FINAL REPORT

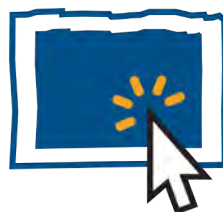**2021**

Summary of Needs and Desired Next Steps for the Community

Orleans
Digital Literacy
Initiative

Orleans Digital Literacy Initiative

FINAL REPORT

Summary of Needs and Desired Next Steps for the Community

Photo courtesy of Elizabeth Carpenter

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Executive Summary

In November 2020, Orleans County began an assessment of digital literacy and internet access through the Orleans Digital Literacy Initiative. This Initiative was funded by the Build Back Better Fund administered through The Community Foundation for Greater Buffalo and led by the United Way of Orleans County. The Initiative was conceived of and managed by a Steering Team of local leaders and assisted by a Consultant to the Initiative, Mary Beth Debus of Program Savvy Consulting.

Over three months, the Consultant and Steering Team conducted an extensive Assessment Phase which included 45 interviews, 10 Focus Groups, and a Community Survey of over 3000 people to help define the key digital literacy and internet access barriers for the residents and communities of Orleans County.

The key barriers include large gaps in internet availability, significant internet unreliability, economic barriers, and a lack of digital literacy skills. These barriers, made more evident through the COVID-19 pandemic, have a tremendous impact on schooling, business, agriculture, health care, and the work done by government offices and nonprofits.

Orleans County is aggressively pursuing funding to increase internet in the County, and the anticipated increased availability should be matched by a desire and ability to access the internet and use it to improve people's lives and the economy and health of the County.

As the County works to find solutions for gaps in internet access, solutions addressing digital literacy were explored by 45 individuals across multiple sectors. This work led to the design of an integrated approach to addressing digital literacy in Orleans County. This design, referred to as the Orleans Digital Literacy Initiative, is composed of two Strategic Priorities:

1. Community Mentors facilitate digital literacy in Orleans County
2. A Public Campaign engages the community in digital literacy and better internet access

The Strategic Priorities were chosen to address needs and take advantage of strengths in the community. Perhaps the simplest way to think of these two strategies is that Strategy One is making access to the internet and digital skills more equitable and accessible while Strategy Two is about motivating participation in existing programs that help. Both inspire change.

Additionally, twelve other projects are outlined such that nonprofits, government, and business can build on and expand upon the two Strategic Priorities outlined in this Final Report.

Background

Most rural counties in the United States have insufficient broadband and other internet options to meet the needs of the residents, businesses, and organizations. In studies done by Pew Research in 2018 and 2019 (https://www.pewresearch.org/fact-tank/2019/05/31/digital-gap-between-rural-and-nonrural-america-persists/), the following was found:

- **24% of adults who live in rural areas reported that getting access to high-speed internet is a major problem in their local community. This is true regardless of income levels and educational attainment.**

- **Rural Americans are 12 percentage points less likely than Americans overall to have home broadband.**

- **Rural residents go online less frequently than their urban and suburban counterparts with 15% saying they never go online (compared to 9% for urban communities and 6% for suburban communities).**

- **Even though rural areas are more wired today than in the past, other research shows that substantial segments of rural America still lack the infrastructure needed for high-speed internet, and what access these areas do have tends to be slower than that of nonrural areas.**

Orleans County had been prioritizing this need for improved internet access for close to a decade but has not received any significant state or federal assistance to improve the gaps in service.

In March of 2020, as COVID-19 began to shut down businesses, schools, services, and most parts of daily life, the gaps in internet coverage and digital literacy were magnified even further. Employees were being asked to work from home, schools moved to remote learning, and many services were being offered in virtual formats exclusively.

For members of the community without internet, with poor internet, without devices, or without the skills to navigate the internet on their devices, there were significant barriers to operating in the COVID-19 environment.

To help to address these needs, the United Way of Orleans County submitted a funding request to the COVID-19 Build Back Better Fund administered through The Community Foundation for Greater Buffalo. In September of 2020, they received notification that their funding request was accepted and the United Way of Orleans, with the Steering Team who had helped to conceive of and design the grant request, began the Orleans Digital Literacy Initiative. (See news report of grant notification in Appendix I.)

Part of the funding was allocated to hiring a consultant to help design and manage the process of the assessment of needs and facilitation of the Initiative itself. The Steering Team selected Mary Beth Debus, President of Program Savvy Consulting (www.programsavvy.com) to serve as the Initiative's Consultant. She began her work with the Steering Team on November 1, 2020 and concluded with the completion of this Final Report.

From November 2020 through March 2021, the Steering Team and their Consultant met weekly to advance the work of the Initiative culminating in this Final Report.

" I was part of a Congressional field hearing on rural broadband in March 2014 where a lot of the barriers that we are dealing with today were laid out clearly. There was testimony from business owners, growers, GCC, and schools. Even at that time, technology was becoming more critical for all of our sectors, and it is even more critical today.

In the context of schools, it is important to both improve internet access for our families and also to help all to learn how to use it effectively. COVID made this need a crisis, but even without COVID, our attempts to connect families to the school through technology has been greatly hampered.

**– Julie Christensen
Superintendent, Kendall Central School District**

The following individuals served as the Steering Team and led this Initiative:

Dean Bellack
Executive Director, United Way of Orleans County

Robert Batt
Executive Director, Orleans County Cornell Cooperative Extension

Ken DeRoller
Orleans County Legislator, Board Member of Orleans County Economic Development Agency

Kelly Kiebala
Director, Orleans County Job Development

Greg Reed
Executive Director, Orleans County YMCA

This Report is designed to serve as a resource to the many organizations in Orleans County who may like to write proposals for and/or implement projects related to digital literacy. The content of this report is available for use in all proposals designed to improve the conditions of Orleans County with attribution to this report.

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Description of Orleans County

Located on the south shore of Lake Ontario, Orleans County is in the western region of New York State. The County is 817 square miles with more than half of that being water. The population of Orleans County is approximately 41,000. Orleans County is blessed with natural beauty, quaint Victorian villages, and a rich history.

Agriculture is Orleans County's number one industry and visitors may sample "guaranteed fresh" fruits and vegetables at roadside farm markets. Railroading history thrives in Orleans County. The Village of Medina is home to the Medina Railroad Museum showcasing the New York Central Railroad.

