



THE ECONOMIC, SOCIAL AND FISCAL IMPACT OF TELEVERDE'S PRISON WORKFORCE PROGRAM

Dr. Anthony Evans, Taylor Gilmore and Saager Buch

L. William Seidman Research Institute

W. P. Carey School of Business,

Arizona State University

FINAL REPORT

December 9, 2019

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).

First established in 1985 to serve as a center for applied business research alongside a consultancy resource for the Arizona business community, Seidman collects, analyzes and disseminates information about local economies, benchmarks industry practices, and identifies emerging business research issues that affect productivity and competitiveness.

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.

Working on behalf of government agencies, regulatory bodies, public or privately owned firms, academic institutions, and non-profit organizations, Seidman specializes in studies at the city, county or statewide level. Recent and current clients include:

- Alliance of Arizona Nonprofits
- Arizona Commerce Authority (ACA)
- Arizona Corporation Commission (ACC)
- Arizona Department of Health Services (ADHS)
- Arizona Dept. Mines and Mineral Resources
- Arizona Diamondbacks
- Arizona Hospital and Healthcare Association
- Arizona Investment Council (AIC)
- Arizona Mining Council
- Arizona Public Service Corporation (APS)
- Arizona School Boards Association
- Arizona Town Hall
- Banner Health
- BHP Billiton
- The Boeing Company
- The Boys & Girls Clubs of Metro Phoenix
- The Cactus League Association
- The Central Arizona Project (CAP)
- Chicanos Por La Causa
- City of Phoenix Dept. Economic Development
- City of Phoenix Fire Department
- CopperPoint
- Curis Resources (Arizona)
- The David and Gladys Wright House Foundation
- De Menna & Associates
- Dignity Health
- Downtown Tempe Authority
- Environmental Defense Fund
- Epic Rides/The City of Prescott
- EPCOR Water (USA), Inc.
- Excelsior Mining
- Executive Budget Office State of Arizona
- The Fiesta and Cactus Bowls Host Committee
- First Things First
- Freeport McMoRan
- Glendale Community College
- Goodwill Industries
- Greater Phoenix Economic Council
- HonorHealth
- Intel Corporation
- Maricopa Integrated Health System
- Navajo Nation Div. Economic Development
- The Pakis Foundation
- Phoenix Convention Center
- The Phoenix Philanthropy Group
- Phoenix Sky Harbor International Airport
- Protect the Flows
- Public Service New Mexico (PNM)
- Raytheon
- Republic Services, Inc.
- Rio Tinto
- Rosemont Copper Mine
- Salt River Project (SRP)
- Science Foundation Arizona (SFAZ)
- Super Bowl XLIX
- The Tillman Foundation
- Turf Paradise
- Valley METRO Light Rail
- Tenet Healthcare
- Vote Solar Initiative
- Waste Management Inc.
- Waste Management Phoenix Open
- Wells Fargo
- Yavapai County Jail District

TABLE OF CONTENTS

EXECUTIVE SUMMARY 1

 Benefits of Televerde for Participants..... 1

 Benefits of Televerde for Families of Participants..... 2

 Benefits of Televerde for the State of Arizona 3

1.0 INTRODUCTION 4

2.0 DATA AND METHODOLOGY..... 5

 2.1 Data..... 5

 2.2 Methodology..... 5

3.0 LITERATURE REVIEW..... 7

 3.1 Background 7

 3.2 Impact of Incarceration on Individuals 9

 3.3 Impact of Incarceration on Families 13

 3.4 Impact of Incarceration on Society 17

 3.5 Conclusion 19

4.0 BENEFITS OF TELEVERDE FOR PARTICIPANTS 20

 4.1 Financial Independence While Incarcerated..... 20

 4.2 Savings For Release 21

 4.3 Employment 21

 4.4 Earnings..... 22

 4.5 Education 24

 4.6 Recidivism 26

 4.7 Conclusion..... 27

5.0 BENEFITS OF TELEVERDE FOR FAMILIES OF PARTICIPANTS 28

 5.1 Lack of Dependence on Family During Incarceration..... 28

 5.2 Education 29

 5.3 Incarceration 30

 5.4 Health Behaviors 32

 5.5 Relationships..... 33

 5.6 Conclusion..... 36

6.0 BENEFITS OF TELEVERDE FOR THE STATE OF ARIZONA.....38

6.1 Decreased Cost of Incarceration.....38

6.2 State Income Tax Revenue40

6.3 Reduced Use of Arizona’s Entitlement Programs41

6.4 Reduced Use of Foster Care and Department of Child Safety Services42

6.5 Economic Impact of Televerde on Arizona43

6.6 Conclusion.....46

7.0 SUMMARY OF FINDINGS48

LIST OF TABLES

Table 1: Recidivism Rates by Gender - 2005.....	8
Table 2: Number of Inmates Employed Per Year and Wages Paid by Televerde	20
Table 3: Brookings Employment with Respect to Time Post-Release	21
Table 4: Televerde Employment Post-Release	22
Table 5: Median Annual Income with Respect to Time Post-Release.....	23
Table 6: Estimated Post-Release Earnings Benefit for Televerde Participants by Age Cohort	24
Table 7: Pre- and Post-Incarceration Educational Attainment of Televerde Survey Sample.....	25
Table 8: Motivated to Pursue Further Education due to Current/Former Employment with Televerde	26
Table 9: National vs. Televerde Rates of Recidivism	27
Table 10: Estimated Education Impact on Adult Children of Televerde Participants.....	29
Table 11: Rate of Incarceration among Adults	31
Table 12: Improved Relationships with Children due to Current/Former Employment with Televerde	34
Table 13: Improved Relationships with Partner due to Current/Former Employment with Televerde .	34
Table 14: Improved Relationships with Other Family Members due to Current/Former Employment with Televerde	35
Table 15: Estimated Cost-Savings to State Associated with Reduced Recidivism	39
Table 16: Annual Contribution of Incarcerated Televerde Employees to Prison Room and Board.....	39
Table 17: Estimated State Income Tax Revenue Impact by Age Cohort	40
Table 18: SNAP Eligibility and Maximum Monthly Allotment	42
Table 18: Televerde Employment Profile, 2011-2018.....	44
Table 19: Televerde Total Expenditure, 2011-2018	44
Table 20: Total Economic Impact of Televerde on Arizona, 2011-2018	45

LIST OF FIGURES

Figure 1: Percent of Survey Participants who Strongly Agree or Agree that their Relationships with Specific Types of Family Member have Improved.....	36
--	----

EXECUTIVE SUMMARY

The purpose of this study is to estimate the economic, social, and fiscal impact of Televerde and the Arouet Foundation's prison workforce program on individuals, families, and the State of Arizona.

The study draws from primary data (a May 2019 online survey of Televerde program participants¹ and operational data supplied by the client), and secondary data sourced from the Arizona Department of Corrections, the Bureau of Justice Statistics, and the Brookings Institution (among others).

An IMPLAN input-output model, customized for the State of Arizona is also used to estimate economic impact.

Benefits of Televerde for Participants

- Between 2011 and 2018, Televerde program participants cumulatively earned \$21.5 million² during their incarceration, enabling prisoners to take care of their own personal needs, fines, restitution and child support.
- Each prisoner also saved on average approximately \$10,100 enabling them to purchase clothing, secure housing, and pay for transportation post-release.
- 94.1% of Televerde participants are in paid employment approximately 5 years after release compared to the national average of 49.8% for former incarcerated females.
- Televerde participants appear to find higher wage-paying jobs than other former incarcerated prisoners. The average lifetime earnings of a Televerde participant post-release may be almost four times the national average for incarcerated females. Seidman estimates it could range from \$150,000 to more than \$1.9 million, dependent on age at the time of release, compared to a national average of \$40,000 to \$526,000.
- Televerde program participants go on to achieve higher levels of education post-release compared to other former incarcerated females. After incarceration, every Televerde participant has a High School diploma or GED, and their estimated median level of educational attainment is

¹ The term "program participants" will be used throughout this report to refer to individuals who have worked for Televerde during incarceration, regardless of their current employment status with the company.

² This is a nominal dollar total.

“some college.” Post-incarceration, 84.4% have at least some college education, including 30.4% with an Associate’s, Bachelor’s or Postgraduate degree.

- Recidivism rates for Televerde program participants are significantly lower than the national average. Approximately 0.4% of Televerde participants, 2011 through 2018, reoffend within 1 year, and 5.4% within 3 years. The national average among females released from state prisons is 35.1% for 1 year and 59.3% within 3 years.³

Benefits of Televerde for Families of Participants

- The earning potential of a Televerde program participant during their incarceration reduces their dependence on family for personal needs, fines, restitution, and child support.⁴
- The dependent children of a Televerde participant may be more likely to complete High School than the children of other former incarcerated prisoners. Seidman estimates that 21 children primarily cared for by Televerde participants are at risk of dropping out from High School based on the Televerde rate of recidivism, compared to 234 kids if the national rate of recidivism instead applied to the same families. This suggests that the children of Televerde participants could be 11 times less likely to drop out of high school based on the two rates of recidivism alone.
- The decreased rate of recidivism among Televerde program participants may also facilitate a decrease in the rate of incarceration among their adult children compared to the national average. Seidman estimates that a maximum of 2 children among Televerde participants may themselves be incarcerated as adults based on the current Televerde rate of recidivism, compared to a maximum of 22 children if the national rate of recidivism instead applied. This suggests that 20 less children to date have potentially been incarcerated as adults due to the lower rate of recidivism among Televerde participants.
- Observed increases in employment and income among Televerde program participants after release may also reduce barriers to health care and encourage the development of good health behaviors in dependent children. Quantification of these impacts is beyond the scope of the current study.
- Two thirds of Televerde participants agree or strongly agree that their relationships with their children have improved because of their current or former employment with the firm.

³ Alper, M. et. al. (2018). 2018 Update on Prisoner Recidivism: A 9-year Follow-up Period (2005-2014). *Bureau of Justice Statistics*.

⁴ The term “program participants” will be used throughout this report to refer to individuals who have worked for Televerde during incarceration, regardless of their current employment status with the company.

- 45.6% of Televerde participants agree or strongly agree that their relationships with partners/spouses have improved because of their current or former employment with the firm.
- 68.1% of Televerde participants agree or strongly agree that their relationships with other family members have improved because of their current or former employment with the firm.

Benefits of Televerde for the State of Arizona

- The lower rates of recidivism observed among the Televerde population may provide between \$49.2 million and \$76.4 million in cumulative cost savings to the state since 2011, dependent on the use of a 1-year or 3-year rate of recidivism. This equates to an annual saving of \$6.1 million to \$9.5 million.
- Televerde participants contribute 35% of any wages earned during their time inside Perryville towards the cost of their incarceration. This amounts to a total cumulative saving of \$7.5 million for the State of Arizona, from 2011 to 2018.⁵
- Employed Televerde program participants may contribute an additional \$26.9 million in personal income taxes over their post-release lifetime as a result of their increased earnings.
- The lower unemployment rate and higher salaries earned by Televerde program participants post-release generates entitlement program savings for the State.
- Lower rates of recidivism among Televerde participants may results in a lower foster care burden. conservatively estimates cumulative cost savings of \$7.8 million to \$8.9 million for foster care, 2011 through 2018, for Televerde participants. If other Department of Child Safety Services not examined within the current study are added, the state's cost-savings may be even bigger.
- Televerde's operations also generate an estimated cumulative total of \$238.2 million GDP by State and \$196.1 million labor income in the Arizona economy between 2011 and 2018.
- Seidman conservatively estimates that the State of Arizona on average has received \$13.3 million annual benefits and cost-savings for the 1,086 participants on the Televerde program. This is based on lower annual incarceration costs associated with the reduction in recidivism, the average annual contributions of program participants to their own incarceration costs, average annual state tax revenue benefits, and average annual foster care savings. The actual saving will be higher when the reduced use of entitlement programs are additionally taken into account.

⁵ The cumulative saving for 2011 through 2018 is expressed in nominal dollars.

1.0 INTRODUCTION

Televerde is a global demand generation company that provides sales and marketing solutions designed to acquire new business and accelerate revenue. First established in Phoenix in 1995, Televerde's global footprint extends beyond the United States to Argentina, Australia, and Scotland.

