



Mobilizing library services in Johnson County

A comprehensive opportunity assessment and project overview

January 2021

Executive Summary

The opportunity gaps that exist for today's youth are among the most deeply rooted and complex challenges communities face. Generations of data and research illustrate the correlation between a child's education outcomes, and factors such as race, gender, socioeconomic background, health, and family and community environments. These factors play a profound role in children's lives and thus through no fault of their own, millions of American children find themselves at risk, unable to experience or realize their personal potential. Despite a reputation as one of the top communities in the nation, Johnson County, Kansas is not immune to this.

Down to the neighborhood, the County's greatest risk areas can be determined by poverty levels, racial and ethnic demographics, and geographic location. There is clear disparity in Johnson County between children who have optimal access to resources and services that support their learning pathways, and those who do not. What is less clear is how to address this disparity and close these gaps of opportunity between children.

To start, there must first be community acknowledgement of the root causes and long-term implications of education disparities for children. Next is the acceptance that there is no single solution to this challenge; mitigating these issues in communities will require collaborative, systemic and multi-faceted efforts.

This report will:

- Outline Johnson County's opportunity to impact learning outcomes for local youth by mobilizing core components of the Library's programs and services through a Mobile Learning Program.
- Highlight key areas of risk in the community.
- Articulate high-level root causes and implications of opportunity gaps that impact an individual from birth to adulthood, making the case for why this is an "us," not "them" problem.
- Lay out the initial blueprints and considerations for a Mobile Learning Program in the Johnson County community, including goals, objectives, and potential metrics; primary and secondary audience profiles; and key considerations for curriculum and program logistics.

What this report will not do is make the bold assertion that a Mobile Learning Program in Johnson County will solve education and opportunity gaps in the community. Rather it intends to advance the case that a well-designed, outcomes-focused Mobile Learning Program can be a powerful tool in the community's education toolkit.

As a community, there is a significant opportunity to coalesce around the well-established programming offered through the County’s Library system and extend that programming in new and innovative ways. Simply mobilizing key aspects of what the Library already offers can significantly increase the Library’s impact, particularly in areas that need the most support.

The Library is well-positioned to reimagine two core service offerings in a mobile capacity—literacy

and early-learning science, technology, engineering, and math (STEM) programming. With community support to jumpstart the program, the Library has the resources and interest to operate and support mobile learning in an ongoing capacity. The research and recommendations outlined here should be leveraged by the Library staff, donors, and key partners to Mobile Learning Program ideas to reality.



About Johnson County Library

Serving the Johnson County community of over 600,000, as well as many visitors from surrounding communities, the Johnson County Library system is comprised of fourteen neighborhood libraries and one resource library.

The mission of the library is to provide access to ideas, information, experiences, and materials that

support and enrich people's lives. Library staff, community partners, volunteers and benefactors together strive to realize their vision of creating environments for people to learn, to explore, to enjoy, to create, and to connect.

Johnson County Library Core Values

- **Customer needs come first.** We place the highest priority on service to our customers and treat every request with equal value.
- **Respect for people.** We treat all our customers, and each other, as valued individuals.
- **Access to information.** We ensure access to information for people of all ages, abilities and means.
- **Learning organization.** We commit to the professional growth and enrichment of our staff and volunteers.
- **Freedom of information.** We protect your freedom to read and view all library information
- **Privacy and confidentiality.** We safeguard your right to request and obtain information in confidence.
- **Basic services without charge.** We provide basic library services free of charge.
- **Quality.** We strive to deliver the highest quality service possible.
- **Stewardship of community resources.** We respect the contributions of the community to its library. We hold ourselves accountable for the efficient and effective use of all resources which you commit to us--people, time, assets, funds.
- **Integrity.** We follow the highest ethical standards which have been adopted by Johnson County Government and our profession.

Upon the foundation of the Library's mission, vision, and values, five key performance areas were identified as core focus areas for the Library's 2019-2023 strategic plan: Education, Operations, Community, Communication and Convenience.

Part One: A chance for every child

Why this matters: Community implications of childhood opportunity gaps

Introduction

American children—including thousands in Johnson County, Kansas—are in crisis.

The United States has long been known as a land of opportunity, setting global standards across numerous social, political, and economic structures. Yet despite a recent history of exponential growth and innovation, largely driven by the technology boom, that is no longer the case. Economic growth as a nation, simply has not translated to economic growth for all citizens, and those most impacted are children.

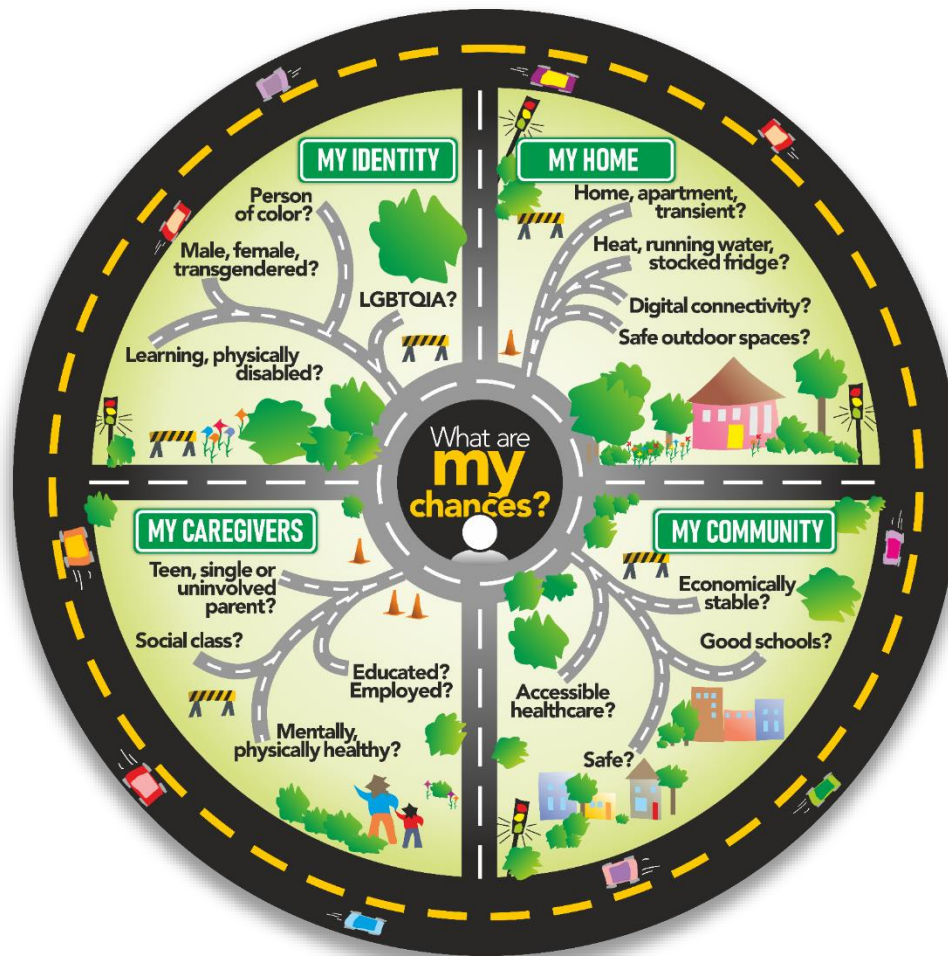
In American communities today, opportunity is significantly correlated to circumstances that exist well outside an individual's control—personal identity dimensions (race, gender, disability, etc.), home and community environments, social class, and access to and quality of education. Most concerning, however, is those factors typically exacerbate themselves in the earliest years of life creating a near-immediate drag, or opportunity gap, that remains with a child, often keeping them from realizing their full potential for years, decades, or even the rest of their lives.

Generally, opportunity gaps are defined by unequal distribution of resources and opportunities for young people. The root causes of opportunity gaps vary but simply stated, where a child lives and how much education and income their caregivers have are among the key drivers of systemic opportunity gaps. If an individual is successful, it is

highly likely at least one key societal element provided the support and structure necessary for success. If an individual is struggling, it is equally likely it is because of a drag created by at least one of those same societal elements. While some children are enabled or propelled by their personal circumstances, many children are born into circumstances not conducive to wellbeing, let alone achievement and are ultimately lost at critical points across the education continuum.



Understanding root causes and implications of opportunity gaps



There is considerable research and data available that cover each of the following components in great detail. For consistency and focus, this report largely draws inspiration from a framework offered by Robert Putman in his book, "Our Kids: The American Dream in Crisis," which illustrates opportunity gaps through the lens of families, parenting, schooling, and community. The parallels established here are purposeful, with full credit given to Putnam for his thought leadership.

Personal identity dimensions

A deep assessment of our nation's political and economic history would be required to fully understand the complexities personal identity has on personal potential. Race, nationality, gender, and disability are all defined by social constructs created and developed by society across complicated and dynamic historical circumstances. These genetic- or physiological-related social constructs have, in turn, evolved into

institutionalized beliefs and mainstream norms that directly impact a person’s opportunity potential. Although a child has no bearing on their personal identity dimensions, from the day they are born those dimensions represent key indicators of their long-term opportunity¹. Putnam notes, “Black parents in America remain disproportionately concentrated among the poor and less educated, so black children continue to be handicapped from the start. Whether their parents are rich or poor, black children live in poorer neighborhoods than white children at that income level, and black children experience less upward mobility and more downward mobility than their white counterparts who started at the same income level.” Systemic racism and discrimination reduce education and

job opportunities and impact personal health outcomes.

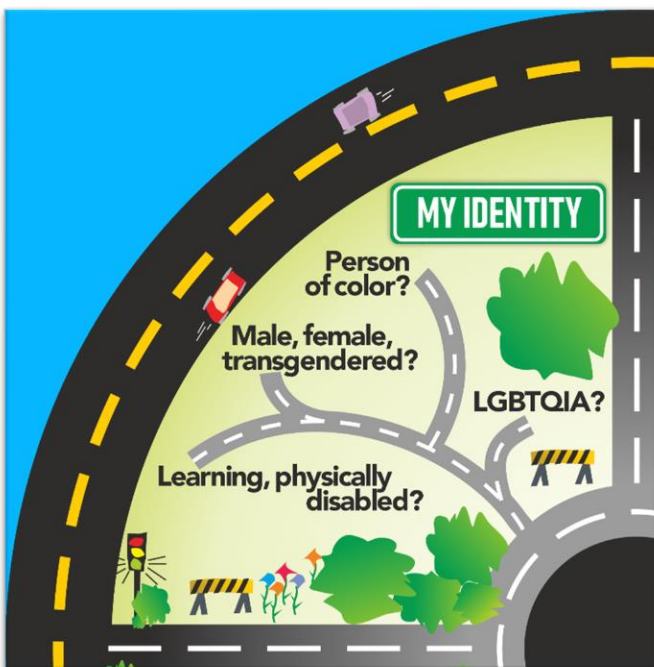
Schools are among the first social environments in which this disparity is revealed. Key findings from a 2016 study² conducted by a Stanford Graduate School of Education research team outlines that opportunity gaps are far more prominent between racial demographics—specifically white and black students, and white and Hispanic students. The study finds that:

- Average test scores of black students are roughly two grade levels lower than those of white students in the same district; the Hispanic-white difference is roughly one-and-a half grade levels.
- Achievement gaps are larger in districts where black and Hispanic students attend higher poverty schools than their white peers; where parents on average have high levels of educational attainment; and where large racial/ethnic gaps exist in parents’ educational attainment.

