EDR GROUP

Uber's Economic Impacts in Florida

UBER

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Uber shapes the way many residents and visitors travel around Florida by giving them the ability to push a button on their phone and get a reliable ride no matter where they are or what time it is. Uber connects networks of drivers and riders by matching them via its smartphone app. This report demonstrates how economic impacts and benefits arise from Uber's presence relative to other transportation options.

The question of Uber's economic impact is a recurring topic of interest for policymakers, residents, and other stakeholders in the regions where it operates. To truly understand how it affects the economy, it is necessary to distinguish the ways Uber affects flows of income in the economy and generates other economic benefits. This is the first report to provide details about how Uber's platform generates economic benefits and impacts for riders and drivers in Florida, leading to additional effects on the state economy.

These impacts have historically been very difficult to address in a rigorous way without privileged access to Uber's administrative data as well as to Uber driver-partners and riders. This study represents the first documented attempt to quantify the economic benefits and impacts of emerging, on-demand transportation services using (1) proprietary data from a transportation network company's platform; (2) rider and driver survey data; and (3) detailed regional economic models. While previous surveys have profiled riders, this study examines the pattern of individual trips.

This report summarizes key findings in three sections: Uber's broader effects on Florida's economy, Uber rider impacts, and Uber driver impacts. The analysis of broader economic effects accounts for net effects of redistributing income among industries and service providers within the state, as well as income and productivity gains. The methodology and more detailed analysis findings are presented at the back of the report, along with a discussion of broader impact issues.

How to Read This Report

This study aims to do two separate things: (1) examine the impact of Uber on the economy as a whole and (2) measure the impacts on individuals. These two perspectives are complementary. In addition to looking at the size of Uber's impact on the economy as a whole, we also investigate the value to riders and drivers that may not always be captured by the movement of dollars at a statewide scale.

For the impact on the economy as a whole, we differentiate Uber's overall contribution, or footprint, in the Florida economy from the net economic impact on economic growth. The economic contribution is composed of driver income and the additional economic activity associated with this income. Net economic impact is addressed differently because it cannot

include spending shifts, only added income to gross state product. We estimate this by measuring the added income to the total economy from visitor spending, productivity gains, and the multiplier effects on those sources of income. All results are in 2017 dollars.

The impacts on individuals are addressed by measuring all of Uber's impacts on riders and drivers and netting those costs and benefits per individual—relative to a baseline of a hypothetical world without Uber. This is important: correctly accounting for a baseline scenario is the only rigorous way to assess net benefits or costs. Of course, it is not possible to observe the baseline (the counterfactual) in the real world. But we were able to survey riders and drivers to ask what they would realistically have done without Uber. We asked riders about their next best option if they had not taken Uber on a recent trip, and we asked drivers what they would have earned if driving with Uber was not an option.

Of particular interest in the case of Uber, there are many offsetting effects in rider and driver impacts. The impact of rider savings can be mitigated when savings for some riders are partially offset by other riders spending more to get to places faster and more easily, or to places that were previously inaccessible. If this is conceived of as a net impact overall, spending and savings can partially cancel each other out, but the individuals using the service clearly do so because of the benefit in each case. Net benefits can also be mitigated on the driver side when increased driver earnings (relative to what drivers think they would earn doing another type of work) are partially offset by some drivers earning less than their alternative (e.g., because they value the flexibility and independence of ridesharing at least as much as the income they report that they are actively choosing to forego). Because Uber is unlocking a new kind of mobility for many riders and unlocking a new kind of flexibility and independence for many drivers, traditional estimates of pure cost savings or pure income gains on either side would fall short.

Broader Effects on the Economy

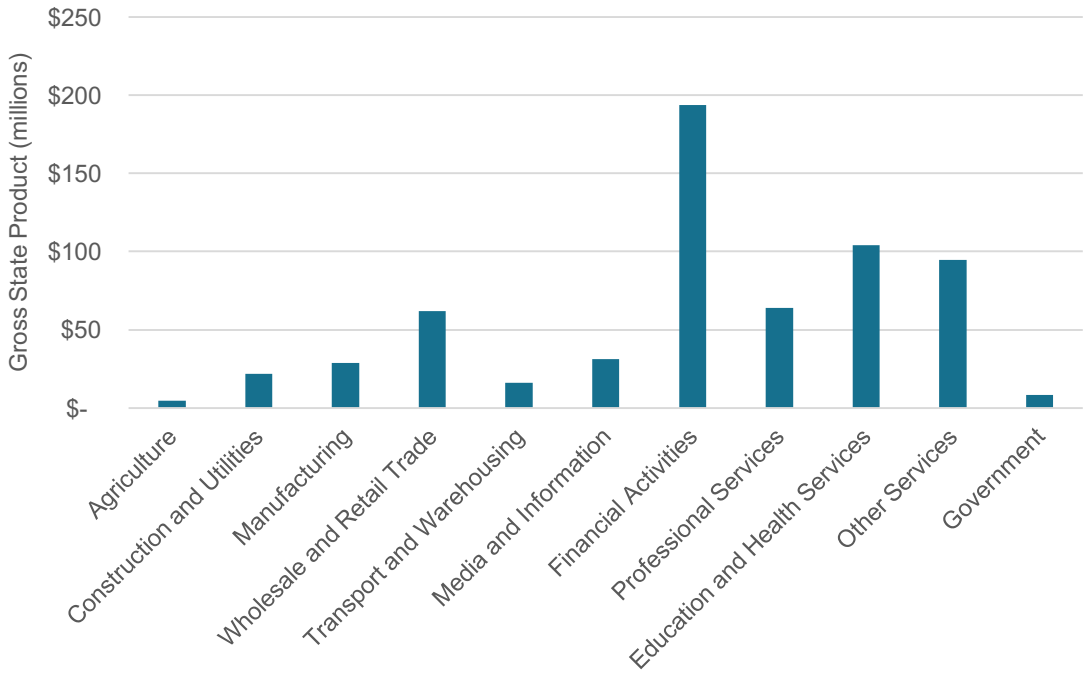
Uber's contribution to Florida's economy is $1.1 billion in gross state product. This does not include the effect of Uber offices in Florida or of the UberEATS business.