Televerde's business model is based in part on training, education, and jobs for incarcerated women, both while in prison and after release. This mission prompted the company to establish the Arouet Foundation in 2011, a nonprofit corporation that helps women tap into their strengths, identify viable career paths, and successfully reintegrate into society after incarceration. Arouet's educational programs and scholarships, mentoring, life-skills classes, health and wellness support, family reunification initiatives, and employment assistance has enabled more than 1,000 women to establish stable, self-sufficient lives outside of prison since 2011.

The purpose of this report is to estimate the economic, social, and fiscal impact of Televerde and the Arouet Foundation's prison workforce program from three perspectives:

- Program participants;
- Families of program participants; and
- The State of Arizona.

This study will address each economic, social, and fiscal benefit separately and estimate a monetary value, where possible.

Section 2.0 describes the data and methods employed by Seidman. A review of academic and professional literature focusing on the impacts of incarceration is presented in Section 3.0. This review includes insights about the measurable benefits of vocational and educational experience programs for currently and formerly incarcerated individuals. Sections 4.0 through 6.0 estimate the economic, social, and fiscal benefits for program participants, their families, and the State of Arizona. A summary of key findings is presented in Section 7.0.

2.0 DATA AND METHODOLOGY

2.1 Data

This study draws from anonymous data on 617 Televerde program participants that was provided by Televerde in conjunction with the Arizona Department of Corrections. This dataset includes demographic, employment and educational information at the time of intake to prison. The Arizona Department of Corrections also provided recidivism data for all 1,086 Televerde program participants from 2011 to 2018.

Additional data was collected through an online survey of 135 Televerde program participants designed by the L. William Seidman Research Institute (Seidman). The survey was distributed by Televerde via email to both current and former employees who worked for Televerde during incarceration. The surveys distributed to current and former employees were the same with the exception of some additional employment status questions on the former employee survey.

To quantify the benefits of Televerde and the Arouet Foundation, Seidman also draws from data published by:

- The Bureau of Justice Statistics,
- The Brookings Institution, and
- Arizona Department of Corrections.

Televerde provided additional data on their operational expenditure required to generate an economic impact estimate using the IMPLAN input-output model.

2.2 Methodology

Seidman conducted an initial survey of relevant literature in order to identify measurable benefits of vocational and educational experience programs for currently and formerly incarcerated individuals, their families, and society. The literature review also examined the likely economic and social outcomes of released prisoners without access to such programs. The full literature review is provided in section 3.0.

The literature review, along with an informal discussion session with a sample of Televerde program participants, informed the design and implementation of a survey tool which was then distributed to current and former Televerde employees who worked for Televerde during incarceration.

Primary survey data, in conjunction with anonymous demographic and recidivism data sourced from the Arizona Department of Corrections, was used to build a series of likely economic and social outcome scenarios for Televerde program participants after release. This was compared to an alternative set of economic and social outcomes for female state prisoners who did not work for Televerde during incarceration, as suggested by relevant literature. Quantifiable differences in the economic and social impacts of both sets of outcomes are used to estimate the benefits of the Televerde prison workforce program to participants, families, and the State of Arizona. An explanation of metrics used is provided where appropriate in Sections 4.0 through 6.0.

An IMPLAN input-output model customized for the State of Arizona is used to estimate the economic impact of Televerde's annual operations and capital expenditure. Additional reflections on the IMPLAN model and data inputs are provided in Section 6.3.

3.0 LITERATURE REVIEW

3.1 Background

The Sentencing Project estimates that Arizona has the fifth highest state imprisonment rate in the United States for prisoners sentenced to more than one year at 569 inmates per 100,000 residents, based on U.S. Bureau of Justice Statistics (BJS) data for 2017.⁶ The 40,263 Arizona prison population in 2017 consists of 36,543 men, and 3,720 women. This is consistent with a U.S. Department of Justice April 2019 update that also identifies a total state and federal prisoner population (irrespective of prison sentence length) of 42,030 in Arizona (that is, 37,971 men and 4,059 women).⁷ BJS total female incarceration rates for the United States in 2017 are 111,360 (all prisoners) and 105,033 (prisoners sentenced for at least one year).

Kajstura, using 2015 data, estimates that the rate of female incarceration in Arizona at 184 per 100,000. If every U.S. state was treated as a country, this would rank Arizona 12th highest in the world. Under the latter scenario, individual U.S. states would be ranked 1 through 26th highest, with the United States as a whole ranked 27th.⁸ She notes that the U.S. accounts for 30 percent of the world's incarcerated women, but only 4 percent of the world's female population. This presents a significant financial burden, as the cost of incarceration in an Arizona state prison in Fiscal Year (FY) 2017 was approximately \$68.55 per day per person as reported by the Arizona Department of Corrections.⁹ For a full year, this equates to approximately \$25,021 per prison inmate in FY 2017.

The Arizona Department of Corrections (ADC) end of year confined population for FY 2018 was 42,113, including 38,023 (90.3 percent) males and 4,090 (9.7 percent) females.¹⁰ The average length of stay among males was 9.1 years in FY 2018, much longer than the average stay of 5.1 years among females.¹¹ The median length of stay decreases significantly for both populations at 5.3 years for males and 3.2 years for

⁶ The Sentencing Project. (2019). State-by-State Data. Retrieved from <https://www.sentencingproject.org/the-facts/#rankings?dataset-option=SIR>

⁷ U.S. Department of Justice, (2019), Prisoners in 2017. April 2019, NCJ 252156. Retrieved from <https://www.bjs.gov/content/pub/pdf/p17.pdf>

⁸ Kajstura, A. (2018). States of Women's Incarceration: The Global Context 2018. *Prison Policy Initiative*.

⁹ Ryan, C. L. (2018). FY 2017 Operating Per Capita Cost Report. *Arizona Department of Corrections, Bureau of Planning, Budget and Research*.

¹⁰ Arizona Department of Corrections. (2018). Admissions, Releases, Confined Population Fact Sheet.

¹¹ Ibid.

females.¹² The average age among the ADC confined population was 38.6 years for males and 37.1 years for females as of June 2018.¹³

Arizona has a relatively moderate rate of recidivism compared to other U.S. states. The ADC defines a recidivist as an offender who returns to the custody of the department for any reason, either with a new criminal conviction or a technical violation of their release conditions.¹⁴ Estimates of recidivism can vary based on reference period, typically three or five years after release from custody. The Arizona recidivism rate was approximately 42.4 percent in 2014.¹⁵ The Pew Research Center estimated that the three-year Arizona recidivism rate in 2007 was 39.1 percent.¹⁶ Both estimates of Arizona recidivism fall below the national average of 68.4 percent rearrested within three years of release in 2005.¹⁷

BJS tends to show a difference in recidivism rates between males and females. An analysis of 1994 BJS data from 15 states at that time estimated that 30.0 percent of females reoffended within three years.¹⁸ This is lower than the total recidivism rate, including men and women, at 37.0 percent.¹⁹ Updated BJS data from 30 states in 2005, displayed in the BJS’ Prisoner Recidivism Analysis Tool (P.R.A.T.), showed an increase in the female recidivism rate to 58.5 percent rearrested for a new offense within three years of release, compared to 69.0 percent for males.²⁰ A 2018 update on prison recidivism for prisoners released in 2005 estimates a female recidivism rate of 59.3 percent rearrested within three years, compared to 69.5 percent.²¹ The P.R.A.T. and 2018 update estimates are summarized in Table 1.

Table 1: Recidivism Rates by Gender - 2005

	REARRESTED WITHIN 1 YEAR		REARRESTED WITHIN 2 YEARS		REARRESTED WITHIN 3 YEARS	
	P.R.A.T.	NCJ 2018	P.R.A.T.	NCJ 2018	P.R.A.T.	NCJ 2018
Females	34.4%	35.1%	49.8%	50.8%	58.5%	59.3%
Males	44.5%	44.9%	60.7%	61.2%	69.0%	69.5%
Total	43.4%	43.9%	59.5%	60.1%	67.8%	68.4%

¹² Ibid.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ O’Donnell, D. E. (2015). State Criminal Justice Profile: Arizona. *Bureau of Justice Assistance, U.S. Department of Justice*. Retrieved from https://bjafactsheets.iir.com/PDF/Arizona_State_Profile_Sheet.pdf

¹⁶ Pew Center on the States. (2011). State of Recidivism: The Revolving Door of America’s Prisons. *The Pew Charitable Trusts*.

¹⁷ Alper, M. et. al. (2018). 2018 Update on Prisoner Recidivism: A 9-year Follow-up Period (2005-2014). *Bureau of Justice Statistics*.

¹⁸ Deschenes, E. P. et. al. (2007). Recidivism Among Female Prisoners: Secondary Analysis of the 1994 BJS Recidivism Data Set. *US Department of Justice*.

¹⁹ Ibid.

²⁰ Bureau of Justice Statistics, (2016). Prisoner Recidivism Analysis Tool – 2005. Available at bjs.gov/recidivism_2005_arrest/

²¹ Alper, M. et. al. (2018). 2018 Update on Prisoner Recidivism. *U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics Special Report*. Retrieved from <https://www.bjs.gov/content/pub/pdf/18upr9yfup0514.pdf>

Sources: P.R.A.T. - Bureau of Justice Statistics, Prisoner Recidivism Analysis Tool 2005 – 2010; and NCJ 2018 – Alper et al. (2018)

Among females in custody of the Arizona Department of Corrections in FY 2016, 79.8 percent have a felony history prior to their current conviction(s), and 42.2 percent have served a prior Arizona prison term.²² Female prisoners in Arizona are less likely than males to have a violent criminal history and more likely to have an intense need for substance abuse treatment.²³ For example in 2016, 27.5% of female prisoners in Arizona have a moderate need for substance abuse treatment, and 61.6% an intense need for substance abuse treatment. This compares to 41.3 percent (moderate) and 36.0 percent (intense) for men. The most common type of commitment offense among both male and female prisoners is drug-related, accounting for the offenses of 20.0 percent of male prisoners and 33.5 percent of female prisoners.

Brookings estimates that more than 620,000 individuals are released from U.S. prisons on an annual basis.²⁴ One significant barrier to reentry into society is employment. Research has shown that individuals with criminal records have higher unemployment rates than those without any criminal history. A 2018 Brookings study shows that within the first full calendar year after release from prison, only 55.5 percent of previously incarcerated individuals report any employment, and the median earnings of those who are employed amount to approximately \$10,090 annually.²⁵

Many educational and vocational training programs exist to assist former prisoners in navigating the challenges of reentry, including finding employment and securing financial independence. Research indicates that post-release employment is one of the most consistent predictors of recidivism, so these programs also contribute value to federal, state, and local governments by reducing costs associated with incarceration. This literature review will explore relevant studies and their findings on the quantifiable and non-quantifiable impacts of such correctional programs, as well as the alternative scenarios where such programs do not exist.

3.2 Impact of Incarceration on Individuals

Securing stable employment and long-term financial independence is a significant hurdle for many offenders in the United States. Literature surrounding the subject tends to find that unemployment rates

²² Arizona Department of Corrections. (2018). Admissions, Releases, Confined Population Fact Sheet.

²³ Ibid.

²⁴ Looney, A. & Turner, N. (2018). Work and Opportunity Before and After Incarceration. *Economic Studies at Brookings*.

²⁵ Ibid.

are higher among individuals with criminal records than those without. Other barriers including lack of public assistance, affordable housing, and transportation compound the employment issue for many returning citizens.

An Arizona State University School of Criminology and Criminal Justice 2014 study finds that women with criminal records are more negatively impacted by their incarceration histories than men with criminal records.²⁶ Focusing specifically on female test subjects, 9.6 percent without a criminal record receive a positive response to their job application, compared to 7.7 percent with a criminal record. In short, they conclude that women without a prison record are more likely to receive a positive response to their job application than women with a criminal record, but the difference is only marginally significant ($p \leq .10$).

A 2018 study by the Prison Policy Initiative calculates the unemployment rate for formerly incarcerated ex-offenders to be 27 percent. That is, more than one out of four people seeking employment who previously served time in prison cannot find a job. Focusing specifically on gender, they refer to working-age “prison penalties” that increase unemployment rates by 18.9 percentage points for white women (from 4.3 percent to 23.2 percent) and 37.2 percentage points for black women (from 6.4 percent to 43.6 percent) when compared to their general population peers.²⁷

A related study published by the National Institute of Health examined the processes through which former prisoners attain economic security, including how they meet basic material needs and achieve upward mobility in four counties in Southeast Michigan. Researchers conducted longitudinal qualitative interviews with 15 male and 7 female subjects selected based on race, local geographic context, and services provided by Michigan Department of Corrections.²⁸ The majority of subjects interviewed were not able to achieve long-term economic stability or upward mobility, and were hindered by public benefits restrictions, including lack of transportation and stable, low-cost housing.²⁹ The study also found that public benefits restrictions for drug offenders tend to disproportionately affect women, including loss of public housing and income support.³⁰

²⁶ Decker, S. H. et al. (2014). Criminal Stigma, Race, Gender, and Employment: An Expanded Assessment of the Consequences of Imprisonment for Employment. *Arizona State University, School of Criminology and Criminal Justice*.

