ECOTONE ANALYTICS

Impact Analysis
and **Social Return on Investment**

Project Summary and FAQs for:

TechPak

January 6, 2021

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Ecotone Analytics Impact Analysis

PROJECT SUMMARY AND FREQUENTLY ASKED QUESTIONS FOR TECHPAK

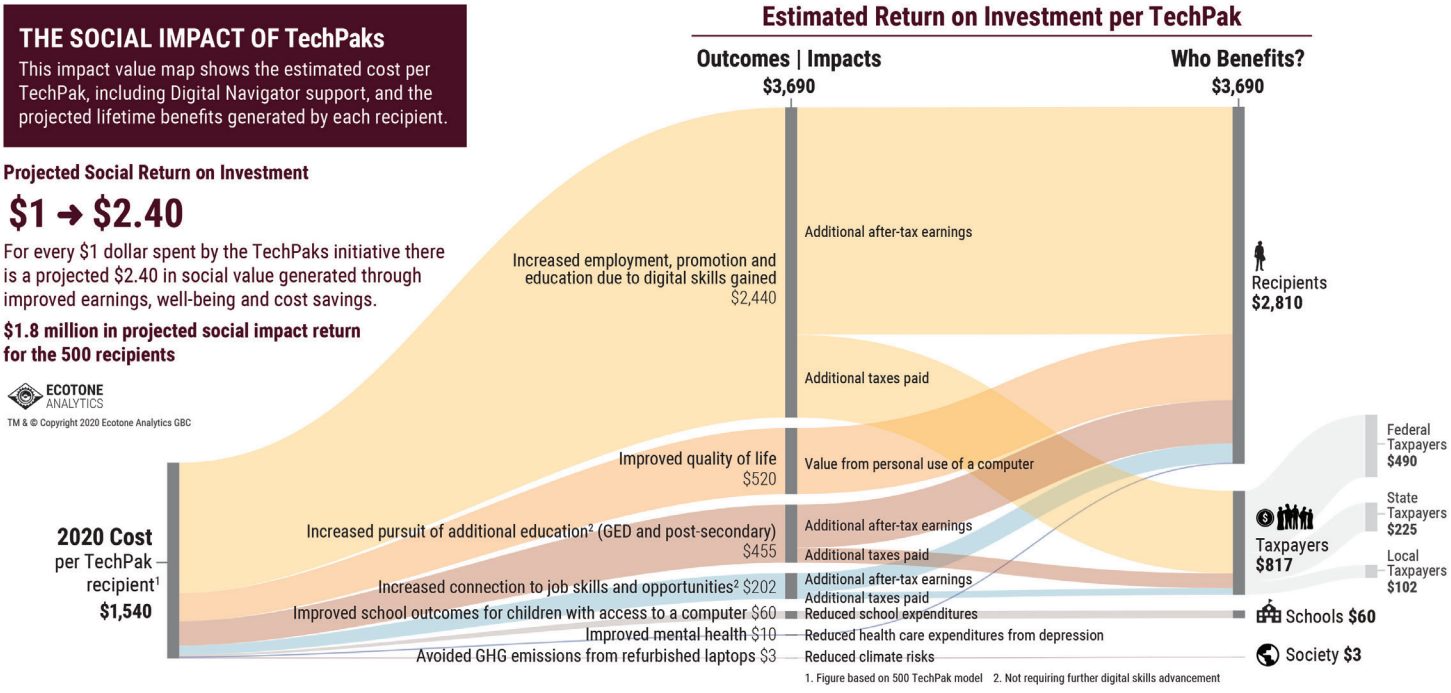
ECOTONE
ANALYTICS

PROJECT SUMMARY

KEY MESSAGE

It is projected that the TechPak initiative will provide a positive social return on investment (SROI). For every $1 spent for the TechPak initiative (Original Model), there is a projected $2.40 in social return on investment (SROI) in present value to recipients, their children, taxpayers, and the school system.

- Projected benefits per recipient: $3,690
- Estimated cost per TechPak: $1,540
- Projected total benefits generated by the TechPak initiative's Original Model: $1.85 million
- Estimated total cost for the TechPak initiative's Original Model: $770,400
- Projected net benefits generated (total benefits minus total costs): $1.08 million
- Largest outcome monetized was the: Increased earnings from increased employment, promotion and education due to digital skills gained
- If half of all households in Ramsey County without computer access were provided with a TechPak, total benefits could reach upwards of $25 million (in present value).