We measure the economic impact of Uber in two ways. *Gross impact* is defined as the contribution of Uber to the state economy. *Net impact* is defined as the incremental change in state income made possible by Uber; this is discussed later.

Uber's contribution to the state economy is measured as the income it directly generates for Uber drivers and indirectly generates for workers in other industries due to Uber activity. The figure below shows how Uber's activities touch every major industry in the state. This occurs as drivers spend their income on food, clothing, housing, and other goods and services, which generates sales and income for other area businesses. A portion of driver income also generates sales of fuel and vehicle maintenance services. As workers in those industries spend their own income, they generate further rounds of economic impact—all of which traces back to the money that Uber

drivers spend. We use an economic impact model (described in the appendix) to calculate Uber's contribution to the Florida economy.

Uber's contribution to gross state product in Florida



The net impact of Uber on state income is $134 million annually. This includes $50 million from added business productivity, $78 million from spending shifts toward greater local sales, and $6 million of inflow from visitor spending.

Uber's net impact in Florida is different than its economic contribution or gross impact. Net impact accounts for offsetting gains and losses among various industries and service providers, including tracing shifts in how people spend money on various types of transportation services. Accounting for spending gains and losses in each industry and how they offset each other, the net economic impact is a change in economic growth—the difference between state income with Uber and without it.

When riders and drivers choose Uber over other options, they gain benefits discussed in the following sections of this report. These choices affect transportation costs and hence business productivity, and they also affect local spending patterns and inflows of income. To be conservative, we focus on current impacts and do not include major changes in vehicle ownership and parking facility usage in our analysis, which will have additional longer-term economic impacts.

Productivity. When Uber saves time or costs for business travel, this translates into real labor and expense savings for businesses. It represents a productivity gain that reduces the cost of doing business and makes local businesses more competitive. Altogether, 9.6% of Uber trips in Florida are for business travel,[1] and this type of travel has a disproportionately large impact on cost savings because of the transportation alternatives that business travelers are most likely to use.

Local business. When travelers use Uber instead of driving an owned or rented car, they shift their spending pattern to support more local labor income. When Uber riders shift from other modes of transportation and save on travel costs, they are left with more money to spend on local meals, entertainment, and services that can generate more local worker income. Overall, 51% of non-business Uber trips result in cost savings over their transportation alternative, enabling the savings to be used for other types of spending.

Inflow of money to the state. When Uber enables trips that would otherwise not occur, riders sometimes spend more locally. This effect is particularly notable for visitors from outside the state who are not simply shifting their spending from one part of Florida to another. Overall, 14.5% of Uber trips in Florida are taken by visitors, and 27.3% of visitors report spending more during their trip because Uber enabled them to visit additional locations. This effect supports greater local business growth.

Uber Rider Impacts and Benefits

Uber rider benefits in Florida add up to $1.5 billion annually when considering cost savings, time savings, and added amenity benefits. The average benefit per trip is a combination of $1.84 in cost savings, $4.64 in time savings, and $4.38 in amenity value.

Travelers who choose to ride with Uber do so because they deem it beneficial compared to other alternatives, or because convenient alternatives are limited. There are three primary classes of benefits: cost savings, time savings, and "amenity" benefits (including improved comfort, safety, weather protection, time and cost certainty/reliability, and flexibility of schedule and destination choice). Over half of Uber riders in Florida save money by using the service. Others pay more because they value its convenience or time savings benefits. After accounting for both groups, there is a net rider savings valued at $122 million annually.

Uber saves 8.3% of its riders costs associated with car ownership, as they report it enables them to eliminate the need for a second car and in some cases even a first car. This finding is also supported by the fact that 11.8% of Uber riders in Florida own no vehicle, compared with 7.1% of all residents in Florida. The Uber-related savings in car ownership equals $349 million annually,

[1] This is likely a conservative estimate of the share of travel that affects business cost savings since some trips reported as going to restaurants or other locations and classified as leisure trips might have also been reimbursed by employers during business travel. Due to business travelers' higher value of time they may also be less likely to respond to the survey, although we have not officially confirmed this bias.

or an average of $2,845 per affected person. Costs of car ownership include lease and purchase payments, insurance payments, licensing, and registration. Costs of using a personal car include fuel, maintenance, parking, and depreciation.

