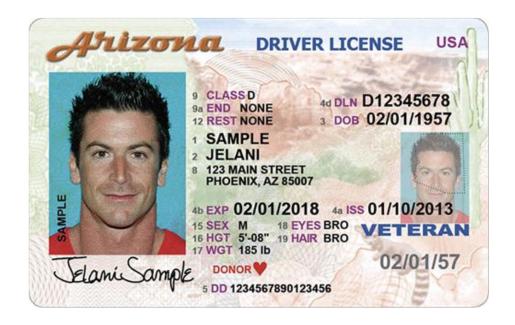


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# THE CITY OF PHOENIX MUNICIPAL COURT'S COMPLIANCE ASSISTANCE PROGRAM, 2016 An Economic Assessment



### **FINAL REPORT**

June 2, 2017

L William Seidman Research Institute W. P. Carey School of Business Arizona State University

# L. WILLIAM SEIDMAN RESEARCH INSTITUTE

The L. William Seidman Research Institute serves as a link between the local, national, and international business communities and the W. P. Carey School of Business at Arizona State University (ASU).

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Using tools that support sophisticated statistical modeling and planning, supplemented by an extensive understanding of the local, state and national economies, Seidman today offers a host of economic research and consulting services, including economic impact analyses, economic forecasting, general survey research, attitudinal and qualitative studies, and strategic analyses of economic development opportunities.

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- Arizona Public Service Corporation (APS)
- Arizona School Boards Association
- Arizona Town Hall
- Arizona 2016 College Football Championship
- Banner Health
- BHP Billiton
- The Boeing Company
- The Boys & Girls Clubs of Metro Phoenix
- The Central Arizona Project (CAP)
- Chicanos Por La Causa
- The City of Phoenix
- The City of Phoenix Fire Department
- CopperPoint Mutual
- Curis Resources (Arizona)
- De Menna & Associates
- Dignity Health
- The Downtown Tempe Authority
- Environmental Defense Fund
- EPCOR
- Epic Rides/The City of Prescott
- Excelsior Mining
- Executive Budget Office State of Arizona
- The Fiesta Bowl
- First Things First

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### **EXECUTIVE SUMMARY**

- This report examines the City of Phoenix Municipal Court's Compliance Assistance Program (CAP) in 2016. It provides travel and socio-economic profiles of program participants based on survey and Census data. It also examines broad estimates of the statewide economic benefit of the CAP using an IMPLAN input-output model, based on participants' reported increases to income.
- Launched in January 2016, the objective of the CAP is to help individuals with civil traffic violations remain complaint with the Court's orders and retain (or have reinstated) their driving privileges.
- There were 7,735 individuals registered in the CAP program as of September 23, 2016.
- The total fines and fees owed to the City of Phoenix Court by CAP participants was \$11.5 million. Adjusted for waivers offered, the total obligation (CAP amount) was \$8.3 million.
- \$4 million in down payments, excess payments and contract amounts associated with the CAP were paid to the City of Phoenix Municipal Court as of September 23, 2016.
- 91% of CAP participants resided in the State of Arizona. Of these, 67.8% lived in the City of Phoenix boundaries. The top 5 zip codes of residence of CAP participants were located in Central and South Phoenix.
- 72% of the identified 6,897 CAP participants who resided in the Greater Phoenix Region lived in zip codes with median household incomes ranging between \$25,000 and \$49,999. The top 5 zip codes identified in the survey had lower median household incomes and a higher percentage of people living below the poverty level than the City of Phoenix and state averages.
- The average household size of survey respondents ranged from 3.8 to 8.9 persons. This was higher than City of Phoenix averages of 2.8 for owner-occupied and 2.72 for rental-occupied households.
- Of *new* CAP registrants, 28.3% had lost their job as a direct consequence of non-compliance and a suspended license, while 52.9% of CAP participants *who had been in the program more than 3 months* indicated that they had lost a job as a consequence of non-compliance and a suspended license.<sup>1</sup>
- Estimated annual income loss (due to reduced work hours or job loss) reported by all CAP participants as a result of non-compliance ranged between \$1,200 and \$300,000 per person, with a median annual loss of \$36,800.

<sup>&</sup>lt;sup>1</sup> A study of drivers in New Jersey reported that 42% of survey respondents with a history of suspension lost their jobs when they had their driving privileges suspended. (*Motor Vehicle Affordability and Fairness Task Force.* Final Report. February 2006.)

- 84.8% of new CAP registrants who took part in a survey were unable to drive their family members to work.
- Survey responses indicate that the program had had a positive impact on individuals with reinstated licenses. 76% indicated that having their driver license reinstated had increased their ability to drive their family members around. 70% noted increased mobility as an important improvement in their lives, while close to 53% indicated that they had obtained a new job as a direct consequence of increased mobility after the reinstatement of their driver license.
- 41.2% reported an increase in income associated with joining CAP. These income increases ranged from \$3,200 to \$48,000 a year per person, with a median of \$24,000.<sup>2</sup>
- An approximate estimate of the benefits of the scheme, January through September 2016, were as follows:
  - o 1,904 job years of employment<sup>3</sup>
  - \$87 million in labor income
  - o \$149.6 million in GDP.