PROJECTED SROI SUMMARY FIGURES

Table 1. Projected SROI for each stakeholder

SROI		Notes
Total	**$2.40**	
Recipient	$1.82	Increased earnings, increased educational attainment, improved quality of life, improved mental health
Federal Taxpayers	$0.32	Increased tax revenues
State Taxpayers	$0.15	Increased tax revenues
Local Taxpayers	$0.07	Increased tax revenues
Public schools	$0.04	Reduced expenditures from grade retention
Society	$0.002	Reduced climate risk

MONETIZED OUTCOMES

Outcomes monetized include:

- Increased earnings from increased employment, promotion and education due to digital skills gained
- Increased earnings from connection to job opportunities otherwise not reachable
- Increased educational attainment - GED and Post-secondary
- Improved school outcomes for children with access to a computer
- Improved quality of life / value of the personal use of a computer (for recipient only)
- Improved quality of life for older residents through improved mental health
- Avoided GHG emissions from refurbished laptops

CORE ASSUMPTIONS

This analysis takes a prospective valuation approach to project the social value attributed to the TechPak initiative, by comparing the projected outcomes of TechPak recipients, against those with similar characteristics who do not receive a TechPak including its associated services.

- We assume that the preliminary data available is representative of all potential TechPak recipients. Future analysis may revise estimates based on the complete data of all TechPak recipients.
- We use the proportion of recipients referred to digital literacy to signal those people without sufficient skills and are interested in gaining more, as a proxy for the population who would not otherwise make this gain without Techpaks.

- Multi-year benefits utilize a 5 year net present value estimate with 2% inflation and 4% discount rate
- Recipients have average annual earnings on par with those who have a high school diploma (approximately $26,700)
- Assume half of those who were without a computer and referred to digital literacy training increase their digital skill level.
- We assume those without computer access and stating GED attainment as goal would not otherwise be pursuing their GED.
- For those recipients pursuing additional education, either GED or post-secondary, we isolate the value for those who were not referred to digital literacy training. This is to avoid risk of double counting benefits that would occur from increased digital skills.
- We assume that education and job assistance benefits can be a result of digital literacy skills gained OR may be realized through career lab and online education opportunities, but not both. This is to avoid risk of double counting benefits.
- Those recipients who passed their basic computer test are less likely to benefit as greatly from additional digital literacy training and ready to enjoy the benefits of computer use.
- We assume the increased likelihood of high school graduation from having a home computer is appropriate for signaling the reduced likelihood of grade retention each year of having a computer.
- Avoided GHG emissions from use of refurbished laptops stems from avoided source reduction.

GENERAL PROJECT FAQS

What is the purpose of this analysis?

- To accurately account for the social value generated from the TechPak initiative and to communicate that value with target stakeholders

- To provide an evidence-based valuation of the impact and identify the people to whom the benefits accrue

What is social return on investment?

Social Return on Investment (SROI) is an adaptation of the financial ROI metric. It is used to measure social, environmental and economic gains (also referred to as returns) as a result of an investment. It accomplishes this by placing financial value on the social, environmental and economic gains identified such as increased educational attainment and improved health. It does not include non-monetizable impacts i.e. those impacts that we may be unable to attach a robust estimate of monetary value to, such as the value of increased self-esteem.

There are two primary definitions of SROI used in the field of impact accounting.

1. **A benefit-cost ratio**: This is the value generated for every dollar invested. It is calculated as:

$$\frac{\text{Social + Environmental + Economic Benefits}}{\text{Investment}}$$

This is the definition used by Ecotone to communicate value creation. For example, the SROI number shown on the Impact Value Map is the "Estimated Return on Investment per TechPak" divided by the figure for "2020 Cost per TechPak Recipient".

2. **A percent return**: SROI can also be communicated as a percentage, similar to a typical financial return. The calculation of the SROI in this case is:

$$\frac{\text{(Social + Environmental + Economic Benefits) - Investment}}{\text{Investment}} \text{ X } 100\%$$

When calculating the return as a percentage, the size of the investment is subtracted from the benefits generated so as to isolate the net benefit from the investment. For the TechPak initiative, this definition results in an SROI of 140%.

Future development of the field will likely isolate a single definition. We note them both here to clarify our own calculation as well as enable increased understanding of SROI metrics a client may see elsewhere.

How does SROI compare to ROI?

ROI is a purely financial calculation, often communicated as a percent return:

$$\left(\frac{\text{Financial Gain from Investment - Investment}}{\text{Investment}}\right) \text{*100\%}$$

ROI alone does not measure the full impact of a program.