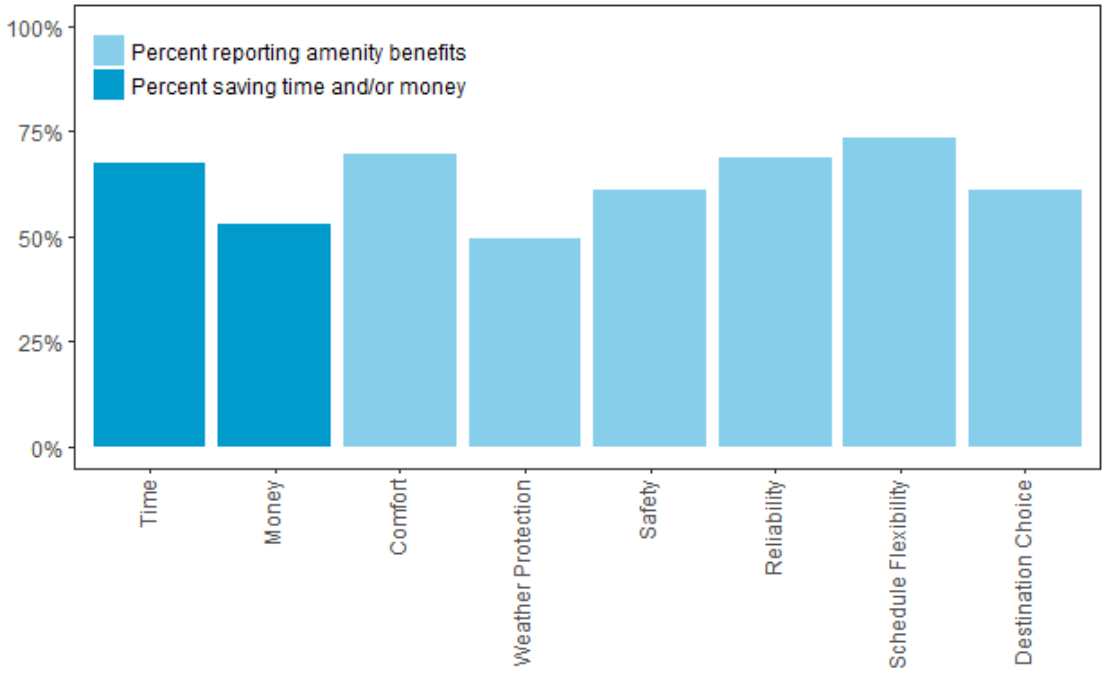
In addition, Uber enables riders to save $318 million annually in avoided parking costs and $308 million in time savings (using U.S. Dept. of Transportation guidance on the value of travel time). Use of Uber also helps free up parking space throughout the state, since 34% of Uber riders report they are now paying for car parking less often.

Many travelers who choose Uber also report non-money amenity benefits from that choice. Some riders intentionally pay more (than other available alternatives) to receive benefits such as comfort, safety, flexibility, and reliability, which is an indication of how they value these benefits. Other riders are not paying more but still benefit from these amenities. The total value of these amenity benefits is $290 million annually.

To be conservative, we assign an amenity benefit to all trips except those that already realized time and cost savings. In other words, for riders spending more than the value of their time savings, their benefit is only the gap compared to the next best alternative. For riders with time and cost savings, no non-money benefit for things like convenience is counted. This yields a conservative benefit amount to riders.

The relative importance of these benefits is shown below.

Share of trips for which Uber provides savings or amenities relative to the next best alternative

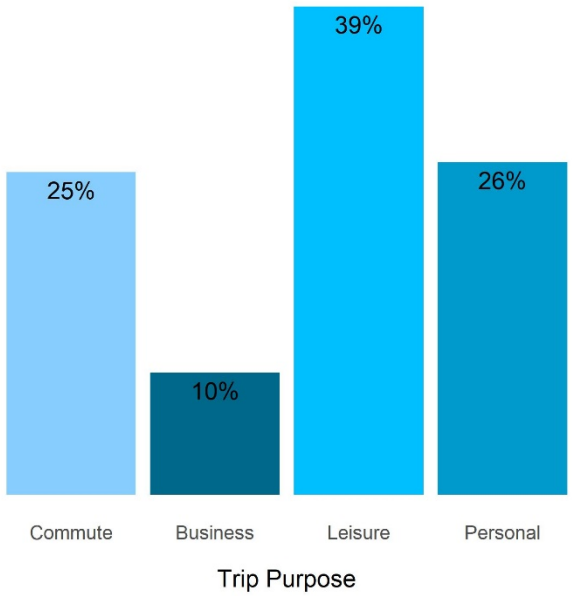


Another 17% of Uber *trips* in Florida enabled riders to visit destinations they would not have visited otherwise. The portion of Uber *riders* who ever use Uber for this purpose is significantly higher. These are generally riders who do not have easy access to cars or other travel options. The

value of these added trips equals $82 million annually, a figure based on how much travelers are paying for this added mobility.