²⁷ Couloute, L., and Kopf, D. (2018). Out of Prison & Out of Work: Unemployment among Formerly Incarcerated People. Retrieved from: <https://www.prisonpolicy.org/reports/outofwork.html>

²⁸ Harding, D. J. et al. (2014). Making Ends Meet After Prison. *National Institute of Health*.

²⁹ Ibid.

³⁰ Ibid.

The National Institute of Justice (NIJ) in 2012 started to collate by state the legal and regulatory restrictions that limit or prohibit people convicted of crimes from accessing employment, business and occupational licensing, housing, voting, education, and other rights, benefits, and opportunities. The NIJ describe some of these collateral consequences as serving a legitimate public safety or regulatory function. For example, keeping firearms out of the hands of people convicted of violent offenses, prohibiting people convicted of assault or physical abuse from working with children or the elderly, or barring people convicted of fraud from positions of public trust. Others are directly related to the crime that was previously committed, such as registering as a sex offender, or driving restrictions for driving offenses. However, some collateral consequences apply without regard to the relationship between the crime and opportunity being restricted, the time that has passed since the crime was committed, or rehabilitation post-conviction. This database has been updated by the CSG Justice Center since 2017, and currently identifies 827 collateral consequences for people convicted of crimes in Arizona.³¹ Some of these consequences are classified in multiple ways. Highlights include:

- Employment and volunteering: 523 collateral consequences
- Occupational & professional licensure and certification: 376 collateral consequences
- Business licensure and participation: 261 collateral consequences
- Political and civic participation: 81 collateral consequences
- Judicial rights: 45 collateral consequences
- Family and domestic rights: 40 collateral consequences
- General relief provision: 31 collateral consequences
- Housing and residency: 27 collateral consequences
- Government contracting and program participation: 15 collateral consequences
- Government benefits: 9 collateral consequences

In a study conducted by the Alliance for a Just Society, the authors examined state-based restrictions on released prisoners that were seeking employment. According to the authors, these restrictions are set up to disable prisoners from taking jobs in certain sectors of the economy, usually high-paying jobs or jobs requiring a high level of education. The study used 2015 data from the American Bar Association Criminal Justice Section to gather evidence from 17 states (Arizona excluded) on legislative restrictions and their

³¹ NICC (2019). Collateral Consequences Search Engine. Available at: <https://niccc.csgjusticecenter.org/>

impact on ex-offenders. The study found that these restrictions perpetuate a pipeline from prison to poverty, forcing released prisoners into low-wage employment. The authors argued that a policy shift from marginalizing those with criminal records to rehabilitating them through in-prison programs is necessary.³²

Literature suggests that released prisoners face high barriers to entry in the competitive labor market, and may struggle to secure stable, high-wage employment. Effective vocational training programs may serve to provide reentering citizens with the skills needed to be successful in the job market, thereby allowing them to gain stable employment and financial independence.

In addition, Yang's (2017) study of public assistance and recidivism estimates that recently released felons with full access to public benefits are 10 percent less likely to return to prison within a year.³³ This is of particular importance as the Personal Responsibility and Work Opportunity Reconciliation Act bars anyone convicted of a drug-related felony from the receipt of Temporary Assistance to Needy Families (TANF) or food stamps as part of the Supplemental Nutrition Assistance Program (SNAP). Many states have subsequently relaxed these rules. For example, as of January 2019, only three states (Mississippi, South Carolina and West Virginia) upheld the full ban on food stamps, while ten states kept the full ban on cash assistance.³⁴

In 2017, Governor Ducey signed into law House Bill 2372 which in part expanded SNAP benefits to individuals convicted of a felony offense.³⁵ ARS-46-219 subsequently allows anyone previously convicted of a drug felony to apply for SNAP provided they agree to random drug testing and meet at least one of following criterion:

- Successfully completes a substance abuse treatment program.

³² Fredericksen, A. & Omli, D. (2016). Jobs After Jail: Ending the Prison to Poverty Pipeline. *Alliance for a Just Society*.

³³ Yang, C. (2017). Does Public Assistance Reduce Recidivism? *American Economic Review: Papers and Proceedings*, Vol. 107 (5). Retrieved from: http://www.law.harvard.edu/programs/olin_center/papers/pdf/Yang_920.pdf

³⁴ Quinn, M. (2019). Criminal Justice Reform Paves the Way for Welfare Reform. *Governing.com*, January 22, 2019. Retrieved from: <https://www.governing.com/topics/health-human-services/gov-welfare-felons-states-federal-ban-tanf-snap-pennsylvania.html>

³⁵ Office of the Governor Doug Ducey (2017). Governor Ducey Signs Legislation To Help Arizona's Most Vulnerable. May 22, 2017. Retrieved from: <https://azgovernor.gov/governor/news/2017/05/governor-ducey-signs-legislation-help-arizonas-most-vulnerable>

- Has been accepted for treatment in a substance abuse treatment program but is subject to a waiting list to receive available treatment, remains enrolled in that program and enters at the first available opportunity.
- Has been accepted for treatment and is participating in a substance abuse treatment program.
- Is determined by a licensed medical provider to not need substance abuse treatment.
- If applicable, is in compliance with all terms of probation.³⁶

3.3 Impact of Incarceration on Families

An abundance of literature explores the direct and indirect impacts of incarceration, particularly parental incarceration, on families and children. Studies generally evaluate the impacts to family structure, financial relationships, income levels, emotional support systems, and living arrangements during and after the incarceration period. Some research also suggests that parental incarceration increases the risk of child delinquency, school dropout, and incarceration, suggesting that the effects of parental incarceration are expansive and often cyclical.

In a study conducted by the College of William and Mary Department of Psychology, researchers explored the effects of having a currently or recently incarcerated parent on children in five U.S. cities. Using archival data from 1993 to 1996 from the Children-at-Risk program in public schools, researchers demonstrated that a history of parental incarceration predicts family victimization and delinquent behaviors in children more accurately than demographic characteristics or other risk experiences.³⁷

A similar report using data from the National Longitudinal Study of Adolescent Health to Adult Health used multivariate logistic regression models to compare survey data for young adults who reported parental incarceration during childhood. The data was collected across the United States in two waves, the first between 1994 and 1995 and the second in 2008.³⁸ Researchers found that a history of parental incarceration is associated with lower use of health care and riskier health behavior such as prescription drug abuse and 10 or more lifetime sexual partners.³⁹ In particular, maternal incarceration was found to

³⁶ Arizona State Legislature 46-219. Retrieved from: <https://www.azleg.gov/viewdocument/?docName=https://www.azleg.gov/ars/46/00219.htm>

³⁷ Aaron, L. & Dallaire, D. H. (2009). Parental Incarceration and Multiple Risk Experiences: Effects on Family Dynamics and Children's Delinquency. *College of William & Mary, Department of Psychology*.

³⁸ Heard-Garris, N. et al. (2018). Health Care Use and Health Behaviors Among Young Adults With History of Parental Incarceration. *Pediatrics*, 142.

³⁹ Ibid.

be associated with higher likelihood of emergency department use.⁴⁰ The associated public costs were not quantified.

A 2007 report by the National Council on Family Relations attempted to break down the impacts of parental incarceration on children by maternal versus paternal incarceration. The report used 1997 data from the U.S. Department of Justice Survey on Inmates in State and Federal Correctional Facilities. Researchers found that adult children of incarcerated mothers are 2.5 times more likely to be incarcerated than adult children of incarcerated fathers.⁴¹ Additionally, adult children of incarcerated mothers with a history of substance abuse are at particularly high risk of incarceration.⁴² One possible explanation for this differential is that minor children of incarcerated mothers are significantly more likely to move to non-familial care situations (i.e. foster care, orphanages) than minor children of incarcerated fathers.⁴³

A 2003 policy brief by the Urban Institute, Justice Policy Center offered a similar finding: two-thirds of incarcerated mothers reported being the only caregiver prior to their conviction, making their children significantly more likely to move to a non-familial caregiver following incarceration.⁴⁴ This report also distinguished impacts of parental incarceration on children by age range and developmental status, suggesting that children less than two years suffer from impaired parent-child bonding while children 15-18 years are more likely to fall into patterns of intergenerational crime and incarceration.⁴⁵ Researchers argued that the severity of the impacts on children depend significantly on the child's age and if the incarcerated parent is the exclusive caregiver.⁴⁶

A similar study by a researcher at Quinnipiac University examined the effects of parental incarceration on criminal activity of adult children. The report drew on data from the 1997 National Longitudinal Survey of Youth. The author found that the odds of being arrested are 1.35 times greater for an individual whose

⁴⁰ Ibid.

⁴¹ Dallaire, D. H. (2007). *Incarcerated Mothers and Fathers: A Comparison of Risks for Children and Families*. National Council on Family Relations.

⁴² Ibid.

⁴³ Ibid.

⁴⁴ Travis, J. et. al. (2003). *Families Left Behind: The Hidden Costs of Incarceration and Reentry*. Urban Institute, Justice Policy Center.

⁴⁵ Ibid.

⁴⁶ Ibid.

father was incarcerated and 1.51 times greater for an individual whose mother was incarcerated.⁴⁷ These results indicate the cyclical nature of incarceration across generations.

In a study published in the *International Journal of Psychology and Education Studies*, researchers examined whether parental incarceration negatively affects high school graduation in young adults. The report used data on 12,418 students from the Add Health Wave IV dataset. Authors found that individuals with a history of maternal incarceration were 16.7 percent less likely to attain a high school diploma, and individuals with a history of paternal incarceration were 8.1 percent less likely to do so.⁴⁸

A similar study by a researcher at Brown University analyzed school dropout rates among children with incarcerated mothers in Illinois. The report used data compiled from several sets of Illinois state administrative collections. The author calculated that the risk of school dropout was 20 to 28 percent higher among youth with incarcerated mothers during the period of maternal incarceration.⁴⁹

Murphy and Cooper (2015) estimate that children who have had an incarcerated resident parent on average are likely to lacking any experience of parental incarceration:⁵⁰

- Frequent economic hardship
- Parental separation or divorce
- Parental death
- Witnessing domestic violence
- Witnessing or experiencing neighborhood violence
- Living with someone who is mentally ill or suicidal
- Living with someone who has a substance abuse problem
- Experiencing racism.

⁴⁷ Gius, M. (2016). The Effects of Paternal Incarceration on the Criminal Activity of Adult Children. *Journal of Forensic Psychology*, 1(4).

⁴⁸ Huynh-Hohnaum, A. et. al. (2015). Incarcerated Mothers and Fathers: How their Absences Disrupt Children's High School Graduation. *International Journal of Psychology and Educational Studies*.

⁴⁹ Cho, R. M. (2011). Understanding the Mechanisms Behind Maternal Imprisonment and Adolescent School Dropout. *Family Relations*.

⁵⁰ Murphey, D., and Cooper, P.M. (2015). Parents Behind Bars: What Happens to Their Children? Retrieved from: childtrends.org/wp-content/uploads/2015/10/2015-42ParentsBehindBars.pdf

Finally Turney and Goodsell (2018) conclude that parental incarceration could affect up to four aspects of children's wellbeing, specifically behavior, education, health, and hardship/deprivation.⁵¹ However, in a prior study, Turney also notes the effects of maternal incarceration on children are not heterogeneous. That is, the children of mothers with a high propensity for experiencing incarceration are often already an extremely disadvantaged group, and the influence of these other disadvantages contributes as much to the unfavorable outcomes as the incarceration of their mothers. However, the children of mothers with a very low (less than 5 percent) risk of experiencing incarceration, the consequences of that incarceration can exert a greater negative influence on their futures.⁵²

While the type and degree of impacts vary throughout the literature, all research acknowledges the negative effects of parental incarceration on families and children. These negative effects can be exaggerated when the incarcerated parent is the primary caregiver, which research shows is predominately the case for incarcerated mothers. While these negative impacts are not quantified in terms of public expenditure on non-familial care systems or health care, there is likely a significant cost associated with the increasing rate of parental incarceration among U.S. children.