Locally, this trend holds true. According to the 2017 Reading State Snapshot Report (Grade 4; Public Schools)³ developed by the National Center for Education Statistics, in Kansas:

- Black students had an average score 25 points lower than white students.
- Hispanic students had an average score 12 points lower than white students.

*Both performance gaps remained consistent since 1998; the performance gaps in the corresponding Math State Snapshot Report represent similar score discrepancies.



¹ The Century Foundation: [Inequality Begins at Birth in America](#) (2014)

² [Stanford News](#): Local education inequities across U.S. revealed in new Stanford [data set](#) (2016)

³ Report provided by Sean Casserley.

The gaps are different for other demographics—gender, nationality, disability—although similar narratives exist for each. Data and research continue to prove that people whose identities fall outside the mainstream “straight, white, middle-class male” construct consistently experience more social and structural opportunity challenges.

Home and community life

A child’s “home base” is one of the most critical factors to their development. It is often at home where a child’s earliest and most basic needs are met, or not met, setting the stage for their early childhood development experience. As outlined in Maslow’s Hierarchy of Needs framework, an individual’s most fundamental needs⁴ are:

- First, the physiological needs of air, water, food, shelter, sleep, and clothing.
- Second, the safety needs that include personal security and health.
- Third, the love and belonging needs exhibited through personal and family connections.

These fundamental needs set the foundation for an individual to realize esteem and self-actualization milestones that are often attributed to a level of personal success and achievement. These basic needs are first and most often experienced at home. Caregivers offer, or do not offer, a child their first sense of safety and housing that establishes the security and comfort critical to a developing child.

Although a child has no bearing on the home life he or she is born into, each one of the social or

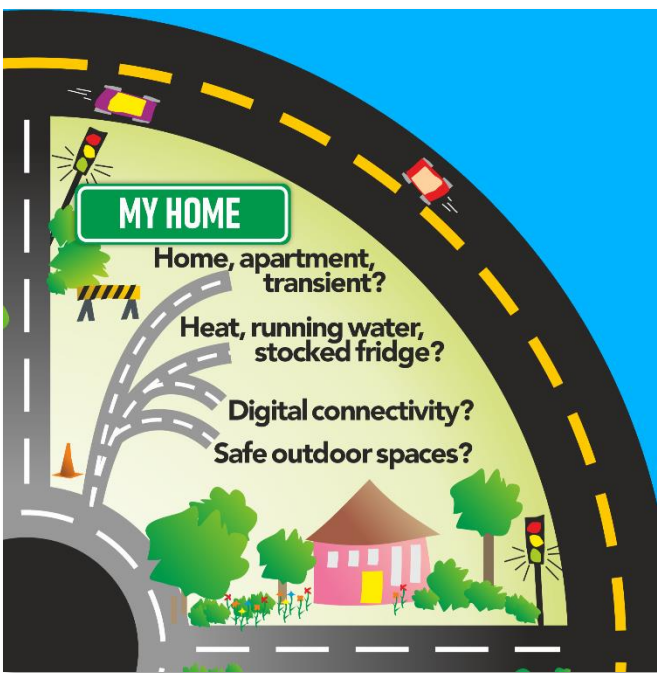


structural components listed below represents an indicator of risk for a child’s long-term opportunity potential:

- A child’s physical environment – Does the house have heat? Running water? Is the fridge stocked? With healthy food? Is there noise pollution? Access to outdoor space?
- A child’s family environment – Is there a consistent and supportive caregiver? One parent or two; married or divorced? Was the child born to teen parent(s)? Did the parent(s) graduate high school? College? Is a parent incarcerated? Is a parent chronically ill (mentally or physically)? Is/are the caregivers gainfully employed?
- A child’s community environment – What are the neighborhood crime rates and drug activity? Are there safe public spaces? Are there accessible health care and food service options? Are there good jobs in the area? Is the local economy strong?

⁴ Maslow, A.H. (1943). [A theory of human motivation](#). *Psychological Review*, 50(4), 370-396.

Any one of these factors impacts whether a child's basic needs are met in healthy and productive ways. When those needs are not met, there is an immediate gap created in that child's ability to learn, which establishes one of the earliest and most profound reasons a child is limited from reaching their potential.



There is also a high correlation to these important “home and community life” components and race. Neighborhoods with large black populations tend to have lower life expectancies than communities that are majority white, Hispanic or Asian; research shows black communities are less likely to have access to resources that promote health—grocery stores, parks and recreational areas, health care facilities.⁵

Social class

In addition to racial inequities, there are also significant inequities in areas with low-income populations.

Living below, at or near the poverty line (\$26,200 for a family of four, including two children⁶) is inextricably linked to opportunity gaps, largely due to the complex dynamics related to living in poverty. Poverty impacts and is impacted by a variety of factors—local economic conditions, personal earnings potential, physical and mental health, crime, drug use and on. Poor children's brains are often underdeveloped creating a lag in cognitive abilities as early as one year old.⁷

On top of this, poverty frequently passes from one generation to the next causing significant social mobility limitations of young people from the start—social mobility references the movement of individuals, families, households, or other categories of people within or between social strata in a society.⁸ Research indicates up to “half of income inequality among parents is transformed to inequality of opportunity among their children.”⁹ The previously cited Stanford study outlined that the most and least socioeconomically advantaged districts have average performance levels more

⁵ Jessica Young, Fast Company. (2018) “[Being born in the wrong zip code can shorten your life.](#)”

⁶ “[Annual update of HHS Poverty Guidelines](#)” Federal Register. 85: 3060. 17 January 2020.

⁷ Jeff Madrick, The Century Foundation. (2014) “[Inequality begins at birth in America](#)”

⁸ “[A Family Affair](#)”. Economic Policy Reforms 2010. Pp. 181-198

⁹ Pablo Mitnik, Victoria Bryant, Michael Weber, Sociological Science. (2019) “[Intergenerational Transmission of Family-Income Advantages in the US.](#)”

than four grade levels apart.¹⁰ In Kansas, students eligible for free/reduced-price lunch, a low family income indicator, had a score 22 points lower than that for students who were not eligible.¹¹

What is less readily known is that American children represent the poorest demographic group in the nation. One out of six children live in poverty; this is nearly 11.9 million children. This rate is approximately 1.5 times higher than that for adults ages 18-64, and two times higher than that for adults 65 and older.¹²

The Children’s Defense Fund’s report, “The State of America’s Children 2020,” offers additional context:

- Nearly 73 percent of poor children are children of color.
- More than 25 percent of black children were poor in 35 states and the District of Columbia in 2018; Hispanic children, in 29 states; and American Indian/Native Alaska children, in 20 states.
- Only two states had white child poverty rates that were 20 percent or higher.



In Kansas, the child poverty rate is 13.8% and there are 74,000 black and Hispanic children below 200% of the poverty level.

The relationship between child poverty and opportunity gaps is significant. Poverty creates instability, impacting a child’s physical and mental health, the nation’s high school dropout rates, crime statistics, personal and community health outcomes, and more.

It is no stretch to say that poverty inside a community is one of the top issues facing that community’s social and financial well-being, making it an “our” issue, not a “their” issue.

¹⁰ [Stanford News](#): Local education inequities across U.S. revealed in new Stanford [data set](#) (2016)

¹¹ 2017 Reading State Snapshot Report (Grade 4; Public Schools) developed by the National Center for Education Statistics

¹² [The State of America’s Children 2020](#). Children’s Defense Fund.

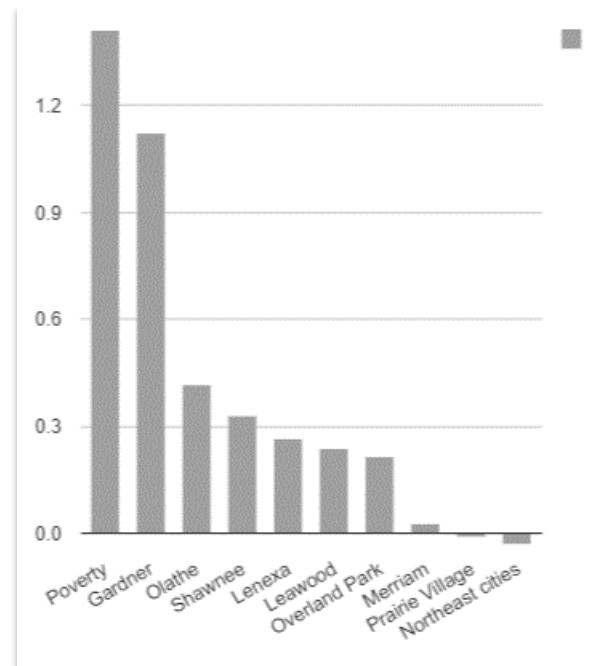
Poverty in Johnson County: A closer look

A report provided by United Community Services¹³, indicates that if poverty were a city, it would be the 5th largest and fastest-growing city in Johnson County.

The report further outlines, “When compared to counties statewide, Johnson County has the 3rd largest poverty level population – trailing Wyandotte County by only 1,000 people.”

As of 2018, more than 32,500 Johnson County residents, equating to approximately 5.6% of the community’s population, lived below the federal poverty level¹⁴. The report predicts that by 2026, 80,000 people in Johnson will be living in poverty, a number at risk of further impacts driven by the economic uncertainty emerging from the COVID-19 pandemic.

Of those living in poverty in Johnson County, 28% are children younger than 18. Some data suggests these rates are also increasing because of the suburbanization of poverty. In an effort to improve their circumstances, individuals and families are moving to Johnson County in search of better jobs, safer communities, and improved education opportunities for children. The rising rates of poverty in the county have, to date, paralleled the rapidly increasing populations numbers;



population growth rates exceeded 140% compared to overall county growth rates of 26%.