Uber riders travel for a variety of reasons throughout the day, including shopping, healthcare, school, work, and recreation.

The range of trip purposes for Uber rides is broad. The graphic classifies Uber trips into four categories: commuting, business travel, leisure, and personal trips (which include shopping trips, healthcare, school, and child care). About a quarter of these trips also involve intermodal connections. When asked about their most recent trip, 6% of respondents said they used the service to connect to a bus or rail line. Another 11% said their most recent trip involved a connection to an airport. The portion of riders who sometimes use Uber to connect to another mode is much higher than the trip percentages reported here. The ability to connect with and complement other types of transportation is evolving with the integration of Uber with trip-planning phone apps such as Transit App.



Driver Impacts and Benefits

Benefits accruing to Uber driver-partners in Florida include the value of added income, flexibility, and other amenity elements of the service. They total $469 million annually (relative to drivers' outside options).

People who choose to be Uber driver-partners do so because they deem it beneficial compared to other alternatives. There are two primary benefits: (a) income and (b) amenity benefits, most notably including schedule flexibility. Just as with riders, drivers were asked about their next best available alternative if Uber were not available—this time, as a source of income.

In terms of personal income, Uber driver-partners in Florida earn $1.6 billion in combined annual income from Uber and other sources. Overall, 87% of drivers earn income from other sources, and some report increases in this other-source income after partnering with Uber. Considering all sources of income, 66% of drivers now make more than they did before partnering with Uber. To remain conservative, we exclude added non-Uber income from our benefit calculations.

In addition to the income they gain by partnering with Uber, drivers value the added flexibility and other non-income benefits the service offers. Drivers can start and stop working at the touch of a button and can hold full or part-time jobs in addition to driving with Uber. This flexibility enables some drivers to drive only a few hours per week to supplement other sources of income, while others rely on Uber as their main source of income.

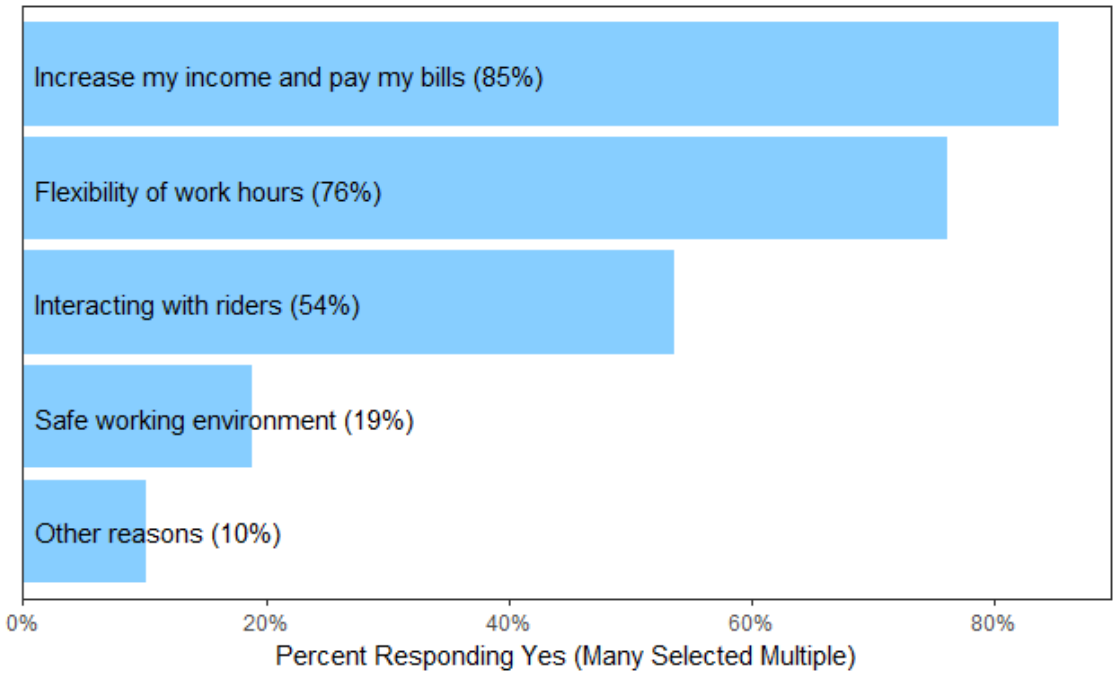
The importance of schedule flexibility is significant and the most commonly reported amenity benefit for drivers. Altogether, 76% of Uber drivers in Florida report benefitting from its schedule flexibility, while 35% report they would not partner with Uber if not for the increased flexibility the service provides. In some cases (up to 34%), drivers choose this flexibility despite the opportunity to earn more money in their previous position.