Leonard Oakes Estate Winery, a 4th generation family-run business, is the only winery on the Niagara Wine Trail USA located in Orleans County. It has been a multi-award-winning producer of handcrafted artisanal wines and ciders year after year and one of the most recognized wineries in the state and region.

Medina sandstone, formed by nature 400 million years ago, became a popular building material by the end of the 19th century. It was the 'bedrock' of the culture in Orleans County and its village of Medina, New York, which gave the stone its name. Medina sandstone was quarried for over a century in Orleans County and can be seen worldwide in architectural masterpieces such as the Brooklyn Bridge, Buckingham Palace and the NYS Capitol. Locally, Medina sandstone was used across WNY in Buffalo's Richardson Olmsted Campus, Connecticut Street Armory, St. Louis RC Church, Williams-Pratt Mansion, and more.

Orleans County's maritime history is presented at the Oak Orchard Lighthouse Museum at Point Breeze. The light is an exact replica of the original 1871 that was the beacon to the shipping industry on Lake Ontario. The Erie Canal, built in 1825, is today a linear park, offering an easy paddle by canoe or kayak. The hard-surfaced Canalway Trail is popular with bicyclists and threads its way through three villages. And for trophy trout and salmon sportfishing, Lake Ontario and the Oak Orchard River host residents and visitors all year long.

The pride in historical architecture is evident with the renovations of 19th century buildings, re-adapting their use while maintaining the charm of yesteryear. Patriotism reins as evidenced with the installation of two new military monuments honoring local veterans and the reconstruction of another. Parks are being enhanced for summertime family entertainment with splash pads, concert venues, and one new park specifically for canine recreation.

Orleans County is looking forward to the ribbon cutting of a new 58-room Cobblestone Inns & Suites hotel to accommodate travelers and motor-coach tours in addition to a 10-room themed boutique hotel in the former Bent's Opera House.

What is the Orleans Digital Literacy Initiative?

The Orleans Digital Literacy Initiative reflects both a process and an outcome. The process refers to the work from November 2020 – March 2021 where the digital literacy needs of Orleans County were defined and solutions were identified to address the needs.

The Initiative also refers to the integrated activities developed from the work which The United Way of Orleans County intends to request funding to implement. Those activities are outlined later in this report.

Upon receiving funding for the Orleans Digital Literacy Initiative, the Steering Team solicited proposals from potential consultants to work with them on delivering on the plan.

Following the selection of Mary Beth Debus/Program Savvy Consulting, the Steering Team and their Consultant developed a project plan to map out the process to ensure an end of March completion.

The early phase of the Initiative included the following:
- Designing a logo which could be used to brand the Initiative since the intention is for the Initiative to last well beyond the timeframe of the grant funding the design.
- The development of an overview document highlighting the goals and intentions of the Initiative. (This can be found as Appendix A.)
- The creation of a contact list of people to be interviewed to begin identification of needs and barriers.
- The development of a list of potential funders for any outcomes of the Initiative.

The next sections of this Report outline the process work that continued. The work was divided into the Assessment Phase and the Solutions Phase.

Methodology for Assessment Phase

The identification of needs and barriers occurred from November 2020 through January 2021. This work consisted of 45 Interviews, 10 Focus Groups, and a community-wide survey completed by individuals who live, work, and/or go to school in Orleans County.

The themes of the interviews, focus groups, and survey were used to design the Solutions Phase of the Initiative.

Interviews

45 interviews were conducted with 1 – 2 individuals representing many sectors of the community. In addition, the Steering Team was available to offer context, perspective, and detail to the information that was obtained.

All interviews were conducted by the Initiative's Consultant, Mary Beth Debus, and followed a general format, adjusted to reflect the distinct information that each interviewee offered. The interviews were completed over Zoom and lasted between 30 and 60 minutes each. Detailed notes were taken.

Name	Title	Organization
PUBLIC		
Peter Anderson	Senior Employment Rep	Orleans County Job Development
Eileen Banker	Chief of Staff Mayor	Senior Staff person for NYS Assemblyman Hawley Village of Albion
Jim Bensley	Orleans County Commissioner Director	Rochester Genesee Regional Transportation System Orleans County Department of Planning and Development
Melissa Blanar	Director	Orleans County Office of Aging
Dawn Borchert	Director	Orleans County Tourism
Chris Bourke	Sheriff	Orleans County
Emily Cebula	Director	Yates Community Library, Lyndonville
Danielle Figura	Director	Orleans County Mental Health
Lynne Johnson	Chairman	Orleans County Legislature
Justin Niederhofer	Deputy Director	Orleans County Emergency Management Office
Sandra Shaw	Director	Community Free Library, Holley
Mike Sidari	Mayor	Village of Medina
Jocelyn Sikorski	Executive Director	Genesee-Orleans Youth Bureau
Nancy Traxler	Director	Orleans County Veterans Services

Name	Title	Organization
PRIVATE		
Ellen Eaton	Director of Employee Experience	Takeform
Patti Fales	Human Resource /EHS Manager	BMP America
Jackie Gardner	VP Client Relations	Claims Recovery Financial Services (CRFS)
Steve Hubbard	CEO	RTO Wireless
Christina Lopez	CEO	Boundless Connections
Bill McGahay	Managing Director	Park Strategies, Inc
Josh Reynolds	Senior Specialist Manager, Modern Workplace - East Region, US Education	Microsoft
Tom Rivers*	Editor	Orleans Hub *Discussion of Initiative with Consultant and Steering Team
Barb Ulrich	Sr. HR Manager	Baxter International Inc.
NONPROFIT		
Kelly Anstey	Associate Executive Director of Day Services	The Arc of Genesee Orleans
Melissa (Mo) Cotter	Director of Vocational Services	The Arc of Genesee Orleans
Donald Colquhoun	Vice President	Orleans County Adult Learning Services (OCALS)
Annette Finch	Director of Community Services	Community Action of Orleans and Genesee
Betty Garcia Mathewson	Senior Consultant, Racial Equity and Social Justice	CCSI
Nyla Gaylord	Director	Genesee Orleans Ministry of Concern
Renee Hungerford	Executive Director/CEO	Community Action of Orleans and Genesee
Jim McMullen	Executive Director	Iroquois Trail Council
Linda Redfield Shakoor, Ph.D.	Program Director	World Life Institute

