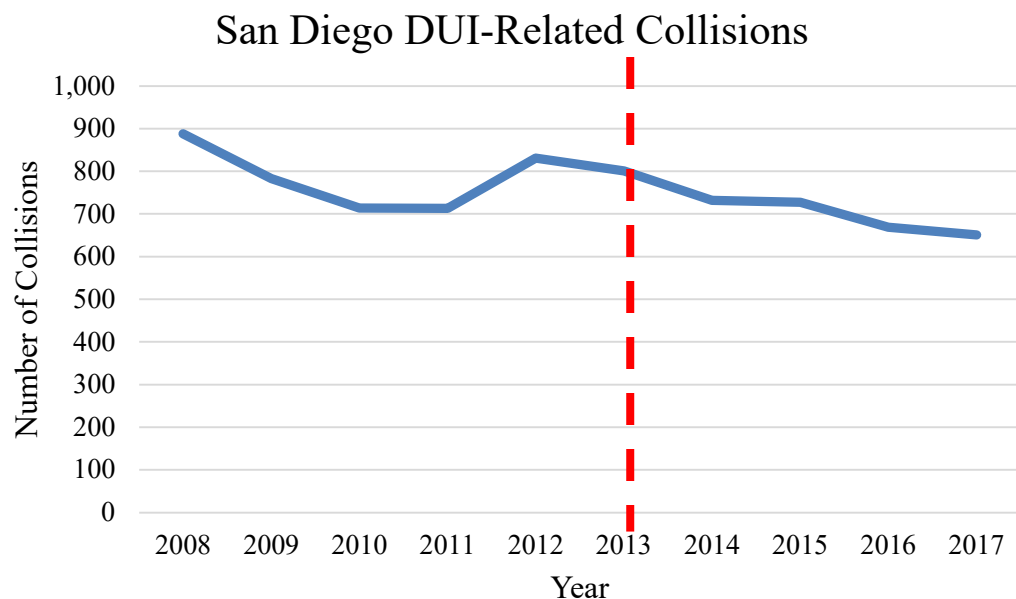
Figure 2 shows the annual number of arrests from 2008 through 2017. The dashed line indicates when ridesharing was introduced. As can be seen in the figure, there was a general reduction in the number of arrests in San Diego over this time period, with the exception of a slight uptick in arrests from 2016 to 2017. Arrests decreased a total of 24.7% following the introduction of Lyft (i.e., from 2013 – 2017). This is compared to a 11.5% decrease in the years preceding ridesharing from 2008 to 2013.





*Figure 2. Annual DUI Arrests in San Diego from 2008 to 2017*

Figure 3 shows the annual number of collisions from 2008 through 2017. Again, the dashed line indicates when ridesharing was introduced. Collisions decreased a total of 18.7% following the introduction of Lyft from 2013 to 2017. This is compared to a 9.8% reduction in the years proceeding introduction from 2008 to 2013. Thus, the general decrease in impaired driving collisions nearly doubled during the same time period Lyft was introduced as compared to the previous six years. This was similar to the results observed for DUI arrests.



*Figure 3. Annual DUI-Related Collisions in San Diego from 2008 to 2017*



## San Francisco

The San Francisco Police Department provided 10 complete years of data on DUI outcomes from 2008 through 2017. This included the annual totals for:

- Arrests and Citations for DUI/DWI/stoned driving;
- DUI/DWI/Stoned driving involved crashes; and
- DUI/DWI/Stoned driving involved injuries and fatalities that took place in the City and County of San Francisco.

Data were provided from a search of the Crime Data Warehouse via Business Intelligence Tools for Incidents reported with various DUI-related codes (e.g., driving under the influence of alcohol, gross vehicular manslaughter while intoxicated, and driving under the influence of alcohol with injury). The data provided via Freedom of Information Act request are shown below in Table 3.

*Table 3. Annual DUI Data from San Francisco from 2012 to 2017*

Year	Incidents	Bookings*	Crashes	Injuries
2012	255	255	16	19
2013	423	423	21	23
2014	335	333	15	16
2015	402	390	22	23
2016	364	359	36	36
2017	292	289	29	29

\*Not arrests

As can be seen above in Table 3, the number of DUI-related events is significantly smaller than the other two cities. This is especially true for crashes and injuries where the numbers ranged from a low of 15 to a high of 36. The low sample sizes for these variables limits the strength of these data for the analysis. Additionally, data were only available for one year prior to the launch of Lyft in San Francisco which limits the ability to examine pre-rideshare trends DUI outcomes.

The correlations and descriptive statistics for San Francisco are provided below in Table 4. The only significant correlations were for incidents and booking and crashes and injuries, indicating that those variables are almost perfectly correlated. Indeed, an examination of Table 3, shows there are only slight variances in the reported numbers between those sets of variables. There was not a significant correlation between Lyft rideshare volume and any of the DUI-related measures. This is likely because 2012, the year prior to the launch of Lyft, had the lowest number of reported incidents and bookings. Again, data going back prior to 2012 would be necessary to fully capture the trend in these outcomes prior to the implementation of Lyft in San Francisco.

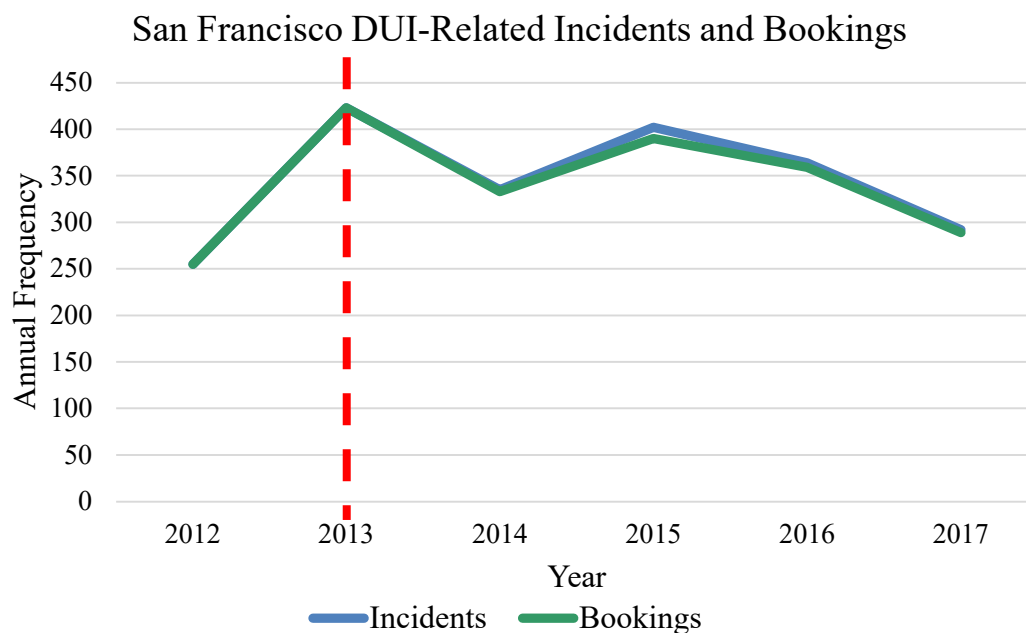
*Table 4. Means, Standard Deviations, and Correlations between Study Variables in San Francisco*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4
1. Volume	9,623,841.0	9,491,958.0				
2. Incidents	345.0	64.3	-.09			
3. Bookings	342.0	62.6	-.12	1.00**		
4. Crashes	23.2	8.0	.79	.17	.15	
5. Injuries	24.3	7.2	.74	.15	.14	.99**