<sup>&</sup>lt;sup>2</sup> According to the 2009 NHTS Study, more income was associated with more travel. The highest income households made two and a half more person trips than the lowest income households. Men accounted for 57.6% of all work and work related business trips while women accounted for 55% of family and errand-related person trips. Individuals reported traveling 31.92 miles of the 36.13 miles per day by private vehicles. For metropolitan areas with a population as large as Greater Phoenix, individuals, on average, spent 56.85 minutes in travel.

<sup>&</sup>lt;sup>3</sup> A job year refers to the employment of one person for 12 consecutive months.

### **INTRODUCTION**

In January 2016, the City of Phoenix Municipal Court launched a Compliance Assistance Program (CAP) to help individuals with civil traffic violations become and/or remain compliant with Court orders to pay a fine or fee. A driver registering with CAP establishes a payment schedule that fits their budget, upon which a driver whose license is suspended solely because of unpaid fines owed to the City of Phoenix are immediately eligible to apply to the Arizona Motor Vehicle Division (MVD) to have their driving privileges reinstated.<sup>4</sup>

### The Compliance Assistance Program (CAP)

When a driver is cited and found responsible for a civil traffic violation such as driving without insurance or driving over the speed limit, fines plus mandatory surcharges and fees established by state law are assessed against the driver. When the driver fails to pay the fine, surcharges, and fees assessed, or enter into an installment payment plan, the Municipal Court is required to notify the MVD, which results in the MVD suspending the individual's driving privileges until the fees and fines are paid in full.

The immediate and direct impact of a driver license suspension is loss of mobility.<sup>5</sup> The loss of mobility has social and economic consequences to individuals and society that may include:

- Reduced work hours and wages, job loss and consequently reduced household income.
- Inability to obtain a job.
- Additional costs associated with alternative modes of travel and increased travel time resulting in lost production, business or personal time.<sup>6</sup>
- Reduced family activity and quality of life for the family. This can induce psychological and social impacts that include strain to the family.<sup>7</sup>
- Increased in insurance costs.

<sup>&</sup>lt;sup>4</sup> The CAP does not lift MVD license suspensions based on fines owed to jurisdictions other than the City of Phoenix or suspensions related to the number or nature of traffic violations a driver has.

<sup>&</sup>lt;sup>5</sup> Motor Vehicle Affordability and Fairness Task Force, (2006).

<sup>&</sup>lt;sup>6</sup> Belenky Peter, (2011).

<sup>&</sup>lt;sup>7</sup> ibid

Reduced employment for a community may result in a reduced labor force and difficulty in filling certain qualified positions that require driving, such as construction and health care jobs.<sup>8</sup> Individuals who become non-compliant may face a range of other court fees in addition to a suspended license and fees and fines related to the violation. These include:

- Installment payment, non-compliance, and default fees plus collection costs accumulated over time in a cycle of court-ordered statutory penalties for non-payment. The accumulated court debt obligation and associated debt payments are referred to as criminal justice debt.
- Driver license suspensions can also lead to incarceration from offenses resulting from nonpayment such as contempt of court or driving on a suspended license. However, incarceration is rarely imposed.

To Seidman's knowledge, the number of individuals becoming non-compliant through financial hardship is unknown. The impact of the non-CAP system specifically on the City's low-income population is also unknown. However, anecdotal evidence drawn from Court officials suggests most non-compliant individuals experience *some* financial limitations or setbacks.

In general, payment of delinquent fees and fines represents a transfer of potential spending from the local private sector to government sector or debt collection agencies. While the short-term net effect of the transfer could arguably be negative or positive depending on the economic sector the dollars are spent or not are not spent in, the long-term effects of continued economic and financial distress because of a suspended license and accumulated debt could have a detrimental downward spiral effect on an already economically distressed portion of the population.<sup>9</sup> The economic downturn of the affected communities may also result in increased demand for public services.<sup>10</sup>

Non-compliance also has a cost to the courts and local and state government. Unpaid fines and fees constitute uncollected revenues that could mean fewer jobs generated and a requirement for additional revenue from taxpayers. In addition, efforts to collect unpaid fines and fees require information technology support and infrastructure, as well as personnel to manage contracts with collection agencies,

<sup>&</sup>lt;sup>8</sup> Gustitus, Sandra, Simmons, Melody, and Waller, Margy, (2008).

<sup>&</sup>lt;sup>9</sup> ibid

<sup>&</sup>lt;sup>10</sup> ibid

staff court appearances, process paperwork, and handle related clerical work, all of which result in further costs.

The goal of the CAP is to minimize the negative impacts (costs, collection and enforcement efforts, appearances in court, lost wages and economic activity, etc.) that past due traffic fines owed to the Court could have on individuals who would like to remain compliant but have financial limitations, by providing alternative payment options and compliance paths.<sup>11</sup> In addition, CAP streamlines the expected cash flow from penalty payments over time, reduces default risk and revenue volatility, and allows for better planning of City resources and services that are dependent on this revenue stream. As of September 23, 2016, 7,735 individuals had entered the program to resolve their unpaid fines.