There is also an additional cost borne by families while their family member is incarcerated. That is the money spent on conviction-related costs, including restitution and attorney fees, plus the costs of calls, visitation, commissary, and health care. A 2015 report by the Neighborhood Funders Group estimates that the family of a convicted member on average spend \$13,607 on conviction-related costs alone.⁵³ The report fails to provide similar average costs for calls, visitation, commissary and health care, but notes that one in three of their survey participants went into debt to cover phone and visitation costs. The most frequent barriers identified by survey participants to maintaining contact with incarcerated family members include the cost of phone calls (69%), distance to location of family member (47%), and visitation-related costs (46%). They also note that Arizona charges adults a one-time \$25 background check fee, prior to allowing them to visit family members in its state prisons.

⁵¹ Turney, K., and Goodsell, R. (2018). Parental Incarceration and Children's Wellbeing. *The Future of Children* Vol. 28 No. 1 Spring 2018. Retrieved from: https://kristinturney.files.wordpress.com/2018/11/turney-goodsell_2018.pdf

⁵² Turney, K., and Wildeman, C. (2015). Detrimental for Some? Heterogenous Effects of Maternal Incarceration on Child Wellbeing. *Criminology & Public Policy*, Vol 14 Issue 1. Retrieved from: <https://doi.org/10.1111/1745-9133.12109>

⁵³ The Neighborhood Funders Group (2015). Who Pays? The True Cost of Incarceration on Families. Retrieved from: <http://whopaysreport.org/wp-content/uploads/2015/09/Who-Pays-FINAL.pdf>

3.4 Impact of Incarceration on Society

Programs that work to help released prisoners secure employment may also provide a benefit to society. As reentering citizens attain wage-paying employment, they are likely to contribute more in taxes and economic productivity. Additionally, many studies find that employment is negatively associated with recidivism, indicating that prisoners who attain stable jobs may be less likely to reoffend.

A 2008 Center for Economic Policy Research (CEPR) study reviewed the impact of incarceration on released prisoners' employment opportunities. The CEPR cited a range of literature, including the National Longitudinal Survey of Youth, employer surveys, and studies of employer behavior. The review found that most research shows that incarceration has moderate to strong effects on employment.⁵⁴ Researchers quantified the impact of incarceration on employment rates and economic output using 2008 data. They reported that incarceration lowered employment rates by 0.8 to 0.9 percentage points and cost the country \$57 to \$65 billion in GDP per year.⁵⁵

The CEPR study was recently updated with 2014 data for incarcerated individuals as well as impacts on employment and economic output. Unlike the previous study, the updated report included data on released female prisoners. The updated CEPR study found a 0.9 to 1.0 percentage point decrease in employment as a result of incarceration, equivalent to 1.7 to 1.9 million workers.⁵⁶ This costs the economy about \$78 to \$87 billion in annual GDP.⁵⁷

In a study conducted by the National Bureau of Economic Research, authors aimed to measure the impact of post-incarceration wages on recidivism. The authors used the National Corrections Reporting Program to measure outcomes of nearly six million offenders from 2000-2014. Findings showed that 35 percent of the sample returned to prison within three years of release.⁵⁸ The authors found that a \$1.00 increase in the minimum wage leads to a reduction in recidivism for both men and women by 2.25 percent.⁵⁹

⁵⁴ Center for Economic Policy Research. (2008). Returns on Investments in Recidivism-reducing Programs.

⁵⁵ Ibid.

⁵⁶ Center for Economic Policy Research. (2016). Returns on Investments in Recidivism-reducing Programs.

⁵⁷ Ibid.

⁵⁸ Agan, A. & Makowsky, M. (2018). The Minimum Wage, EITC, and Criminal Recidivism. *National Bureau of Economic Research*.

⁵⁹ Ibid.

Both work release programs and post-release assistance programs have demonstrated impacts on recidivism rates, which translate to a cost avoidance benefit distributed among federal, state, and local governments. Two comparable studies on the impact of work release programs on recidivism rates were conducted in Minnesota and Washington. The first study, published by the Criminal Justice Policy Review, compared outcomes from 1,785 prison work release participants and 1,785 matched non-participants between 2007 and 2010.⁶⁰ Researchers found that work release programs significantly, but modestly, reduce the risk of reoffending with a new crime and increase the chances that individuals find employment post-release.⁶¹ Similarly, a study comparing outcomes of work release participants and non-participants in Washington between 1998 and 2003 found that work release facilities reduce total recidivism by 2.8 percent.⁶²

A number of studies have also attempted to monetize the net impacts of correctional treatment programs, with an emphasis on employment and vocational training programs. A comprehensive review of 12 U.S. and 2 U.K. cost-benefit analyses from the University of Massachusetts – Lowell evaluated the impact of correctional treatment on the rate of reoffending in the community. All of the studies except for one yielded a favorable benefit-cost ratio ranging from 1.13:1.00 to 270.00:1.00, meaning society received a return of 1.13 to 270 monetary units (dollar or pound) for each unit spent on the programs.⁶³ The study that did not return a favorable benefit-cost ratio examined a small number of young offenders in a relatively new military-style work program in the U.K. and therefore may be less applicable to this scope of work.⁶⁴ Neither the state nor the nation contribute to the cost of implementing Televerde's program.

According to the Washington State Institute for Public Policy, work release programs generate approximately \$3.82 of benefits per dollar of cost, equivalent to \$2,300 per work release participant.⁶⁵ These economic benefits include forecasted benefits to taxpayers and crime victims as a result of reduced recidivism among work release participants. Among Minnesota work release participants, this monetary

⁶⁰ Duwe, G. (2015). An Outcome Evaluation of a Prison Work Release Program: Estimating Its Effects on Recidivism, Employment, and Cost Avoidance. *Criminal Justice Policy Review*.

⁶¹ Ibid.

⁶² Drake, E. (2007). Does Participation in Washington's Work Release Facilities Reduce Recidivism? *Washington State Institute for Public Policy*.

⁶³ Welsh, B. C. (2004). Monetary Costs and Benefits of Correctional Treatment Programs: Implications for Offender Reentry. *Federal Probation*.

⁶⁴ Ibid.

⁶⁵ Drake, E. (2007). Does Participation in Washington's Work Release Facilities Reduce Recidivism? *Washington State Institute for Public Policy*.

benefit was estimated to be smaller at approximately \$700 per work release participant.⁶⁶ This discrepancy could stem from differences in employment programs within Washington and Minnesota prison systems or an imbalance of success among state correctional programs and legislature in reducing recidivism.

While the range of monetary values differs significantly across studies, almost all cost-benefit analyses report a net benefit of some amount to society for every dollar (or pound) spent on pre- and post-release employment programs. This value stems from the success of correctional employment programs in reducing rates of recidivism across communities, which generates a cost-saving for society.

3.5 Conclusion

The high rate of female incarceration in Arizona presents a significant financial and social burden at the individual, family, and community levels. Research shows that incarceration has long-term negative impacts on employment opportunities, which often prevents former prisoners from supporting themselves or their families. Ex-offenders who do find employment are typically limited to low-wage jobs with little or no upward mobility. Not only does this cost the economy in terms of lost output, many studies have also found that post-release employment is significantly correlated with recidivism. For example, Nally et al (2014)'s five-year study indicates that post-release employment is an effective buffer for reducing recidivism among ex-offenders.⁶⁷ A decrease in reoffending, in turn, leads to a decrease in public expenditure on incarceration costs.

Various educational and vocational programs are in place to support current and former prisoners through the challenges of reentry, including finding employment and securing financial independence. These programs contribute value to federal, state, and local governments by reducing rates of recidivism and the associated costs of incarceration. The impacts of such programs are expansive, as they not only benefit the individual recipients but also their families and greater communities. While the estimated economic and social impacts of such programs vary among individual studies, almost all research on the subject demonstrates that reentry assistance programs provide a net benefit to society.

⁶⁶ Duwe, G. (2015). An Outcome Evaluation of a Prison Work Release Program: Estimating Its Effects on Recidivism, Employment, and Cost Avoidance. *Criminal Justice Policy Review*.

⁶⁷ Nally, J.M., Lockwood, S., Ho, T., and Knutson, K. (2014). Post-Release Recidivism and Employment among Different Types of Released Offenders: A 5-Year follow-up Study in the United States. *International Journal of Criminal Justice Science*, Vol. 9 Issue 1. Retrieved from: <https://www.sascv.org/ijcjs/pdfs/nallyetalijcjs2014vol9issue1.pdf>

4.0 BENEFITS OF TELEVERDE FOR PARTICIPANTS

Based on a review of literature and primary and secondary data, Seidman identified six measurable ways in which Televerde program participants benefit through their employment with the company:

- Financial independence while incarcerated;
- Savings for when they are released;
- Increased rate of employment post-incarceration;
- Increased lifetime earnings post-incarceration;
- Increased level of education post-incarceration; and
- Decreased rate of recidivism.

The following sub-sections will address each of these benefits separately and estimate, where possible, a monetary benefit to the individual.

4.1 Financial Independence While Incarcerated

Incarcerated women earn money as a result of their enrollment on Televerde's employment program. From 2011 through 2018, 1,086 unique female inmates have been employed by Televerde during their incarceration. The total wages paid to these 1,086 inmates is \$21.5 million.⁶⁸ This equates to average total earnings of \$19,783 per enrolled inmate. Annual numbers are shown in Table 2.

Table 2: Number of Inmates Employed Per Year and Wages Paid by Televerde⁶⁹

	2011	2012	2013	2014	2015	2016	2017	2018
Total Inmates Employed	323	391	399	397	379	393	392	429
Total Wages (Millions \$)	\$2.4	\$2.6	\$2.5	\$2.8	\$2.7	\$2.8	\$2.7	\$2.9

Source: Televerde

⁶⁸ This is a nominal dollar total.

⁶⁹ Note: Total wages are expressed in millions of nominal dollars.

The wages paid by Televerde enables participating prisoners to take care of their own personal needs, fines, restitution and child support. They also pay 35% of their wages to the State of Arizona as a contribution towards their cost of incarceration, thereby reducing the burden on taxpayers (see Sections 5 and 6 for more details).

4.2 Savings For Release

Approximately 51% of a Televerde participant’s wages are placed into a savings account while they work in prison. The total wages paid to inmates between 2011 and 2018 is \$21.5 million (nominal dollars). This means that approximately \$11 million has been automatically saved by inmates – that is, an average total saving of approximately \$10,100 per participating inmate. This money is used by Televerde participants post-release to purchase clothing, secure housing, and pay for transportation.

4.3 Employment

Employment is one of the many challenges formerly incarcerated individuals face when reentering into society. Felony convictions often inhibit returning citizens from attaining stable, competitively paid jobs. A 2018 study by the Brookings Institution found that within the first full calendar year after release, only 53 percent of formerly incarcerated females report any earnings for federal tax purposes.⁷⁰ This suggests that at least 47 percent of formerly incarcerated females are not employed.

The distribution of employment among formerly incarcerated females by year are shown in Table 3. This distribution assumes that the rate of employment among formerly incarcerated females after Year 5 remains constant.

Table 3: Brookings Employment with Respect to Time Post-Release

YEAR 1 (RELEASE)	YEAR 2	YEAR 3	YEAR 4	YEAR 5+
53.0%	58.7%	56.1%	54.9%	49.8%

Source: Brookings Institution

⁷⁰ Looney, A., and Turner, N. (2018). Work and Opportunity Before and After Incarceration. *Economic Studies at Brookings*.

In contrast, Seidman’s primary survey data show that 94.1 percent of Televerde participants report are in paid employment at an average of 5.2 years after release from prison (Table 4). The latter survey sample consists of current and former Televerde employees. Of Televerde program participants who did not work for Televerde at the time of the survey, 88.2 percent report being employed elsewhere for wages.

Assuming employment rates in Brookings’ national data remain stable beyond year 5 post-release, Televerde participants are almost twice as likely to be in work as Brookings national average for formerly incarcerated females. That is a 94.1% employment rate for Televerde participants compared to the 49.8% national rate for formerly incarcerated females. This suggests that Televerde program participants are more likely to attain wage-paying jobs after reentry than non-participants.