\* $p < .05$

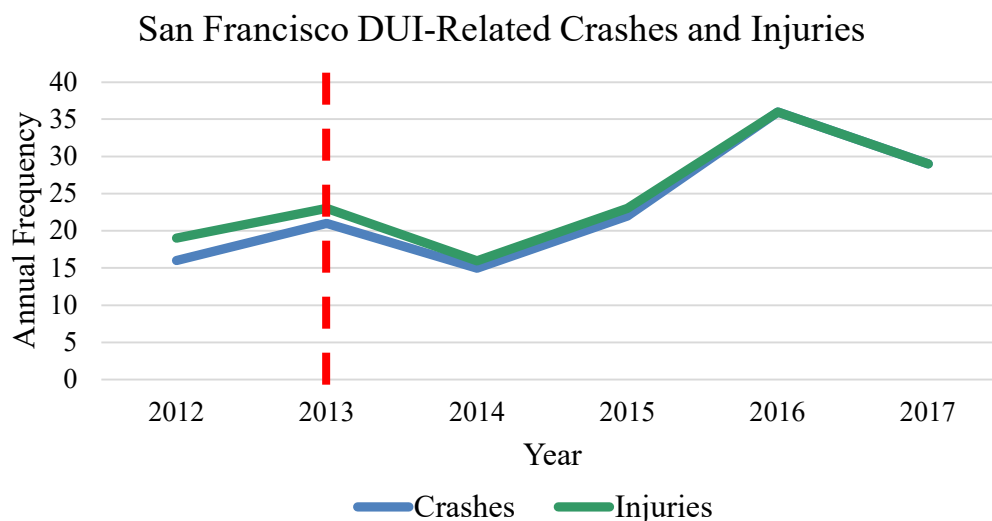
\*\* $p < .01$

Figure 4 shows the number of DUI incidents and bookings from 2012 through 2017. The dashed line shows when Lyft was launched in San Francisco (Spring 2013). From the time of launch in 2013 to 2017, DUI incidents decreased a total of 31.0% and DUI booking decreased by 31.7%. Immediately prior to the first full year of launch (i.e., 2012 to 2013) incidents and bookings both increased by 65.9%. However, data going back prior to 2012 would be necessary to provide a more stable analysis of DUI trends prior to the implementation of Lyft.



*Figure 4. San Francisco DUI Incidents and Booking 2012 to 2017*

As noted above, DUI crashes and injuries were very low in frequency for San Francisco. This creates a lot of variability in the data and makes it more difficult to assess trends. Figure 5 depicts both of these outcomes from 2012 to 2017. From 2012, both crashes and injuries increased relative to 2017. The relative number of these events remained relatively unchanged with 21 crashes in 2013 compared to 29 crashes in 2017 and 23 injury events in 2013 compared to 29 injury events in 2017.



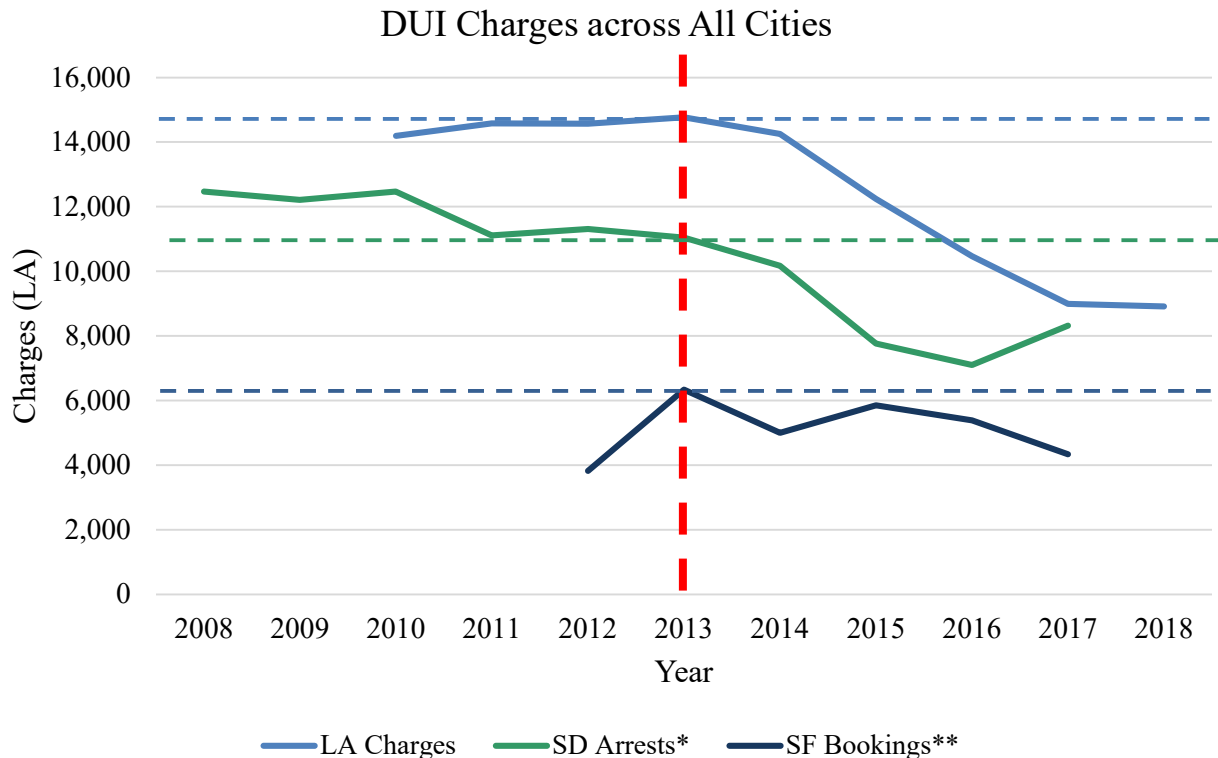
*Figure 5. San Francisco DUI Crashes and Injuries 2012 to 2017*

The crash and injury data should be interpreted with caution due to the relatively low frequency of behaviors and only marginal increase in the number of events over this time period.

### Overall Results and Summary

While each of the cities in this study provided a different set of DUI outcome variables and years of data, some comparisons are possible across locations. The most comparable variable across all locations was “charges” for Los Angeles, “arrests” for San Diego, and “bookings” for San Francisco.

Figure 6 shows the change of these related outcome measures across all three cities over the periods where data were available. This allows for an examination of general trends related to the introduction of ridesharing. The dotted red line shows the year of Lyft rideshare introduction across all three cities. The solid lines show changes in DUI charges, arrests, and bookings (with scaling for San Diego and San Francisco to show trends on the same graph). The dashed lines of the same color correspond to the number of DUI charges for the year Lyft was introduced. This allows easier interpretation of pre- and post-introduction changes in DUI outcomes. This figure shows significant decreases in these DUI outcomes following the introduction of Lyft and marked improvements as compared to the years prior to this introduction.



\*3-1 Scale

\*\*15-1 Scale

*Figure 6. DUI Charges Pre- and Post- Lyft Launch*

## Discussion

### Importance of rideshare

In addition to driver impairment by alcohol consumption, drug-impaired driving has evolved to be more than just driving under the influence of illicit drugs and has also become a significant concern on our roadways. With the recent legalization and decriminalization of recreational and medical cannabis by several states, as well as, the growing abuse of prescription drugs including the opioid crisis, driving under the influence of drugs is a continuing public safety threat that gives rise to increasing risk on U.S roadways.

It is clear that given the option to have a sober ride rather than driving impaired, rideshare offers an affordable, convenient, and accessible alternative. However, the option lies within the driver to do so. In this regard, an annual economic survey conducted by Lyft, found that 71% of riders reported they are less likely to drive substance-impaired due to the availability of Lyft. As previously mentioned, NHTSA has documented that most alcohol impaired driving fatalities occur on nights and weekends, this information aligns with the frequency of Lyft's reported ride use where the majority of Lyft rides take place outside of commute hours, such as nights and weekends. In addition, according to a recent analysis by Lyft, more Lyft pick-ups and drop-offs occur in areas where entertainment and nightlife establishments occur and during the evening

([Hutchinson, 2020](#)). It is evident that Lyft has positioned itself as an accessible alternative to driving impaired especially during the days, times, and locations most needed.

### Discussion of study findings

Trends in DUI outcomes with the introduction of Lyft ridesharing were examined in three California locations: Los Angeles, San Diego, and San Francisco. All three locations experienced significant declines in outcomes related to impaired driving charges, arrests, and bookings following the introduction of Lyft. This included a 39.6% reduction in DUI charges in Los Angeles, a 31% reduction in DUI bookings in San Francisco, and a 24.7% reduction in arrests in San Diego. Furthermore, results showed that increases in ridesharing volume were significantly associated with decreases in these DUI outcomes. Indeed, there were strong significant negative correlations between rideshare volume and DUI incidents in Los Angeles ( $r = -.95, p < .05$ ) and San Diego ( $r = -.77, p < .05$ ). There were also negative correlations between rideshare volume and both DUI incidents and bookings in San Francisco, but these correlations failed to reach statistical significance. In general, San Francisco reported substantially fewer DUI incidents than any other location, which makes it more difficult to reach statistically significant results at this location.