All said, the impacts of child poverty on a community do not change because of the various reasons why poverty exists and is growing. Poor children are more likely to have poor academic achievement, drop out of high school and later become unemployed, experience economic hardship and be involved in the criminal justice system, all of which have significant social and financial implications for the surrounding community.¹⁵

¹³ United Community Services, Johnson County; [Poverty in Johnson County and What Business Leaders Can Do](#)

¹⁴ United Community Services, Johnson County; [Poverty in Johnson County, 2018 Estimates](#)

¹⁵ [The State of America's Children 2020](#). Children's Defense Fund.

Quality of and access to education

In looking at the other root causes of opportunity gaps, largely wrapped up in home and community life, race (and/or other personal identity dimensions) and poverty, it is not a stretch to see how the quality of and access to local education represents another critical root cause of opportunity gaps.

Many of the same factors that impact an individual's ability to succeed also impact the local education system's ability to succeed—racial demographics, poverty rates, economic health, adult engagement (in a child's life or in the education experience broadly), crime rates, community health and on.

These factors have considerable influence on educational inequality in America – the unequal distribution of academic resources such as school funding, teaching talent, books, and technology. Further, it is likely not a surprise that those communities most impacted are, again, those with high poverty rates, rural geographies, or higher populations of black and Hispanic citizens.

To further compound this problem, there are also considerable financial factors that impact education inequality in communities. In many U.S. communities, schools are managed locally and funded by property taxes. Tax-related factors, such as home values, tax rates, tax-increment-financing (TIF) agreements, et al., have direct implications on

a school's ability to provide programming and support to fully meet the needs of a diverse and dynamic student base. While not the only factor in student outcomes, school spending does correlate to school performance. High-poverty districts spend 15.6% less per student than low-poverty districts do. An increase of 20% in per-pupil spending a year for children in poverty can lead to:

- An additional year of completed education.
- 25% higher earnings.
- A 20% reduction in the incidence of adult poverty.¹⁶



Tight education budgets are often the difference between having additional support staff and not; offering enhanced curriculum support, such as supplemental reading, math, and science programs, or not; offering personal support to children with special needs, or not; offering robust

¹⁶ Alana Semuels, The Atlantic. (2016) "[Good School, Rich School; Bad School, Poor School.](#)"

STEM programming or technology capabilities, or not; making available cultural enrichment programming, such as foreign language, music, and theater, or not; offering sports and wellness programs, or not. What is a baseline education experience for many children in America, is a luxury for many others.

So yet again, because of circumstances they have no control over—teaching talent, access to supplies, funding for supplemental programming, tax codes, corporate financing agreements, property valuations—American children face socioeconomic, geographical, and political dynamics that create significant inequities in their education experience.

Another challenging dynamic facing education institutions is the rapidly evolving workforce needs that require more and/or different types of education. Workforce needs have shifted considerably from process-based, manufacturing-specific skillsets to those based on information, knowledge, and soft skills, such as critical thinking, collaboration, learning agility, interpersonal communication and more.

Alongside the growth of technology, which comes with unprecedented access to information, another gap is developing in education institutions as they face evolving how students are taught and what they learn. Some are well-positioned to do this while many others struggle to keep up, often those already lagging because of one or more of the factors previously outlined. As a result, the

education system continues to generate graduates who are not effectively prepared to engage in the modern workforce.

The COVID-19 pandemic is another factor exposing this inequity between education institutions. As schools were faced with considerable disruption and a rapid transition to remote learning, the efficacy of those efforts varied considerably based on school resources. Those with established technology inventories and digital infrastructures were far better positioned to make this urgent transition than those without. Many students faced delays in the time it took to receive a learning device from their school and/or faced connectivity challenges in their home environment based on a lack of broadband access.

The engagement required of parents during this time establishes another gap. Students' virtual learning significantly increases the need to have a parent or caregiver available, creating complications for those required to work outside the home as well as one reasonably trained or able to support in-home learning needs.

As education institutions continue to define the learning experience in the era of pandemic disruption, the already existent gaps between students will grow and more will be created.

Diminishing education pipelines, workforce gaps and economic impact

If a child experiences any of the factors attributed to opportunity gaps, a consistent and equitable pathway to postsecondary education and/or careers is all but eliminated for them. Getting education right early is the most promising way to close or minimize opportunity gaps.

The benefits of education compound. If a child is exposed to meaningful development opportunities at a young age, they are significantly more advantaged when it comes to academic achievement in later years. Assuming that child continues to meet predefined education milestones (particularly reading), academic achievement consistently translates to obtaining a high school diploma and a college degree. The National Research Council asserts that, “academic success, as defined by high school graduation, can be predicted with reasonable accuracy by knowing someone’s reading skill at the end of third grade. A person who is not at least a modestly skilled reader by that time is unlikely to graduate from high school.”¹⁷

The cost of education also rises as remediation needs rise. Students who need to catch up with the support of learning interventions, such as supplemental staff, staff with special training and/or specialized curriculum, are generally twice as expensive to educate. The learning curve is also

incredibly steep and often unsuccessful for children who must achieve both catch-up learning milestones and normal learning milestones.¹⁸

Dropping out or failing to graduate are considerable implications of opportunity gaps. Every one of the factors outlined here increases the risk of high school truancy and dropout rates. The challenges created by an unsafe or unhealthy home life, systemic racism experienced inside schools or communities, teenage pregnancy, language barriers, lack of parental support or advocacy for education, poor learning experiences or lack of appropriate learning resources and on and on and on—all impact an individual’s ability to stay in school, get a high school diploma, and ultimately obtain post-secondary education.

It is also clear that high school and college graduation attainment matters a lot. The Pew Research Center’s report, “The Rising Cost of Not Going to College”¹⁹ outlines the disparities in annual earnings driven by education level. Put simply, the less education a person has, the more limited their lifetime earning potential, ultimately enabling the deeply complex cycle of financial inequity across America. As of 2009, the national unemployment rate for high school dropouts was 15.9 percent, compared to 9.4 percent for high school graduates, 7.9 percent for individuals with some college credits

¹⁷ [Early Warning! Why Reading by the End of 3rd Grade Matters](#), Annie E. Casey Foundation

¹⁸ The Children’s Reading Foundation. “[What’s the Impact?](#)”

¹⁹ Pew Research Center. (2014) “[The Rising Cost of Not Going to College](#)”

or an associate degree, and 4.7 percent for individuals with a bachelor’s degree or higher.²⁰

In Johnson County:²¹

- The high school dropout rate is nearly 5%.
- The college graduation rate is approximately 52%.
- Seven percent have obtained an associate degree.
- Two percent did not finish the 9th grade.

Johnson County dropout rates by district:²²

- Blue Valley: <1%
- DeSoto: <1%
- Gardner Edgerton: <1%
- Olathe: <1%
- Shawnee Mission Schools: 1.3%
- Spring Hill: 12.2%

This is critical for communities. The Pew Research Center report further highlights that, “Every student who does not complete high school costs our society an estimated \$260,000 in lost [lifetime] earnings, taxes and productivity.”²³ That lifetime earnings potential is further handicapped in the current economy, which requires advanced skills.

Not only do communities bear significant costs when students drop out of school, employers continue to struggle finding enough skilled workers. Further, community colleges and other higher education institutions spend considerable time and resources on remedial coursework for students who simply are not prepared for post-secondary education despite having a high school diploma. From an economic perspective, rates of

“structural unemployment”—a mismatch between the skills that workers in the economy can offer, and the skills demanded of workers by employers— are rising at unsustainable levels. This impacts several key workforce sectors, both “blue” and “white-collar,” including engineering (computer, mechanical, electrical, traditional), manufacturing, healthcare, supply chain and logistics, construction and more.

In today’s knowledge economy, individuals with more education generally have more success landing jobs that not only come with the advantages of higher wages, but also come with healthcare-related benefits, such as health insurance, paid leave, paid time off, retirement benefits and more, which, as outlined further in this report, has considerable implications for an individual’s personal health outcomes and productive engagement in society.

When a holistic education and social system capable of effectively educating and graduating students is not cultivated, that community ultimately bears significant social and economic costs downstream. Enabling and educating all students is, among many other things, good economics.

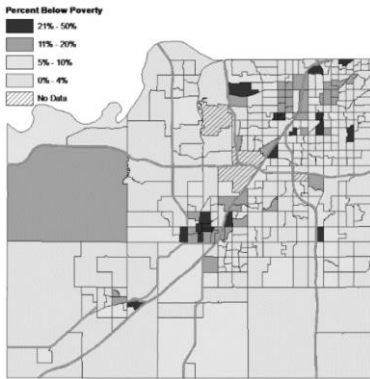
²⁰ Caitlin Curley. GenFKD (2016) “[How school dropouts impact the criminal justice system](#)”

²¹ Open Data Network. (2018) “[Johnson County, KS Graduation Rates](#)”

²² Kansas University, Institute for Policy and Social Research (2016-17) “[Dropout Rates in KS School Districts, by County](#)”

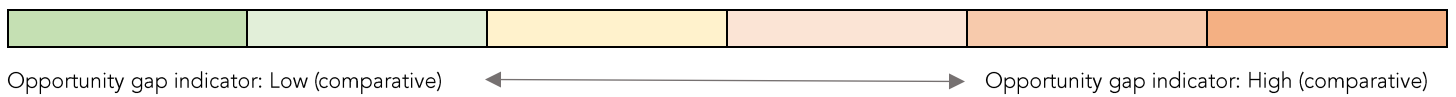
²³ Pew Research Center. (2014) “[The Rising Cost of Not Going to College](#)”

Opportunity gap indicators in Johnson County: A deeper look



In the United Community Services 2018 report on poverty, the geographical poverty gaps in Johnson County help further illustrate the County’s challenge. An analysis by the Johnson County Department of Health and Environment highlights the higher poverty rates in the Northeast suburbs, the county seat of Olathe, urban communities along the I-35 corridor and rural areas of Edgerton, De Soto and Spring Hill.

Johnson County school districts include Blue Valley, DeSoto, Gardner Edgerton, Olathe, Shawnee Mission and Spring Hill. The chart below highlights demographic data²⁴ and socioeconomic data frequently leveraged as indicators of opportunity gaps. Color represents comparison to same data in other districts.