To be conservative, for drivers who report they are willingly foregoing income because they prefer driving with Uber, we estimate amenity benefits at that amount and no more. For drivers making more than their best outside option, we estimate their amenity benefits based on the income their peers chose to forego to drive, which is much less than what they report they would require in added pay if they lost the flexibility to choose when they drive. The minimum possible value of driver amenity benefits under this methodology is $517 million annually.

Drivers partner with Uber for a variety of reasons, including both earning income and flexible hours. Most drivers in Florida report that in addition to schedule flexibility, they value aspects of driving including a safe work environment and the ability to interact with riders.

Approximately 85% of driver-partners drive because they want to increase their income and pay their bills, while 76% cite the importance of schedule flexibility that Uber offers. As shown in the graphic below, another 54% report the importance of interacting with riders, and 19% of having a safe working environment. There are many other reasons drivers partner with Uber that cannot be captured using these broad categories. These include knowledge gained by talking with riders, ability to see unfamiliar places, and satisfaction from helping others.

Reasons drivers partner with Uber



The ability for Uber driver-partners to choose if, when, and where they drive means that there is no such thing as a typical driver. In Florida, 63% of drivers drive less than 20 hours per week. A separate study also found very large variation in driver hours from week to week, reflecting the schedule flexibility in action.[2]

[2] A nationwide analysis of Uber administrative data found that in a typical week, over half the drivers worked either 25% more or 25% fewer hours than they did during the prior week. (Jonathan V. Hall and Alan B. Krueger, "An Analysis of the Labor Market for Uber's Driver-Partners in the United States," November 2016. NBER Working Paper No. 22843.)

Although drivers' income gains were measured against what they earned pursuing an alternative form of work (to remain conservative in our estimates), a substantial fraction of drivers were unemployed before driving with Uber. Across Florida, 19% of drivers were "seeking employment" and 13% of drivers were "not working and not seeking employment" before driving with Uber. Some of those who were previously not working and not seeking employment could have been discouraged workers Uber brought back into the economy, or workers who were previously unable to participate in the economy due to family or child care obligations, a disability, or other reasons. For example, a person who came out of retirement to drive may have had a desire to work, but only if they were given the flexibility offered by Uber.

Methodology and Detailed Results

Coverage. The study focused on how Uber generates economic benefits and impacts for riders and drivers in Florida and leads to additional effects on the state economy. The study did not cover other Uber platforms such as the UberEATS business, nor did it consider the economic impact of employment in Uber offices. Thus, the impacts presented here represent a low-side estimate of Uber's full economic impact.

The accounting of rider and driver benefits covers what economists call "social benefits," reflecting effects on *money* saved or earned, plus the value of *non-money* benefits to those parties. Non-money benefits such as time savings have a very real value to people, but that value is not hard cash. Thus, only the money impacts have an impact on the state economy by affecting the flows of dollars and economic productivity.

Economic impacts are defined in two ways. (1) *Gross impacts* are defined as Uber's contribution to the state's economy, i.e., Uber's economic footprint in the state. This counts the income that is generated for both Uber driver-partners and for workers in other industries who benefit as a consequence of Uber's existence. (2) *Net impacts* are defined as the difference in gross state product (a measure of the size of the state economy) between the state's current situation and what would be the case without Uber. This measure reflects the fact that most gains and losses among industries and service providers cancel out, so the state economy expands only insofar as Uber brings productivity gains, attracts more spending from visitors, or increases the local content of business and household spending. In fact, all these effects occur.

As this study focused on users of Uber's platform and related effects on the state economy, it did not assess broader transportation network or system impacts that may affect traffic routing, volumes, or congestion levels at various times and places. It also did not assess broader environmental impacts of traffic flow changes, if any, though clearly those topics are also important for public policy. However, issues relating to those topics are included in the discussion of transportation impacts at the end of this report.