It is important to note that national trends have also shown decreases in alcohol impaired driving. Specifically, alcohol impaired-driving fatalities in the past 10 years have declined by 2 percent from 10,759 in 2009 to 10,511 in 2018 ([NCSA, 2018](#)). Across the U.S., alcohol-impaired drivers involved in single-vehicle, nighttime crashes dropped from 49% in 2009 to 40% in 2018 (9% difference; [NCSA, 2018](#)). Thus, an important aspect of this study was to investigate if reductions in DUI outcomes with the introduction of Lyft simply captured this national trend or if greater improvements in DUI outcomes were experienced following rideshare introduction. This was the primary goal of conducting pre-post analyses in this study.

The result of the pre-post analysis provided further support for the introduction of ridesharing. While DUI charges dropped significantly in all three cities following the introduction of Lyft, two of the three cities in this study were actually exhibiting increases in this outcome in the preceding years. In San Diego, the one study city where DUI arrests were already decreasing before Lyft was introduced, this decline more than doubled following the launch of Lyft from an average of 11.5% to 24.7%.

Due to the lack of true experimental control and the large number of variables that impact traffic outcomes, a causal attribution cannot be given to the role of ridesharing in directly producing the improvements in DUI outcomes that were observed across all three study cities. However, the results are consistent with research hypotheses that ridesharing would be associated with traffic safety improvements. The results provide early support for the safety benefits of ridesharing and should encourage further research in this area.

### Limitations

Certain limitations of this study and approach should be acknowledged. The purpose of this study was to examine the correlational relationship between impaired driving incidents and the presence of Lyft in these cities. This study is not intended to identify a causal relationship between the use of Lyft's rideshare services and the frequency of impaired driving outcomes. There are several factors that were not examined for the purposes of this study that can



influence the number of impaired driving incidents. Some of these factors include vehicle miles traveled (VMTs), law enforcement engagement, countermeasures and messaging that may have been conducted during these times, socioeconomic influences, sex, age, and other demographics.

Data were only provided for Los Angeles, San Diego, and San Francisco. Control cities were not used for pre-post comparison purposes. Data obtained for this study did not include individual Lyft usage and related DUI events since it is not possible to solely examine Lyft's relationship with traffic outcomes at the individual level.

While information on arrests, crashes, and fatalities was provided for several cities, the number of these events was relatively small. This makes these data largely unsuitable for an examination of trends or other conclusions related to these data. Thus, while these data were reported in this study for full transparency, caution should be applied when interpreting results where data were limited. This limited data often did not fit the overall patterns of other results, such as DUI arrest data. For example, crashes and injuries in San Francisco actually increased over study years (i.e., 2012 – 2017). Larger amounts of data would be necessary to more fully understand the impact of ridesharing on these outcomes.

Despite these limitations, this study adds to the limited empirical knowledge about the association of rideshare services with traffic outcomes. Future research should investigate these relationships to further expand our understanding of rideshare services.

## Recommendations

Several studies shown that rideshare platforms are related to reductions in impaired driving arrests, fatalities, and crashes, while other studies show no effect. This study adds to that body of literature and is a crucial early step in understanding the potential value of ridesharing in reducing DUI harm. Although reductions in DUI incidents were observed with the introduction of Lyft in all three cities, the correlational results cannot be used to determine a causal relationship. It is possible and likely that other factors may have influenced these reductions. It is recommended that further research is conducted using additional data which, at a minimum, includes vehicle miles traveled, law enforcement engagement, and economic factors.

The research team applauds Lyft's dedication to improving public safety and providing their rideshare data in an effort to promote and support this research. The research team encourages all rideshare programs to engage in similar data sharing to allow for greater understanding of rideshare benefits and to conduct more robust studies to identify the impact of rideshare platforms on impaired driving incidents.



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## **Rideshare Volume and DUI Incidents in Atlanta, Georgia; Chicago, Illinois; and Fort Worth, Texas**

Developed for National District Attorneys Association (NDAA)

by

Casanova Powell Consulting and Dr. Ryan C. Smith

March 26, 2021

### **Introduction**

Every day, 29 people in the United States die on average in motor vehicle crashes that involve an alcohol-impaired driver ([NCSA, 2019](#)). This equates to one death every 50 minutes. According to the National Highway Traffic Safety Administration (NHTSA), there were 10,142 alcohol-impaired-driving fatalities accounting for 28 percent of 2019 overall fatalities, the lowest percentage since 1982, when NHTSA started reporting alcohol data ([NCSA, 2020](#)). This is a 5.3 percent decrease from 2018 to 2019. Alcohol-impaired-driving also carries a significant price tag in addition to the loss of life. The annual cost of alcohol-related crashes totals more than \$44 billion ([Blincoe et al, 2010](#)).

The COVID-19 pandemic has forever changed the landscape of traffic safety creating several challenges for traffic safety professionals. NHTSA and the National Safety Council (NSC) report that early estimates from 2020 indicated the COVID pandemic had influenced driving behaviors in 2020. Although a decline in vehicle miles traveled (VMT) occurred, there was a rise in crashes as risky driving behaviors were found to have increased during this time; in particular, driving impaired, non-belt use, and speeding ([Wagner et al, 2020](#)). The NSC estimates that 42,060 people died in vehicle crashes in 2020, an 8 percent increase over 2019 and the first jump in four years. In addition, the fatality rate per 100 million miles driven spiked 24 percent, the largest annual percentage increase since the council began collecting data in 1923 ([NSC, 2021](#)).

Alcohol-impaired driving laws across the U.S. prohibit driving with a blood alcohol content (BAC) at or above a specified level (0.05 or 0.08 depending on the state). Additionally, zero tolerance laws (e.g., for drivers under the age of 21) have been established where any measurable amount of alcohol detected when driving is illegal. Even though these laws are well known, alcohol-impaired drivers continue to get behind the wheel and alcohol-impaired driving persists as a significant public health and safety issue on U.S. roadways. While the impact of the legalization of marijuana in several states on impaired driving fatalities and serious injuries is relatively unknown, the national roadside survey has shown an increase in drug-positive driving, including cannabis ([Berning, Compton, & Wochinger, 2015](#)). In addition to the legalization of both recreational and medical marijuana, the opioid crisis, and this rise of other drug use – including over the counter (OTC) and prescription drugs has likely contributed to this increase. The COVID pandemic and current social issues certainly have and continue to impact policing, public health workers, traffic safety professionals, and all road users despite decades of efforts to address and reduce the incidence of these behaviors. It is apparent that new strategies to mitigate the rising number of crashes and to reduce risky driving behaviors are imperative to reverse this growing trend. Even though road use, traffic patterns and VMTs are rebounding

closer to pre-coronavirus levels, risky driving behaviors, including impaired driving, continue with deadly consequences.

The share of Americans who say they have used ride-sharing services doubled between 2015 – 15 percent; and 2018 – 36 percent ([Jiang, 2019](#)). Rideshare platforms provide a viable countermeasure to address alcohol- and drug-impaired driving and other risky driving behaviors by offering a safe, alternative method of transportation. NHTSA has reported that night and weekend alcohol-impaired driving fatalities are consistently higher than other days and times of the week ([NCSA, 2019](#)). Ride-sharing alternatives, which are largely available during these proven higher fatality periods, should be seriously considered when seeking mitigation efforts in this regard.

Driving impaired is one of the riskiest driving behaviors that take place on United States (U.S.) roadways. For this reason, alcohol- and drug-impaired driving is considered a priority issue by every state highway safety office (HSO). Risky driving behaviors such as impaired driving, that are deemed as priority issues for States, are listed as such in HSO highway safety plans (HSPs) where state funding and strategies are focused on reducing crashes resulting from engaging in these actions.

State highway safety office (SHSO) countermeasures to reduce alcohol-impaired driving often include messaging to designate a “sober ride” home. Since 2018, the Governors Highway Safety Association (GHSA), has partnered with Lyft to combat impaired driving during the holiday season. Through this partnership, five grants are awarded to SHSOs. The 2019 State recipients were California, Illinois, Maine, Oregon, and Washington. These states distributed Lyft ride coupons and delivered educational and awareness campaign messaging on both social media and paid media platforms ([GHSA, 2020](#)). Overall, the traffic of the Lyft ads along with the number of ads promoted was a success, and all 1,002 Lyft credits distributed were redeemed by the end of the campaign. As a result, these five state agencies were effective in generating public awareness and encouraging residents to use Lyft as an alternative to driving impaired when participating in holiday festivities. 2020 Holiday Season grant awardees were Colorado, Illinois, New Mexico, North Carolina, and Texas ([GHSA, 2020](#)).