	3 rd Grade (%) L1/L2* ELA	4 th Grade (%) L1/L2 ELA	Economically Disadvantaged**	English Language Learners	Median Household Income	Avg. Value of Residence	African American/Black	Hispanic
Blue Valley ²⁵	32.33	22.82	7.94%	2.23%	\$116,934	\$476,147	3.42%	6.38%
DeSoto	38.41	34.86	11.40%	2.97%	\$52,364	\$203,200	2.72%	8.39%
Gardner Edgerton	56.76	41.91	30.53%	2.55%	\$75,985	\$178,700	3.39%	10.54%
Olathe	48.83	43.91	26.88%	9.01%	\$85,318	\$224,000	7.33%	16.81%
Shawnee Mission	44.79	42.82	35.04%	9.22%	\$55,096	\$165,307	8.83%	18.99%
Spring Hill	48.30	41.96	34.66%	1.04%	\$72,384	\$188,800	3.27%	7.45%

*Kansas assessment results are reported in four levels. **Level 1** indicates that a student shows a limited ability to understand and use the English Language Arts skills and knowledge needed for Postsecondary Readiness. **Level 2** indicates that a student shows a basic ability to understand and use the English Language Arts skills and knowledge needed for Postsecondary Readiness. Level 3 indicates that a student shows an effective ability to understand and use the English Language Arts skills and knowledge needed for Postsecondary Readiness. Level 4 indicates that a student shows an excellent ability to understand and use the English Language Arts skills and knowledge needed for Postsecondary Readiness.

**Economically disadvantaged means an individual who received an income or is a member of family that received a total of family income, that in relation to family size, does not exceed the higher of the poverty line; or 70 percent of the lower living standard income level.

Additional notes of relevancy:

- Blue Valley: Percent of teaching staff with a master’s degree or higher – 73%
- Across the state of Kansas, 66% of students were at or above the National Association of Education Progress (NAEP) Basic Reading level; only 34% of students were at or above the Proficient Reading level in 2019

²⁴ [Kansas Report Card 2018-2019, KS State Department of Education](#)

²⁵ [Blue Valley MAP Guidelines, Fall 2019](#)

Crime

The correlation between academic performance, graduation attainment, and crime is profound. Inside communities, higher numbers of school dropouts also mean higher number of individuals entering the criminal justice system, creating another drag on local economies.

- The percentage of prisoners in the two lowest levels of reading proficiency is 70%.²⁶
- High school dropouts commit about 75% of crimes.²⁷

This is a deeply complex topic, and it is not the purpose of this report to cover, at length, the many implications of crime rates to economic health. It is important however, to reiterate the cyclical nature of crime across generations and its continued impact on opportunity for youth. Anyone, but particularly children, exposed to crime and violence is at risk of poor long-term behavioral and mental health outcomes (including depression, anxiety, post-traumatic stress, eating disorders, and more), regardless of whether they were directly involved in the crime or not. These children are also more prone to aggressive and violent behavior beginning in upper elementary school—a critical age in the education pipeline.²⁸

Children who face this type of adversity are naturally going to struggle to focus on and succeed in school—and this is simply from a social-emotional perspective. If these issues are exacerbated in their home life or the overall quality

of the local education system, the drag becomes heavier. The environment—emotionally and physically—is not conducive to learning and creates an inability for children to effectively reach key milestones, stay in school, graduate and advance to further education or career training.

There is, however, a significant amount of promising data on the impact of education on crime. It is becoming more widely accepted that improving the education and enablement of individuals in a community—youth and adults—is the single most important action a community can support to reduce crime rates. Until then, our school children remain at higher risk when they are expected to learn and develop in environments ripe with crime and violence.

Community Health

These somber trends continue when assessing how personal health impacts an individual’s ability to learn and develop. Recognizing the need for a healthy start, a significant amount of social support is increasingly available to mothers and babies in the earliest days of a child’s life to ensure they are set up for optimal development from birth. Yet environment matters a lot here, too. Poor nutrition, lack of healthcare, unhealthy physical and emotional surroundings all create additional risk factors for children when it comes to learning.

²⁶ National Institute for Literacy, 1998

²⁷ Smiley, Travis. PBS [“Fact Sheet: Is the dropout problem real?”](#)

²⁸ The Healthy People 2020. Office of Disease Prevention and Health Promotion. [“Crime and Violence”](#)

An educated individual generally has improved opportunities for better health. They have increased income and resources to obtain the health care they need, there are fewer psychological concerns stemming from crime and poverty, they have increased visibility to and understanding of healthy behaviors, are surrounded by healthier environments, and generally, they live longer.²⁹ This impacts attendance in school, ability to engage and concentrate, and get help for any potential learning disabilities. Educated individuals also usually make more money, enabling them to purchase healthy food, have time for exercise, and create more stable living circumstances. Poor health creates just the opposite.

Stress is a critical personal health component to consider as well. All the factors outlined here—personal identity, home and community life, social class and poverty, quality of and access to education—can create an increased likelihood of considerable and long-term stress for an individual. Ongoing stress inhibits a body’s ability to operate at normal functioning, disturbing immune responses, digestive and cardiovascular health; it

impacts sleep patterns and reproductive functions; and creates acute issues, such as headaches, irritability, sadness, anger.

Imagine a child in these circumstances being asked to learn.

As that child grows, these issues increase in complexity both individually and across populations. The rising cost of healthcare continues to be one of the country’s biggest economic issues. Among the key drivers of increasing healthcare costs are the unsustainable levels and cost of chronic disease, and a lack of patient engagement.³⁰ These drivers of healthcare costs are seen far more frequently in those who lack education than those who do not. Again, however, it is not “their” issue. The cost of healthcare is a shared burden in our society, so effectively managing this cost can generate significant economic outcomes and enable continued personal health of the individuals in the community.

²⁹ VCU Center on Society and Health (2015). [“Why Education Matters to Health: Exploring the Causes”](#)

³⁰ Alliance for Health Reform. (2012) [“High and Rising Costs of Health Care in the U.S.”](#)

Conclusion

Despite the perceived marriage of the United States and opportunity, it is clear that opportunity is determined by circumstances outside an individual's control. A child's personal identity dimensions, home and community life, social class, and quality of and access to education, have implications on children, as well as their communities, economically, and through crime and public health. Most tragically is that these factors manifest in the earliest years creating a near-immediate drag that remains for years, decades or even the rest of their lives.

Without intending to discredit personal merits, the fact remains—if an individual is successful, it is likely that at least one societal element provided support and structure necessary for their success.

These issues are incredibly complex. The intent here is not to present and explain these challenges at great length, but rather to clearly illustrate how they impact our youth, most often before those children ever have a chance to experience and exhibit their own potential.

As it relates to opportunity gaps in children, the United Community Services summarizes the long-term costs to society:

- Lower student achievement in schools
- Loss of human potential and productivity
- Reduction of workforce readiness and economic competitiveness
- Worse health outcomes, higher health insurance premiums and higher medical costs
- Increased crime and rising cost of criminal justice
- Erosion of a tax base

It is incumbent on community leaders to:

1. Understand how these issues are dramatically impacting communities.
 2. Have the foresight to recognize the considerable “downstream” effects of opportunity gaps.
 3. Identify opportunities to mitigate these issues.
-

No single program or service will generate enough impact to address these challenges alone. Change will require meaningful and visionary collaboration across the business community, government and social service agencies, schools, and residents. Communities need to work together to assess the “tools” in their “toolkit” to identify the opportunities they have to improve education outcomes in their community and understand the gaps that exist relative to combating these challenges.

The remainder of this report will expand upon an opportunity in Johnson County to grow the impact of the County's existing library programs and services. Taking the context of how education attainment and opportunity gaps have long-term implications for community health and vitality, readers are encouraged to assess how this particular tool could help improve the County's toolkit when it comes to ensuring there is a chance for every child in Johnson County.

Part Two: A chance for every child

Establishing a Mobile Learning Program in Johnson County

Part One of this report expanded on the topic of opportunity gaps, presenting the case for how the unequal distribution of resources and opportunities for young people creates systemic challenges that should be top-of-mind for communities. The “tool in the toolkit” concept illustrates the fact that many local resources are positioned to help mitigate the challenges outlined, either with existing or expanded services.

The Johnson County Library Advantage

The Johnson County Library system serves over two million people annually from 14 library buildings. The Library exists to create opportunity in the community through the access to ideas, information and experiences that support and enrich people’s lives. Library staff offers a considerable amount of expertise in multiple areas, including:

- Community programming and relations
- Curriculum, training, and learning services (for early childhood, youth and adults)
- Literacy
- STEM education
- Maker experiences
- Event production
- Civic engagement
- Incarcerated and multi-cultural outreach

The Library’s team of professionals lend their expertise every day to the cause of literacy and learning in Johnson County. They bring a history of programming aimed at key outcomes, such as helping children obtain the six key skills they need by age six to become a proficient reader; or by advocating for the learning and exploration of modern STEM skillsets through the Makerspace facility.

helping children obtain the six key skills they need by age six to become a proficient reader; or by advocating for the learning and exploration of modern STEM skillsets through the Makerspace facility.

The Library operations are funded, in large part, by Johnson County tax allocations so maximizing the community’s investment in this organization makes good business sense.

As such, the Library is seeking to broaden its reach into underserved communities by launching a Mobile Learning Program. Much broader in scope and impact than a traditional bookmobile, a fully executed Mobile Learning Program will bring key Library programming and services into previously unreached and underserved areas of Johnson County.

Part Two of this report outlines important tactical, organizational and strategic considerations for this program at large and for the staff, partners and funders who will support it.

Mobile Learning Program: Organizational and strategic alignment

Organizational and partner alignment

Above all, there must be shared understanding and agreement between Library leadership, staff, partners and funders that a Mobile Learning Program is right for the organization and the community. For the Library team, this is particularly important to assess in the context of the Library's already established short- and long-term strategies.

Alignment and agreement across the organization will be critical to support the development and execution of this program. The mobile learning plans outlined here should be integrated into existing strategic planning conversations between Library leaders, staff and key partners, including the Johnson County Library Foundation, Friends of the Johnson County Library, and the Board of County Commissioners.

Strategic alignment

In 2015, the Library, with the support of the Library Board of Directors and the Board of County Commissioners established a 20-year master plan for the Library. The Comprehensive Library Master Plan outlines specific and coordinated upgrades and changes to Johnson County Library services, facilities and staffing for the next two decades.

The plan outlines five principles that guide the Library's strategic planning:

- Equitable library services throughout the County
- Optimize access to services that are valued by customers
- Build on existing infrastructure
- Operational sustainability
- Flexible and responsive for evolving services and community change



A Mobile Learning Program is a natural extension of this master plan—a reimagined, innovative way of delivering Library services to consumers. In outlining the concept of “Equitable - not identical,” the plan notes that the Library should continue to provide core services locally to optimize convenience AND strategically locate special services to optimize services costs and quality. It further outlines a vision that centers on “[Designing] for behaviors,” which takes into consideration patterns of travel and use and alludes to a need to develop flexible spaces daily and over the long term.