#### License Suspension and Traffic Safety

Driving is considered a privilege because of the potential it has to inflict damage, injury and death if traffic laws are violated. The value assigned to driving is the value which is diminished when a negligent or high-risk driver license is suspended or revoked. This punishment is often used by law enforcement to punish high risk drivers, such as persons driving under the influence of alcohol, and to reduce the risk of fatal and injury crashes.<sup>12</sup> However, recognition by law makers of the high value associated with driving has resulted in the use of license suspension/revocation as punishment for other non-driving offenses, including financial and non-compliance reasons.<sup>13</sup> As a result, the link between driver license suspension and driving behavior has become less clear over time.<sup>14</sup> All 50 states and the District of Colombia have established laws that permit motor vehicle agencies, law enforcement and courts to suspend driver licenses for non-driving reasons.<sup>15</sup> For the residents and visitors of Arizona, a civil traffic violation such as 'missing red tail lamps' can result in a license suspension if the fines are not paid on time and thereby become a failure to comply with a court order.

Recent research reveals that drivers suspended for non-driving offenses do not necessarily pose a higher safety or traffic risk than drivers suspended for driving offenses. Carnegie and Eger (2009), in a NHTSA funded study that assessed the relationship between driving behavior and violations of traffic laws among

<sup>&</sup>lt;sup>11</sup> https://www.azatss.com/compliance-assistance-program.html

<sup>&</sup>lt;sup>12</sup> Gerbers, Michael, and De Young, J. David, (2002).

<sup>&</sup>lt;sup>13</sup> Gustitus, Sandra, Simmons, Melody, and Waller, Margy, (2008).

<sup>&</sup>lt;sup>14</sup> Motor Vehicle Affordability and Fairness Task Force, (2006).

<sup>&</sup>lt;sup>15</sup> Gustitus, Sandra, Simmons, Melody, and Waller, Margy, (2008).

suspended drivers, concluded that drivers suspended for financial or compliance reasons posed a comparatively lower safety risk than drivers suspended for a driving violation.<sup>16</sup> The researchers suggested that drivers suspended for non-driving offenses should be differentiated from drivers suspended for driving violations, and therefore treated differently by motor vehicle agencies, law enforcement and the courts.<sup>17</sup> Gebers and De Young (2002) determined that drivers suspended for non-driving offenses had traffic risks comparable to licensed drivers.<sup>18</sup> The three most common non-driving-related reasons for license suspension are: failing to comply with a child support, lack of proper insurance, and failure to appear in court to pay or respond to a traffic violation citation.<sup>19</sup> More recently, states such as New Jersey recognized and addressed the disconnect between license suspensions and their original intended use as punishment for bad driving, and the disproportionate effect driver license suspension has had on low income drivers and their communities. The City of Phoenix CAP is one of many innovative ways local government is addressing the unintended consequences of license suspensions for non-driving reasons while effectively collecting fees and fines.

This study provides a narrative of and summary statistics for the CAP Program, January 2016 through September 2016. Socio-economic profiles of CAP participants were developed using data provided by the Phoenix Municipal Court and the 2015 Arizona Community Survey five-year estimates. A small survey was also conducted. Responses were summarized to provide insights into the consequences of noncompliance, including reduced work hours and income, increased travel time and cost, and the benefits of participating in the CAP program. The survey data was also used to develop estimates of the potential benefits associated with an individual retaining their driver license.

<sup>&</sup>lt;sup>16</sup> Carnegie, Jon, and Eger III, Robert J., (2009).

<sup>17</sup> ibid

<sup>&</sup>lt;sup>18</sup> Gerbers, Michael, and De Young, J. David, (2002).

<sup>&</sup>lt;sup>19</sup> Carnegie, Jon, and Eger III, Robert J., (2009).

### 2.0 RESEARCH METHODS AND DATA

The study spanned four principal phases.

### **Phase I: CAP Program Summary Statistics**

Seidman compiled and provided summary statistics of participants by city, state and zip code of residence, violations by type of enabling authority, statistics of payment of delinquent fees, and fines by CAP participants as of September 2016.

#### Phase II: Overview of the Socio-Economic Profile of CAP Participants

Violation and non-compliance information of existing CAP participants as of November 23, 2016 was provided by the City of Phoenix Municipal Court staff.

Zip codes of residence for the CAP participants was provided by the City of Phoenix Municipal Court and subsequently mapped to zip codes from the 2015 American Community Survey Five-Year estimates to determine economic characteristics by association. Socio-economic profiles by zip code provide some indication of the general economic condition predominant in the communities and neighborhoods of each CAP participant.

### **Phase III: Survey of CAP Participants**

One survey was administered to new CAP participants upon registration at the City of Phoenix Municipal Court. The purpose of this survey was to develop a range of profiles for individuals with suspended licenses, assess changes in their socio and economic status resulting from a suspended license, and obtain their expectations and opinions of the program.

Convenience sampling, a non-probability sampling method, was selected for three reasons:

1) The impracticability and challenge of identifying non-compliant individuals who had recently registered with CAP (last two weeks).

2) The cost associated with identifying and administering the survey questions.

3) The information gathered would be solely used for developing a range of profiles and storylines of CAP participants, rather than for statistical analysis or inferences.

An invitation to participate in this survey was issued by Court staff as each individual completed their CAP registration at the Court registration booths. Participants were then given the option of a face-to-face interview or the completion of a paper survey on-site. This took place in September and October 2016, three days a week, six hours each day, for 6 weeks.