According to GHSA, this program was even more critical this year, since motor vehicle fatalities increased as drivers who were on the road during this period were also more likely to engage in risky behaviors including speeding, drunk driving and not buckling up. NHTSA examined fatal and serious injury data collected at five trauma centers during this period and found more than half of drivers tested positive for at least one active drug, including alcohol, marijuana or opioids ([Thomas et al, 2020](#)).

Several studies have examined the relationship between rideshare companies and other alternative transportation and the incidence of impaired driving incidents with varying results. Some research observed a significant decline – up to a 35 percent reduction in at least some types of traffic fatalities following the rollout of Uber and Lyft ([MADD, 2015](#); [Martin-Buck, 2017](#); [Peck, 2017](#); [Greenwood and Wattal, 2017](#); [Dills & Mulholland, 2018](#) & [Moll Law Group, 2020](#);

[Casanova-Powell & Smith, 2020](#)). Other studies found evidence for either no effect ([Brazil and Kirk, 2016](#)) or even an increase in fatalities ([Morrison et al., 2018](#); [Barrios et al., 2019](#)).

A study by Freidman et al, reviewed medical records at a Level I trauma center in New Orleans, Louisiana from 2012 to 2018 and found a significant decrease in the annual average proportion of alcohol related motor vehicle crashes pre/post the availability of ride-sharing services (39 percent vs. 29 percent). This study also showed a decrease in the average annual incidence of fatal alcohol related motor vehicle crashes (11.6 vs 5), a reduction of these crashes for the age category 18 to 29-year-olds (12.7 percent vs 7.5 percent), those that occurred at night (14.7 percent vs 7.6 percent) and the number of DWIs in the area (1,198 vs 612; [Freidman et al, 2020](#)).

Other recent research has found that specific strategies can be used to deploy ridesharing alternatives as a strategy to reduce the incidence of impaired driving. A study by Kurtz et al., found there is potential for on-demand ride hailing alternative transportation to reduce DUI behaviors and arrests among high-risk younger populations. This study focused on adult nightclub patrons who consume alcohol and/or drugs when engaging in a nightclub experience and found key educational, peer support, and structural targets for intervention increased the use of ride-sharing alternative transportation among this population ([Kurtz, et al. 2020](#)).

A study conducted by Kirk et al. investigated differences in the timing of the deployment of Uber across Britain to test the association between the advent of Uber's ride-sharing services and rates of fatal and non-fatal road crashes. This study found that the deployment of Uber in Great Britain was associated with a marginally significant reduction in the number of serious road crash injuries, yet not the number of serious crashes. However, statistically significant association between Uber and traffic fatalities was not observed ([Kirk et al., 2020](#)).

A recent study by Fell et al., found that the most successful alternative transportation programs typically have the following criteria ([Fell et al., 2020](#)):

- social acceptance,
- a high level of public awareness,
- low cost,
- year-round availability,
- provide rides to and from drinking venues,
- several sponsors that provide funding,
- convenience,
- perceived to be safe.

Further research is needed to document and demonstrate the effectiveness of rideshare applications. However, application of the techniques and criteria found in these recent studies regarding strategies to implement ridesharing serves as a useful countermeasure to reduce the incidence of impaired driving.

## Background & Scope of Work

The National District Attorneys Association (NDAA) appointed Casanova Powell Consulting and Dr. Ryan C. Smith to examine the relationship between rideshare volume and driving under the influence (DUI) incidents in three cities: Atlanta, Georgia; Chicago, Illinois; and Fort Worth, Texas in support of their existing partnership with Lyft.

Founded in 1950, the National District Attorneys Association (NDAA) is a national, non-partisan non-profit membership association that provides training, technical assistance, and services to prosecutors around the country in support of the prosecution profession. As the oldest and largest association of prosecutors in the country with over 5,000 members, our mission is to be the voice of America's prosecutors and to support their efforts to protect the rights and safety of the people by providing its members with the knowledge, skills, and support they need to ensure justice is attained. NDAA, located in Arlington, VA represents state and local prosecutors' offices from both urban and rural districts, as well as large and small jurisdictions. NDAA serves as a nationwide, interdisciplinary resource center for research, training, knowledge building and accountability as it works to promote a fair and equitable administration of justice ([NDAA, 2020](#)).

Lyft was founded in 2012 by Logan Green and John Zimmer to improve people's lives with the world's best transportation and is available to 95 percent of the United States population as well as select cities in Canada. Lyft is committed to effecting positive change for our cities and making cities more livable for everyone through initiatives that bridge transportation gaps, and by promoting transportation equity through shared rides, bikeshare systems, electric scooters, and public transit partnerships ([GHSA, 2020](#)).

## Objectives

This study has three main objectives:

1. Obtain and format traffic safety data related to Lyft rideshare volume and DUI incidents in target locations (Atlanta, Georgia; Chicago, Illinois, and Fort Worth, Texas).
2. Determine the relationship between Lyft rideshare volume and DUI "incidents" in these locations.
3. Evaluate changes in DUI trends pre and post-Lyft introduction in these locations.

## Analysis Cities

Three cities were selected for analysis for this report: Atlanta, Georgia; Chicago, Illinois; and Fort Worth, Texas. These cities were selected based on their volume of traffic, DWI incidences, and availability of data.

According to the CDC, from 2009-2018, 3,241 people were killed in crashes involving an alcohol-impaired driver in Georgia ([CDC, 2020](#)); 3,148 people were killed in crashes involving an alcohol-impaired driver in Illinois ([CDC, 2020](#)); and 13,592 people were killed in crashes involving an alcohol-impaired driver in Illinois ([CDC, 2020](#)). Georgia's DUI arrest rates have increased by more than 25 percent since 2014 ([Baktari, 2019](#)). Researchers reported that the number of DUI arrests and alcohol-related fatal accidents in Illinois have remained stable or decreased from 2009 to 2019. In 2019 in Illinois, 276 people were killed in alcohol-related crashes, which was approximately 27 percent of the 1,009 total crash fatalities. Additionally, and

26,224 DUI arrests were recorded by the Secretary of State's office in Illinois ([Wise, 2021](#)). NHTSA reported that Texas had one of the highest alcohol-impaired driving fatality percentages in 2018 ([NCSA, 2020](#)). As previously mentioned, early estimates show the COVID pandemic affected motor vehicle crashes and fatalities, however, specific state numbers involving alcohol or drug impairment have not been readily available. Like several states in 2020, Texas showed an increase in fatal crashes despite the drop in traffic volume. The Texas Department of Transportation reported 3,893 people were killed in automobile crashes during 2020, up from 3,623 deaths in 2019. That increase occurred even though traffic volumes were about 50 percent below normal for several months of the year ([Dixon, 2021](#)).

### Impaired Driving Laws

Impaired driving laws vary substantially by state. A brief description of the impaired driving laws for Georgia, Illinois, and Texas are included below to provide context into each state's impaired driving legal environment. All states had a .08 per se law for alcohol but varied on their drug policies and rules regarding repeat offenders.

#### Georgia

A first and second DUI (alcohol or drug impairment) are considered misdemeanor offenses ([O.G.C.A. § 40-6-391\(c\)](#)). A third DUI is considered a more serious, aggravated misdemeanor with the potential to be declared a habitual offender. This can result in the offender losing their license for an extended period. A fourth DUI in a ten year period (since July 1, 2008) is considered a felony offense with penalties including a fine between \$1,000 and \$5,000 as well as a prison sentence of between one and five years. The judge may "suspend, stay, or probate all but 90 days of any term of imprisonment." A defendant may receive credit for time served in jail after he or she was placed under arrest. In addition, to a prison sentence and any fine that may be imposed, a defendant may also be required to serve probation, community service, and ordered to complete a DUI program and go through a clinical evaluation.

In addition to the criminal penalties that may be imposed, a person convicted of a felony DUI will also have administrative penalties including an administrative license suspension. The length of the license suspension and the ability to retain a temporary license depends on the level of offense.