A more recent strategic planning exercise at the Library established the following short-term (2019 to 2023) focus areas: Education, Operations, Community, Communication, and Convenience.

All aspects of that short-term strategic plan align particularly well to the mobile learning opportunity:

- **Education:** Johnson County Library creates inclusive and welcoming environments that spark curiosity and learning.
- **Operations:** Johnson County Library staff collaborates and coordinates to create efficient procedures and processes that provide exceptional customer service.
- **Community:** Johnson County Library offers neutral spaces and opportunities where all voices are equal, and connections are forged.
- **Communication:** Johnson County Library listens to and shares information with all, building strong connections and relationships.
- **Convenience:** Johnson County Library delivers services and materials how, when and where patrons want.

The library’s strategic visions, expected outcomes and goals:

Education	<ul style="list-style-type: none"> • Outcome: People will learn about themselves and the world. • Goal: Provide a premier customer experience by improving and annually reviewing all Library services.
Operations	<ul style="list-style-type: none"> • Outcome: People will receive seamless service. • Goal: Develop and review the annual budget, allocating resources to align with strategic goals, tactics.
Community	<ul style="list-style-type: none"> • Outcome: People will thrive and prosper. • Goal: Annually review and align the 2019-23 strategic partnerships to continue to support the mission.
Communication	<ul style="list-style-type: none"> • Outcome: People will be connected. • Goal: Set and annually review the communication vision and mission.
Convenience	<ul style="list-style-type: none"> • Outcome: People will be surprised and delighted. • Goal: Lead and administer the 20-year comprehensive master plan with provided resources.

Mobile Learning Program: Objectives and goals

Objectives

At the Johnson County Public Library, the primary objective of the Mobile Learning Program is to leverage mobile capabilities to increase access to ideas, information, experiences, and materials that support and enrich lives, particularly for the community's most vulnerable.

The secondary objective is to generate traffic into Johnson County Library branches to maximize existing programs and services, through special events and promotions.

Additionally, the Library might consider leveraging existing strategic goals to assess program outcomes. In particular, the following goals from the Library's strategic plan have direct, measurable alignment to mobile learning.

Goals

There are many ways to establish program goals and the Library staff should have a focused discussion on this once there is agreement on the program plan at large.

At minimum, the primary goal centers on helping mitigate opportunity gaps for the community's most vulnerable youth.

Strategic Vision - Convenience

Johnson County Library delivers services and materials how, when and where patrons want

Suggested Performance Indicators:

- Number of patrons served
- Program usage stats (number of services provided; number of patrons served; number of events booked, computer usage, etc.)
- Number of new Library memberships created through the mobile program
- Number of books checked out
- Performance metrics of curated collections
- Representation of geography and mileage covered to illustrate community reach

(continued)

Strategic Vision - Community

Johnson County Library offers neutral spaces and opportunities where all voices are equal, and connections are forged.

Suggested Performance Indicators:	<ul style="list-style-type: none"> • Customer demographics (age, race, gender, etc.), including at-risk indicators (free & reduced lunch eligibility, as an example) • Number of groups served • Number and type of organizations served, including details on the educational or informational needs those organizations work to address (for example, a partnership with a local “English as a second language (ESL)” learning program, extension of incarcerated outreach program, etc.) • Number of events attended/hosted • Number of cultural enrichment programs supported/hosted
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Strategic Vision

Operations - Johnson County Library staff collaborates and coordinates to create efficient procedures and processes that provide exceptional customer services.

Communication – Johnson County Library listens to and shares information with all, building strong connections and relationships.

Suggested Performance Indicators:	<ul style="list-style-type: none"> • Customer satisfaction or net promoter scores • Program governance metrics
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Strategic Vision - Education

People will learn about themselves and the world.

Suggested Performance Indicators:	<ul style="list-style-type: none"> • Number of new Library memberships created through the mobile program • Number of books checked out • Performance metrics of curated collections • Number of cultural enrichment programs supported/hosted • Education outcomes for local school partners
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These recommendations are starting points for measuring the Mobile Learning Program against the Library’s strategic goals. Yet there is also the larger stated goal for the Mobile Learning Program that centers on educational outcomes for the community’s most vulnerable, particularly children. This will be a more involved outcome to measure and the Library will need to consider how it might partner with other institutions in the community to track this more holistically, particularly partner school districts. A consideration for longer-term outcome measurement might

include creating a baseline and continuing to measure against 3rd grade algebra and reading scores for Kansas’ Title 1 schools.

While the Library’s services can and do play a critical role in education and literacy, they cannot change those outcomes alone. That said, the program should maintain an eye on standardized test results of schools in the county, as well as juvenile crime rates, both of which serve as important input into the program plans.

Mobile Learning Program: Target audiences

Primary audience

Ultimately, the Johnson County Library Mobile Learning Program will help eliminate barriers to Johnson County residents, specifically youth, who for a variety of reasons cannot maximize the Library resources available to them.

To support the overall intent of the program’s goals the “primary audience” of the Mobile Learning Program should be youth – toddlers to teenagers. Further priority should be given to Pre-K through 6th grade students, given the criticality of early education and literacy.

Layered on top of this is the “most vulnerable” component. This is largely considered through the lens of poverty, which has been established as a

key indicator of child and community well-being.

As of the 2018 US Census Bureau's 5-year estimate, more than 32,500 Johnson County residents (5.6% of the population) live below the federal poverty level and the poverty rate of youth is higher than any other age group. While the County’s poverty rate is lower than the national average, it is the inequality across the County that is a cause for concern. The same census bureau report indicates that while there is poverty throughout the county, it is significantly higher in certain geographic locations. Comparatively, some neighboring locations fall well above average national income rates.

Relative to the community’s “most vulnerable,” attention should be given to:

- Northeast suburbs
- Olathe
- Urban communities along the I-35 corridors
- The rural areas of Edgerton, De Soto, Spring Hill

Cities with the highest child (0-17) poverty levels include: Shawnee, Roeland Park, Merriam, Olathe, followed by Gardner and Lenexa.

From a school district perspective, this includes:

- The Shawnee Mission School District (Lenexa, Merriam, Roeland Park and Shawnee)
- The Olathe Unified School District (Olathe)
- Gardner Edgerton School District 231 (Gardner)

These regional areas and school districts serve as a filter by which priority is set relative to audience and mobile learning programming. The largest opportunity to reach the target audience is a partnership, first, with the Shawnee Mission School District, followed by Olathe and Gardner.

Additional considerations:

- School districts are a critical partnership, but care must be taken to not design programming solely in the context of a traditional school day or at physical school locations, as that could limit the potential value of the Mobile Learning Program. The Library team must be creative in their planning and partnerships to identify differentiating opportunities to reach their target audiences.

- With less demographic information available, it is hard to fully assess whether the local home school community would meet any sort of “vulnerable” criteria, but they must be considered in the context of mobile learning programs and services as a partnership there could provide several mutual benefits.

Secondary audience

There is strong potential use for the Mobile Learning Program beyond youth services, particularly in the Library’s existing outreach services. Today, Library staff packs, loads, transports, and unloads all materials needed for various outreach programs; the mobility of a “library on wheels” could make this process significantly easier.

The Library staff should discuss in what capacity the Mobile Learning Program could support other groups without negatively impacting their desired outcomes for the target audience. It should also consider its long-term mobile program roadmap to determine whether multiple vehicles would significantly increase the impact of the new mobile program, and if so, how that fits into the Library’s strategic planning efforts.

Existing outreach programs that could benefit:

- Incarcerated individuals
- Senior citizen communities
- Local immigrant communities; ESL learners
- Corporate partners

Mobile Learning Program: High-level program overview

The Mobile Learning Program through the Johnson County Library is intended to be a modern spin on a well-known service. Historically known as bookmobiles, book wagons, library-on-wheels and others, successful mobile learning programs exist throughout the country and focus on a variety of different outcomes.

With the Library's core focus on increasing access to ideas, information, experiences, and materials that support and enrich lives, particularly for the community's most vulnerable, the Mobile Learning Program will mobilize key library services and learning experiences across the community.

The opportunities available to customers of the Mobile Learning Program are endless; once they access the mobile learning unit, the doors open to access the full capabilities of the Library system.

The ability to have a presence outside a brick-and-mortar branch also creates a whole new lineup of outreach opportunities for the Library. Art fairs and exhibits, speakers' series, cultural enrichment events, summer programming in the parks, farmer's markets, election activities, community center partnerships, pop-up libraries, and more, all offer unique opportunities for the Library to deliver new customer experiences and drive new traffic into its network.

Given the wide possibilities of the Mobile Learning Program, the staff should focus on establishing distinct calls to action for each engagement they offer. Can they help customers get a library card? Should they point them to the most convenient library? Every engagement in the program is a pipeline opportunity for traditional Library services.

Library services:

The following library services will be available through the Mobile Learning Program as part of its core services:

- Library card applications
- Checkouts, renewals and returns (for books, as well as small collections of CDs, DVDs, video games, eBook and audiobooks)
- Place holds
- Interlibrary loan requests
- Fine payment
- Replacement card requests
- Internet access/Wi-Fi connection

Learning experiences:

To optimize learning outcomes for the primary audience, programming and curriculum of the Mobile Learning Program will center on two key learning outcomes: reading proficiency and STEM exploration.

Reading proficiency

Relative to the early childhood population, the mobile unit will serve as an extension of the Library's "6 by 6 Program," which centers on developing the six key skills necessary for reading proficiency by age six.

- Having fun with books
- Notice print everywhere
- Talk, talk, talk
- Look for letters everywhere
- Tell stories about everything
- Take time to rhyme

Success will require tight alignment between the Mobile Program Manager(s) and the Youth Services Manager(s) who can provide direction relative to "6 by 6" strategy and objectives.

Beyond the "6 by 6 Program," curriculum should be developed to support reading objectives by age group, and should align with relevant existing Library programs, (e.g., the Library's Storytime program).

The mobile learning curriculum and scheduling should offer flexibility and supplemental support for individuals who are behind their respective age/grade levels (see chart on next page³¹), as well as address potential learning risk areas, such as summer learning slides, or the emerging pandemic learning slides.

³¹ Jeanne Chall (1983) "Stages of Reading Development"

Chall's Stages of Reading Development

Source: Jeanne S. Chall, *Stages of Reading Development*. N.Y.: McGraw BHill Book Company, 1983.