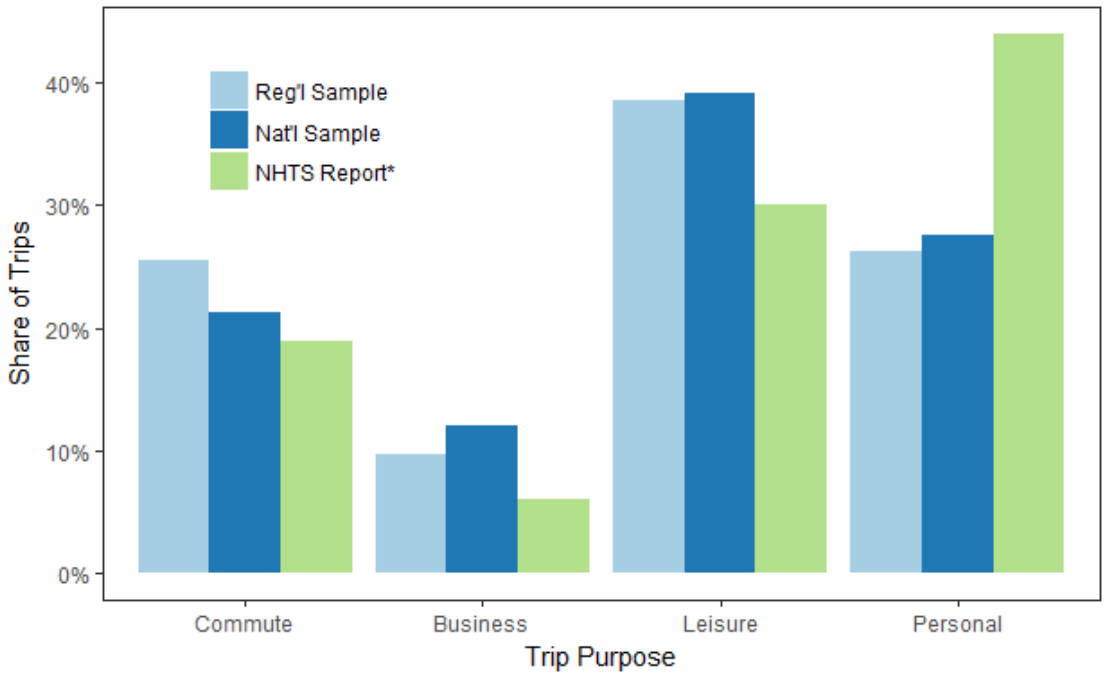
Data collection. To calculate the various forms of economic benefits and impacts Uber is having on Florida and its economy, EDR Group surveyed 424 riders and 749 drivers in the state between June and August 2017. Survey samples were drawn from individuals who had used the Uber platform in the previous 48 hours as a rider or driver. The surveys focused on how people use Uber and what they would have done if Uber or a similar service were not available. In other words, all impacts were measured against a realistic baseline so as to capture Uber's added value.

The research team matched rider survey findings with Uber trip data to gain a more complete understanding of how users rely on the service to meet their travel needs. The team also matched driver survey findings with Uber administrative records to gain a more complete understanding of how driver-partners rely on the service as a source of income. All analysis was done by staff of EDR Group, on a confidential basis, independent of Uber.

Individual survey responses were then weighted on the basis of day of the week and time of day to appropriately represent the known profile of all Uber trips. These weighted values were expanded to capture the total population of trips, riders, and drivers in the state over a one-year period. This aggregation method takes advantage of the maximum amount of detail from the surveys and state profiles of Uber usage to understand total state benefits.

Data validation. The *rider survey* asked about the purpose of their most recent Uber trip and what the rider would have done if Uber or a similar service were not available. To ensure accuracy, Uber provided anonymous data on trip characteristics such as the travel and wait duration, distance, and cost of the most recent trip. Trips were weighted to match the state's profile for time of day, day of the week, trips by tourists vs. locals, trips to or from an airport, and by riders' frequency of use. The trip purpose profile was compared with national Uber profiles and national transportation surveys, as shown in the graph below.

Why Uber riders and the general population make trips



** National Household Travel Survey (NHTS), U.S. Dept. of Transportation*

Respondents to the rider survey provided their own estimates of the time and cost of their next best alternative. Knowing the distance of the ride, the research team independently calculated the expected travel time and cost for the reported alternative (based on normal ranges for travel speeds, per-mile and per-trip costs, wait times, and delays). The survey responses were compared to expected time and cost calculations to assess their reasonableness. While the results were close in the vast majority of cases, the research team did adjust for occasional "outliers" (travel time and cost values outside of the normally believable range) by constraining the values to be within +/- 50% of expected value. This correction for reporting errors has the effect of tamping down on claims of particularly large time and cost savings associated with Uber use, resulting in conservative estimates for the overall value of Uber's rider benefits.

The *driver survey* asked about why drivers chose to use the Uber platform, what they were doing prior to driving with Uber, and how Uber fit into their current overall earnings situation. Uber administrative data provided additional anonymized information on respondents' earnings and driving activity, from which the research team constructed profiles of drivers' use of Uber's platform. Based on this data, survey responses were weighted to match the state's profile for weekly driving and take-home pay. In some cases, corrections were made when there were inconsistencies between questions to ensure benefits of driving with Uber were not overstated. Drivers' expenses related to trips provided using the Uber platform were estimated based on regional data for fuel prices and other mileage-based costs and characteristics of the state's Uber vehicle profile.

Rider benefit valuation assumptions. To calculate travel benefits, the dollar value of travel costs was defined to include travel related fares, fees, car rental payments, and per-mile costs of driving one's own car, as applicable. Savings in parking costs and car ownership costs were calculated and discussed separately. The value of travel time savings varied by trip purpose, based on guidance from the U.S. Dept. of Transportation (*www.transportation.gov/office-policy/transportation-policy/guidance-value-time*).

For reported trips that would not have been made without Uber or a similar service, the value of Uber enabling those trips was calculated based on the economic concept of "consumer surplus." This approach recognizes that riders gain value from the ability to make those additional trips (or else they would not have paid for those rides), but the value must be less than that calculated for those who would otherwise have traveled using another mode (or else they would have already been using that other mode). Economists normally calculate the social benefit as the halfway point in this range. The "rule of one-half" is explained in *www.vtpi.org/tca/tca07.pdf*.