Table 4: Televerde Employment Post-Release

	% EMPLOYED	% OF RESPONDENTS
Currently working for Televerde	100.0%	49.6%
Not currently working for Televerde	88.2%	50.4%
Combined	94.1%	100.0%

Source: 2019 survey of Televerde program participants

4.4 Earnings

Among the formerly incarcerated individuals who find employment, many of them are confined to lower-paying jobs as a result of their criminal records. The same study by the Brookings Institution estimates earnings among the formerly incarcerated female population by year since release. Of those who report any earnings, Brookings estimates that the median annual income of female former prisoners 5 years after release is \$14,073.⁷¹ The distribution of earnings with respect to time can be found in Table 5. This distribution assumes that earnings after Year 5 remain constant.⁷²

⁷¹ Looney, A., and Turner, N. (2018). Work and Opportunity Before and After Incarceration. *Economic Studies at Brookings*.

⁷² Note: Earnings figures are adjusted for inflation.

Table 5: Median Annual Income with Respect to Time Post-Release⁷³

	YEAR 1 (RELEASE)	YEAR 2	YEAR 3	YEAR 4	YEAR 5+
Median Annual Income Post-Release (Brookings)	\$6,319	\$10,167	\$11,381	\$12,334	\$14,073
Televerde Median Annual Income Post-Release	\$23,649	\$38,050	\$42,592	\$46,160	\$52,668
Difference	\$17,330	\$27,883	\$31,211	\$33,826	\$38,595

Source: Brookings Institution, 2019 survey of Televerde program participants

Following the same distribution, Seidman estimated the median annual income of Televerde program participants across each year post-release using data collected from a survey of participants. With a median reported income of \$52,668 at an average of 5.2 years after release from prison, a Televerde program participant on average earns an estimated \$38,595 more than a former prisoner in the Brookings study at approximately the same point in time relative to release.

Assuming that income remains constant for both groups in subsequent years (post-year 5), that no further crime is committed, and the former incarcerated female remains in employment up to age 65, the average lifetime earnings of a Televerde participant could be more than \$1.1 million post-release. This compares to the national average of \$301,062 if the female prisoner had not initially enrolled with Televerde. This suggests that a Televerde participant on average could expect to earn more than 3.7 times the lifetime earnings of a non-Televerde participant post-release, all other things being equal.

The difference is equivalent to a cumulative post-release lifetime earnings benefit of \$843.0 million for the 1,086 Televerde program participants. Table 6 summarizes the calculations used to arrive at the estimated earnings values.

The post-release lifetime earnings impact on Televerde program participants assumes that annual income does not fluctuate from year five onwards after release. If the earnings differential between Televerde program participants and non-participants grows larger in subsequent years after release, the impact of the program on post-release lifetime earnings calculated above may be understated. Conversely, if this earnings differential grows smaller in subsequent years after release, the impact may be overstated.

⁷³ Note: All dollar values are expressed in 2018 dollars.

Table 6: Estimated Post-Release Earnings Benefit for Televerde Participants by Age Cohort^{74 75}

	ESTIMATED COUNT OF TELEVERDE PARTICIPANTS	ESTIMATED COUNT OF TELEVERDE PARTICIPANTS EMPLOYED	ESTIMATED POST- RELEASE LIFETIME EARNINGS NATIONAL AVERAGE	ESTIMATED POST- RELEASE LIFETIME EARNINGS TELEVERDE AVERAGE	INDIVIDUAL POST- RELEASE LIFETIME EARNINGS BENEFIT	CUMULATIVE POST- RELEASE LIFETIME EARNINGS BENEFIT
21- 30	72	68	\$525,722	\$1,967,503	\$1,441,781	\$98,116,425
31- 40	507	476	\$384,991	\$1,440,821	\$1,055,830	\$502,961,193
41- 50	298	280	\$244,261	\$914,140	\$669,879	\$187,412,289
51- 60	201	189	\$103,530	\$387,458	\$283,928	\$53,672,076
61- 64	8	8	\$40,201	\$150,451	\$110,250	\$833,642
Total	1,086	1,021	\$1,298,705	\$4,860,373	\$3,561,669	\$842,995,625

Source: Authors' calculations

4.5 Education

Education is often cited as another barrier to reentry for former prisoners, as educational qualifications may prohibit the reentering population from attaining high-wage employment. Many studies have also demonstrated that educational programs in adult corrections facilities are effective at reducing rates of recidivism, providing a broader social and economic benefit to individuals and communities.

According to the 2004 Survey of Inmates in State and Federal Correctional Facilities conducted by the Bureau of Justice Statistics, the median education level of female prisoners in state custody across the United States is 11th grade.⁷⁶ Prior to incarceration, Televerde program participants have an estimated median educational attainment of only one year greater than the national level, with a high school or high school equivalent diploma. Drawing from the survey data, 13.3% of Televerde participants did not have a

⁷⁴ Note: All dollar values are expressed in 2018 dollars.

⁷⁵ Note: Columns may not tally exactly due to rounding.

⁷⁶ Survey of Inmates in State and Federal Correctional Facilities, United States, 2004, State Data. (2004). *Bureau of Justice Statistics*.

High School diploma or GED before incarceration, but all are required to obtain a high school diploma or GED during their incarceration in order to become eligible for participation in the Televerde program.

Based on a survey of current and former employees, Televerde program participants go on to achieve higher levels of education after release from prison, summarized in Table 7. The estimated median educational attainment of Televerde program participants after release from prison is some college. Post-incarceration, 84.4% have at least some college education compared to the BJS national rate of 16.1%. This 84.4% for Televerde respondents post-incarceration includes 30.4% with an Associate’s, Bachelor’s or Postgraduate degree.

Table 7: Pre- and Post-Incarceration Educational Attainment of Televerde Survey Sample

	% OF BJS RESPONDENTS	% OF TELEVERDE RESPONDENTS (PRE- INCARCERATION)	% OF TELEVERDE RESPONDENTS (POST- INCARCERATION)
No high school	12.2%	3.7%	0.0%
Some high school	45.5%	9.6%	0.0%
High school diploma or GED	26.1%	40.7%	15.6%
Some college	4.9%	30.4%	51.9%
Trade or technical school diploma	N/A	9.6%	2.2%
Associate's degree	7.8%	4.4%	16.3%
Bachelor's degree	3.4%	1.5%	10.4%
Postgraduate degree (e.g., Master's, J.D., or Ph.D.)	N/A	0.0%	3.7%

Source: 2019 survey of Televerde program participants

More than 68.1 percent of Televerde survey respondents either ‘Agree’ or ‘Strongly Agree’ that they are motivated to pursue further education as a result of their current or former employment with Televerde.. A response breakdown is shown in Table 8.

Combined, these results indicate that Televerde program participants potentially achieve higher levels of education after release from prison, despite holding a similar education level as the national population

of female state prisoners at the time of incarceration. This may be due, in part, to the support and resources provided to them through Televerde and Arouet Foundation programs.

Table 8: Motivated to Pursue Further Education due to Current/Former Employment with Televerde

	% OF RESPONDENTS
Strongly agree	43.7%
Agree	24.4%
Somewhat agree	20.7%
Somewhat disagree	8.9%
Disagree	0.0%
Strongly disagree	2.2%

Source: 2019 survey of Televerde program participants

4.6 Recidivism

Likely compounded by their greater employment opportunities, increased income, and higher education levels discussed to date in this Section, Televerde program participants also have much lower rates of recidivism compared to the national female state prison population. According to 2018 Bureau of Justice Statistics data, the 1-year recidivism rate for new offenses among females released from state prisons in 2005 was 35.1 percent.⁷⁷ The 3-year recidivism rate was 59.3 percent for the same population.⁷⁸

In comparison, the 1-year recidivism rate for new offenses among Televerde program participants released between 2011 and 2018 is 0.4 percent. The 3-year recidivism rate is 5.4 percent. The substantial difference between the two populations, 34.7 percentage points for the 1-year recidivism rate and 53.9 percentage points for the 3-year recidivism rate, suggests that Televerde program participants may be less likely to reoffend after release from prison compared to non-participants. These results are detailed in Table 9.

⁷⁷ Alper, M. et. al. (2018). 2018 Update on Prisoner Recidivism: A 9-year Follow-up Period (2005-2014). *Bureau of Justice Statistics*.

⁷⁸ Ibid.

The substantially decreased rate of recidivism among Televerde program participants not only benefits the participants themselves, but also their families and broader communities. These impacts will be further explored in subsequent sections.

Table 9: National vs. Televerde Rates of Recidivism

	NATIONAL FEMALE STATE PRISON POPULATION (BJS)	TELEVERDE POPULATION	% POINT DIFFERENCE
1-year Recidivism Rate for New Offenses	35.1%	0.4%	34.7%
3-Year Recidivism Rate for New Offenses	59.3%	5.4%	53.9%

Source: Bureau of Justice Statistics Prisoner Recidivism Analysis Tool – 2005, Arizona Department of Corrections data

4.7 Conclusion

It is important to note the existence of overlap between the benefits described in the preceding sections, as they are not necessarily independent from one another. For example, education and earnings are inextricably linked, and therefore the increase in education level among Televerde program participants may explain some or all of the observed increase in earnings. In this manner, the program benefits identified in this report should be explained in conjunction with one another rather than as separate and independent effects.

Acknowledging the overlap between program impacts, Seidman estimates the average lifetime earnings of a Televerde employee post-release could be more than \$1.1 million, provided they work until age 65 and do not commit any further crime. This is \$825,000 more than the national average for a former incarcerated female (\$301,602).

The difference is equivalent to a cumulative post-release lifetime earnings benefit of \$843.0 million for the 1,086 Televerde program participants since 2011. This post-release lifetime earnings impact may be explained, in part, by the increased employment opportunities, continued education, and decreased rates of recidivism observed as additional effects of the Televerde program on participants. These benefits are likely the result of the support, development, and training services that Televerde and the Arouet Foundation provide to the currently and formerly incarcerated females.

5.0 BENEFITS OF TELEVERDE FOR FAMILIES OF PARTICIPANTS

A collection of literature explores the direct and indirect impacts of incarceration, particularly parental incarceration, on families and children. In the same vein, the benefits of the Televerde program may extend beyond the participant, positively affecting the lives of their children and other family members. Seidman identified the following ways in which the families of Televerde program participants may benefit from the program:

- Lack of dependence on family while incarcerated.
- Decreased likelihood of school dropout among adolescent children;
- Decreased likelihood of incarceration among adult children;
- Decreased likelihood of poor health behaviors and emergency department use among young adult children; and
- Improved relationships between participants and children, partners/spouses, and other family members.

The following sub-sections will address each of these benefits separately. As many of the effects on families of incarcerated individuals are qualitative in nature, Section 5.0 is also more qualitatively focused than previous and subsequent section.

5.1 Lack of Dependence on Family During Incarceration

As previously discussed in Section 4.1, incarcerated prisoners earn money as a result of their enrollment on the Televerde program. From 2011 through 2018, 1,086 unique female inmates have been employed by Televerde during their incarceration. The total wages paid to these 1,086 inmates is \$21.5 million (nominal dollars). This equates to average total earnings of \$19,783 per enrolled inmate. This enables participating prisoners to take care of their own personal needs, fines, restitution and child support. In the absence of the Televerde employment, the onus would have fallen on family members to support their incarcerated loved ones. The importance of inmate earnings cannot be underestimated. In a 2015 national survey of prisoners and their families, the Neighborhood Funders Group in association with several partners concluded that:

- 48 percent of families overall were unable to afford the costs associated with a conviction;
- 58 percent of families making less than \$15,000 per year were unable to afford these costs; and
- 34 percent of families fell into debt just to pay for phone calls and visits with incarcerated family members.⁷⁹

5.2 Education

Research demonstrates that parental incarceration, particularly maternal incarceration, has negative effects on the educational outcomes of dependent children. Rates of dropout prior to receiving a high school diploma are notably higher for students with incarcerated parents compared to groups of control students. A 2011 study on school dropout rates of 6,008 adolescents with incarcerated parents found that students were at a 20-28 percent increased risk of dropout during the year(s) that their mothers were incarcerated.⁸⁰ In contrast, a 2015 study of adolescents found a 16.7 percent decrease in likelihood that individuals whose mothers had ever been incarcerated would attain a high school diploma.⁸¹ These results indicate that parental incarceration has the most significant impact on educational performance during the year(s) of incarceration, but likely also has enduring impacts throughout the child’s educational career.