Stage	Approximate Age/Grade	Characteristics and Masteries by End of Stage	How Acquired	Relationship of Reading to Listening
Stage 0: Pre-reading "pseudo reading"	6 months – 6 years Preschool	Child "pretends" to read, retells story when looking at pages of book previously read to him/her, names letters of alphabet; recognizes some signs; prints own name; plays with books, pencils and paper.	Being read to by an adult (or older child) who responds to and warmly appreciates the child's interest in books and reading; being provided with books, paper, pencils, blocks, and letters. Dialogic reading.	Most can understand the children's picture books and stories read to them. They understand thousands of words they hear by age 6 but can read few if any of them.
Stage 1: Initial reading and decoding	6 – 7 years old 1 st grade and beginning 2 nd	Child learns relation between letters and sounds and between printed and spoken words; child is able to read simple text containing high frequency words and phonically regular words; uses skill and insight to "sound out" new one syllable words.	Direct instruction in letter+sound relations (phonics) and practice in their use. Reading of simple stories using words with phonic elements taught and words of high frequency. Being read to on a level above what a child can read independently to develop more advanced language patterns, vocabulary and concepts.	The level of difficulty of language read by the child is much below the language understood when heard. At the end of Stage 1, most children can understand up to 4000 or more words when heard but can read about 600.
Stage 2: Confirmation and fluency	7 – 8 years old 2 nd and 3 rd grade	Child reads simple, familiar stories and selections with increasing fluency. This is done by consolidating the basic decoding elements, sight vocabulary, and meaning context in the reading of familiar stories and selections.	Direct instruction in advanced decoding skills; wide reading (instruction and independent levels) of familiar, interesting materials that help promote fluent reading. Being read to at levels above their own independent reading level to develop language, vocabulary and concepts.	At the end of Stage 2, about 3000 words can be read and understood and about 9000 are known when heard. Listening is still more effective than reading.
Stage 3: Reading for learning the new Phase A Phase B	9 + 13 years old 4 th – 8 th grade Intermediate 4 th – 6 th Junior high school 7 th – 9 th	Reading is used to learn new ideas, to gain new knowledge, to experience new feelings, to learn new attitudes, generally from one viewpoint.	Reading and study of textbooks, reference works, trade books, newspapers, and magazines that contain new ideas and values, unfamiliar vocabulary and syntax; systematic study of words and reacting to the text through discussion, answering questions, writing, etc. Reading of increasingly more complex text.	At beginning of Stage 3, listening comprehension of the same material is still more effective than reading comprehension. By the end of Stage 3, reading and listening are about equal for those who read very well, reading may be more efficient.
Stage 4: Multiple viewpoints	15 – 17 years old 10 th – 12 th grade	Reading widely from a broad range of complex materials, both expository and narrative, with a variety of viewpoints.	Wide reading and study of the physical, biological and social sciences and the humanities, high quality and popular literature, newspapers, and magazines; systematic study of words and word parts.	Reading comprehension is better than listening comprehension of materials of difficult content and readability. For poor readers listening comprehension may be equal to reading comprehension.
Stage 5: Construction and reconstruction	18+ years old College and beyond	Reading is used for one's own needs and purposes (professional and personal); reading serves to integrate one's knowledge with that of others, to synthesize it and to create new knowledge. It is rapid and efficient.	Wide reading of ever more difficult materials, reading beyond one's immediate needs; writing of papers, tests, essays, and other forms that call for integration of varied knowledge and points of view.	Reading is more efficient than listening.

STEM Exploration

At its most basic level, STEM exploration helps cultivate critical thinking abilities. It inspires wonder, creativity, curiosity, trial and error, problem-solving and other important skills that set the foundation for advanced learning.

There are numerous possibilities for STEM activities inside a mobile learning unit, but the core purpose should be to help create an environment where children can begin to strengthen their critical thinking muscles. The activities and environment should inspire kids to engage in:

- Comparing and contrasting
- Asking and explaining
- Evaluating and forming opinions
- Seeing other perspectives
- Predicting what happens next
- Creative thinking

All these skills correlate directly to language and literacy success, creating strong alignment to the other focus area of the Mobile Learning Program.

On one hand, it is about teaching kids to read; on the other, it is about teaching them to read between the lines.

There are vast resources available to support the development of STEM programming, including experts working in the Johnson County Library system. As part of the formal project plan, the Library should convene a committee of early

learning and STEM education professionals (from within and outside of the Library) to advise and develop a framework for STEM learning in the mobile learning unit.

As a framework for STEM learning in the mobile unit is developed, it will be important to remember that STEM exploration can occur with the most basic of materials, including many found in everyday surroundings—paper, water, air, magnets, light, wood, photos, plants, and more. This direction of thinking may be more conducive to developing mobile STEM programming versus attempting to create a mobile maker space, for example. There are likely components of a maker experience that will translate nicely into a mobile learning experience, and certainly mobile learning programming should serve as a pipeline into the Library’s existing makers’ experiences. That said, replicating a mobile maker space in the unit would be a significant cost driver given the cost of equipment and the added wear and tear that might occur with frequent movement. Staffing considerations would also have to be made to ensure the appropriate skills are available in the mobile learning unit. There are no doubt synergies between the Maker Space and the Mobile Learning Program, but the goal should be to complement, not replicate.

Mobile Learning Program: Tactical considerations

Staffing

Once the strategic direction has been set by the Library leadership and socialized with the staff, the first step toward making the Mobile Learning Program a reality is establishing oversight of the ongoing mobile learning strategy and program. Two key capabilities are required for this role and it may make sense to split it into two roles based on resource abilities.

First, the Library will need a Project Manager who is adept at taking a big idea to reality. This could be a temporary role that exists for the duration of the program development and phases out once the program is up and running successfully. Key responsibilities of this role include (but are not limited to):

- **Executive engagement:** Overseeing regular interactions with Library and Foundation leadership to ensure continued alignment to the strategic plan and donor expectations.
- **Collaboration and coalition-building:** Bringing along key resources in the organization to support the development of and operationalize a new program, regardless of their ultimate involvement in the program.
- **Strategic planning and execution:** Transitioning the business case and initial project plan into reality, in close partnership with all stakeholders.
- **Project management:** Managing a plan and budget, progressively driving toward established deadlines and deliverables, and partnering across the organization to advance the plan.

Secondly, the Library will need a Program Manager who can “run” programs effectively. This longer-term role is focused on the ongoing oversight and execution of the Mobile Learning Program. Key responsibilities of this role include (but are not limited to):

- **Program management:** Oversight and coordination of related projects, experiences, and continuous improvement initiatives within the Mobile Learning Program. This requires an ability to build strong partnerships and collaborate with key resources in the Library system, such as the Collections Manager, the Youth Services team, the Administrative team, and others.
- **Consumer experience and engagement:** Drives positive interactions between customers/patrons and program services on a consistent basis.
- **Daily operations:** Maintains general administrative oversight of key program functions, including staffing, scheduling, budgeting, and any relevant regulatory or licensing requirements.

While not necessarily a requirement, institutional knowledge of the Library, an understanding of the surrounding communities and relationships with local school districts, are desirable qualifications for this role.

How the Mobile Learning Program will be staffed operationally will require planning and collaboration across the Library as current staff voiced concerns that this program likely could not be supported with existing resources. There are several existing Library resources who could effectively lend their expertise as a normal course

of business in their current roles (examples below), but certainly Library leadership may have to help with prioritization of focus and workloads.

Examples cited by staff:

- The Collection Development Manager could assist in curating a revolving collection of books designed to support the mobile program's objectives and audiences.
- The Outreach Librarian could expand her work with local immigrant families through the Mobile Learning Program.
- Consistent alignment with Youth Services and Youth Information Specialist staff members will be important from an ongoing program perspective.



In an ongoing capacity, the Library will need to identify the team who will deliver the Mobile Learning Program and support its daily operations, beyond the staff members who would provide their general subject matter expertise, and in addition to the primary program manager.

At-large staff capabilities required for a successful Mobile Learning Program include:

- Project management
- Program management
- Clerical and administrative
- Event management and execution
- Customer service/experience (especially with youth)
- Extensive knowledge of Library's network and resources
- General knowledge of the Johnson County community and its school districts
- Ability to speak multiple languages
- Ability to lift heavy objects
- Ability to operate a commercial vehicle
- Ability to work evenings and weekends, full- or part-time

Organizationally, the Mobile Learning Program could be housed within System-Wide Services, either as a new standalone function reporting directly to the Associate Director of System-Wide Services, up through the Deputy County Librarian, or as a new component of the Library's existing outreach services. This organizational structure decision should be reviewed and made by the Library's administrative team.

Mobile Learning Vehicle

The capabilities of the mobile unit itself become the major differentiator from an experience and outcomes perspective. The Library leadership should continue to consult with their architecture partners at The Clark Enerson Group to assess the type of vehicle most appropriate for meeting program goals and objectives. A peer in the national Library community, noted there are specialty services available to support efforts like this. Richard Kong, director of Skokie Public Library, recommended [Specialty Vehicle Services, LLC.](#), as one example.

Ideally, the team would start with a vehicle base that provides as many of the desired capabilities as possible to help minimize customization costs. This is most likely accomplished by starting with a recreational vehicle (RV) and creating blueprints for conversion to a mobile learning unit.