How does this valuation differ from an economic impact study?

This analysis is focused on monetizing social impacts. This is distinct from an economic impact study given that we are not including estimations of economic growth, business activity, indirect employment changes, etc. While social impacts certainly can influence economic conditions, that is beyond the scope of this analysis.

What is a non-monetized impact?

In addition to impacts monetized in the SROI estimation, there are impacts that are not monetized due to their intangible nature and/or the lack of quality data to support monetization presently. As future studies are conducted however, certain impacts may become monetizable.

What is Ecotone Analytics GBC?

Ecotone is a Minneapolis-based impact accounting and stakeholder communication firm. Its mission is to help clients scale their social and environmental impact by communicating impact value to stakeholders and investors.

How did Ecotone calculate SROI?

Ecotone's process analyzes and combines external literature of the highest level of evidence of causality with internal organization data to quantify and project the potential value of an organization's impact while identifying the people and entities to whom the benefits accrue. Where possible, outcomes were monetized. When monetization was not possible, non-monetizable outcomes were noted. This analysis is conservative and transparent in all calculations to ensure nothing is overstated, there is credible evidence, and there is no double counting of value.

What is a 'good' SROI?

While there is no standard definition of what a 'good' SROI consists of, the first step in noting the cost effectiveness of the investment is simply having a return greater than the costs, i.e. an SROI greater than $1. In some investor communities, an SROI of $2.50 is used as a benchmark for screening potential investments. This benchmark however is not based on evidence that a return below $2.50 is 'bad', but simply that it has served as a tool to limit those investments under consideration. This inherently places greater importance on those interventions that are able to more readily monetize their outcomes, as well as those interventions that have more near-term impacts, being less burdened by discount rates tied to long-term outcomes.

Further, using a single SROI benchmark across all sectors is risky, as different sectors are associated with greater SROIs. Comparing a workforce development SROI to an early childhood program's SROI becomes a comparison of apples and oranges. We recommend comparisons between programs that are as similar as possible - and even then there may be nuance that is important to recognize. This nuance however is that aspect unique to organizations from which they can better manage and maximize their impact, using the SROI as both an external facing communication piece, but also, and equally important, the SROI becomes that internal accounting tool to understand organizational impact, recognize value pathways, improve KPIs, understand key assumptions and seek new learnings.

PROJECT SPECIFIC FAQS

What resources were used for this analysis?

Many external resources were used, ranging from rigorous experimental evaluations to descriptive studies. A full bibliography is included at the end of the technical documentation and is ranked by level of evidence of causality. Whenever possible, resources with higher levels of evidence are utilized over lower levels of evidence.

How were costs estimated?

Costs were estimated by first estimating the total program cost. This included a combination of the contracts paid to Tech Dump/Tech Discounts and LiteracyMN as well as the operational overhead costs borne by Ramsey County and City of St. Paul. The total cost figure was then divided by the 500 TechPaks made available in the Original Model. This figure is then the average cost per TechPak delivered and includes full digital navigation services.

Where are the greatest uncertainties in this analysis?

As with any analysis, there are several uncertainties in our estimation. These include:

- We do not have TechPak-specific data to signal the results achieved after being referred to additional services. We do not know to what extent digital skills are increased following referral to digital literacy courses. Similarly, we do not know what career lab services are utilized, the likelihood the individual would otherwise be connected to the career lab without the digital navigator, and we do not know the specific outcomes achieved by TechPak recipients after being referred to the career lab. As a result we leverage external research from other programs and conservatively estimate the proportion of TechPak recipients who would receive the benefits of those referral services.
- We do not know the true probability of otherwise accessing a computer or Internet. Would a motivated individual be able to find computer access elsewhere? Over what time period would that person be without computer access were it not for the TechPak initiative? These questions may be addressed in follow-ups with TechPak recipients.
- We do not have TechPak-specific data to signal the extent the barriers noted by recipients in their application are being addressed by the initiative. This would support operational decisions and potential recognition of additional partners to collaborate with.
- Given that education programs may last several months to years, it is difficult to claim the extent an educational credential is attained

thanks to TechPak access. Further we do not know the extent the pursuit of education would be paused during COVID-19 versus entirely foregone.