Table 10: Estimated Education Impact on Adult Children of Televerde Participants

	ESTIMATED RATE OF SCHOOL DROPOUT %
Dependent Children of Televerde Participants	5.6%
Dependent Children of Non-Participants	5.8%
Difference	0.2%

Source: Authors’ calculations

Failure to receive a high school diploma can have lasting effects on the employment and income opportunities of students, which follow them into adulthood. The observed reductions in recidivism

⁷⁹ The Neighborhood Funders Group (2015). Who Pays? The True Cost of Incarceration on Families. Retrieved from: <http://whopaysreport.org/wp-content/uploads/2015/09/Who-Pays-FINAL.pdf>

⁸⁰ Cho, R. M. (2011). Understanding the Mechanisms Behind Maternal Imprisonment and Adolescent School Dropout. *Family Relations*.

⁸¹ Huynh-Hohnaum, A. et. al. (2015). Incarcerated Mothers and Fathers: How their Absences Disrupt Children’s High School Graduation. *International Journal of Psychology and Educational Studies*.

among Televerde program participants may positively impact educational outcomes of their dependent children, possibly making them more likely to attain a high school diploma.

The risk of school dropout for dependents of Televerde program participants may reduce as much as 0.2 percentage points compared to dependent children of non-participating incarcerated mothers (Table 10).

The impact on risk of school dropout for adult children of Televerde program participants estimated above draws on the 3-year rate of recidivism for new offenses for both the Televerde population and the United States formerly incarcerated population. The calculation assumes that dependent children of formerly incarcerated mothers who *do not* reoffend within 3 years of release are at a 16.7 percent greater risk of school dropout than other students, while children of formerly incarcerated mothers who *do* reoffend are at a 24 percent greater risk of school dropout than other students.

Taking all of the above into account, Seidman estimates that 21 children primarily cared for by Televerde participants are at risk of dropping out from High School at the Televerde rate of recidivism, compared to 234 kids at the national rate of recidivism. That is, the children of a Televerde participant could be approximately times more likely to complete High School than the children of a former incarcerated parent not enrolled on a Televerde program.

5.3 Incarceration

Cyclical patterns of intergenerational crime and incarceration are prevalent throughout the United States. Research shows that children of incarcerated parents are at a greater risk of incarceration during adulthood than children who do not experience parental incarceration. The adult children of incarcerated mothers are at an even heightened risk of incarceration compared to the adult children of incarcerated fathers.⁸²

A study using data from the 1997 National Longitudinal Survey of Youth found that individuals aged 21 to 34 are approximately 1.5 times more likely to be arrested if their mother was incarcerated within their

⁸² Dallaire, D. H. (2007). *Incarcerated Mothers and Fathers: A Comparison of Risks for Children and Families*. *National Council on Family Relations*.

first 16 years of life.⁸³ A more recent 2015 study by Central Connecticut State University suggests that children of incarcerated parents are approximately 3 times as likely as the children of non-incarcerated parents to become justice-involved.⁸⁴ The latter study is based on a review of global studies, including two U.S. analyses. One of the U.S. analyses suggests that children of incarcerated parents are 2.6 times more likely to be arrested. The other suggests that children of incarcerated parents are 2.27 times more likely to be arrested. Both U.S. studies examined the children of incarcerated mothers alone. Based on the 2016 United States incarceration rate of 860 inmates per every 100,000 adults, the rate of incarceration among adult children of incarcerated mothers could range from approximately 1,959 per 100,000 to 2,240 per 100,000. The rates are summarized in Table 11 below.

Table 11: Rate of Incarceration among Adults

	INCARCERATION RATE %
US Total	0.86%
Adult Children of Incarcerated Mothers (Options)	1.95% - 2.24%

Source: Bureau of Justice Statistics, *Journal of Forensic Psychology*

According to a survey of Televerde program participants, approximately 76 percent of participants have children, and 51 percent of those who have children are their primary caretaker after release from prison. Among those who have children and are their primary caretakers after release, Televerde program participants have 2 dependent children on average. This totals to approximately 820 children who are the dependents of Televerde program participants after release from prison.

Comparing Televerde and national recidivism data, it is apparent that Televerde program participants are much less likely to return to prison for a new offense after release. The 3-year rate of recidivism for new offenses among Televerde program participants is 5.4% compared to 59.3% for the Bureau of Justice Statistics rate of recidivism among females released from state prisons. That is, the Televerde rate of recidivism is 91 percent lower than the BJS' national rate among females released from state prisons.

⁸³ Gius, M. (2016). The Effects of Paternal Incarceration on the Criminal Activity of Adult Children. *Journal of Forensic Psychology*, 1(4).

⁸⁴ Conway, J.M., and Jones, E.T. (2015). Seven Out of Ten? Not Even Close. A Review of Research on the Likelihood of Children with Incarcerated Parents Becoming Justice Involved. Central Connecticut State University. Retrieved from: https://www.ccsu.edu/imrp/Publicatons/Files/CIP_Seven_Out_of_Ten_Not_Even_Close.pdf

The decreased rate of recidivism among Televerde program participants may facilitate a decrease in the rate of incarceration among their dependent children, as Televerde participants are likely to spend less time in prison. Assuming that duration and frequency of maternal incarceration affects the rate at which adult children are incarcerated, this could make the dependent children of Televerde program participants less likely to offend than the dependent children of non-participants.

Applying both recidivism rates to program participants since 2011, Seidman estimates that a maximum of 2 children among Televerde reoffenders may themselves be incarcerated as adults. This could increase to a minimum of 19 and maximum of 22 children in the absence of a Televerde program and the application of the higher national rate of recidivism for former female prisoners.

5.4 Health Behaviors

Research in pediatric and adult medicine suggests that parental incarceration before the age of 18 is linked with a number of high-risk health behaviors. A 2018 study exploring longitudinal associations between parental incarceration and health behaviors among young adults found that a history of maternal incarceration is linked to forgone health care, prescription drug abuse, smoking, 10 or more lifetime sexual partners, and use of emergency departments as primary health care.⁸⁵ While the authors do not provide data on the length or frequency of parental incarceration episodes experienced by the sample, it is likely that increased length and frequency may be associated with more negative health effects.

Dependent children of Televerde program participants may benefit from the program in non-quantifiable ways such as experiencing a more stable home life with a mother as their primary caregiver after release. A survey of program participants finds that of those who have children, 51 percent of Televerde program participants were the primary caretaker of their children after release from prison. Additionally, 64 percent of Televerde program participants strongly agree that they have become more financially stable as a result of their current or former employment with the company. Observed increases in employment and income among the Televerde population after release could also lead to greater access to health care resources, healthy food options, and physical activities for dependent children. Combined, these impacts

⁸⁵ Heard-Garris, N. et al. (2018). Health Care Use and Health Behaviors Among Young Adults With History of Parental Incarceration. *Pediatrics*, 142.

could positively influence the physical health of dependent children of Televerde participants by reducing barriers to health care and encouraging the development of good health behaviors.

More conclusive research on this topic could take the form of a longitudinal study of health behaviors among dependent children of Televerde program participants.

5.5 Relationships

Maternal incarceration is shown to have particularly negative effects on various youth outcomes, as children of incarcerated mothers are more likely to be placed in non-familial care situations than children of incarcerated fathers.⁸⁶ Research suggests that this is because incarcerated mothers are more likely to be the primary caregivers before incarceration. This disruption in family structure and maternal separation can place a strain on mother-child relationships. Separation and disruption between partners/spouses and other family members as a result of incarceration can also challenge other familial relationships.

According to a survey of program participants, Televerde participants overwhelmingly agree that their current or former employment with the company has positively impacted their relationships with children, partners/spouses, and other family members. Of program participants who have children, two thirds either 'Strongly Agree' or 'Agree' that their relationships with their children have improved as a result of their current or former employment with Televerde. The distribution of survey responses is summarized in Table 12.

Of participants who are married or in domestic partnerships, 45.6% percent either 'Strongly Agree' or 'Agree' percent agree that their relationships with their partners/spouses have improved as a result of their current or former employment with Televerde. These results are summarized in Table 13.

⁸⁶ Dallaire, D. H. (2007). *Incarcerated Mothers and Fathers: A Comparison of Risks for Children and Families*. *National Council on Family Relations*.

Table 12: Improved Relationships with Children due to Current/Former Employment with Televerde

	% OF SURVEY RESPONDENTS (WITH CHILDREN)
Strongly agree	43.1%
Agree	23.5%
Somewhat agree	23.5%
Somewhat disagree	1.0%
Disagree	1.0%
Strongly disagree	7.8%

Source: 2019 survey of Televerde program participants

Table 13: Improved Relationships with Partner due to Current/Former Employment with Televerde

	% OF SURVEY RESPONDENTS (MARRIED OR IN A DOMESTIC PARTNERSHIP)
Strongly agree	33.3%
Agree	12.3%
Somewhat agree	24.6%
Somewhat disagree	8.8%
Disagree	8.8%
Strongly disagree	12.3%

Source: 2019 survey of Televerde program participants

Televerde program participants also indicate that other familial relationships have been positively affected by the program. Of all survey respondents, 68.1 percent either ‘Strongly Agree’ or ‘Agree’ that their relationships with other family members (excluding children and partners/spouses) had improved as a result of their current or former employment with the company. The survey responses are summarized in Table 14.

Table 14: Improved Relationships with Other Family Members due to Current/Former Employment with Televerde

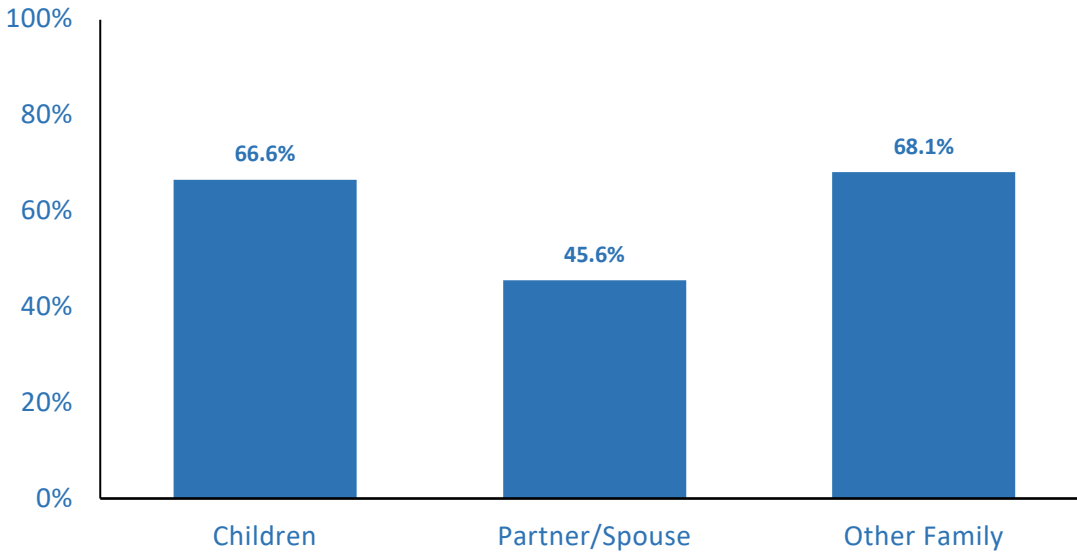
	% OF SURVEY RESPONDENTS
Strongly agree	45.9%
Agree	22.2%
Somewhat agree	18.5%
Somewhat disagree	4.4%
Disagree	2.2%
Strongly disagree	6.7%

Source: 2019 survey of Televerde program participants

These results indicate that the majority of Televerde program participants feel their relationships with family are positively affected by their employment with the company. This may stem from a combination of the individual benefits observed among program participants (i.e. increased employment, increased income, decreased recidivism, and/or improved self-confidence, communication skills, and conflict resolution) which may alleviate common stressors on families, and the benefits observed among the relatives of program participants described in this section. Improved stability and family structure, particularly within the nuclear family, can have tangible impacts on youth and adult outcomes that affect health and wellbeing.

Figure 1 summarizes Seidman’s survey findings on the impact of Televerde on familial relationships of participants.

Figure 1: Percent of Survey Participants who Strongly Agree or Agree that their Relationships with Specific Types of Family Member have Improved



Source: 2019 survey of Televerde program participants

5.6 Conclusion

The benefits of the Televerde program may extend beyond the participants to have substantial impacts on the lives of their family members as well. While these impacts are interrelated and difficult to quantify, literature on the subject of parental incarceration suggests that incarceration of a mother during childhood can lead to increased likelihood of incarceration, decreased likelihood of high school graduation, negative health behaviors, and strained familial relationships among dependent children.