#### Illinois

"[Driving Under the Influence](#)" is defined as operating a motor vehicle while impaired by alcohol, other drugs, including cannabis (marijuana) prescribed for medical purposes, or intoxicating compounds and methamphetamine. In Illinois, drivers are legally considered to be under the influence if they have a blood-alcohol content (BAC) of .08 or more, have a tetrahydrocannabinol (cannabis) concentration (THC) of either 5 nanograms or more per milliliter of whole blood or 10 nanograms or more per milliliter of other bodily substance, have used any other controlled substance, or are impaired by medication. Illinois law allows for the medical and recreational use, if age 21 or older, of cannabis. A driver may not operate a motor vehicle while impaired by the use of cannabis, whether used medically or recreationally.

A statutory summary suspension provides for the automatic suspension of driving privileges of a driver arrested for DUI who fails, refuses to submit to, or fails to complete chemical testing. Failure of chemical testing means a driver has a BAC of .08 or more, a THC of either 5

nanograms or more per milliliter of whole blood or 10 nanograms or more per milliliter of other bodily substance, or a trace of other drugs. Administrative penalties for a first offense include suspension of driving privileges for six months (eligible for a Monitoring Device Driving Permit). Administrative penalties for a second or subsequent offense within five years include suspension of driving privileges for one year. A first conviction is considered a Class A misdemeanor and that carries a minimum revocation of driving privileges for one year (two years if driver is under age 21) and suspension of vehicle registration. A second conviction is also considered a Class A misdemeanor with a mandatory minimum imprisonment of five days or 240 hours of community service; the revocation of driving privileges for a minimum of five years for a second conviction within 20 years; and suspension of the vehicle registration. A third Conviction is considered an Aggravated DUI – a Class 2 felony. Here, driving privileges are revoked for a minimum of 10 years; and the vehicle registration is suspended. Fourth and subsequent Convictions are also considered an Aggravated DUI and Class 2 felony which warrants revocation of driving privileges for life and suspension of the vehicle registration. These violations are also subject to fines ranging from \$2,500 to \$25,000 and imprisonment from up to 1 year for a Class A misdemeanor to a Class X felony of up to 30 years.

## Texas

A driver is legally intoxicated in Texas ([Texas Penal Code § 49.04, et seq](#)) when a driver's blood alcohol concentration reaches 0.08 percent, however a driver is considered to be in violation as soon as drugs or alcohol affect their driving even if the BAC is not at the legal limit, a driver is considered to be intoxicated if the driver's mental or physical abilities are impaired due to alcohol or other drugs. Penalties for a first offense included up to a \$2,000 fine; up to 180 days in jail upon conviction with three mandatory days, driver license suspension for up to a year. Penalties for a second offense include up to a \$4,000 fine; one month to a year in jail upon conviction, and driver license suspension up to two years. Penalties for a third offense includes a \$10,000 fine; two to 10 years in prison; driver license suspension for up to two years. These fines do not include a state fine of \$3,000, \$4,500, or \$6,000 assessed upon sentencing. Penalties also may include community service, DWI education and treatment programs, mandatory use of ignition interlock device (after 2 or more DWI convictions in 5 years), and increased auto insurance premiums.

## Methods

The general analytic approach was to examine changes in impaired driving outcomes with the introduction of ridesharing in three cities: Atlanta, Georgia; Chicago, Illinois, and Fort Worth, Texas. Each of these cities provided data to Lyft in response to a Freedom of Information Act request. There was significant variability in the data provided by these locations, including format, level of aggregation, time periods covered, and DUI outcomes. Data were provided by Lyft on monthly Lyft rideshare volume in each of those locations.

Individual analyses of each location were conducted to account for the variability in DUI outcome measures. Initial analyses at each location focused on descriptive statistics and changes in DUI outcomes following the introduction of Lyft ridesharing in the city. Next, correlations were calculated to understand the strength of the relationship between Lyft rideshare volume and DUI outcomes. Finally, trends in DUI outcomes before and after the



introduction of Lyft ridesharing were examined. Specifically, these analyses focused on whether trends in DUI outcomes improved in these locations following the introduction of Lyft.

## Results

### Atlanta

The most comprehensive data were provided by the city of Atlanta. This included case-level data on DUI charges and crashes from 2009 to 2017. The dataset included event location, date, number of vehicles, injuries, crash type, weather, violation, and specific arrest charge. All DUI-related charges and crashes were included in these analyses. Rideshare data were provided by Lyft for 2013 (when Lyft rideshare was introduced in Atlanta) through September 2020. Table 1 shows DUI outcomes in Atlanta for all available data years.

*Table 1. Yearly Atlanta DUI Outcomes 2009 - 2017*

Year	Charges	Crashes
2009	1,714	247
2010	2,241	238
2011	1,923	238
2012	2,070	219
2013	2,155	247
2014	1,943	208
2015	1,541	239
2016	1,305	215
2017	1,028	203

The relationship between these DUI outcome variables and ridesharing volume were calculated using bivariate correlations. The correlation matrix is provided in Table 2. As can be seen in the table, rideshare volume was strongly negatively correlated to DUI charges in Atlanta ( $r = -.86$ ,  $p < .01$ ). There was also a negative correlation between rideshare volume and DUI crashes in Atlanta that approached statistical significance ( $r = -.66$ ;  $p = .054$ ). It is not surprising even a strong correlation would not necessarily reach statistical significance because of the low statistical power of this analysis (each year was treated as a subject). The table also shows the relationship between charges and crashes in Atlanta, as well as means and standard deviations of the study variables. The relationship between rideshare volume, charges, and crashes are further examined below.

*Table 2. Means, Standard Deviation, and Correlations for Atlanta DUI Outcomes and Rideshare Volume*

Variable	<i>M</i>	<i>SD</i>	1	2
1. Volume	813,747	1,555,502		
2. Charges	1,769	409	-.86**	
3. Crashes	228	17	-.66	.51

\*\* $p < .01$

Figure 1 shows the annual number of DUI charges from 2009 through 2017 in Atlanta. The dashed line indicates when ridesharing was introduced (i.e., 2013). During the years prior to the introduction of ridesharing (i.e., 2009 to 2013) there was a 25.7 percent increase in DUI charges. This is compared to a 52.3 percent decrease from 2013 to 2017, the last year outcome data were available for Atlanta.