Required capabilities of mobile learning unit

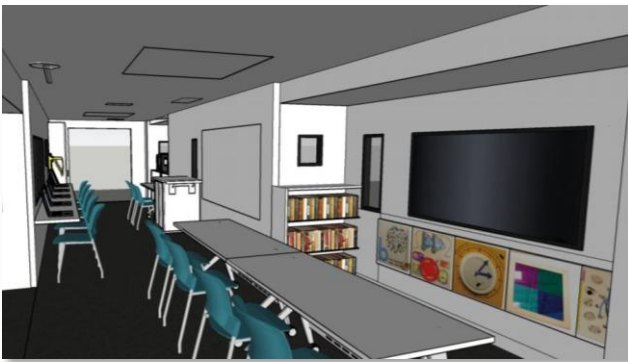
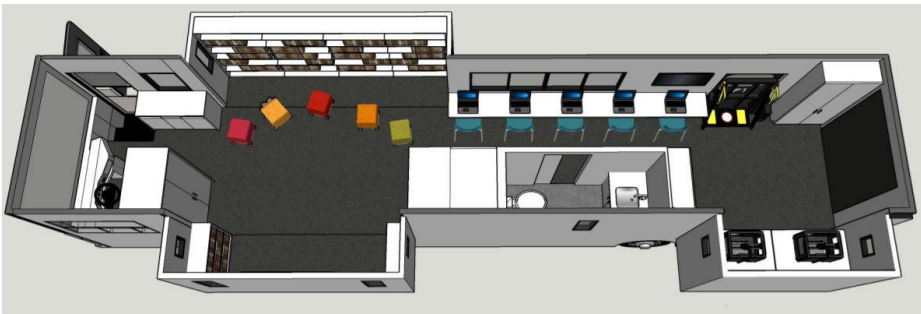
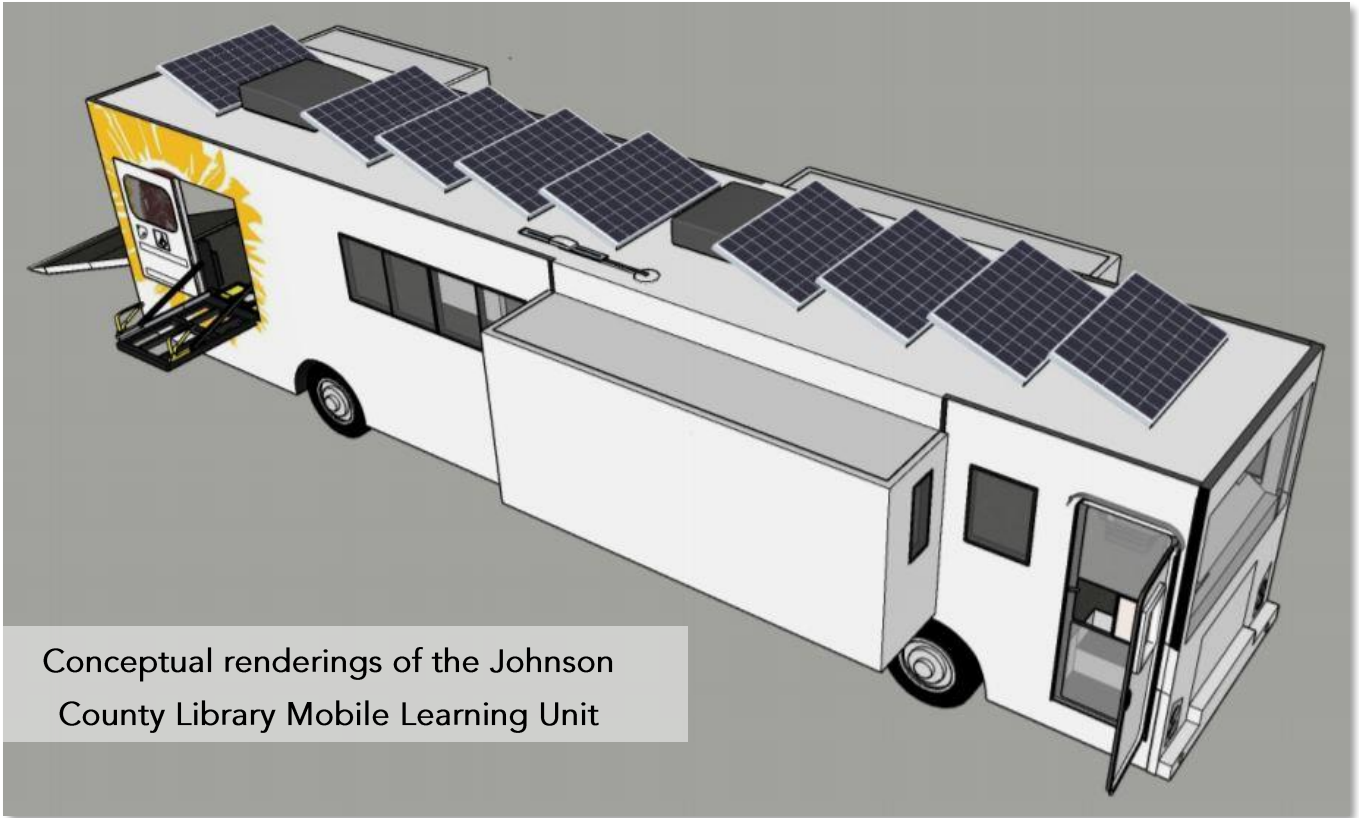
- Has basic infrastructure to accommodate regular operations: HVAC, electricity (including generator), storage, audio/video/wi-fi capabilities
- Windows and doors designed to support indoor/outdoor events
- ADA compliant (inclusive of the ramps and chair lifts seen in the corresponding conceptual rendering)

Preferred capabilities of mobile learning unit

- Has the flexibility to be a learning center, an event pop up experience and/or a promotional tool
- Can accommodate indoor and outdoor events and programming
- Creatively designed to appeal to broad base of consumers, while fully accommodating the needs of the primary audience
- Flexibility in core programming modules or stations (a reading nook one day can become a voter registration booth another day, as an example)

Initial renderings have been created by architects at The Clark Enersen Partners as a starting point for staff, partners, and donors to conceptualize and finalize the unit. The embedded renderings highlight how an RV can be converted into a multi-purpose learning space with indoor and outdoor expansion options.

These renderings have also been used to generate an initial cost estimate for creating the mobile unit, broadly estimated between \$250,000 and \$500,000. Variance is based on final decisions relative to all components that will be included in the unit. The recommendation is that the Library focus first on the ideal customer experience and refine the specs for the unit to support that, then work with the architects to develop a more detailed cost estimate, which will be instrumental to establishing targeted fundraising goals.



Conceptual renderings developed by The Clark Enersen Partners.

Technology

The technical configuration of the mobile unit warrants considerable discussion and planning. More modern recreational vehicles are increasingly equipped with smart systems, and there should be a sophisticated technical infrastructure developed inside the unit to support operations and programming.

Under the leadership of the Library's information technology team, a comprehensive plan that outlines details for implementation, support, security, maintenance, upgrades, replacements, and outages should be developed.



Core components of the mobile unit technology to consider include (but are not limited to):

<p>Hardware</p>	<p>PCs, tablets, audio/visual screens, microphones, speakers, credit card payment machines</p> <p>Given the desire to offer fee collection (and potentially other payment-based transactions) in the mobile unit, the Library needs to decide what kind of payment processing to include. They can equip the unit similarly to a physical branch with standalone credit card processing machines, but might also consider leveraging online payment options via PC to minimize equipment and support needs.</p>
<p>Software and applications</p>	<p>Will vary based on final programming.</p>
<p>Systems</p>	<p>Will vary based on final lists of services provided in the mobile unit, but ultimately should be designed in a way that supports the desired customer experience (library applications, book requests, fee payment, etc.)</p>
<p>Networks</p>	<p>Networking in the unit, inclusive of Wi-Fi connectivity, will need to be configured in a way that enables connectivity within the unit, as well as back to the Central Library network, regardless of location. Devices connected to the network would include computer banks, tablets, audio/visual screens, and any other programming-specific needs that requires digital enablement.</p>
<p>Disability Accommodations</p>	<p>A stated goal in this effort is to design a mobile experience that is fully inclusive of all children. This will have implications for the technology strategy. There are a number of assistive technology tools available, including text-to-speech, audio books, alternative keyboards, sip-and-puff signaling devices, portable word processors, and much more. The Library will need to very clearly determine its inclusivity goals relative to mobile learning experiences and work with their technology team to develop a holistic plan for digital inclusivity enablement.</p>
<p>Information security</p>	<p>Cyber security remains a top concern for most organizations and the mobile unit should be integrated into central information security operations and governance. The mobile nature of the unit may lend itself to increased security risks, such as malicious access to the Library network, eCommerce and data breaches, etc.</p>
<p>Physical security</p>	<p>Given the risk of theft as well as the mobile nature of the vehicle, physical security of the mobile unit's technical assets needs to be planned for. Will devices be anchored to the unit or stored securely during transit? What safeguards should be put in place to mitigate risks of theft, abuse or even general wear and tear?</p>

Collaborating with technology resources at the Library early in the planning process is critical to the success of this portion of the experience. While technology will be a major enabler, it can also be a major driver of poor consumer experiences and should not be taken lightly. The Library’s technical resources can serve as subject matter experts through the entirety of the effort — from providing subject matter expertise when interacting with donors, to working with the Mobile Learning Program leaders when focus shifts to design and implementation. Leveraging proper technical resources will help ensure positive customer and staff experiences.

Logistics

Licensing and Permits

The Mobile Learning Vehicle, and designated vehicle operators, will have to maintain all relevant licenses, inspections and permits, including special event permitting, as relevant. Details will depend on the final vehicle specs and requirements of host locations.

Disability accommodations

Considerations for digital accommodations are outlined previously in this report. Additional care should be taken to plan and implement accommodations for disabled individuals throughout the unit itself. Wheelchair lifts and ramps are included in the initial renderings and must be considered a required component of the mobile unit. The interior of the unit should also be

designed to be ADA compliant — the width of the corridors, the heights of the shelving and desks, et al. — should be addressed in the final design.

Routes

The Mobile Learning Program should establish a core, regular route in service of its primary audience. This creates an opportunity to engage those customers in programming on an ongoing basis, which will increase the Library’s ability to generate individual and group learning outcomes.

It also creates an ongoing opportunity for those customers to make use of the library services provided by the Mobile Learning Program. A regular route, for example, will make it easy for someone to check out a book one week and return it the next time the mobile learning unit visits, which is an obvious benefit for populations who do not traditionally visit Library branches.

Routes should flex seasonally, complementing the academic year. The school district partnership will be critical to establishing this core, regular route. As an example, the bus may stop at school locations every two weeks during the school year, then flex to a route that accommodates summer schools, childcare programs, summer learning programs, etc.

Event Calendar

With the core, regular route established, additional events can then be added. A master calendar should be developed, which will create an opportunity to proactively identify events and

engagement opportunities. This is the chance for the Library staff to determine how far they can maximize the learning unit for additional outreach programming (events with senior citizens; incarcerated individuals, cultural events, etc.).

Tracking will be critical to usage and performance metrics as it will help the Library measure the intended use next to actual use.

Community requests

There is a lot of benefit in creating a mechanism by which Johnson County community members can request that the mobile learning unit come to their event. Appropriate timing should be considered, specifically whether this makes sense to do near the start of the program or if its more appropriate as a later-phase effort once core programming has been effectively established.

Additionally, should the staff choose to accept requests, they will need to create parameters by which they will review and accept community requests. Will they attend an individual child's birthday party? If a recognized hate group requests the mobile unit for an event, how is that assessed? If a large donor requests the unit when it is already scheduled for another event, how will that be handled? Opening the program up for requests has a lot of benefits, but a lot of important considerations as well. The staff should consider whether this is on the program's roadmap and plan thoughtfully from there.



Hours of operation

Regularly scheduled hours will flex considerably, which is an important consideration for staffing. In addition to regular school day hours, the mobile learning unit may need to be staffed during evening hours and on weekends, year-round. This was also cited as an issue to address with Library

staff, given the nature of their work primarily falls within traditional business hours.