Seidman's second survey was issued by mail to a random sample of 500 existing CAP registrants, using personal identification numbers as a non-identifiable piece of information assigned to each participant by the Court based on their court case. The primary purpose of this second survey was to gather qualitative information from existing CAP participants about their perceptions of the program, including benefits and costs. The City of Phoenix Municipal Court staff addressed and mailed out the surveys in self-addressed envelopes to safeguard participant anonymity. Of the 500 mailed questionnaires, 13 responses were received. This meets the minimum sample size of a heterogeneous population of 12-30.<sup>20</sup>

### Phase IV: Consequences of Non-compliance and Economic Benefits of CAP

The U.S. Department of Transportation provides estimates of the Valuation of Travel Time (VTT) for use in economic assessments.<sup>21</sup> VTT is the cost of time spent traveling to a destination. It refers to the monetary value (opportunity cost) of time that could be spent in production (cost to businesses of employees and vehicles on the road), in recreation (value of personal time), or decreased or avoided discomfort from traveling.<sup>22</sup> VTT is based on the idea that a reduction in travel time potentially allows an individual to apply the time saved to other economic or social activities of equal or more value.

In this study, Seidman assumed that the additional time spent by CAP participants to travel to work via an alternative mode of transportation because of a suspended license could have been saved if they had retained their driving license. The U.S. Department of Transportation nationally estimates that an individual loses \$22.90 for every additional hour of intercity business travel.<sup>23</sup> This was used by Seidman

<sup>&</sup>lt;sup>20</sup> Non-Probability Sampling. Research Methodology. http://research-methodology.net/sampling-in-primary-datacollection/non-probability-sampling/. Quoted from Saunders, Mark, Lewis, Philip, and Thornhill, Adrian, (2012). *Research Methods for Business Students*. 6th edition, Pearson Education Limited.

<sup>&</sup>lt;sup>21</sup> The Value of Travel Time Savings: Department Guidance for Conducting Economic Valuations, Revision 2, (2011).

<sup>&</sup>lt;sup>22</sup> Transportation Benefit-Cost Analysis, website: http://bca.transportationeconomics.org/benefits/travel-time

<sup>23</sup> ibid

as a general estimate of the potential lost income associated with the reduced mobility of CAP participants.

Survey responses were used to estimate economic benefits for CAP participants. Using income change data obtained from survey responses, an IMPLAN input-output model was employed to estimate potential statewide economic effects of participants' self-reported income increases associated with the program.<sup>24</sup>

IMPLAN is a widely-used and commercially-licensed regional input-output software model developed by the University of Minnesota. IMPLAN models examine how a dollar spent in a sector ripples through other sectors of the economy, generating subsequent waves of economic activity or multiplier effects. The IMPLAN model generates impact effects for a finite period (typically one full calendar year) expressed in terms of:

- Gross Domestic Product (GDP): This is synonymous with total valued added, total income or incomebased GDP. GDP represents the dollar value of all goods and services produced for final demand in a county, state or national economy. GDP can also be defined as the sum of employment compensation, proprietor income, property income, and indirect business taxes.
- **Employment:** This is the number of equivalent job years needed to support the economic activity.
- Labor income: This is the sum of the income of the self-employed and the total compensation of payroll employees. Employment compensation consists of wages, salaries and benefits.

<sup>&</sup>lt;sup>24</sup> IMPLAN<sup>®</sup> is an acronym for IMpact analysis for PLANning.

### 3.0 CAP PROGRAM STATISTICS

#### **CAP Program Financial Outline**

There were 7,735 individuals registered in the CAP program as of September 23, 2016. The total amount of fines and fees owed to the City of Phoenix Court by CAP participants was \$11.5 million. Adjusted for waivers offered, the total obligation (CAP amount) was \$8.3 million. The total cost of waivers provided by the Court as an incentive to join the CAP program totaled approximately \$3.14 million, or an average of \$407 per individual. Waivers ranged from \$0 to \$4,515. For only "paid" and "active" accounts, the total amount of fees waived was \$2.3 million.

CONTRACT	DISCRETE	TOTAL	TOTAL	TOTAL	TOTAL	EXCESS
STATUS	PARTICIPANTS	COST	САР	DOWN	CONTRACT	PAY
		WAVERED	AMOUNT	PAYMENT	AMOUNT	TODAY
		Thousands \$				
Active	3,184	\$1,765.0	\$4,583.5	\$717.6	\$5,344.8	\$99.3
Canceled	10	\$2.0	\$7.4	\$1.2	\$11.7	\$0.1
Delinquent	693	\$296.3	\$817.8	\$138.0	\$932.7	\$19.7
Noncompliant	1,336	\$535.3	\$1,448.6	\$235.1	\$1,670.6	\$35.6
Paid	2,512	\$550.9	\$1,476.6	\$333.9	\$1,493.9	\$987.8
Total	7,735	\$3,149.5	\$8,334.1	\$1,425.9	\$9,453.7	\$1,142.5

#### **Table 1: CAP Program Contract Payments**

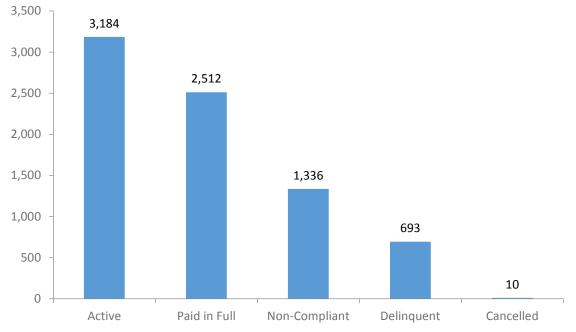
Source: City of Phoenix Municipal Court

Down payments collected as required on the day of registration were \$1.4 million, or 15% of the total contract amount. An additional \$1.1 million was paid in excess of the required down payment on date of registration, resulting in \$2.5 million in payments on the first day. The total down payments, excess payments and contract amounts paid as of September 23, 2016 amounted to \$4 million in revenues to the City of Phoenix Municipal Court. This was for the first 9 months of the program (January-September 2016).