Many of these negative effects may be mitigated among the dependent children of Televerde program participants, as their mothers are less likely to reoffend after release from prison. While some impacts are not measurable based on available data, it is likely that a decrease in the duration and frequency of maternal incarceration as a result of the Televerde program may positively affect various health and social outcomes in dependent youth that are linked to histories of parental incarceration.

Televerde program participants also earn a wage during their incarceration, which minimizes their dependence on families. The importance of inmate earnings cannot be underestimated, as a 2015

national survey of prisoners and their families concluded that 48 percent of families overall were unable to afford the costs associated with a conviction.

6.0 BENEFITS OF TELEVERDE FOR THE STATE OF ARIZONA

The impacts of Televerde extend beyond participants and their families. There are also benefits for the State of Arizona. Seidman identified the following ways in which the State of Arizona benefits from Televerde operations:

- Decreased cost of incarceration;
- Increased income tax revenue;
- Reduced use of entitlement programs;
- Reduction in the use of foster care and the Department of Child Safety services; and
- Increased economic activity from Televerde operations.

The following sub-sections will address each of these benefits separately and estimate a monetary benefit to the state.

6.1 Decreased Cost of Incarceration

High rates of incarceration in Arizona place a significant financial burden on the state. According to the Arizona Department of Corrections, the cost of incarceration in an Arizona state prison is approximately \$68.55 per person per day.⁸⁷ Adjusted for inflation, this is \$70.10 per person per day. With an end of year incarcerated population of 42,113, this equates to approximately \$1.1 billion in expenditure in Fiscal Year (FY) 2018.

The decreased rates of recidivism observed among the Televerde population benefits the State of Arizona by reducing the total number of females returning to prison, and thus the costs associated with incarceration in state prisons. The total monetary benefit is a function of the decreased rate of recidivism, which varies depending on years passed since release.

Based on the 1-year rate of recidivism for new offenses, the Televerde program has provided up to \$49.2 million in cumulative cost-savings to the State since 2011. This number increases for the 3-year rate of

⁸⁷ Ryan, C. L. (2018). FY 2017 Operating Per Capita Cost Report. *Arizona Department of Corrections, Bureau of Planning, Budget and Research*.

recidivism as the differential between Televerde program participants and the national female prison population grows larger over time. Based on the 3-year rate of recidivism for new offenses, the Televerde program has provided up to \$76.4 million in cumulative cost-savings to the State since 2011 (Table 15). The annual savings to the State of Arizona range from \$6.1 million to \$9.5 million over the 8 years of study, dependent on the usage of a 1-year or a 3-year rate of recidivism for new offences. The cost-savings are based on the assumption that Televerde participants would reoffend at the national rate for formerly incarcerated females if they participated in the Televerde program.

Table 15: Estimated Cost-Savings to State Associated with Reduced Recidivism⁸⁸

COUNT OF TELEVERDE PARTICIPANTS	AVERAGE LENGTH OF INCARCERATION FOR FEMALES (YEARS)	COST OF INCARCERATION PER PERSON PER YEAR	COST-SAVINGS TO STATE (1-YEAR RECIDIVISM RATE)	COST-SAVINGS TO STATE (3-YEAR RECIDIVISM RATE)
1,086	5.1	\$25,585	\$49,171,500	\$76,378,786

Source: Authors' calculations

In addition, incarcerated females enrolled on a Televerde program pay 35 percent of their total earnings for room, board and utilities inside Perryville, which relieves the burden on taxpayers. The annual value of this contribution ranges from \$0.8 million to \$1.0 million between 2011 and 2018. The total cumulative saving for the State of Arizona for the 8 years studied by Seidman is more than \$7.5 million.

Table 16: Annual Contribution of Incarcerated Televerde Employees to Prison Room and Board⁸⁹

	2011	2012	2013	2014	2015	2016	2017	2018
Total Inmates Employed	323	391	399	397	379	393	392	429
Total Wages (Million \$)	\$2.4	\$2.6	\$2.5	\$2.8	\$2.7	\$2.8	\$2.7	\$2.9
Total Inmate Contribution	\$0.8	\$0.9	\$0.9	\$1.0	\$1.0	\$1.0	\$0.9	\$1.0

Source: Authors' calculations

⁸⁸ Note: All dollar values are expressed in 2018 dollars.

⁸⁹ Note: All dollar values are expressed in nominal dollars.

6.2 State Income Tax Revenue

The State of Arizona also benefits from increased personal income tax revenue as a result of the increased rates of employment and higher earnings observed among Televerde program participants. Employed Televerde participants are expected to see an individual post-release lifetime earnings benefit of \$150,451 to \$1.9 million depending on their age. This is expected to lead to commensurate increases in tax contributions over their post-release earnings lifetime.

Based on the Arizona Tax Year 2018 income brackets and contributions, the estimated 1,021 employed Televerde program participants may contribute up to an additional \$26.9 million in personal state income taxes over their post-release lifetimes as a result of their increased earnings. This is compared to the national annual average earnings for former incarcerated females. Table 17 summarizes the calculations used to arrive at this monetary value.

Table 17: Estimated State Income Tax Revenue Impact by Age Cohort⁹⁰

	ESTIMATED COUNT OF TELEVERDE PARTICIPANTS	ESTIMATED COUNT OF TELEVERDE PARTICIPANTS EMPLOYED	INDIVIDUAL POST-RELEASE LIFETIME TAX REVENUE BENEFIT	CUMULATIVE POST-RELEASE LIFETIME TAX REVENUE BENEFIT
21-30	72	68	\$46,070	\$3,135,159
31-40	507	476	\$33,698	\$16,052,800
41-50	298	280	\$21,327	\$5,966,684
51-60	201	189	\$8,956	\$1,692,928
61-64	8	8	\$3,389	\$25,622
Total	1,086	1,021	\$113,440	\$26,873,193

Source: Authors' calculations

The post-release lifetime income tax revenue impact calculated above assumes that annual income does not fluctuate between year four after release from prison and final year of work-life. The estimation does not account for any changes in Arizona personal income tax rates beyond Tax Year 2018. Future changes in personal income tax rates will impact the amount of tax revenue realized by the state.

⁹⁰ Note: All dollar values are expressed in 2018 dollars.

6.3 Reduced Use of Arizona's Entitlement Programs

Entitlement programs are government provisions guaranteeing benefits to a group or segment of the population. Examples of relevance to the current study include Medicaid, the Supplemental Nutrition Assistance Program (SNAP) for low-income individuals and their families, unemployment benefit, and other forms of Social Security payments. Seidman does not have access to the time series data needed to definitively estimate the cost-savings associated with the reduced use of entitlement programs in the state. Nevertheless, an *indicative* estimate of SNAP (Food Stamp) savings for Televerde's 2011-2018 program participants has been calculated.

The Supplemental Nutrition Assistance Program (SNAP) is federally funded but administered through the State of Arizona. The cost of administration is shared by Federal, State and local governments. Eligibility is based on gross income, resources, and size of the household. Recipients are given an electronic benefits transfer (EBT) card. Money is added to the card each month to buy food and drinks at most grocery stores, convenient stores, gas stations, pharmacies that sell food, and farmer's markets. It cannot be used to buy alcohol, tobacco, medicine, hot food, food meant to be eaten in the store, or any non-food items.

In FY2017, there were 382,000 homes in Arizona in receipt of SNAP. These homes accounted for 852,000 adults and children. The total annual payment was \$104.9 million.⁹¹

Table 18 summarizes the current gross/net monthly income eligibility and maximum SNAP payment by household size.

Seidman estimates that a maximum of four Televerde participants surveyed could currently be eligible for SNAP due to their participation on the program and their subsequent higher earnings.⁹² The maximum annual SNAP payment for all four families (combined) would be \$22,104. Extrapolating for all 1,086 Televerde participants as a whole (2011-2018), this could mean that less than 3% of Televerde participants post-release were eligible for SNAP, equating to \$177,814 SNAP payments a year. If this is accurate, it represents a significant saving for the State, because up to 91% of former prisoners nationwide post-

⁹¹ United States Department of Agriculture (2019). Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2017. Retrieved from: <https://fns-prod.azureedge.net/sites/default/files/resource-files/Characteristics2017.pdf>

⁹² This estimate is based on income alone. Additional requirements, such as households not having more than \$2,250 in countable resources (rising to \$3,500 if at least one person is over the age of 60 or is disabled), could further reduce the number of eligible families.

release are food insecure.⁹³ When other welfare savings are added such as Temporary Assistance for Needy Families (TANF) and unemployment income, the State of Arizona clearly benefits from the implementation of the Televerde program.

Table 18: SNAP Eligibility and Maximum Monthly Allotment⁹⁴

HOUSEHOLD SIZE	GROSS MONTHLY INCOME	NET MONTHLY INCOME	MAXIMUM MONTHLY ALLOTMENT
1	\$1,276	\$981	\$194
2	\$1,726	\$1,328	\$357
3	\$2,177	\$1,675	\$511
4	\$2,628	\$2,021	\$649
5	\$3,078	\$2,368	\$771
6	\$3,529	\$2,715	\$925
7	\$3,980	\$3,061	\$1,022
8	\$4,430	\$3,408	\$1,169
Each Additional Member	+\$451	+\$347	\$146

Source: *Eligibility.Com*⁹⁵

6.4 Reduced Use of Foster Care and Department of Child Safety Services

The National Conference of State Legislatures (2009) estimate that 11 percent of incarcerated mothers place their children in foster care while they serve their sentences, compared to 2 percent of incarcerated fathers. The data, drawn from a 2008 BJS survey, is based on an inmate identifying a type of caregiver. This study did not estimate the actual number if children placed into foster care by the 11 percent of incarcerated mothers (a key weakness of their data).⁹⁶

⁹³ Wang, E.A., Zhu, G.A., Evans, L., Carroll-Scott, A., Desai, R., and Fiellin, L.E. (2013). A Pilot Study Examining Food Insecurity and HIV Risk Behaviors among Individuals Recently Released from Prison. *AIDS Educ Prev.* 2013 Apr; 25(2). Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3733343/>

⁹⁴ Note: Gross and Net Monthly Incomes shown in Table 18 are 130% above the federal poverty line.

⁹⁵ Eligibility.Com (2019). Food Stamps (SNAP) – Eligibility for Food Stamps, or the Supplemental Nutrition Assistance Program (SNAP). *Eligibility.com*, updated February 22, 2019. Retrieved from: eligibility.com/food-stamps

⁹⁶ National Conference of State Legislatures (2009). *Children of Incarcerated Parents*, March 2009. Retrieved from: <https://www.ncsl.org/documents/cyf/childrenofincarceratedparents.pdf>

Zill (2011) estimates that the average total of maintenance costs and administrative costs per child in foster care per year in FY 2010 at \$25,782.⁹⁷ This consists of \$19,107 for foster care maintenance payments under Social Security Act Title IV-E, plus \$6,675 administrative costs (placing and monitoring children in foster care). Adjusting for inflation, this equates to approximately \$21,503 per year for maintenance payments and \$7,512 per year for administration.

However, Peeples (2019) estimates that a family currently receives \$669-\$867 maintenance payments per foster child per month in the State of Arizona.⁹⁸ This is equivalent to \$8,028 to \$10,404 per child per year. This is a base rate, encompassing food, clothing, personal expenses, and transportation. Foster children are also covered under the State of Arizona's health insurance, including any behavioral or mental health needs. Nevertheless, Peeples' estimate is less than half the national average.

Based on the 3-year rate of recidivism for new offenses, the Televerde program has provided an annual cost saving of \$1.5 million to \$1.7 million in foster care administration and maintenance payments. Applying the national average prison length stay of 5.1 years, the cumulative cost saving to the State of Arizona for foster care could amount to \$7.8 million to \$8.9 million. This is a conservative cost-saving for the State of Arizona as it excludes other Department of Child Safety services. The lower range is based on Peeples' Arizona-specific costs. The upper range is based on Zill's 2011 national average, adjusted to 2018 dollars.

6.5 Economic Impact of Televerde on Arizona

Televerde directly affects the local economy through its employment of operational staff and its supplier purchases. The company indirectly affects the local economy when its suppliers hire staff to fulfill its purchasing needs, or place upstream demands on their own suppliers. Induced effects occur when workers either directly or indirectly associated with Televerde spend their incomes in the local economy.