Holiday hours should be planned for as part of the regular scheduling and should follow the Library’s established holiday schedule.

Sample schedule: School year

Key components:

- Includes time for staff administration and planning
- Blends a regular route with flexibility for outreach program use and special events
- Assumes engagement of multiple resources: Mobile Learning Program staff, outreach staff, special events staff / full- and/or part-time
- Includes a day off (for staff and the mobile unit)
- Accommodates time for vehicle maintenance, cleaning, etc.

7:00 a.m.							
8:00	Regular Route: School Stop			Flex Event: Homeschool Group		Flex Event: Farmer's Market	Mobile Learning Program Closed
9:00		Regular Route: School Stop	Regular Route: School Stop		Regular Route: School Stop		
10:00							
11:00	Regular Route: School Stop						
Noon							
1:00 p.m.			Regular Route: School Stop	Regular Route: School Stop	Regular Route: School Stop		
2:00	Hold for planning and administration						
3:00							
4:00		Monthly Event: Incarcerated Outreach					
5:00							
6:00					Flex Event: Theatre in the park		
7:00							
8:00							
9:00							

Contingency plans for program disruption

Contingency plans and policies should be developed for inclement weather and vehicle malfunction:

- Inclement weather: Given the mobile nature, an inclement weather policy should be created. Not only should it take into consideration school district and Library closures, but an approach should also be developed by which the Mobile Learning Program staff can adequately assess road and weather conditions to determine the ability for the vehicle to reach its destinations safely. This should include the protocol for cancelling mid-programming when inclement weather approaches quickly.
- Vehicle malfunction: A clear policy and communications plan should be developed to address “service outages” due to vehicle malfunction. The policy should take into consideration what happens if the issue is short-term (less than a week) or longer (more than a week). Not only should this plan address the impact to partners and programming, but it should also address the plan for staff who may not be able to work due to the vehicle being offline for repair.

Mobile Learning Units: Peer Learning

Gina Millsap, CEO - Topeka and Shawnee County Public Library, offered the following comments.

*Comments provided verbatim, except where noted.

Things to think about

- Always get a generator because that gives you flexibility in where you go.
- Be prepared to negotiate with property owners for access to stop sites and the special electrical hook-ups you'll need.
- Be aware that some vehicles are fussy about where they're parked. They like really flat, level surfaces, especially if you have the slide outs.
- Some vehicles are fussy about temperature, especially if it's below 20 degrees F.
- Be prepared for human error, everything from leaving the stop without disengaging the shore (electrical) cord to hitting someone's building or vehicle.
- Be prepared to make having a [commercial driver's license] for bookmobile staff a requirement in some cases.

Here's the good stuff

- People love 'em and have emotional connections to bookmobiles that surpass their loyalty to a building. We have generations of bookmobile fans in Topeka and Shawnee County.
- It's cheaper to buy and operate a bookmobile than building and operating a branch.
- It's easy to change a bookmobile stop vs moving a branch.
- Invest in the design and production of your wrap. They're moving billboards and brand promotions.
- Pay attention to how frequently you change out the inventory. You can change out collections easily and get a lot more bang for the buck with bookmobiles if you stock them as popular materials service points.
- Invest in staff who are really good at readers services and curation. You'll build readers engagement and loyalty in ways that surpass what we do in our buildings.

Mobile Learning Program: Program plan viability and potential risks

Without question, this is a viable opportunity for the Library to extend its programming and services and reach underserved and unreached community members.

There are potential risks — although none of them present a compelling reason to stop continued development of the program at this time. Each potential risk should be assessed and addressed accordingly by the Library Administrative team as they begin determining the next steps in program development. Potential risks include:

1. **Timing** – The COVID-19 global pandemic continues to create significant disruption for organizations around the world. That said, it has also created opportunities for innovation in education and consumer experiences (see more detail in the Closing Comments). The Library must weigh the need to capitalize on and meet the increased demand for remote and mobile learning against existing Library priorities and capacity during these unprecedented times.

Determining where and how this program fits in the strategic efforts of the Library, no later than first quarter of 2021, is an important step for the Library leadership team, allowing them to effectively weigh all aspects of timing and resourcing.

2. **Staff alignment** – Even early conversations about this opportunity appeared to create

anxiety among some Library staff members. A part of the next phase of the mobile learning effort should center on organizational alignment.

Significant effort was undertaken by the Head Librarian to assess this opportunity in the context of systemic community needs and there is strong potential for this program. The outcome of this work is worth discussion between internal Library resources, and it will be important for staff to meaningfully engage in that. It will be equally important for Library leadership to listen to document the concerns raised from the staff so that, together, the organization can advance a plan that has broad support.

3. **Staff resources** – Across the duration of this engagement, the top concern consistently cited by staff centered on whether the Library had the resources to support a Mobile Learning Program on top of everything else they are doing. These concerns were articulated before COVID-19 disruption and upheld or strengthened across 2020 as the Library faced several resourcing and operational disruptions from the pandemic.

Comparatively, Library leadership consistently cited that launching a program like this will require the staff to think about resourcing differently and potentially make decisions to

stop other programs and free up resources. This remains somewhat of a disconnect and should be a focused topic of discussion as the Library team moves to strategic planning.

4. **Technology** – This report introduces high-level considerations for the technology enablement of a mobile unit program but creating a technology experience that can work seamlessly on wheels is a significant effort. The Library should prioritize initiating a workstream focused on the development of a technology plan for the mobile unit.

Timing is important. Drafting this plan now would support a more targeted fundraising goal as there would be better clarity of overall costs to develop and launch the mobile unit. Continuing to develop that plan throughout the course of the program development will also ensure it is inclusive of the latest technology.

It is important to underscore that this needs to be a focused effort. Not approaching this effectively puts the program at risks of missed deadlines, increased costs, poor customer and staff experience, and even information security breaches.

5. **Funding** – According to conceptual renderings from The Clark Enersen Partners, a mobile learning unit may cost anywhere from \$250,000 to \$500,000 depending on final

components and capabilities included. It is recommended that the Library create a scalable model that allows for a base level of functionality that can be adapted as needs change and additional funding becomes available.

The Library is in a strong position to cover the ongoing operational costs of a Mobile Learning Program but will need to secure external resources for the initial purchase and buildout of the unit. While this is an advantageous position to be in, it remains incredibly important to develop a more detailed operational cost projection and budget for the program. Without that, it will be challenging to validate that the cost of the program is effectively balanced with the outcomes created by its programs and services.

Mobile Learning Program: Next steps

The recommendation for next steps centers on two key efforts:

1. Socialize the opportunity assessment with key stakeholders.

Phase two should start with comprehensive discussions with Library staff (admin team and beyond), Library board, Board of County Commissioners and the Library Foundation Board about the opportunity they have to collectively advance a Mobile Learning Program in Johnson County.

All stakeholders will need to generally align on interest in and support of the project. Once that has occurred, the Library should initiate its project charters to begin transitioning to the next phase of this effort—Program Planning and Development. That phase should take the broad ideas and concepts outlined in the opportunity assessment and begin to put detailed plans to them, advancing them toward implementation.

A timeline for launch should also be established to help ensure continued progress and clarity of expectations relative to Phase Two work.

2. Begin fundraising.

Although the Library is well-positioned to support the operational costs of the Mobile Learning Program, the initial buildout will require charitable support from donors. This opportunity exhibits a number of components that will be attractive to donors including tangible and measurable outcomes, documented community and partner support, innovative expansion of existing successful programming, digital ambition, and a focus on inclusion. There is also timeliness to a charitable request of this nature given the implications surrounding the COVID-19 global pandemic. Donors are looking to make charitable investments in programs that meet the needs for increased remote and digital learning environments.

At the same time the Library leadership team is assessing this opportunity in the context of their strategic plan, the Foundation can be assessing and developing a targeted fundraising strategy. These two things should advance together, in parallel.

Mobile Learning Program: Closing comments

The world has changed since the onset of this report. Citizens around the world are grappling with the disruption of a global pandemic. Their personal and professional priorities are shifting. They are struggling with economic uncertainty, new social limitations, new work- and school-life norms, unrest in our civic and social interactions, and more. So many areas of life that used to be true are now in question.

The unfortunate reality is that current conditions will undoubtedly expand the gaps thousands of American children are already facing. The challenges outlined in Part One of this report, in the course of a single year, are compounding at alarming rates.

- Lower student achievement in schools
- Loss of human potential and productivity
- Reduction of workforce readiness and economic competitiveness
- Worse health outcomes, higher health insurance premiums and higher medical costs
- Increased crime and rising cost of criminal justice
- Erosion of a tax base

The gaps are getting bigger. The urgency has increased. The implications are growing. Winston Churchill, among others, is widely attributed to the notion of “never letting a crisis go to waste.” Without intending to disregard the legitimate challenges and disruptions created by current

circumstances, it is also important to capitalize on the opportunity afforded by those same circumstances.

Communities that focus on collectively understanding the long-term effects of childhood opportunity gaps— both for the child and the community at large — are already taking the most important first step toward creating systemic solutions.

Again, no single program, policy or service will solve this challenge—there must be a strategic, multi-faceted approach—but high-potential opportunities exist.

The Johnson County Library is so well-positioned to be a leader in addressing opportunity gaps in children. With the depth of subject matter expertise, the experience in programming, curriculum and learning outcomes and the infrastructure to build upon, the Library’s assets create a strong foundation for a comprehensive outreach program. It then follows that mobilizing that Library experience has strong potential to create a true community advantage.

While it may be a stretch for some community partners to equate mobile learning to long-term community impact, it is not a stretch for leaders in

one of the community's largest school district, Shawnee Mission Public School. Not only do they eagerly support this idea, but they also helped articulate the opportunity in the first place. Strategic partners, particularly those who understand what is at stake for our youth, will help create a formidable case to the community. The Library should continue to grow that support base by socializing the objective with more school administrators, civic leaders, businesspeople. The support is important and, again, establishes an important leadership role for the Library.

It may also be a stretch for some staff to equate mobile learning to long-term community impact. Library culture can help this. Reiterate the mission,

vision and strategic goals of the Library to help connect dots for staff who feel it is little more than "another program." The alignment is there, but there may need to be more selling of the "hearts and minds" for some staff, many of whom need to be meaningfully involved in the development and execution of the mobile program itself.

With the right vision and focus on core objectives, the program plan and implementation become much easier to advance. Make no mistake, it is a considerable undertaking, but far easier to do when there is alignment, focus and ongoing support of the Library's overall purpose—to increase access to ideas, information, experiences, and materials that support and enrich lives.

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