Photo courtesy of Anna Brasted

Name	Title	Organization
CIVIC		
Katie Meindl	Lyndonville Resident	
EDUCATION		
Michele Bokman	Director of Operations	Genesee Community College Albion and Medina Campuses
Julie Christensen	Superintendent	Kendall Central School District
Sue Diemert	Staff Specialist/Continuing Ed Literacy Director	Orleans/Niagara BOCES
Kristina Gabalski	Coordinator	Orleans County Cornell Cooperative Extension 4-H Program
Michelle Ryan	Assistant Superintendent	Monroe 1 BOCES and Monroe-2-Orleans BOCES
HEALTHCARE		
Dr. Nancy Ciavarri	Medical Director	Oak Orchard Community Health Center
Cheryl Kast	RPA-C, Primary Care	Oak Orchard Community Health Center
Dr. Thomas Madejski	Physician Trustee	Lake Plains Medical American Medical Association
Heather Smith	Executive Director	Orleans Community Health Foundation
AGRICULTURE		
Craig Kahlke	Team Leader	Cornell Cooperative Extension – Lake Ontario Fruit Team
John Kast	Grower	Kast Farms
Christopher Oakes	Production Manager/ Vice-President	LynOaken Farms

Focus Groups

The following focus groups were conducted:

In order to determine themes offered from a like-group of people, focus groups were conducted via Zoom by the Initiative's Consultant. Some of the focus groups were held as a distinct event, others were included as part of a regularly scheduled gathering of individuals.

Focus Group Description	Content Covered in Focus Group
Orleans County Job Development Staff	Needs of unemployed and underemployed
Workforce Development Committee – a committee of local businesses who meet monthly to discuss collective needs	Working from home needs and baseline digital literacy needs
School Superintendents	Needs of students, families, and teachers/staff and barriers encountered due to COVID-19
Hub Meeting – nonprofit leaders and staff who meet monthly to learn and define mutual projects	Equity – definition of needs impacting digital literacy and access and how to address the barriers to those most in need
Human Services Committee – a committee of human services agencies that meets monthly	Issues related to delivery of services and equity issues
Nioga Library Staff	Community needs, equity issues
Leadership of Community Action of Orleans and Genesee, Inc.	Equity concerns, needs of clients served
Faith Leaders	Impact of COVID/internet issues on religious services and barriers to their faith communities
Leadership of Genesee Orleans Ministry of Concern	Equity, needs of the community
Staff of Orleans/Niagara BOCES	Services provided, gaps in those services, and what would be needed to serve more

Survey

3,006 members of the community participated in the Orleans County Digital Literacy Survey with a 79% completion rate. The 3000+ responses represents 8.4% of those eligible to take the survey. The Survey was available from December 2020 through early March 2021. The average time spent completing the survey was 11 minutes 13 seconds.

The Survey was available in English and Spanish as well as paper versions in both languages.

The survey was promoted through paid advertising on the Orleans Hub and received press coverage. (See Appendix I.)

The survey link was sent out to everyone who participated in the Assessment Phase and most then distributed to their email distribution lists and posted on social media. This included school districts, businesses, libraries, government agencies, and nonprofits.

The Steering Team was concerned about the access of the survey for those with digital literacy gaps and so the paper survey was distributed at food distribution sites, at local libraries, and through workplaces. While there were efforts to reach those with digital literacy concerns (with some success), as expected, most of the respondents already had internet and devices. 96% of respondents owned one or more device and 85% had internet in their homes. It is worth noting however, that even with those with devices and internet being overrepresented, the issues regarding connectivity and digital literacy were very evident.

The survey explored a number of areas including capturing if the person lived, worked, or went to school in Orleans County. (If someone did not meet those requirements, the survey was ended.)

Respondents shared whether they had internet in their home, and if not, whether that was by choice or not. The respondents shared the type of internet, the reliability of that internet and the devices used in their homes.

Where Respondents to Survey Live
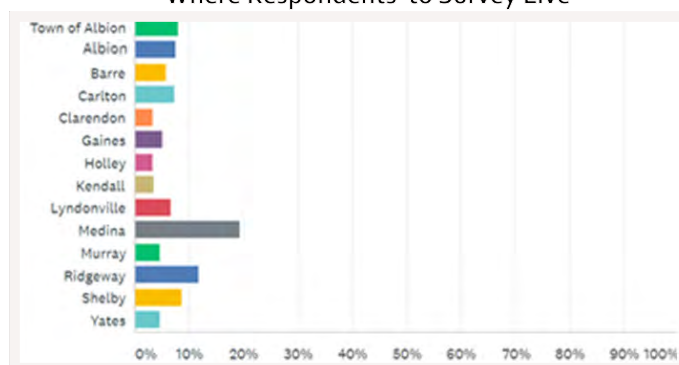
There was a section designed for students (the survey received responses from 6th graders and older), those who were employed, and those who were unemployed.

The survey asked respondents how skilled they were at a number of activities that were indicators of their digital literacy.

Some information about who participated:
- All respondents had some combination of living, working and/or going to school in Orleans County.
  - 31% lived in Orleans County (but did not work or go to school in Orleans County)
  - 41% both lived and worked in Orleans County.
  - 20% both lived and went to school in Orleans County.
- Most respondents were female (69%).
- 93% of respondents were white compared to 86% in the County population.