### **CAP Program Participant Statistics**

Of the 7,735 individuals registered in the CAP program, more than 91.6% had their driver licenses reinstated.

73.6% of the 7,735 CAP participants were identified as being active (3,184 or 41.9%) or having paid in full (2,512 or 32.5%) under the new CAP payment scheme. 1,336 (17.3%) reverted to non-compliance. 693 (9.0%) were delinquent, and 10 (0.1%) had cancelled their participation in the program.



Graph 1: Status of CAP Participants, September 23, 2016

### Table 2: Violations by Type of Enabling Authority

ENABLING AUTHORITY FOR SPECIFIC	VIOLATION	COUNTS	PERCENT
Arizona Revised Statutes (ARS)		21,224	88.7%
	Civil Traffic (VT)	21,218	00.770
	Parking (PK)	4	
	Minor Criminal Traffic		
	(MN)	2	
Phoenix City Code (PCC)		1,358	5.7%
	Parking (PK)	1,007	
	Civil (CV)	255	
	Civil Traffic (VT)	96	
Total Violations		23,940	100%

Source: City of Phoenix Municipal Court

Over 88% of all CAP participant offenses were for ARS violations. 99% (21,218 individuals) were reported as civil traffic violations. The three most common traffic violation offences were: failure to produce

Source: City of Phoenix Municipal Court

evidence of financial responsibility or insurance; no current registration; and no valid driver license or endorsement.

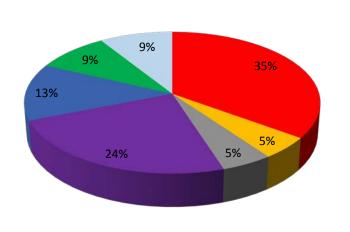
Individuals with multiple citations were assigned a unique case number per violation. The total number of unique individuals in the program was 16,143.

STATUS OF CONTRACT ASSOCIATED WITH VIOLATION	NUMBER OF VIOLATIONS	PERCENT OF TOTAL
Active	7,636	47.3%
Paid	4,242	26.3%
Delinquent	1,565	9.7%
Noncompliant	2,693	16.7%
Cancel (include renegotiated contracts)	7	0.0%
Number of Violations (Charges with assigned charge numbers)	16,143	100.0%
Active and Paid Charges	11,878	73.6%

Table 3: Number of Violations by Status of Associated Contract

Source: City of Phoenix Municipal Court

### Graph 2: Six Major Traffic Violations as a Share of Total Violations Reported



Other

Vehicle Without Liability Insurance

Displaying Suspended Plate

Failure to Produce Evidence of Financial Responsibility

- No Current Registration
- No Valid Driver License/Endorsement
- Speed More Than Reasonable

Source: City of Phoenix Municipal Court

### 4.0 CAP PARTICIPANTS SOCIO-ECONOMIC PROFILES

#### **CAP Participants' Place of Residence**

91% of CAP participants lived in the State of Arizona at the date of assessment. Of these, 67.8% lived in the City of Phoenix boundaries. The remaining 9% of CAP participants resided in 48 other states, including California (166 participants), Texas (54 participants) and New Mexico (34 participants).

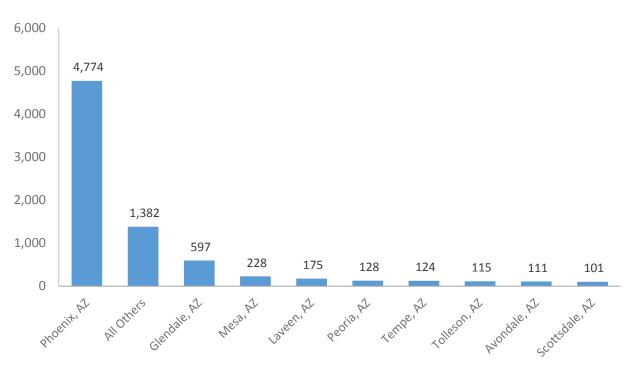




Table 4 describes the top 5 zip codes of residence for CAP participants, expressed in terms of the major arterial streets at the north and east boundaries of each zip code. The top 5 zip codes of residence for CAP participants were in Central and South Phoenix. These zip codes had lower median household incomes and a higher percentage of people below the poverty level than the City of Phoenix and statewide averages (see Table 5).