⁹⁷ Zill, N. (2011). Better Prospects, Lower Cost: The Case for Increasing Foster Care Adoption. *Adoption Advocate* No. 35, May 2011. Retrieved from: https://www.adoptioncouncil.org/images/stories/NCFA_ADOPTION_ADVOCATE_NO35.pdf

⁹⁸ Peeples, (2019). Getting Paid to be a Foster Parent: State-by-State Monthly Guide. *We Have Kids* website, September 4, 2019. Retrieved from: <https://wehavekids.com/adoption-fostering/What-does-being-a-foster-parent-really-pay>

Seidman uses an IMPLAN economic model to estimate the economic impact of Televerde’s operations on the State of Arizona. This is a system of linear equations describing the inter-industry relationships in an economy.

Primary data provided by Televerde includes company employment and total payroll costs as well as a complete record of payments to suppliers associated with services and parts or maintenance activities by procurement category. Summaries of data inputs are illustrated in Tables 18 and 19.

Table 18: Televerde Employment Profile, 2011-2018

	2011	2012	2013	2014	2015	2016	2017	2018
Employees	470	551	570	585	668	705	642	694

Source: Televerde

Table 19: Televerde Total Expenditure, 2011-2018⁹⁹

	MILLIONS OF 2018 DOLLARS							
	2011	2012	2013	2014	2015	2016	2017	2018
Expenditure	\$14.5	\$15.3	\$16.3	\$18.3	\$22.9	\$26.0	\$24.1	\$25.3

Source: Televerde

Table 20 estimates the total economic impact of Televerde’s operations and supplier purchases in the State of Arizona between 2011 and 2018. All dollar values are expressed in 2018 dollars. Employment figures are expressed in job-years.¹⁰⁰

The annual total values in Table 20 represent the sum of the direct, indirect and induced effects generated in the Arizona economy through Televerde’s employee expenditures and supplier purchases.

GDP by State represents the dollar value of all goods and services produced for final demand in the Arizona economy. It can also be defined as the sum of employment compensation, proprietor income, property income, and indirect business taxes.

⁹⁹ Note: All expenditure values are expressed in nominal dollars.

¹⁰⁰ A job-year is the equivalent of one year of work for one person. This label should not be simplified or abbreviated to “job.”

Employment is the number of full-time and part-time employees needed to support the economic activity. It is a head count, rather than full-time positions, and is based on the average output per employee in a given industry.

Table 20: Total Economic Impact of Televerde on Arizona, 2011-2018¹⁰¹

YEAR	GDP BY STATE	EMPLOYMENT (JOB-YEARS)	LABOR INCOME
2011	\$21,534,001	598	\$17,703,841
2012	\$22,777,286	684	\$18,693,379
2013	\$23,828,408	714	\$19,549,993
2014	\$26,863,355	746	\$22,109,601
2015	\$33,564,615	875	\$27,675,727
2016	\$38,104,456	939	\$31,451,878
2017	\$35,054,369	856	\$28,883,379
2018	\$36,434,484	917	\$30,078,781

Source: Authors' calculations

Labor income is the sum of proprietor (self-employed) income and the total compensation of payroll employees, consisting of wages or salaries and benefits.

Seidman estimates that Televerde's annual operations generate \$21.5 to \$38.1 million GDP by State in Arizona each year. An estimated 598 people were employed in Arizona in 2011 alone because of Televerde. In 2018 alone, an estimated 917 people were employed in Arizona because of Televerde. The annual total labor income contribution ranges from \$17.7 to \$31.5 million.

For the entire 2011-2018 period, Televerde's operations generated an estimated cumulative total of \$238.2 million GDP by State and \$196.1 million labor income in the Arizona economy.¹⁰²

¹⁰¹ Note: All dollar values are expressed in 2018 dollars.

¹⁰² As employment results are estimated in job-years, a cumulative total employment impact for the 8-year period is not appropriate.

6.6 Conclusion

Alongside Televerde program participants and their families, the State of Arizona also enjoys cost savings and economic benefits from Televerde operations.

As a result of reduced rates of recidivism among Televerde program participants, the State benefits from decreased public expenditure related to incarceration. Based on the 1-year rate of recidivism for new offenses, the Televerde program has provided up to \$49.2 million in cumulative cost-savings to the State since 2011. Based on the 3-year rate of recidivism for new offenses, the Televerde program has provided up to \$76.4 million in cumulative cost-savings to the State since 2011. The annual savings to the State of Arizona range from \$6.1 million to \$9.5 million over the 8 years of study, dependent on the usage of a 1-year or a 3-year rate of recidivism for new offences.

Taxpayers within the State also pay less for the current incarceration of female prisoners enrolled on a Televerde program. This is because Televerde participants contribute towards the cost of their own incarceration. The annual value of this contribution ranges from \$0.8 million to \$1.0million between 2011 and 2018. The total cumulative saving for the State of Arizona for the 8 years is \$7.5 million.

The State of Arizona also benefits from increased personal income tax revenue as a result of the increased rates of employment and higher earnings observed among Televerde program participants. Based on the Arizona Tax Year 2018 income brackets and contributions, Televerde program participants may contribute an additional \$26.9 million in personal income taxes over their post-release lifetime as a result of their increased earnings.

Lower recidivism rates among Televerde program participants may generate lower numbers of children placed in foster care due to incarceration. Based on the 3-year rate of recidivism for new offenses, the Televerde program has provided an annual cost saving of \$1.5 million to \$1.7 million in foster care administration and maintenance payments. Applying the national average prison length stay of 5.1 years, the cumulative cost saving to the State of Arizona for foster care could amount to \$7.8 million to \$8.9 million.

An economic impact analysis of Televerde's employment expenditure and supplier purchases estimates that Televerde's operations generated a cumulative total of \$238.2 million GDP by State in the Arizona

economy between 2011 and 2018. The company's operations are also associated with a cumulative total of \$196.1 million in labor income for the same period.

Seidman conservatively estimates that the State of Arizona on average has received \$13.3 million annual benefits and cost-savings for the 1,086 participants on the Televerde program. This is based on lower annual incarceration costs associated with the reduction in recidivism, the average annual contributions of program participants to their own incarceration costs, average annual state tax revenue benefits, and average annual foster care savings. The actual saving will be higher when the reduced use of entitlement programs are additionally taken into account.

7.0 SUMMARY OF FINDINGS

Televerde's business model is based in part on training, education, and jobs for incarcerated women, both while in prison and after release. Working in partnership with the Arouet Foundation, founded by Televerde in 2011, the firm has enabled more than 1,000 formerly incarcerated women to establish stable, self-sufficient lives outside of prison since 2011.

Televerde program participants enjoy financial independence while incarcerated and also save in advance of their release. Upon their release, they then go on to attain employment, earnings, and education at higher rates and reoffend at lower rates than other formerly incarcerated females in the United States:

- Between 2011 and 2018, each Televerde program participant earned on average \$19,783 during their incarceration. The total wages paid to the inmates during those eight years is \$21.7 million. This enables each participant to take care of their own personal needs, fines, restitution and child support.
- Approximately 51% of a Televerde participant's wages are placed into a savings account while they work in prison. This equates to an average total saving of approximately \$10,100 per inmate. The savings are used by Televerde participants post-release to purchase clothing, secure housing, pay for transportation and prepare for transition back into the community.
- Televerde participants are almost twice as likely to be in work as other non-Televerde former incarcerated females. 94.1% of Televerde participants are in paid employment approximately 5 years after release compared to the national average of 49.8% for former incarcerated females.
- In addition, Televerde participants find higher wage-paying jobs than other former incarcerated prisoners. The average lifetime earnings of a Televerde participant post-release could range from \$150,000 to more than \$1.9 million, dependent on age at the time of release. This compares to a national average of \$40,000 to \$526,000, dependent on age at the time of release, for former incarcerated females. This suggests that Televerde participants may earn almost four times the national average for former incarcerated females.
- At the time of their incarceration, Televerde participants possess a similar level of education as the national population of female state prisoners. However, Televerde program participants go on to achieve higher levels of education post-release compared to other former incarcerated females. Every Televerde participant has a High School diploma or GED, and the estimated median

level of educational attainment is “some college.” Post-incarceration, 84.4% have at least some college education, including 30.4% with an Associate’s, Bachelor’s or Postgraduate degree.

- Televerde program participants are also less likely to reoffend than other former incarcerated females. Approximately 0.4% of Televerde participants, 2011 through 2018, reoffend within 1 year, and 5.4% within 3 years. The national average is 35.1% for 1 year and 59.3% within 3 years. The Televerde 3-year rate of recidivism is 91 percent lower than the BJS’ national rate among females released from state prisons.

Additional benefits exist for the families of Televerde program participants. These include less dependence on the family during incarceration, a lower high school drop-out rate for adolescent dependents, a decreased likelihood of incarceration when participants’ children become adults, fewer child health issues, and enhanced family relationships:

- The earning potential of a Televerde participant during their incarceration reduces their dependence on family for personal needs, fines, restitution, and child support.
- The dependent children of a Televerde participant may be more likely to complete High School than the children of other former incarcerated prisoners. Seidman estimates that 21 children primarily cared for by Televerde participants are at risk of dropping out from High School based on the Televerde rate of recidivism, compared to 234 kids if the national rate of recidivism instead applied.
- Additionally, the decreased rate of recidivism among Televerde program participants may facilitate a decrease in the rate of incarceration among their adult children compared to the adult children of other incarcerated mothers. Seidman estimates that a maximum of 2 children among Televerde reoffenders may themselves be incarcerated as adults, compared to a maximum of 22 children if the national rate of recidivism instead applied.
- Observed increases in employment and income among Televerde program participants after release may also reduce barriers to health care and encourage the development of good health behaviors in dependent children.
- Televerde program participants indicate that their relationships with children, partners/spouses, and other family members improve as a result of their employment with the company. Two thirds of participants agree or strongly agree that their relationships with their children have improved because of their current or former employment with Televerde. 45.6% agree or strongly agree

that their relationships with partners/spouses have improved, and 68.1% either agree or strongly agree that their relationships with other family members have improved.

The State of Arizona also enjoys cost-savings and economic benefits associated with the Televerde prison workforce program. This includes incarceration cost-savings, increased income tax revenue, welfare entitlement program savings, a reduction in the use of foster care, and the increased economic activity generally resulting from Televerde operations.

- The lower rates of recidivism observed among the Televerde population reduces the number of females returning to prison, thereby lowering costs for the state. The Televerde program has provided between \$49.2 million and \$76.4 million in cumulative cost savings to the state since 2011, dependent on the use of a 1-year or 3-year rate of recidivism. This equates to an annual saving of \$6.1 million to \$9.5 million.
- Televerde participants contribute 35% of any wages earned inside Perryville towards the cost of their incarceration. This amounts to a total cumulative saving of \$7.5 million for the State of Arizona, from 2011 to 2018.¹⁰³
- Based on the Arizona Tax Year 2018 income brackets and contributions, the estimated 1,021 employed Televerde program participants may contribute an additional \$26.9 million in personal income taxes over their post-release lifetime as a result of their increased earnings.
- The higher salaries earned by Televerde program participants post-release generates entitlement program savings for the State. For example, Seidman estimates that less than 3% of program participants are eligible for SNAP post-release because of their participation on the program and subsequent higher earnings. The magnitude of this potential saving for the State is demonstrated by the fact that 91% of former prisoners nationwide are potentially “food insecure.”
- Lower rates of recidivism among Televerde participants results in a lower number of children seeking foster care during incarceration. Seidman conservatively estimates cumulative cost savings of \$7.8 million to \$8.9 million for foster care, 2011 through 2018, for Televerde participants. If other Department of Child Safety Services not examined within the current study are added, the cost-savings for the State of Arizona may be even bigger.

¹⁰³ The cumulative saving for 2011 through 2018 is expressed in nominal dollars.

- Seidman conservatively estimates that the State of Arizona on average has received \$13.3 million annual benefits and cost-savings for the 1,086 participants on the Televerde program. This is based on lower annual incarceration costs associated with the reduction in recidivism, the average annual contributions of program participants to their own incarceration costs, average annual state tax revenue benefits, and average annual foster care savings. The actual saving will be higher when the reduced use of entitlement programs are additionally taken into account.
- Finally, an economic impact analysis of employment expenditure and supplier purchases demonstrates that Televerde operations generated an estimated cumulative total of \$238.2 million GDP by State and \$196.1 million labor income in the Arizona economy between 2011 and 2018.



Arizona State University
Seidman Research Institute

660 S MILL AVENUE, SUITE 300

TEMPE

AZ 85281-4011

Tel: (480) 965 5362

Fax: (480) 965 5458

seidmaninstitute.com

 [@SeidmanResearch](https://twitter.com/SeidmanResearch)