Age of Survey Respondents

The results of the survey are dispersed throughout this report in sections where responses are most relevant. To see the results of the survey, you may access them at this link: https://www.surveymonkey.com/stories/SM-XJ6RJGLC/.
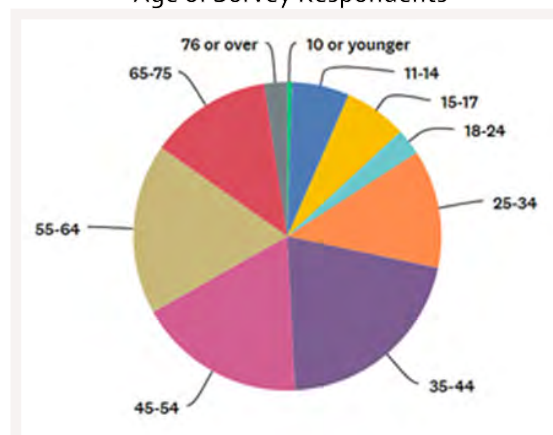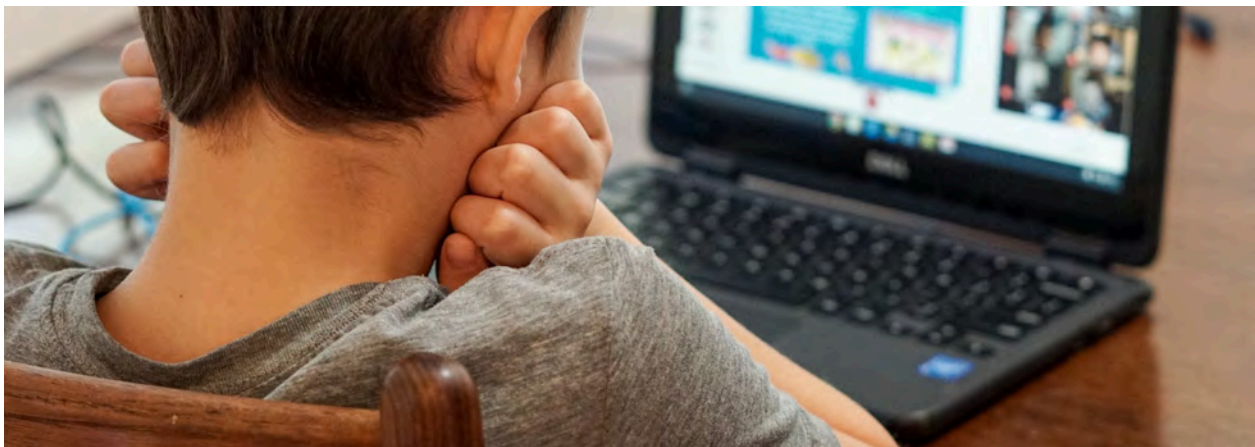
Findings – Needs and Barriers

There are key areas that were known to be of concern throughout Orleans County, but were explored with more detail through the Assessment Phase.

Internet Access and Connectivity

There are 1,351 households in Orleans County that do not currently have access to internet which is approximately 11% of households in the County. The Orleans Legislative body conducted a study to confirm these numbers in preparation for submitting for USDA funding to close the gaps within the community. Lynne Johnson, Chairman of the Legislature, describes the process: "Niagara-Orleans Regional Alliance (NORA) completed its analysis by putting feet-on-the-street and driving every road, in every town... A visual inspection of the presence, or lack of presence of Internet infrastructure was recorded and correlated with the actual addresses along each route.

Excel spreadsheets documented every unserved address-point, which were used to generate maps highlighting each unserved road with starting and ending addresses. Percentages of served and unserved addresses were also calculated to help identify those areas with the least service." Appendix E provides the full documentation of this process and Appendix F shows a map of gaps in internet coverage.

Additionally, the quality of internet, even for those who have it, is lacking.

Throughout this Initiative, participants had to turn video off, share devices, and were dropped out altogether because of connectivity issues. The problems with connectivity played out real time throughout the 5 months of this Initiative.

The ability to participate in remote schooling and work from home, as well as access to information regarding COVID-19 was a significant barrier to families. In the following sections, information regarding access and connectivity is explored around key areas of importance to the community.

SURVEY RESULTS

ONLY 22%

of respondents to the community survey said that their internet was "very reliable." In comparison, 27% said their internet was either "spotty" or "did not work well at all." (50% had "occasional problems.")

46%

of respondents gave a resounding "Yes!" when asked if their internet got worse when multiple devices were being used while 31% said "Sometimes."

15%

of respondents had the option to buy a higher level of internet. Of the others, they either already had the highest level (19%) or nothing else was available.

35%

of respondents leave their home (sometimes, often, or always) to use internet for school, work, or other activities.

SURVEY RESULTS

13%

of the survey respondents were in grades 6–12 with 4% being college students.

94%

of the students were engaged in learning at least in part remotely– 46% remote only and 48% hybrid.

The School Districts within Orleans County spent much of 2020 and the start of 2021 in remote learning. When they were able to meet in person, they often needed to revert back to remote learning due to increases in COVID-19 cases within a school.

Schools themselves do not have internet access barriers. But, there was a significant issue related to remote learning due to families not having devices to use for school work and a lack of internet or reliable internet.

As a result, School Districts provided Chromebooks to grades 1 – 12 and iPads to Kindergarteners. The devices were very helpful for families who had internet, but a large number of families did not. The School Districts also distributed hotspots to families in order to provide internet access for those who did not have internet. There were not enough hotspots to accommodate all needs, however. This resulted in some families needing to find an alternative location to engage in school, utilize worksheets distributed by teachers as an alternative to online classes, and some families removed their children from the district classes and began to homeschool their children.

K-12 schools were not the only educational institutions impacted. Genesee Community College knew that its students without internet access historically enrolled in in-person classes. After COVID-19 removed that option from students, GCC's enrollment declined 10%.

BUSINESS

With the start of COVID-19, many businesses requested or required all or segments of their workforce to work from home. Some businesses began to experience some of the benefits of that move.

Work-from-home formats are going to continue for many businesses. By reducing the amount of real estate needed for support positions, there is an opportunity to increase manufacturing space. For some businesses, they are now able to reduce their real estate footprint, reducing operational expenditures.

Offering remote work can also be an enticement for some in the workforce. It can also fill in gaps in recruitment by bringing in people from other parts of the country to fill hard to fill positions.

> We asked 6 of the largest employers if they would increase their work-from-home staff if internet was more available and reliable, and half said they would.

> " When we transition more of our workforce to remote work, it frees up our real estate for production.
>
> – Barb Ulrich, Baxter International

For employees, however, this move to work-from-home created significant barriers for many. When employees lived in an area without internet, the ability to be productive in their jobs was a constant challenge as they created make-shift solutions for the lack of internet options in their area of the County.

Additionally, even those with internet are experiencing significant connectivity issues. Jackie Gardner, former VP of Client Relations for CRFS said clearly what was experienced by many: "*Employees are losing internet throughout the day – they are often needing to reconnect. The frustration level is really high.*"

AGRICULTURE

Agriculture is Orleans County's biggest industry and has 47% of the land mass in the County, totaling 117,000 acres. $348 million in total farming is produced in Orleans County and the County is ranked 13th out of 62 New York State Counties.

Agriculture has specialized equipment that relies heavily on internet, including GPS. There is often a gap between what the equipment is capable of doing and what it is being used for, because the connectivity issues limit effectiveness. Productivity issues can often be linked to spotty internet since so much of agriculture relies on the internet for processing functions.