- The duration of impact for all outcomes is uncertain, with limited data to inform the estimation. In particular, the duration of impact for increased earnings from digital skills that can be attributed to the TechPak is unknown. We utilize workforce development figures as a proxy in this case, although additional research is needed.
- The improved quality of life estimate comes from willingness to pay surveys of Americans, many of whom have a computer and regular Internet access as well as some having higher incomes. This means that those recipients of the TechPak may have a lower willingness to pay for a computer than the external research notes, but we utilize the figure from research so as to avoid a misallocation of benefits due to income levels. To maintain a conservative reframing, we also do not include the potential quality of life benefits from Internet access (which may be very high) given that there are various means of accessing the Internet, such as cellular data, which would provide connection to many resources but would not be sufficient for work purposes.

What wasn't included in the SROI? What was non-monetized?

As with any SROI or cost-benefit analysis, there are some outcomes that are not readily monetizable. However, just because we are not able to attach a dollar value to a given outcome does not mean it is not occurring or that it is not worth noting. Asa result we make sure to note a selection of prominent non-monetized outcomes that are still a part of the story of the TechPak initiative.

Examples of non-monetized outcomes include:

- Spillover effects on friends and family members are likely to some extent. For example, the TechPak may be used by multiple family members. The Internet hotspot may be used by friends visiting. Further, the recipients may help connect family members to resources they themselves were referred to or became aware of as a result of the program.
- There is likely increased access to public services given that many services are delivered digitally now.
- There is likely increased access to pandemic resilient jobs which can support earnings as well as job stability in the future.

- Health and health literacy are likely impacted to some extent whether that is accessing telemedicine resources or simply learning more about health conditions the recipient may have or may be around them in their community.
- Increased earnings from improved language skills may occur for English language learners utilizing online resources.
- Increased entrepreneurial opportunities given increased access to markets through the Internet.
- Increased ability to maintain caregiving responsibilities due to increased ability to work from home and reduce risk of exposure to COVID-19.
- Increased access to creative expression opportunities - there are more low cost of entry opportunities to create content and share online than in person.
- Increased civic engagement in various forms may occur given the many opportunities for online engagement.
- Reduced social isolation due to increased digital connections is likely.
- Increased volunteering rates due increased ability to participate digitally.
- Economic growth from increased employment and educational attainment may occur.
- Economic inclusion rates are a goal of the program although the effect of inclusion itself is not causally measured.
- There is likely a significant future impact from NorthStar infrastructure developed for and funded by the TechPak initiative that will continue to be used.

How is this analysis different from other Ecotone analyses?

Each SROI analysis with Ecotone must take a slightly different approach in response to the extent client-specific data and effect sizes are available. While the development of the counterfactual (i.e. what would have otherwise happened were it not for the TechPak) varies from analysis to analysis, this estimation as a whole takes a prospective approach - projecting social value created - as opposed to a retrospective approach which would review the value already created. We do not know the true value generated as a result of each TechPak but we are able to forecast value creation given the alignment of TechPak activities with external studies. This is a common approach for Ecotone analyses, particularly for new initiatives that are looking to understand their impact and build out their impact management processes.

What is the 'shelf life' of this analysis?

Generally, if elements in the cost structure change, if there's a new randomized longitudinal study linking TechPak related services to improved outcomes, if the delivery of TechPak services changes, or if the target population served by the TechPak changes, then the SROI would likely need updating as well. The analysis may also be updated as further TechPak-specific data is collected, allowing for the creation of an estimation that is more specific to the initiative, and correspondingly less reliant on external literature for estimating changes in earnings, education, health, etc.

What would make the SROI higher?

While increasing the SROI is not necessarily the goal of each program, there are a few variables noted here that would support a higher SROI.

- Increased economies of scale from growing the program: If the program grows in size it would be expected that the cost per unit would go down, helping to raise the SROI.
- Increased targeting of recipients who have no computer access, no Internet, and little to no digital literacy skills: By highlighting these characteristics, the program is likely to provide a greater boost than if serving individuals who already share a computer, have proficient computer skills, etc.
- Increased targeting of recipients with families and friends who would also benefit from access to TechPak use and/or service referrals. When the TechPak initiative serves as a platform for connecting to other resources (as it already does in many respects), its scale and type of impact can grow more rapidly.

How might the impact be different for the other TechPak models compared to the Original model analyzed here (including full navigation support)?

While this analysis did not review data on the other TechPak models it would be helpful to compare the demographics of recipients reached in each model against the goals of recipients and resources utilized by recipients (including digital literacy training, career lab, etc.). This would include recognizing how different levels of support provided by the different models may lead to greater (or less) completion of Northstar assessments, follow-up rates with external opportunities, rates of employment, rates of educational enrollment (and eventually attainment), etc. Each of these elements may influence the scale of value created. A full evaluation of all models may allow for a quasi-experimental analysis that can isolate specific components of value within the initiative and how models can be best tailored to each individual.