*Figure 1. Rideshare Volume and DUI Charges in Atlanta from 2009 to 2017*

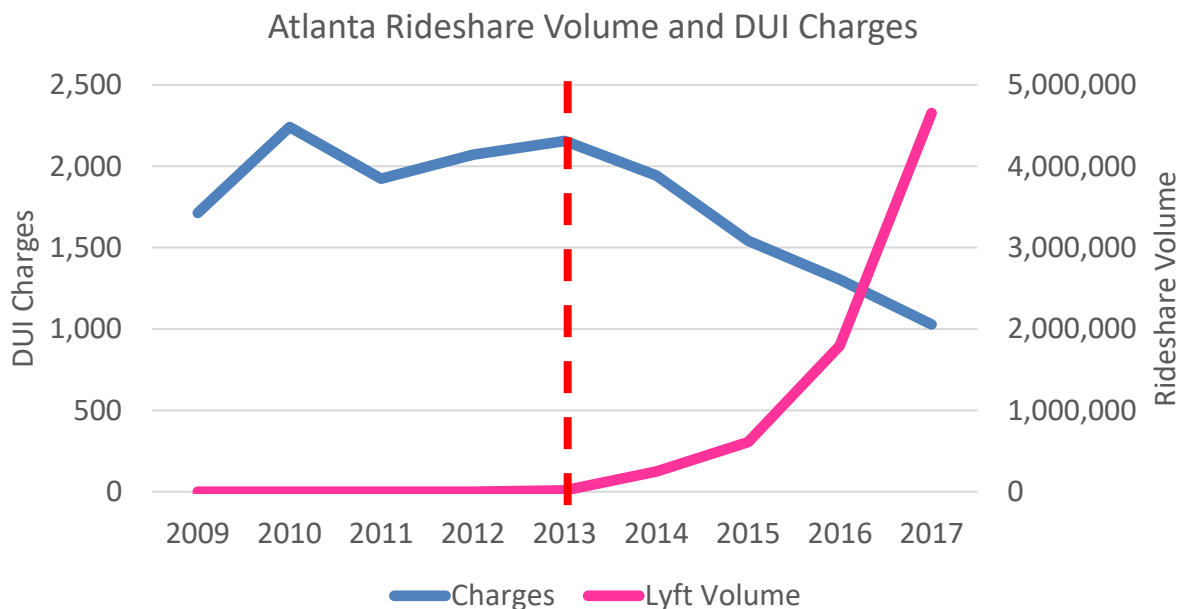
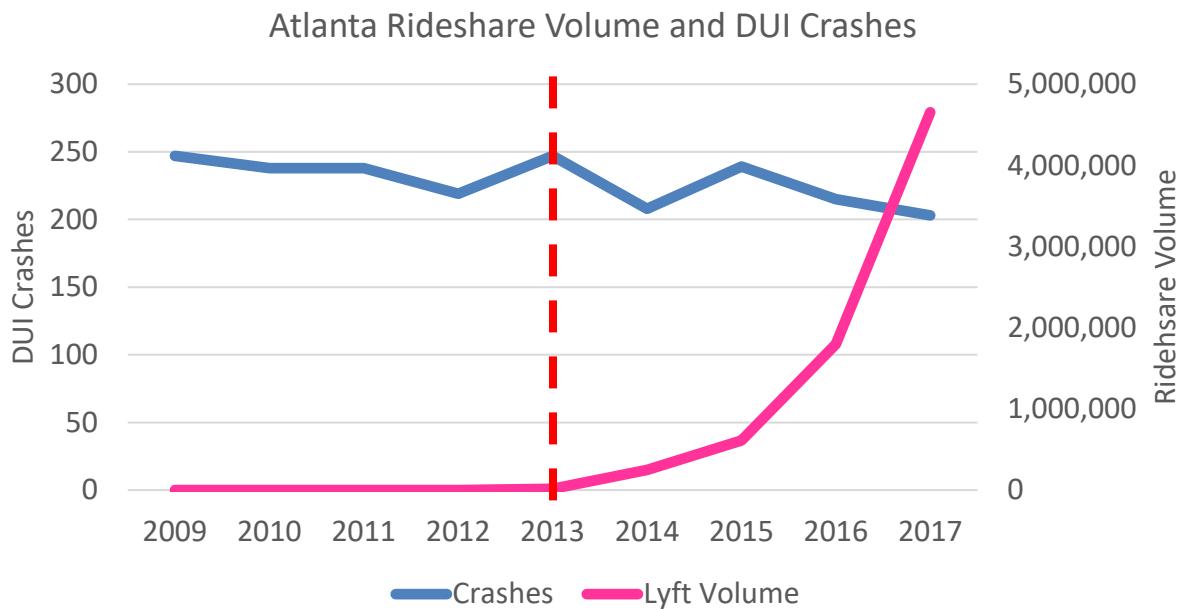


Figure 2 shows the annual number of DUI crashes from 2009 through 2017 in Atlanta. While there was some variance across years, the total number of DUI crashes was identical from 2009 to 2013 (when ridesharing was introduced;  $n = 247$ ). Following the introduction of ridesharing, the number of crashes decreased by 17.8 percent from 2013 through 2017.



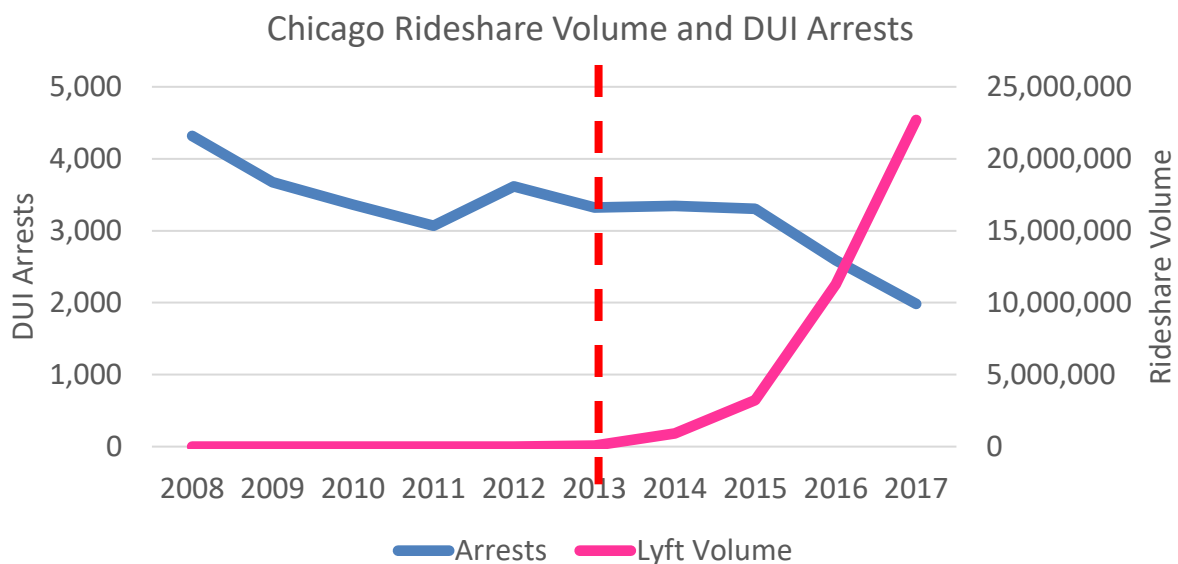
Figure 2. Rideshare Volume and DUI Crashes from 2009 to 2017



## Chicago

The city of Chicago provided the number of annual DUI arrests from 2008 to 2017. Figure 3 shows the change in DUI arrests and rideshare volume over this time period. The dotted red line indicates the year Lyft was introduced in Chicago (i.e., 2013). During the period prior to rideshare from 2008 through 2013, there was a 23.0 percent decrease in DUI arrests from 4,318 to 3,323. Following the initiation of rideshare in Chicago there was a 40.3 percent decrease from the 3,323 arrests in 2013 to 1,983 arrests in 2017. The correlation between charges and rideshare volume was strong and statistically significant ( $r = -.85$ ,  $p < .01$ ).

Figure 3. DUI Arrests and Lyft Rideshare Volume in Chicago from 2008 to 2017



## Fort Worth

Fort Worth provided two sets of outcome data. Annual DUI/DWI arrests by the Fort Worth Police Department were provided for 2008 through 2017. Reported crashes with a positive alcohol or drug test result were provided from 2012 through 2017. These crashes were further broken down into the categories of unknown, incapacitating injury, non-incapacitation injury, possible injury, fatality, and not injured. Analyses were conducted on all available data years (i.e., starting with 2008 for arrests and 2012 for crashes). Total crashes and fatalities were analyzed from the crash dataset. Lyft provided its ridesharing data from 2014, when it was introduced, through 2020. Specific outcome data are provided below in Table 3.

*Table 3. Annual DUI Outcomes for Fort Worth*

Year	Arrests	Crashes	Fatal Crashes
2008	2,580	-	-
2009	2,304	-	-
2010	1,889	-	-
2011	1,511	-	-
2012	1,918	523	43
2013	1,544	412	35
2014	1,469	373	39
2015	1,486	407	29
2016	1,272	340	40
2017	1,359	359	26

The relationship between these DUI outcome variables and ridesharing volume were calculated using bivariate correlations. The correlation matrix is provided in Table 4. As can be seen, rideshare volume was negatively correlation to all DUI outcome measures (i.e., arrests, crashes, and fatal crashes). While each of these correlations was greater than .45, these values did not reach statistical significance. Again, this is likely due to the low statistical power of using aggregate annual data where the effective sample size is equivalent to the number of years analyzed. There was a strong significant correlation between arrests and crashes indicating that both outcomes are highly related in Fort Worth. The relationship between rideshare volume, arrests, and collisions are further examined below.

Table 4. Means, Standard Deviations, and Correlations between Study Variables in Fort Worth

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Volume	92,643	202,039.6			
2. Arrests	1,733	430.8	-.46		
3. Crashes	402	65.3	-.52	.99**	
4. Fatal Crashes	35	6.7	-.60	.46	.41

\*\* $p < .01$

Figure 4 shows the annual number of arrests from 2008 through 2017. The dashed line indicates when ridesharing was introduced. As can be seen in the figure, there was a substantial reduction in the number of arrests in Fort Worth over this time period. In fact, the number of arrests decreased by 47.3 percent over these ten years. This included a 43.1 percent reduction in arrests preceding the introduction of Lyft and a 7.5 percent reduction in the number of arrests post-Lyft.