As Chris Oakes of LynOaken Farms states: "*There is a lot of new technology available – sensors in the field and in the equipment. If the network doesn't keep up, we are going to be left behind.*"

Many farms within Orleans County hire migrant workers. These workers, residents of other countries, typically want to stay connected to their families back home. They also send money to their families.

There are also well-established programs within Orleans County that provide English lessons. Online formats are used as part of these programs.

The housing units that the migrant workers live in, however, do not have internet access. The ability to participate in education, stay in contact with family, and many other typical online activities cannot be accomplished from their temporary homes.

GROWER'S SURVEY RESULTS

OVER 80%

agree that poor internet interferes with their farm production

75%

said that if they had great internet they would add equipment, change processes, and/or seek additional training and certification to improve their farm.

69%

said there is a significant negative financial impact on their farm due to unreliable internet.

As part of this Initiative, we conducted a survey of Growers. The results of that survey can be found here: https://www.surveymonkey.com/stories/SM-Y83NS8VC/

Example of Connectivity Issues Impact on Agriculture:

Kast Farms invested in new technology that monitors the drying of grain. This process used to require a farm worker to be monitoring the process 24/7. The new technology allows the process to be controlled off an iPhone or Tablet. This replaces the need for a farm worker to be present 24/7. But when internet fails, a farm worker has to replace the technology.

"One of our biggest obstacles is inconsistent internet. And our farm has better internet than many."
– John Kast, Grower, Kast Farms

HEALTHCARE

During COVID-19, there were waivers in place allowing medical appointments to be provided via technology. These opportunities were critical during COVID-19 but would be very beneficial to residents of a rural community at any time. While there is a hospital in Orleans County, many residents have appointments in other counties to address health issues without specialization in Orleans. Barriers such as time, transportation, weather, and child/elder care would make the ability to have appointments through telehealth very helpful to residents.

This option, however, is not easy for many residents as they just do not have access to internet or their connection is not reliable enough to be able to utilize the video on their device. As Cheryl Kast from Oak Orchard Community Health says, *"It's not as valuable to do telehealth over the telephone. Without video there is no way to get a sense of the swelling in the leg that a patient is complaining about. But they don't want to come in either because of concerns like COVID or transportation."*

There is a strong preference for the use of video, but, because of the current reality of poor connectivity, there are advocacy efforts to eliminate the video requirement for telehealth. This is especially true for mental health appointments where the video requirements are often a barrier to appointments.

Patient portals are underutilized in the County in part because so many patients do not have internet access. It is also difficult to recruit providers to the area because providers want user-friendly resources and web-based medical portals. With a lack of internet for their patients, those processes are more cumbersome.

The County has been dealing with significant issues getting residents signed up for COVID-19 vaccines as the process is all online. Those eligible for the vaccine who do not have internet at home are being encouraged to use the public internet systems available at the local libraries or in parking lots of schools where there are hotspots. See Appendix I for an article on this concern.

SURVEY RESULTS

1/3

of the respondents who attempted to have a telemed appointment either weren't able to connect at all or were not able to use video.

56%

of the respondents would definitely like to have telemed as an option, even after COVID-19. (25% were unsure. 19% said no.)

" **We can tell where people live in the County just by the connectivity experience during telemed appointments.**

– Dr. Thomas Madjeski

COMMUNITY SERVICES

Government Offices and nonprofits are also impacted by a lack of internet and poor connectivity. Below are some of many examples:

- Local municipal governments used to mail newsletters to residents. Now they are all posted on websites which is a barrier for those without internet.
- Veterans receive mileage reimbursement for travel to medical appointments. Since so many veterans need to travel significant distances to receive medical care, this is an important benefit. The process to submit reimbursement is all online. And a lot of veterans, especially older veterans, do not have internet access.
- When Zoom public meetings are held to address public safety and provide important information, there are large sections of the county that can not access the meetings from home.
- Public safety is hampered because of lags in GPS and limited cell phone coverage. There are options to improve messaging and public safety practices, but they all rely on internet access and connectivity.
- Individuals with disabilities living in congregated settings often do not have internet set up at home limiting options for everyday activities. During COVID-19 there were significant restrictions on visiting, and even online visits were lacking as only about 20% of clients have connectivity.
- Church communities struggled to stay connected with their congregations during COVID-19 as their own internet was often not strong enough to engage in activities like Facebook Live and few of their congregants had internet or strong enough connectivity to successfully engage. Important rituals like funerals which were livestreamed were having significant buffering issues.
- Nonprofits are desiring or being encouraged to implement online/real time intake processes and data collection. Because of a lack of reliability and access, this isn't a practical approach. These more robust processes are often attractive to funders. Additionally, solutions that require internet cannot typically be pursued by nonprofits in Orleans, because they cannot meet the requirements of the granters. As Don Colquohoun from Adult Learning Services said, *"There are grants available for devices so that our tutors could bring them into the homes to enhance our instruction, but connectivity is so poor that we can't go after that funding."*
- During COVID-19, programming by many nonprofits was greatly impacted. Even if they could successfully move their programming online, the number of people without reliable internet meant that there was a great decline in reaching people. As Don Colquohoun said, *"We did an internal survey and 75% of the people we serve have no internet. That prevented us from rolling out good programming online when we had to shut down our in-person programming."*
- Individuals who desire to become US Citizens need to be able to study for the exam. All of the study material is online.
- Older adults are being encouraged to use delivery services such as Instacart during COVID-19 and bad weather. But, many older adults do not have internet access.
- The hospital runs seminars throughout the County and uses an online registration system. Without fail there are issues signing people in because the bandwidth can not support the 5 laptops accessing the internet at the same time. Reboots are a normal occurrence and sessions often have to start late or without everyone in the room.

> " **People are often told to go to _____.com to learn important information. But that means lots of people are missing out.**
>
> – Sheriff Chris Bourke

> " **We have lost perhaps 20% of our Scouts because they can't participate due to no access to reliable broadband internet or not being able to afford data on their phones.**
>
> – Jim McMullen, Iroquois Trail Council

ECONOMIC DEVELOPMENT

Economic development relies on assets like phone coverage, internet, schools, and medical facilities. The County is highly agricultural, and the growers are, as discussed earlier, feeling that they are falling behind and losing a competitive advantage. Businesses are struggling to efficiently provide work-from-home options to employees. In fact, the work-from-home policies reviewed for this Initiative eliminate that option from many in the County because they cannot meet the internet requirements of the policies.