Source: City of Phoenix Municipal Court

#### Table 4: CAP Participants Top 5 Zip Codes of Residence

ZIP CODES	MAJOR INTERSECTIONS	MAJOR EMPLOYER
85041	South of Broadway, West of Central	Walmart (305 jobs)
85033	South of Camelback, West of 59 <sup>th</sup> Avenue	Cartwright School District 83 (280 jobs)
85301	South of Northern Avenue, West of 43 <sup>rd</sup> Avenue	Ace Building Maintenance (530 jobs)
85009	South of Thomas Road, West of 19 <sup>th</sup> Avenue	Shamrock Foods Company
85035	South of Thomas Road, West of 43 <sup>rd</sup> Avenue	Walmart (380 jobs)
Phoenix	City boundaries	U Haul (3,964 jobs)

Source: 2015 MAG Employer Database, employers with 5 or more employees

#### Table 5: CAP Participants Top 5 Zip Codes of Residence

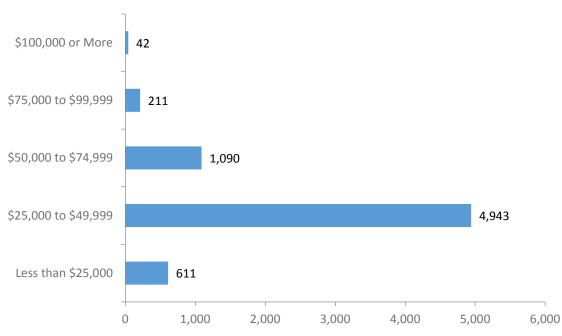
ZIP CODES	NUMBER OF PARTICIPANTS	UNEMPLOYMENT RATE, 2015	MEDIAN HOUSEHOLD INCOME	PEOPLE BELOW THE POVERTY LEVEL
85041	357	8.3%	42,830	25.7%
85033	295	11.6%	33,662	35.7%
85301	285	14.3%	27,103	41.3%
85009	269	9.0%	21,719	51.8%
85035	259	11.1%	31,803	38.4%
Phoenix	4,774	8.8%	47,326	23.1%
Arizona	7,042	8.9%	50,225	18.2%

Source: U.S. Census Bureau

### **CAP Participants' Household Income**

CAP participants predominantly lived in zip codes with median household incomes ranging between \$25,000 and \$49,999. This household income bracket represented about 72% of the identified 6,897 CAP participants who resided in the Greater Phoenix Region.

Based on the identified median household income brackets, the most prominent traffic violation among all the median income levels was a failure to produce evidence of financial responsibility. Zip codes with a median household income of more than \$100,000 had the largest percent share of 'speed related' offenses (17%) and the largest share of 'no current registration' offense (16%), as shown in Table 6.



Graph 4: CAP Participants by Median Household Income based on Zip Code of Residence

Sources: City of Phoenix Municipal Court and U.S. Census Bureau

Table 6: CAP Participant Top 5 Violations by Median Household Income

	FAIL TO PRODUCE EVIDENCE OF FINANCIAL RESPONSIBILITY	NO CURRENT REGISTRATION	NO VALID DRIVING LICENSE/ ENDORSEMENT	SPEED MORE THAN REASONABLE	DISPLAYING SUSPENDED PLATE	VEHICLE WITHOUT LIABILITY INSURANCE
Less than \$25,000	23.9%	11.8%	11.1%	8.2%	5.1%	4.5%
\$25,000 to \$49,999	23.8%	12.3%	9.0%	8.9%	5.5%	4.5%
\$50,000 to \$74,999	23.4%	12.6%	6.2%	12.3%	6.4%	5.0%
\$75,000 to \$99,999	23.0%	14.0%	5.0%	11.0%	7.0%	4.0%
\$100,000 or More	17.0%	16.0%	10.0%	17.0%	2.0%	3.0%

Sources: City of Phoenix Municipal Court and U.S. Census Bureau

### 5.0 SURVEY RESPONSES AND PROFILES

Driving is a privilege highly valued by Americans. About 88% of individuals ages 15 or older in the United States are reported as drivers. The primary purpose for driving private vehicles is to commute to and from work. According to the 2009 National Household Travel Survey (NHTS), 91.4% of individuals used private vehicles to commute to and from work, 88.1% used private vehicles for work-related business, and 87.8% for family or personal errands.<sup>25</sup>

TRIP PURPOSE	PERCENT OF PERSON TRIPS
To/From Work	91.4%
Work-Related Business	88.1%
Family/Personal Errands	87.8%
School or Church	70.7%
Social and Recreational	76.9%
Other	71.0%
Average	83.4%

### Table 7: National Percent of Person Trips and Purpose by Private Vehicle

Source: 2009 NHTS

In the Greater Phoenix Region, 87.9% of workers ages 16 and over travel to work by car. 5.5% work from home, 2.2% use public transportation, and the remainder walk or bike to work.

Information from a sample of 75 CAP participants was collected by interview and questionnaire. Summary statistics for the travel behavior of the sample is presented in Table 8.

COMMUTING CHARACTERISTIC	PERCENT
Own a car	57%
Commute to work by car	53%
Commute to work by public transport	21%
Carpool	19%
Other	6%

### Table 8: CAP Survey Travel/Commuting Characteristics

Source: Seidman Questionnaire and Interview Responses

<sup>&</sup>lt;sup>25</sup> Summary of Travel Trends, 2009 National Household http://nhts.ornl.gov/2009/pub/stt.pdf

55.9% of individuals in the CAP Program for more than 3 months reported traveling to work by car. 47.5% of the new CAP registrants still awaiting the reinstatement of their driver licenses also reported traveling to work by car. There are several reasons for this difference including reduced mobility due to a suspended license, lower income levels and car ownership, and the availability of employment opportunities closer to home.