IMPACT COMMUNICATION

Why identify the United Nations Sustainable Development Goals?

These are the blueprint, established by the United Nations, to achieve a better and more sustainable future for all and include 17 distinct goals. They serve as an easily recognizable marker of agreed upon impact areas for stakeholders. See below for impacted United Nations Sustainable Development Goals (UN SDGs).

For more information on UN SDGs: un.org/sustainabledevelopment

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Goal 1: End poverty in all its forms everywhere

Target 1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance

Indicator 1.4.1 Proportion of population living in households with access to basic services

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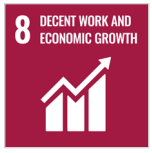
Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Target 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

Indicator 4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill

Target 4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

Indicator 4.5.1 Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated



Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Target 8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

Goal 12: Ensure sustainable consumption and production patterns

Target 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

Why use the Impact Management Project's Five Dimensions of Impact?

The Impact Management Project (IMP) is a community of 2,000+ organizations building consensus on how to measure, compare and report impact on environmental and social issues. The IMP community has developed a set of 5 dimensions of impact in order to help build consensus and a common language when organizations and investors discuss their impact. This has been a rapidly growing field, and future alignment of the TechPak initiative's impact with the 5 dimensions could help attract additional investment.

Table 3. The TechPak Initiative's Five Dimensions of Impact

TechPak Initiative FIVE DIMENSIONS OF IMPACT	IMPACT MANAGEMENT PROJECT
□	**WHAT:** Increased economic inclusion through increased access to digital literacy training, skills and Internet technology
○	**WHO:** Ramsey County residents experiencing job loss, reduction in hours, change in income or other barriers and uncertainties related to COVID-19 pandemic
≡	**HOW MUCH:** Over 500 TechPaks distributed to recipients who receive .5 - 2.5 hours of Navigator support, a year of Internet access and hardware support, and their own computer - supporting lifelong opportunities.
+	**CONTRIBUTION:** There is a persistent gap in digital literacy skills and unmet demand for Internet access in Ramsey County that would not be reduced without TechPaks.
△	**IMPACT RISK MITIGATION:** TechPaks offers support on computer skills training and makes referrals as indicated by individual assessments and goals, empowering recipients to develop the skills they desire. Non-profit, business and government partnerships strengthen the model by providing a complete service offering that increases the likelihood of continued digital skills development and use.

Table 4. Details for the Five Dimensions of Impact

Impact Dimension	Impact Questions Each Dimension Seeks to Answer
WHAT	• What outcome occurs in period? • How important is the outcome to the people (or planet) experiencing it?
WHO	• Who experiences the outcome? • How under served are the affected stakeholders in relation to the outcome?
HOW MUCH	• How much of the outcome occurs--across scale, depth and duration?
CONTRIBUTIONS	• What is the enterprise's contribution to the outcome accounting for what would have happened anyway?
IMPACT RISK MITIGATION	• What is the risk to the people and planet that impact does not occur as expected?

IMPACT MANAGEMENT PROJECT

PRESS KIT

We have compiled some sample posts for social media/ newsletter/ website for you to use, edit and share if you would like, to help your team easily communicate the results of our analysis.

About Ecotone

Ecotone Analytics is a leading impact analysis and social value communication consultancy. Ecotone leverages evidence-informed data and key performance indicators to support organizations in achieving their goals and in advancing policy, management, and investment decision making.

Best practices for talking about the work

When talking about the findings of the impact analysis it's important to be careful so as not to misconstrue or mislead. When referencing the SROI and other specific numerical outcomes, be sure to include "projected" or "estimated" as they are evidence based projected future outcomes, and not outcomes that have already happened that can be measured exactly.

Sample social media posts

The TechPak initiative brought the tools and training necessary for computer and Internet access as well as digital literacy to Ramsey County homes economically impacted by COVID-19. The projected Social Return on Investment of this initiative is $2.40 for every $1 dollar spent on it.

Social Return on Investment (SROI) is a metric adapted from the traditional financial Return on Investment (ROI) and is used to measure social, environmental and economic returns. The projected SROI of the TechPak initiative is $2.40 for every $1 dollar spent on it.