Tourism is also a significant economic driver in Orleans County. As Dawn Borchert, Tourism Director says, *"The tourism businesses are doing okay. It's the visitors experiencing the problems."* One indication of the barriers to tourists is the fact that the Orleans County Tourism Office prints 10,000 black and white maps annually of Orleans County which are a huge resource to visitors to Orleans County. Visitors quickly realize that they cannot get a signal (to utilize their Maps function on their cell phones) therefore, the maps are required to get around.

SURVEY RESULTS

66%

of employees had been asked to work from home part time or full time by their employers, but 13% of those employees were not able to.

Those who reported working from home had barriers, including:

14% had no internet	56% had unreliable internet	60% had slow internet

Economic Barriers

Not all internet barriers are related to the overall poor internet in Orleans County. 14% of the population lives below the poverty line and only 16% have earned a Bachelors degree or more, about 2/5 of the rate in New York State (36.6%). (U.S. Census Bureau, 2019.)

For many residents, internet is not affordable. When parents are struggling to meet the basic needs of their family, the $65 or so a month for basic internet is considered a nonessential. And yet, to be able to accept a work-from-home position, to search for and apply for work or a better paying job, and to access information related to health, safety, and services for their family, internet is a must.

Nonprofits who focus their efforts on those with economic barriers repeatedly shared that a lack of internet access was a barrier to their ability to deliver services. This is true at all times, but certainly during COVID-19.

While there are hotspots within the County, the bus system does not go to all of those places. For example, while all 4 of the libraries are a great option for internet for the community, no buses travel to the Lyndonville Library. Some internet is available from parking lots, but when individuals

are without a car (especially in bad weather), this is not a good option.

In addition to barriers to internet, many individuals and families with economic barriers do not have devices at all, or sufficient for what would be beneficial to supporting them. Many nonprofit leaders spoke about most internet being accessed off of phones, but that most had limited data. Some activities, like applying for jobs, go much more smoothly with a laptop vs. a phone.
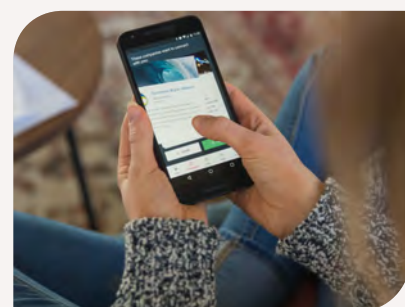
SURVEY RESULTS

Of those who have not upgraded their internet,

60%

indicated the reason is that it is too costly.

Here are examples of how economic barriers contribute to gaps in internet accessibility in Orleans County and the implications of those gaps:

- Daily activities are often a struggle for those without internet access and/or proper devices. These include online banking, accessing the news, details on how to access needed services, dates and locations of food drives, discounts and promotions promoted online and on social media, safety information or weather forecasts.
- Families were not able to participate fully in telemedicine or teletherapy due to devices without video or without data to support the appointment. At Oak Orchard Community Health, less than 50% successfully engaged in telemed in 2020 due to no WiFI or equipment issues.
- There are good programs to reach people who have English as a second language. But Rosetta Stone is part of the curriculum and students need internet access to use it. For many, cost is a barrier to accessing the needed internet.
- Head Start families are trying to engage in the program using their phones. Many are giving up on the process because it is so cumbersome.
- Many employees make minimum wage, and then to successfully work from home they need to either add internet or upgrade their internet. Their wages do not support this added cost. Additionally, many employers do not provide laptops for employees. To be hired for a work-from-home position, it is often expected that you will have your own device.
- Poorer families cannot access school portals. Students struggling with homework have a harder time accessing help. Parents have a harder time reaching teachers.
- There are medically involved people looking for jobs who would be well suited to work from home, but they don't have the current financial resources to purchase a computer and they may not have internet.
- Those with Intellectual/Developmental Disabilities are often limited financially and cannot afford smart phones/laptops. When they get government-sponsored phones they are often flip phones with limited data plans.
- Disabilities such as vision impairment require special apps which adds to the cost of the device. Without these apps, the device lacks usefulness.

Those with economic barriers without internet access or devices cannot easily take advantage of discounts or promotions, here is one example:

> **" One of the biggest challenges there is is not having access to a physical computer and no WiFi. There are so many resources that a computer is needed for, from applying for driver's permits, to learning programs, to applying for citizenship.**
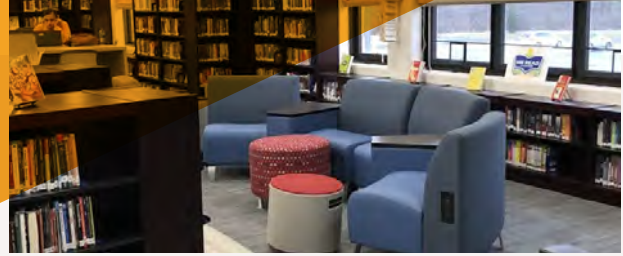
Linda Redfield Shakoor,
World Life Institute

> **" Most of my clients looking for work have no internet, no easy access to a computer, and don't have a lot of minutes on their phone.**

Peter Anderson, Orleans Job Development

Digital Literacy

The main reason for the Orleans Digital Literacy Initiative was to better define and generate solutions to address digital literacy. Time was spent speaking of internet connectivity and economic barriers though, because it is unrealistic to expect that people will be skilled at something to which they have little to no access. Digital literacy concerns exist in part because there is little need to develop these skills or little opportunity to practice them.

And, it is also true that for those with access there are gaps in digital literacy skills that were exposed to a greater degree during COVID-19. Additionally, Orleans County is aggressively pursuing funding to increase internet in the County, and the anticipated increased availability should be matched by a desire and ability to access the internet and use it to improve people's lives and the economy and health of the County.

Orleans is not alone. According to the National Skills Coalition, in their "The New Landscape of Digital Literacy" (May 2020) they report that nearly one-third of U.S. workers lack digital skills. This gap is particularly true in industries which are key to Orleans County's employee base. *"The occupational category with the greatest portion of low skilled workers is plant and machine operators and assemblers. Nearly two-thirds (63%) of workers in this category have limited or no digital skills. Workers in these occupations include people who operate industrial and agricultural machinery and equipment, drive and operate trains and other motor vehicles, or assemble parts."* 53% of the category which includes agricultural occupations also have limited or no digital skills.