Table 9: CAP Survey Socio-Economic Profile of Survey Respondents

FEATURE	VALUE
Number of Survey Respondents	75
Mean Household Size/Persons per Household	5.0
Average Number of Children per Household	1.8
Percent Employed	59%
Percent Unemployed	29%
Percent Self-employed**	5%

\*\* Excludes individuals self-reported as retired

Source: Seidman Survey and Interview Responses

The mean household size of the sample respondents was 5.0 persons per household. This was higher than the City of Phoenix average of 2.8 for owner-occupied and 2.72 for rental-occupied households.

59% of respondents were employed (excluding the self-employed). This included 47% of the mailed questionnaire responses, and 83.3% of respondents interviewed on registration day. Though not a direct comparison, 59.8% of people in the City of Phoenix were employed.<sup>26</sup>

<sup>&</sup>lt;sup>26</sup> American FactFinder - 2011-2015 American Community Survey Five-Year Estimates

### 6.0 CONSEQUENCES OF NON-COMPLIANCE

The survey responses provided evidence of the impacts of a suspended driver license on an individual's life. Of the new CAP registrants, 28.3% lost a job as a direct consequence of non-compliance and a suspended license, while 52.9% of CAP participants who had been in the program more than 3 months indicated that they had lost a job as a consequence of non-compliance and a suspended license. A study of New Jersey drivers reported that 42% of survey respondents with a history of suspension lost their jobs when they had their driving privileges suspended.<sup>27</sup> The job losses in New Jersey extended across all income and age groups, but were most significant among low-income and younger drivers.<sup>28</sup> 45% of people in New Jersey that lost their jobs were unable to find another.<sup>29</sup> 45.7% of new CAP registrants responding to the survey reported that they could not find a job.

New CAP registrants reported income losses ranging between \$1,200 and \$300,000 per person per year. Existing CAP participants reported income losses ranging between \$6,000 and \$35,000 per person per year. Combined, the median income loss reported by all CAP participants was \$36,800.<sup>30</sup> 63% of the new CAP registrants who had not had their licenses reinstated at the time of the study reported working less hours because of non-compliance, and 46% were unable to get a job.

The most notable consequence of non-compliance was the effect it has on family activities. 84.8% of new CAP registrants in the sample were unable to drive their family members to work. This indicated a broader societal and psychological impact beyond the individual resulting from a suspended driver license. The New Jersey study also looked at the psychological effects of a suspended driver license. They estimated that 85% of those with a history of suspensions 'often' or 'sometimes' thought about the suspension when not intending to; 72% were ashamed of their suspension; 81% experienced a loss of freedom; and 74% reported that it put a strain on family, friends and colleagues.<sup>31</sup>

<sup>&</sup>lt;sup>27</sup> Motor Vehicle Affordability and Fairness Task Force, (2006).

<sup>&</sup>lt;sup>28</sup> ibid

<sup>29</sup> ibid

<sup>&</sup>lt;sup>30</sup> This includes income loss due to reduced work hours or job loss.

<sup>&</sup>lt;sup>31</sup> ibid

FEATURE/CHARACTERISTIC	VALUE	
Percent whose lives affected by license suspension	99%	
Percent employed that lost a job	31%	
Range of income lost per person, per year	\$1,200 to \$300,000	
Median income lost per year	\$36,800	
Percent that worked less hours	57%	
Percent unable to get a job	47%	
Percent unable to drive family members to work	87%	
Percent travel time to work increased	79%	
Increases in car insurance payments	54%	
Main reason people joined CAP	Payment plan	

Table 10: The Impact of Non-compliance/License Suspension

Source: Seidman Survey and Interview Responses

76.1% of *new* CAP registrants who responded to the Seidman survey reported an increase in their travel time due to their suspended license; 94% of *existing* CAP participants also reported an increase in travel time.

Travel time for *new* CAP registrants who responded to the Seidman survey increased by 845 hours a year. Applying the VTT of \$22.90 per hour, the value of time that could have been saved if a license was not suspended, assuming all else remains the same, was estimated at \$19,350 per person per year. For *existing* CAP participants, the value of time that could have been saved without a suspended license was \$9,572 per person per year. Seidman therefore suggests a range of \$9,572.20 to \$19,350 for lost income opportunities per person due to the increased travel time associated with the loss/suspension of a driving license.

### THE CONSEQUENCES OF NON-COMPLIANCE – AN EXAMPLE OF AN EXISTING CAP PARTICIPANT

Responding to a mailed questionnaire, person X had originally failed to comply with a speeding citation. At the time of the survey, he was employed full-time and used a private vehicle to commute to work. 7 people lived in his household, including 4 children. The consequences of his non-compliance included:

- 780 hours a year additional traveling to work (VTT estimate of \$17,862 in lost income).
- An additional \$5,000 a year expenditure on other forms of travel.
- Lost a job due to the citation and initial suspension of a driver license.
- Worked an estimated 3,900 hours less in a year.
- Was unable to obtain a job.
- Was unable to drive family members to work.
- Reported an estimated \$35,000 in lost income.
- He joined CAP so he could visit his son in another state.

His perception of CAP? "Thank GOD the people who came up with this program!! THANK YOU!!!!"

### 7.0 THE ECONOMIC IMPACT OF CAP

Sample responses from CAP participants indicated that the reinstatement of licenses has had a positive impact. 76% of survey respondents indicated that the reinstatement of their driving licenses increased their ability to drive their family members around. 70% noted increased mobility as an important improvement in their lives, and close to 53% indicated that they had obtained a new job as a direct consequence of increased mobility from a reinstated driver license.