The benefits of reduced car use and reduced car ownership were calculated based on costs estimated by the American Automobile Association (*newsroom.aaa.com/auto/your-driving-costs*); national averages for car age; and True Cost of Ownership for typical cars of that age reported by Edmunds (*www.edmunds.com/tco.html*). This information covers the cost of fuel, tires, maintenance, time- and distance-based depreciation, annual and distance-based insurance, and financing. Monthly parking expenses were provided by survey responses.

The values for amenity benefits from use of the Uber platform for riders were derived from observed "willingness to pay." This was measured as the amount by which some riders intentionally paid more than their next best alternative to gain non-money advantages (such as schedule flexibility, destination choice, and safety) from Uber. The amenity benefit was calculated as the additional amount paid by those riders who did not save time or money. A breakdown of the Uber rider benefits is shown in the table that follows.

Uber Rider Benefits in Florida Add Up to $1.5 Billion Annually	
Uber Rider Benefit	**Annual Total (millions)**
Out-of-pocket trip costs: Saving money (53% of riders)	*+$412M*
- Out-of-pocket trip costs: Paying more (47% of riders)	*- $290M*
= Savings in net trip cost	+$122M
+ Savings in parking cost	+$318M
+ Value of time savings	+$308M
+ Value of rider convenience/amenity benefit	+$290M
+ Value of benefit for added trips	+ $82M
+ Savings in car ownership cost (8% of riders)	+$349M
= Direct Traveler Benefit *(from survey analysis)*	**+$1,468M**

Note: Totals may not sum exactly due to rounding.

Driver benefit valuation assumptions. For drivers, the non-Uber alternative was considered to be their income and employment situation before they partnered with Uber, except in situations in which they were unemployed and looking for work. Total personal income was estimated based on earnings from Uber and the reported share of each respondent's income coming from other sources. By ignoring any current non-Uber earnings above previous non-Uber earnings, and assuming Uber driver-partners could make at least as much as they did previously if driving with Uber was not an option, we present a conservative estimate of net changes in income.

The calculation of amenity benefits for Uber drivers (the largest element of which is the added flexibility of work schedule and amount of time to work) closely follows the approach used to calculate amenity benefits for riders. Some drivers willingly earn less than their next best alternative to enjoy the flexibility and other amenity benefits, but many other drivers also reported placing a high value on this flexibility. To be conservative, for drivers who report they are willingly foregoing income because they prefer driving with Uber, we estimate amenity benefits at that amount and no more. For drivers making more than their best outside option, we estimate their amenity benefits based on the income their peers chose to forego to drive, which is much less than what they report they would require in added pay if they lost the flexibility to choose when they drive. A breakdown of the Uber driver benefits is shown in the table that follows.

Driver Economic Benefits in Florida Add Up to $469 Million Annually

Driver Benefits	Annual Total (millions)
Current driver income (from Uber and other sources*)	+$1,616M
- Substitute income if Uber or similar service was not available	-$1,501M
- Driver added cost for vehicle fuel & maintenance	-$163M
+Added value of flexibility and other non-income benefits	+$517M
=Total Annual Value of Driver Benefits	**$469M**

**Most drivers (87%) earn income from other sources, and some report increases in this other-source income* after *partnering with Uber. To provide a conservative comparison, this income is not included in the calculation.*

Economic impact model. Results of the survey analysis were used with a region-specific economic impact model to calculate broader impacts on the state's economy. The model used in determining gross and net economic impacts, TREDIS, provided the following elements:

- calculation of the value of time savings associated with Uber use, by trip purpose;
- allocation of business-related cost and time savings to local industries;
- effects of business cost savings on productivity, competitiveness and economic growth;
- analysis of how household cost savings are re-spent on other types of purchases;
- analysis of how Uber use further shifts traveler purchasing patterns;
- analysis of how spending shifts affect local production and imports of outside goods & services;
- calculation of broader "indirect" effects on suppliers;
- calculation of broader "induced" effects of worker re-spending, generating consumer purchases;
- measurement of Uber's contribution to GSP (gross state product); and
- measurement of Uber's net impact on GSP.

TREDIS is the nation's most widely used system for analyzing interactions between transportation and the economy. The version used here is calibrated for this specific state economy. It incorporates detailed household and industry buy-sell relationships (known as input-output modeling), with a dynamic model of state business cost responses to productivity and competitiveness changes over time. It tracks impacts on 536 industry sectors. More information is available at www.tredis.com.

Calculation of broader economic impacts. State economic impacts occur insofar as Uber use by riders and drivers affects household and visitor spending patterns and business-related costs. These impacts were extracted from the broader social benefits results and input to the economic model to calculate additional effects on productivity and net state income inflows and outflows. Some additional benefit categories such as savings in parking and car ownership costs can also have a significant role in the economy, but they were not included in the economic impact analysis because their valuation was less certain and there was a desire to keep the economic impact estimates conservative.