This lack of digital skills matters for employees. The data is clear: The lower a person's digital skills, the lower their earnings tend to be. The good news is, though that a 2018 study ("Literacy and growth: Policy implications of new evidence from PIAAC," Guido Schwerdt, Simon Wiedehold, and T. Scott Murray) suggests that skill gains among those with low digital literacy has a more powerful effect on labor productivity and on per-capital Gross Domestic Product compared to those starting with a higher level of digital literacy.

Even though it is expected that those who took the community survey had more digital literacy skills than the overall population, there are still many every day skills that respondents reported they could not do or do well enough.

Some examples of things respondents feel they could not do or do well enough:
- **13% - renew their driver's license online**
- **17% - register to vote online**
- **24% - sign up for benefits like veterans benefits or unemployment**
- **16% - sign up for a patient portal**
- **13% - use Microsoft Word**
- **19% - participate in a Zoom or Microsoft Teams meeting**
- **33% - schedule a Zoom or Microsoft Teams meeting**

The following sections further describe the digital literacy barriers within specific contexts.

> **When Orleans County implemented hotspots throughout the County in 2020, there lacked good instruction for the residents on how to use them. It was not unusual for people to question what a hotspot was, much less know how to access it.**

> " **While Orleans County is working to close the internet 'unserved' gap, it is clear that even the 'served' would benefit from increased digital literacy. A well-coordinated digital literacy effort focused on both residents and businesses can help to close that gap for anyone wishing to benefit from it. This Initiative has the potential to raise digital literacy and adoption to (or beyond) the level enjoyed by residents of surrounding areas.**

Evhen Tupis, Resident, Town of Clarendon, and a participant during the Solutions Phase

SCHOOLS

When COVID-19 shut down schools, the School Districts within Orleans County accelerated a plan to provide Chromebooks to students. The distribution of the Chromebooks, however, was met with a significant gap in knowledge in how to operate the device or how to effectively use it. This was equally true for the parents or guardians of the students, not just the students. There was and remains a large need to teach how to use the devices that students are expected to use in their educational experience.

To complicate this reality, the use of technology to teach and engage students was new to many of the teachers. As the style of teaching continues to shift, the need to learn how to teach both asynchronous and synchronous lessons with technology has been a learning need for teachers.

Genesee Community College attracts a lot of nontraditional students, and the school has found that many lack skills and/or confidence when it comes to basic computer skills. Many do not know how to access an email.

SURVEY RESULTS

1 in 4

students was having trouble using the device or the online tools that were a part of their remote learning.

73%

of students indicated that they needed some help with technology but only

44%

of those students had an adult in the house who could help them.

BUSINESS

As businesses moved their workforce to home, internet access was not the only barrier. Many employees could not set up their laptops/computers at home without significant support. One HR professional shared that employees were forgetting how to do things they know how to do – the degree of disarray just created confusion about even known tasks. Several organizations designed guides to try to help employees navigate systems and software from home. For many, there was a need to address security concerns and figure out file sharing.

Unsurprisingly, the businesses that had relatively smooth transitions were those with a strong and well resourced IT department.

There are businesses within Orleans County that could increase their work-from-home opportunities. But some employers acknowledged that they anticipated that some of that workforce would come from outside Orleans County because of a lack of digital skills amongst unemployed/underemployed. As of March 2021, there were over 1,100 open jobs in the community with increases in employment anticipated. Many of these jobs need a workforce with digital literacy skills.

There is a need for the current workforce and potential workforce to better learn tools like

Zoom, Google Docs, and even email. The pandemic exposed this need and the need for these tools will continue post-pandemic.

Businesses also spoke about digital literacy being a barrier to being in touch with their customers. Digital communication was key during the pandemic, but some customers were not able to access it.

> " **I would love to offer online training, but barriers of internet access and digital literacy would be a barrier.**

Patti Fales, BMP America

SURVEY RESULTS

1 in 4

employees working from home had one or more problems with digital literacy, such as:

Not knowing how to use meeting software like Zoom or Teams

Not knowing how to access company documents, attach documents to email, or keep computer updated

AGRICULTURE

Growers report that customers complain that they have trouble finding information provided to them by farms. It is a combination of the farms not adequately presenting their information in the best way and the public not knowing how to perform navigation or searches.

Farming equipment is getting very complicated very quickly. Those in key positions need to know how to program, operate, and troubleshoot. With the start of COVID-19, there was a need to begin using tools like Zoom. Stakeholder meetings moved online, and many growers had learning to do to participate.
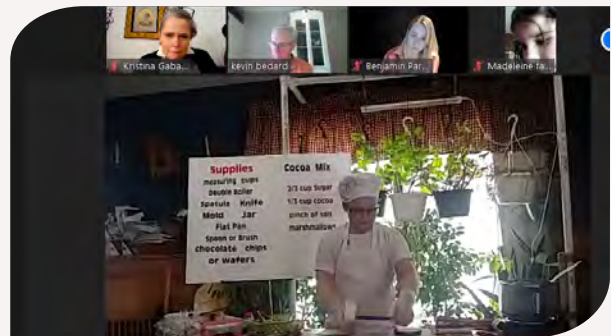
UNEMPLOYED

311 respondents to the survey identified as being unemployed. As businesses report the need for increased technology and digital literacy skills, the respondents were reporting some barriers in searching for a job which likely would be barriers to being employed.

Several employers stated that completing the online job application process is one "test" they use to measure digital literacy. And yet, 15% of survey respondents said that they could not meet that requirement. Additionally, only half had a professional email address, 1/4 do not know how to use job search engines or search for jobs online, and 38% did not know how to conduct research on companies they might be interested in working for.

Orleans Job Development is having trouble recruiting the unemployed to participate in virtual job fairs. There is a belief it is because people are intimidated by the virtual format because drive through (in person) job fairs are being attended. Even systems, like unemployment insurance, designed to support the unemployed, are conducted online. Orleans Job Development is finding the newly unemployed struggling to apply for benefits, and they often complete the process incorrectly adding significant delays to receiving their unemployment checks.

There are good trainings available from the Department of Labor to help with the job search process or increase skills. With transportation being a barrier, the online format could be helpful even in non-COVID times. However, access to this training requires baseline digital literacy.