#### **Table 11: Economic Impact of Reinstated Driver Licenses**

LIFE CHANGE AS A RESULT OF CAP AND REINSTATEMENT OF A DRIVER LICENSE	PERCENT RESPONDENTS
Got new job	52.9%
Increased working hours	35.3%
Can qualify for a job	41.2%
Increased mobility	70.6%
Can drive family members around	76.5%
Have reduced my own travel time	70.6%
Spend less money on alternative ways to travel	70.6%

Source: Seidman Survey and Interview Responses

Among *existing* CAP participants, 41.2% reported an increase in income since joining CAP. This range of income gain was \$3,200 to \$48,000 a year per person, with a median increase of \$24,000.<sup>32</sup>

### **Estimated Potential Economic Impact of CAP Benefits**

The number of survey respondents who reported increased income because of the CAP was 41.2%. This equated to a median increase in income of \$24,000 per year. In September 2016, there were 7,735 participants in the CAP. To estimate the potential economic impacts of the CAP through September 2016, Seidman applied the survey data to an IMPLAN input-output model to quantify the statewide multiplier effects of an additional \$76.5 million in household spending. The results are summarized in Table 12. The estimated effects of the CAP for the 9-month study period were 1,904 job years, \$87 million in labor income, and \$149.6 million in GDP.

<sup>&</sup>lt;sup>32</sup> According to the 2009 NHTS Study, more income is associated with more travel. The highest income households made two and a half more person trips than the lowest income households. Men accounted for 57.6% of all work and work related business trips, while women accounted for 55% of family and errand-related person trips. Individuals reported traveling 31.92 miles of the 36.13 miles per day by private vehicles. For metropolitan areas with a population as large as Greater Phoenix, individuals, on average, spent 56.85 minutes per day traveling.

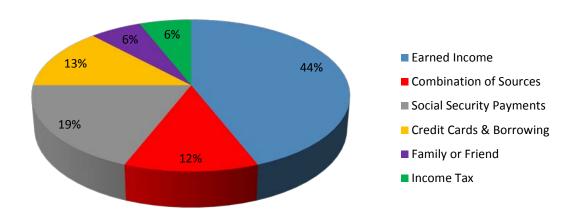
INCREASE IN HOUSEHOLD INCOME	EMPLOYMENT	LABOR INCOME	GDP
\$76.5 million	1,904	\$87 million	\$149.6 million
Source: Seidman's Calculations			

### Table 12: Estimated Economic Impacts of CAP at September 2016

Source: Seidman's Calculations

About 44% of CAP participants who responded to the survey paid their court fines and fees installments due from earned wages and salaries. Another 12% used a combination of wages and salaries, partner's income and social security payments. 19% used social security payments to pay their installments. 13% used borrowed money or credit cards to pay their installments due. The sources of income used to pay the CAP installments are summarized in Graph 5.

#### **Graph 5: Sources of Income for CAP Payments**



Source: Seidman Mailed Survey

### BIBLIOGRAPHY

- Belenky Peter, (2011). *Revised Departmental Guidance on Valuation of Travel Time in Economic Analysis*.U.S. Department of Transportation. September 28, 2011
- Carnegie, Jon, and Eger III, Robert J, (2009). *Reasons for Driver License Suspension, Recidivism, and Crash Involvement among Drivers with Suspended/Revoked Licenses.* Final Report. NHTSA. June 2009.
- Gerbers, Michael, and De Young, J. David, (2002). "An Examination of the Characteristics and Traffic Risk of Drivers Suspended/Revoked for Difference Reasons." Research and Development Branch, California Department of Motor Vehicles. November 2002.
- U.S. Census Bureau, (2017). American FactFinder. 2011-2015 American Community Survey, Five-Year Estimates. Website: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml. Accessed March 1, 2017.
- Gustitus, Sandra, Simmons, Melody, and Waller, Margy, (2008). "Access to Driving and License Suspension Policies for the Twenty-First Century Economy." *The Mobility Agenda*. Washington, DC. June 2008.
- Saunders, Mark, Lewis, Philip, and Thornhill, Adrian, (2012). *Research Methods for Business Students.* 6th edition. Pearson Education Limited.
- Motor Vehicle Affordability and Fairness Task Force, (2006). Alan M. Voorhees Transportation Center, Edward J. Bloustein School of Planning and Public Policy, Rutgers University and New Jersey Motor Vehicle Commission. Final Report. February 2006.
- Summary of Travel Trends, 2009 National Household Travel Survey, (2011). U.S. Department of Transportation. Website: http://nhts.ornl.gov/2009/pub/stt.pdf. Accessed March 1, 2017.

The Value of Travel Time Savings: Department Guidance for Conducting Economic Valuations. Revision 2,U.S.DepartmentofTransportation.September28,2011.Website:https://www.transportation.gov/regulations/value-travel-time.Accessed March 23, 2017.

### *Transportation Benefit-Cost Analysis*. Website:

http://bca.transportationeconomics.org/benefits/travel-Time. Accessed March 23, 2017.

*Transportation Cost and Benefit Analysis II – Travel Time Costs*. Victoria Transport Policy Institute. Website: http://www.vtpi.org. Accessed March 23, 2017.



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