Figure 4. DUI Arrests and Lyft Rideshare Volume in Fort Worth from 2008 - 2017

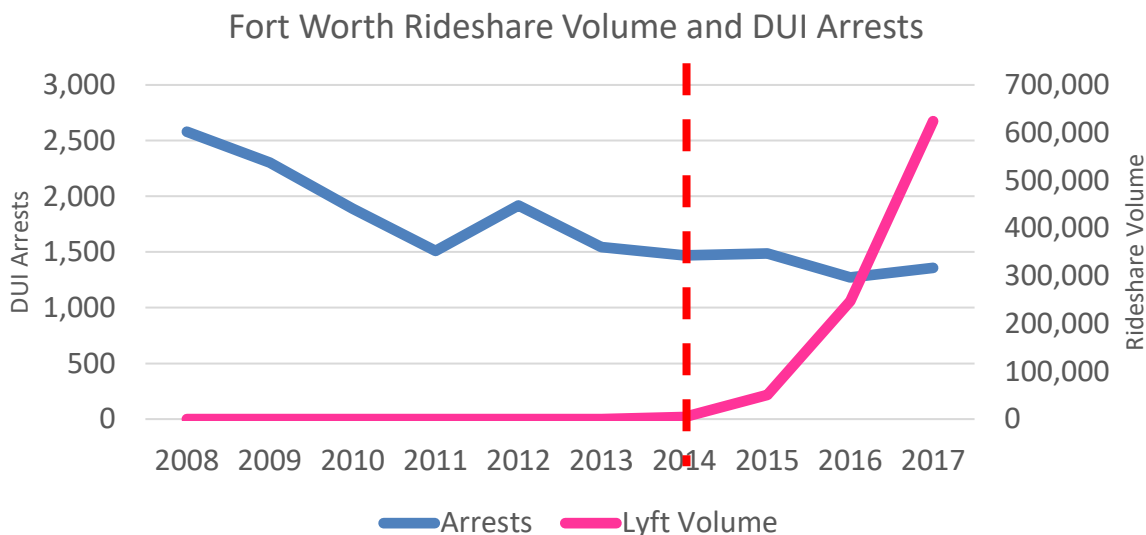
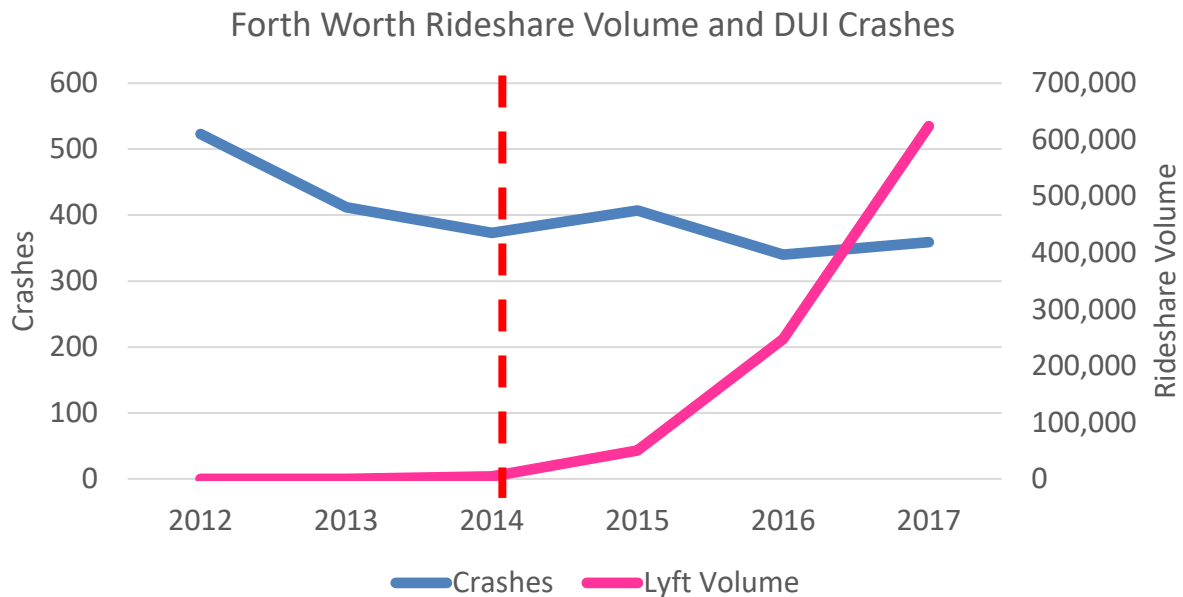


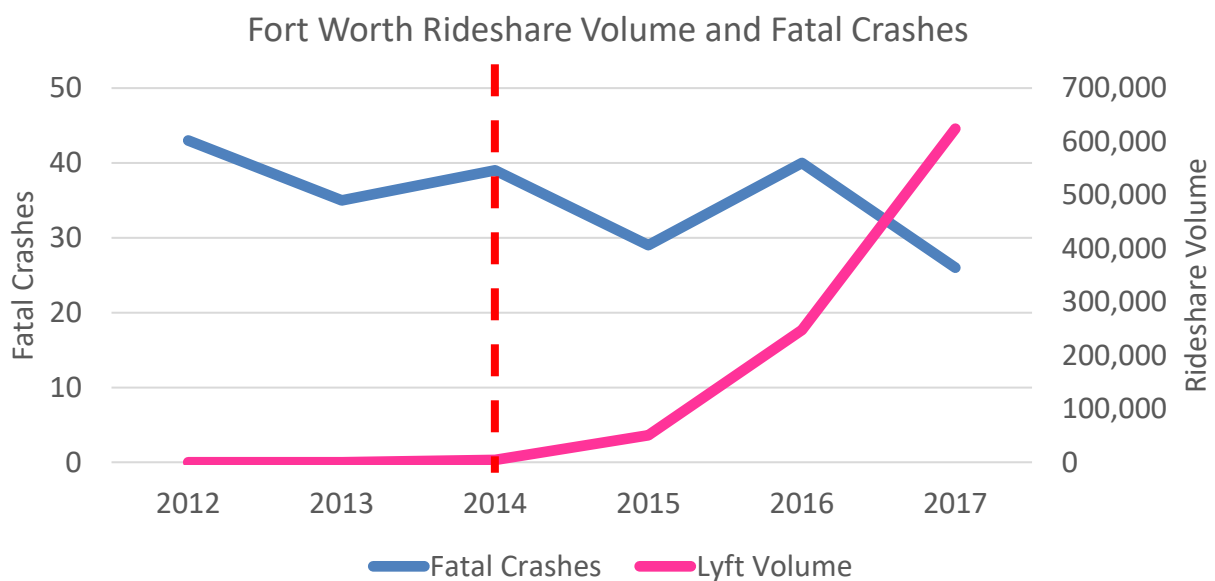
Figure 5 shows the annual number of alcohol- and other-drug-involved crashes in Fort Worth. Again, data on crashes were only provided from 2012 through 2017. Overall, the number of DUI crashes decreased by 31.4 percent over this period. This included a 28.7 percent reduction in crashes preceding the introduction of Lyft (i.e., 2012 – 2014) and a 3.8 percent reduction in crashes post-introduction (2014 – 2017).

Figure 5. Annual Crashes and Lyft Ridesharing Volume in Fort Worth 2012 – 2017



Alcohol- and other-drug-involved fatal crashes were also specifically examined as shown in Figure 6. During this time period, fatal crashes decreased by 39.5 percent. Fatal crashes decreased 9.3 percent in the two years preceding the introduction of Lyft (i.e., 2012 – 2014). The number of fatal crashes further decreased by 33.3 percent following the introduction of Lyft (i.e., 2014 – 2017).

Figure 6. Annual Fatal Crashes and Lyft Ridesharing Volume in Fort Worth 2012-2017



## Overall Results and Summary

The differences in data provided by each of the cities, as well as other key differences in each city (e.g., when Lyft was introduced), make comparisons across each of these locations challenging. While these differences make aggregate analyses infeasible, there were strong themes that could be identified in the results of each of these three cities when considered in combination. In fact, the results were largely consistent across all three locations.