The economic modeling also considered the cost structures of different transportation modes and how their use leads to changes in business buying and purchasing patterns. TREDIS also closely tracks the industries that utilize transportation services in each economic region, how important

transportation cost savings are to their operations, and how business operating cost changes lead to further investment and business growth responses. Details of the calculations are shown below.

Uber's Total Economic Contribution to Florida is $1.1 Billion Annually

Uber's Contribution to (Role in) the State Economy (GSP)	**Annual Total ($ millions)**
Uber driver-partner payouts	+$739M
+ Indirect effect of driver transportation purchases	+$90M
+ Induced effect (worker income re-spending on goods & services)	+$235M
+ Added local spending by visitors	+$6M
= Total Contribution to (Role in) the State Economy	**+$1,070M**

Note: Economic contribution is defined as (a) income that the Uber platform generates for its drivers, (b) additional income generated for other industries as a consequence of visitor spending and driver transportation purchases, and (c) respending of worker income on consumer goods & services.

Uber's Net Impact on State Economic Growth is $134 Million Annually

Uber's Net Impact on Growing the State Economy (GSP)	**Annual Total ($ millions)**
Change in business productivity gains	+$50M
+ Change in local labor content (import substitution)	+$78M
+ Inflow: Added local spending by visitors	+$6M
= Net Incremental Impact on the State Economy	**+$134M**

Note: Net impact is defined as the increase in state economic activity enabled because of Uber's transportation services. This includes effects of: (a) productivity gain for businesses whose workers travel via Uber, (b) added local business sales due to shifts in transportation related spending (e.g., from car-related purchases to Uber services), and (c) added local business sales associated with trip-making to additional destinations (primarily visitor spending).

Transportation Impacts

The analysis reported in this document focused exclusively on measuring Uber's effects on its riders and drivers and the economic consequences of those changes affecting income and spending flows among households and various providers and suppliers of goods and services. The analysis did not include traffic modeling or regional transportation systems analysis (which would require additional detailed information on trip generation, origin-destination patterns, mode split and vehicle occupancy rates) to calculate further effects on patterns of traffic routing, volumes, and congestion levels. However, while the survey instruments were not developed to assess either transportation system or network effects, they do provide some insight regarding those issues.

Mobility impacts. An important survey finding is that Uber enables rides for some people who do not have access to cars or other convenient transportation options. This is evidenced by the previously reported finding that Uber enabled some people to visit destinations that they would not otherwise have been able to reach. In addition, Uber is being used in situations where riders report that their next best alternative has safety or weather protection issues or issues regarding its schedule availability or destination access. This finding is supported by the previously reported finding on the benefits of using Uber.

Traffic impacts. The relationship of Uber to road traffic is complex, reflecting a variety of offsetting factors. On the one hand, the survey results show that some travelers use Uber to access public transportation services, which can potentially reduce traffic. Other travelers use Uber instead of driving themselves to destinations with high parking costs, which does not necessarily change vehicular traffic but does reduce parking demand. While some travelers are paying for Uber instead of walking or using other available transportation services, those choices are being made in situations where the other transportation options are less desirable from a schedule, reliability, weather protection, or safety perspective (as previously noted). This situation tends to occur most often at off-peak times and outside of the urban business core—in other words, not where traffic congestion is most problematic. However, this study did not examine the occupancy rate of Uber vehicles or the use of UberPOOL, nor did it map the locations of Uber use, so it is not possible to make conclusions regarding net offsetting effects on traffic congestion.

Longer-term impacts. Perhaps the most significant transportation impact evident from the surveys is the finding that some Uber riders are now deferring car purchases, which should ultimately reduce car ownership rates among this segment of the population. Transit planners also see the longer-term potential for services such as Uber to complement transit by providing a more efficient service for times and locations where transit service is not available or is limited in frequency and coverage. There is supporting evidence in a report published by the American Public Transportation Association (Shared Mobility and the Transformation of Public Transit, APTA, 2016). There are also ongoing pilot programs in various communities in which Uber service is being coordinated with transit or offered as an alternative to parking facility use for commuters. More travel modeling and more research on results of the pilot experiments is needed to better understand the potential benefits of these efforts.

About EDR Group

Economic Development Research Group, Inc. (EDR Group) is a consulting firm focusing specifically on applying state-of-the-art tools and techniques for evaluating economic development performance, impacts, and opportunities. The firm was started in 1996 by a core group of economists and planners who are specialists in evaluating impacts of transportation infrastructure, services, and technology on economic development.

EDR Group provides both consulting advisory services and full-scale research projects for public and private agencies throughout North America as well as in Europe, Asia and Africa. The firm's work now focuses on three practice areas: transportation, energy and economic development. In each area, it provides economic impact analysis, benefit/cost analysis and market analysis.

The transportation work of EDR Group includes studies of the economic impacts of road, rail, air and marine modes of travel. The firm is widely recognized for its authorship of reports on transportation economic impact analysis for national organizations including the American Public Transportation Association, American Society of Civil Engineers, U.S. Conference of Mayors, U.S. Dept. of Transportation and Transportation Research Board. EDR Group is also nationally recognized for state-of-the-art analysis products, including the Transportation Economic Development Impact System (TREDIS).

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