The Sustainable Development Goals (SDGs) are a set of 17 agreed upon goals created by the United nations to create a better and more sustainable future, and are being increasingly used as a way to align and measure goals of purpose driven organizations. Below you can see the SDGs the TechPak initiative aligns most closely with. *(attach SDG icons to post)*

What (and how much) impact does the TechPak initiative have on the Ramsey County community? Check out this Impact Overview prepared by Ecotone Analytics to see! *(link to IO in post)*

The estimated cost per TechPak is $1,540 and the projected benefit per recipient is $3,690. These benefits are seen by recipients, their children, taxpayers and the school system.

Longer Form Text

for email newsletter/website

The TechPak initiative is a partnership between Tech Dump / Tech Discounts, PCs For People, Literacy Minnesota, Saint Paul Public Library and Ramsey County, bringing computers, Internet and digital literacy training into the homes of Ramsey County residents who have experienced economic impacts due to COVID-19.

TechPak recipients work closely with a Digital Literacy Navigator from Literacy Minnesota. Navigators provide individual support through digital literacy classes and referrals on workforce training and job searches.

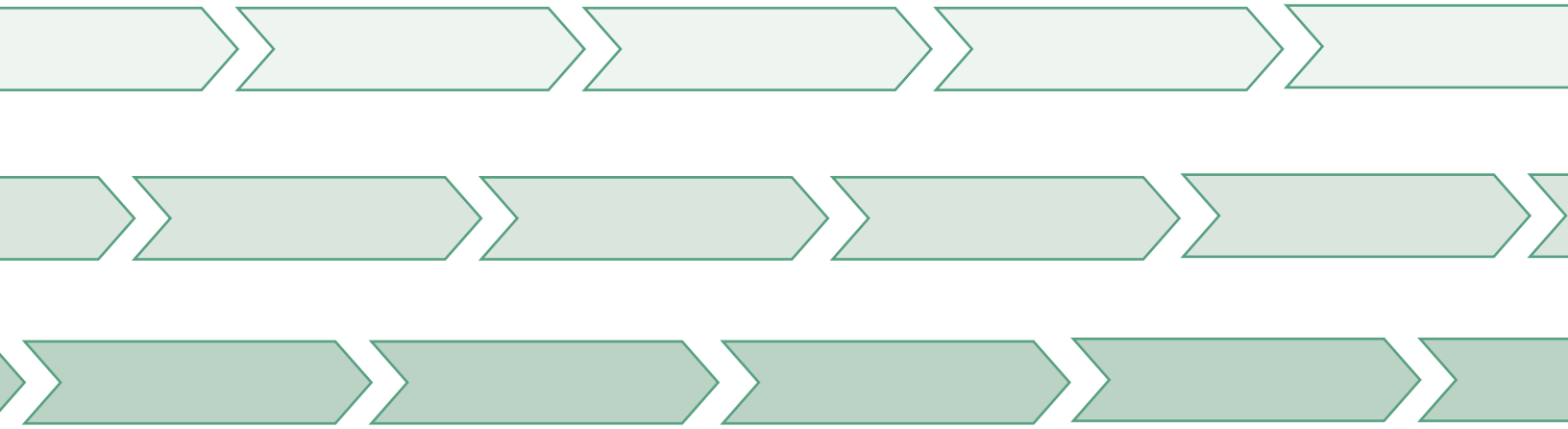
The Ramsey County TechPak initiative is a part of the Ramsey County Investment and Support Efforts (RISE) program, which invested $72 million of federal Coronavirus Aid, Relief and Economic Security (CARES) Act funding in the community by the end of 2020.

Ecotone Analytics conducted an Impact Analysis to identify and measure the impact of the TechPak initiative. When conducting its impact analysis Ecotone Analytics identified a Social Return on Investment (SROI), which is a metric adapted from the traditional financial Return on Investment (ROI) that is used to measure social, environmental and economic returns of an investment in order to create a more holistic picture of the value being generated.

The projected SROI for the TechPak initiative is $2.40 for every $1 dollar spent. This social value is generated through outcomes created through the initiative, with the largest one being increased earnings from increased employment and promotion, and education due to digital skills gained. At scale (*in TechPak's original model of 500 packs*), there is a projected $1.85 million in social value generated.

Additional monetized outcomes include:

- Increased earnings from connection to job opportunities otherwise not reachable
- Increased educational attainment - GED
- Increased educational attainment - Post-secondary
- Improved school outcomes for children with access to a computer
- Improved quality of life / value of the personal use of a computer (for recipient only)
- Improved quality of life for older residents through improved mental health
- Avoided GHG emissions from refurbished laptops



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