Across all three cities, every DUI outcome decreased following the introduction of Lyft. This included arrests, crashes, and fatalities. The relationship between rideshare volume and these DUI outcomes were further examined using bivariate correlations. Again, there was a moderate-to-strong negative correlation between rideshare volume and each of the DUI outcomes. This means that as rideshare volume increased in these cities, the number of DUI events (i.e., arrests and crashes) decreased. Despite the low statistical power, many of these correlations reached or approached statistical significance.

Finally, longitudinal trends in DUI outcomes were examined before and after the introduction of Lyft. While it is quite notable that DUI outcomes decreased following the implementation of Lyft in all locations, it is also valuable to consider how these decreases compared to city-level trends prior to the introduction of Lyft. This provides context around whether the decreases in DUI outcomes are likely capturing existing downward trends or represent a change in the trends.

The strongest results for changes in trends over time were observed for Atlanta. In this city, there was a 25.7 percent increase in DUI charges from 2009 – 2013 prior to the introduction of Lyft. This is compared to a 52.3 percent decrease in DUI charges following the introduction of Lyft. Furthermore, while there was no net change in the annual number of DUI crashes from 2009 – 2013, there was a 17.8 percent decrease in the number of these crashes following Lyft's introduction. Thus, these DUI outcomes went from increasing or staying the same to decreasing post-Lyft.

Across the ten years of data provided by Chicago (i.e., 2008 – 2017), there was a continual downward trend in the number of DUI arrests. However, the decrease in DUI arrests nearly doubled from 23.0 percent prior to the introduction of Lyft to 40.3 percent post-introduction. The average number of DUI outcomes in Fort Worth also trended downward over the years available for analysis. For both DUI arrests and crashes, there was a greater decrease prior to the introduction of Lyft (43.1 percent and 28.7 percent) as compared to following the introduction of Lyft (7.5 percent and 3.8 percent, respectively). Yet, it remains notable that these outcomes continued to decline, albeit at a slower pace, following the introduction of Lyft. The number of fatal crashes in Fort Worth is smaller than both the number of DUI arrests and crashes, and, thus, extra caution should be given to interpreting these values. Nonetheless, while there was a 9.3 percent reduction in fatal crashes in the years prior to the introduction of Lyft, this increased to a 33.3 percent reduction post-introduction of Lyft.

## Discussion

### Importance of Rideshare

With the recent increase in risky driving trends due to the COVID pandemic, including driver impairment by alcohol and drugs, we have lost important life-saving ground in our efforts to get to zero deaths on our roadways. There has also been an increase in states moving to legalize and decriminalize recreational and medical cannabis. According to Czeisler et al. (2020), communities have faced mental health challenges related to COVID-19–associated morbidity, mortality, and mitigation activities. Elevated levels of adverse mental health conditions, substance use, and suicidal ideation were reported by adults in the United States in June 2020 at a time when access to care was limited ([Czeisler et al. 2020](#)). This likely contributed to the increase in drinking and driving behaviors during this time. Traffic safety professionals are concerned that these behaviors will not subside. In addition, some states and lobbyists are looking to continue the availability of alcohol “to-go” and curbside sales. Changes in policy, paired with the increased use of prescription and over the counter drugs, highlights the increased public safety threat of driving under the influence of alcohol and drugs on U.S. roadways.

Rideshare services, more now than ever, offer an affordable, convenient, and accessible alternative, and riders are responding in a positive way. An annual economic survey conducted by Lyft, found that 71 percent of riders reported they are less likely to drive substance-impaired due to the availability of Lyft. As previously mentioned, NHTSA has documented that most alcohol impaired driving fatalities occur on nights and weekends, this information aligns with the frequency of Lyft’s reported ride use where the majority of Lyft rides take place outside of commute hours, such as nights and weekends. In addition, according to a recent analysis by Lyft, more Lyft pick-ups and drop-offs occur in areas where entertainment and nightlife establishments occur and during the evening ([Hutchinson, 2020](#)). Previously mentioned research by Kurtz showed that pairing marketing and messaging to utilize ride-sharing alternatives to these demographics can reduce the incidence of impaired driving which supports the analysis of data presented in this report.

### Discussion of study findings

It is important to note that through 2018, national trends have also shown decreases in alcohol impaired driving. Specifically, alcohol impaired-driving fatalities in the past 10 years have declined by 2 percent from 10,759 in 2009 to 10,511 in 2018 ([NCSA, 2018](#)), with an additional 5.3 percent decrease from 2018 to 2019 ([NCSA, 2020](#)). Across the U.S., alcohol-impaired drivers involved in single-vehicle, nighttime crashes dropped from 49 percent in 2009 to 40 percent in 2018 (9 percent difference; [NCSA, 2018](#)). As with a prior study by [Casanova Powell and Smith](#), “Rideshare Volume and DUI Incidents in Target California Communities”, an important aspect of this study was to investigate if reductions in DUI outcomes with the introduction of Lyft simply captured this national trend or if greater improvements in DUI outcomes were experienced following rideshare introduction. This again was the primary goal of conducting pre-post analyses in this study.

Accordingly, trends in DUI outcomes with the introduction of Lyft ridesharing were examined in three cities: Atlanta, Georgia; Chicago, Illinois, and Fort Worth, Texas. Results were largely

consistent across cities and supportive of a decrease in negative DUI outcomes following the introduction of Lyft ridesharing. Across all cities, there was a notable decrease in each of the assessed DUI outcomes following the introduction of Lyft. Furthermore, as rideshare volume went up in these locations, there was an associated decrease in these outcomes. In fact, this decrease was statistically significant for DUI charges in both Atlanta and Chicago. These two cities also experienced substantial changes in the annual trends of DUI outcomes following the introduction of Lyft. For example, Atlanta went from averaging a 25 percent increase in DUI charges prior to the introduction of Lyft to a 52.3 percent reduction post-introduction, and the decrease in charges in Chicago nearly doubled post-Lyft (23.0 percent versus 40.4 percent). Findings did differ in Fort Worth with DUI arrests and crashes decreasing following the introduction of Lyft, but not at as largely as the pre-introduction time period. However, fatal crashes in Fort Worth did decrease at a greater magnitude post-Lyft as compared to pre-Lyft (33.3 percent versus 9.3 percent).

As with the Casanova Powell & Smith study in California, due to the lack of true experimental control and the large number of variables that impact traffic outcomes, a causal attribution cannot be given to the role of ridesharing in directly producing the improvements in DUI outcomes that were observed across all three study cities. However, the results are consistent with research hypotheses that ridesharing would be associated with traffic safety improvements. The results provide early support for the safety benefits of ridesharing and should encourage further research in this area.

### Limitations

Certain limitations of this study and approach should be acknowledged. The purpose of this study was to examine the correlational relationship between impaired driving incidents and the presence of Lyft in these cities. This study is not intended to identify a causal relationship between the use of Lyft's rideshare services and the frequency of impaired driving outcomes. There are several factors that were not examined for the purposes of this study that can influence the number of impaired driving incidents. Some of these factors include vehicle miles traveled (VMTs), law enforcement engagement, countermeasures and messaging that may have been conducted during these times, socioeconomic influences, sex, age, and other demographics.

Data were only provided for Atlanta, Georgia; Chicago, Illinois; and Fort Worth, Texas. Control cities were not used for pre-post comparison purposes. Data obtained for this study did not include individual Lyft usage and related DUI events since it is not possible to solely examine Lyft's relationship with traffic outcomes at the individual level.

Despite these limitations, this and the previous study provide additional information to the limited empirical knowledge about the association of rideshare services with traffic outcomes. Future research should investigate these relationships to further expand our understanding of rideshare services.

## Recommendations

Several studies shown that rideshare platforms are related to reductions in impaired driving arrests, fatalities, and crashes, while other studies show no effect. This study adds to that body of literature and is a crucial early step in understanding the potential value of ridesharing in reducing DUI harm. Although reductions in DUI incidents were observed with the introduction of Lyft in all three cities, the correlational results cannot be used to determine a causal relationship. It is possible and likely that other factors may have influenced these reductions. It is recommended that further research is conducted using additional data which, at a minimum, includes vehicle miles traveled, law enforcement engagement, and economic factors.

The research team applauds Lyft's dedication to improving public safety and providing their rideshare data in an effort to promote and support this research. The research team encourages all rideshare programs to engage in similar data sharing to allow for greater understanding of rideshare benefits and to conduct more robust studies to identify the impact of rideshare platforms on impaired driving incidents.



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