HEALTHCARE

The digital literacy barrier was felt at the start of COVID-19 for mental health providers. There was a significant drop off in appointments at the start of the pandemic. It took concerted efforts on the parts of providers to guide their clients in navigating telehealth. The Orleans Mental Health Department estimates that they dedicated 40% of staff time teaching clients how to successfully engage in telehealth.

What this does offer us though is recognizing that with personalized, concerted effort, a change can be made.
Completed appointments is back to pre-COVID numbers following these efforts by the staff.
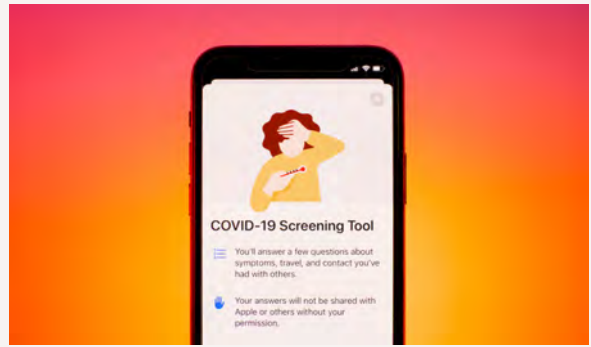
A significant barrier within the County has been accessing the COVID-19 vaccine. Appointments were online and older adults especially (the main recipient of the first vaccines) were struggling with registering themselves for the vaccine. The Office of Aging was spending significant time trying to support the community in registering for vaccines. See Appendix I for local coverage of this issue.

COMMUNITY SERVICES

Nonprofits, churches, and those serving the community have their own experiences of digital literacy. Below are some examples:

- Nonprofits have found that their Board Meetings have been challenging as they moved online. In addition to internet access barriers, many Board Members lack digital literacy skills.
- The clients that many nonprofits serve often have reading and writing literacy barriers, and so layering on digital literacy makes their attainment of skills difficult.
- With older adults making up a large percentage of church communities, and with older adults lagging behind digital literacy, churches are finding that up to 1/3 of their congregations are not participating online.
- The lack of digital literacy skills has kept older adults, already facing isolation, with increased isolation during days of social distancing.
- Those with financial barriers are more likely to have a flip phone vs. a smart phone, limiting even more what can be accomplished via their phone. When they gain access to a computer they often struggle to use it.

SAFETY CONCERNS

Both Sheriff Bourke and Justin Niederhofer, Deputy Director of Emergency Management Office, spoke about the need to teach safety as it relates to the internet. Older adults are often the target of scams. Privacy and fraud are of concern to all users, especially those who may be new to using the internet.

Schools and those working with youth stress the need to address safety and online bullying.

All agreed that any efforts to increase internet access and use should include a focus on safety and security.

Orleans Digital Literacy Initiative

It's Time for Solutions!

This is the place to sign up for the Orleans Digital Literacy Initiative Orientation and Solutions Sessions! Please register for ONE Orientation Session of the 11 offered. Then sign up for the Solutions Sessions you are most interested in.

Methodology for Identifying Solutions

Based on the Interviews, focus groups, survey, and input of the Initiative's Steering Team, fourteen topics were chosen to address during the Solutions Phase of the Initiative.

The Consultant to the Initiative developed an online registration process such that potential participants could easily engage in the process and register to attend. Participants were able to register at: https://odli.coursestorm.com/ (Note: this site will not be permanently available to review.)

All of the individuals who participated in the focus groups and interviews were invited and they often invited peers. Additionally, the Orleans Digital Literacy Initiative Survey invited people to express interest in participating, and nine people expressed interest, seven of whom did participate. Additionally, the Orleans Hub wrote an article about the upcoming process and included a link to the registration link. (See Appendix I.)

Each of the Solutions Sessions followed a format of Ideation – Sorting – Prioritizing – Developing Ideas. A document reminding participants of the process was included with all confirmations to sessions, and reviewed during Orientation (described below). The Process Document is included as Appendix B.

In order to better simulate an in-person session, the Consultant utilized a collaborative on-line tool called Miro (www.miro.com). The participants were taught four key skills needed to operate within the environment, and they used Miro to participate in the process. Appendix C shows the instruction page provided to all participants. Appendix D shows screenshots of completed Solution Sessions in Miro, providing a sense of the sessions.

Prior to participating in their first Solutions Session, each participant attended a half hour Orientation. The purpose of the Orientation was three fold:

1. Preview the process that would be used in all the Solutions Sessions so that participants would know how to participate and contribute.
2. Introduce and provide practice for the online collaborative tool that was used in each session: Miro.
3. Allow each Solution Session to begin without a long introduction to the process and tool since so many participants attended multiple sessions. (There was no need to be oriented more than once.)

Each Solution Session was two-hours long. The topics were:
- Digital Literacy: Older Adults
- Digital Literacy: Youth
- Economic Equity: Access to Internet and Devices
- Increasing Content for the Spanish Speaking Community
- Digital Literacy: Expanding Existing Services
- Digital Literacy: The Unemployed and the Underemployed
- Digital Literacy: Preparing the Future Workforce
- Digital Literacy: Supporting Schools, Students, and Families
- Supporting the Nonprofit Community's Digital Literacy and Technical Needs
- Improving Internet Access
- Digital Literacy: Improving Access for those with Disabilities
- Developing an IT Workforce
- Designing a Digital Literacy Campaign
- Improving Access to Healthcare

Forty-five individuals participated for a total of 120 instances of participation across the 14 Solutions Sessions (8.6 average number of persons attending each session). The strongest participation was from Orleans/Niagara BOCES, Orleans County Job Development, nonprofits, Orleans Cornell Cooperative Extension, and Nioga Libraries. There was also representation from health care, education, various government offices, and business.

Methodology for Crafting the Orleans Digital Literacy Initiative

Following the completion of all of the Solutions Sessions, the Consultant created a list of ideas which were repeated and seen to have value by participants in the Solutions Sessions.

Everyone who had participated in at least two Solutions Sessions was invited to participate in a three-part series designed to craft the Orleans Digital Literacy Initiative – that is, the integrated effort the community would seek to implement.

The three sessions were held in early March and were attended by 21 individuals with 19 or 20 being present at each of the three sessions. The participants who crafted this final design were:

Participant	Title	Organization
Robert Batt	Executive Director	Orleans County Cornell Cooperative Extension
Dean Bellack	Executive Director	United Way of Orleans County
Don Colquhoun	Vice President/Treasurer	OCALS Learning Services
Pamela Denson	Employment and Training Counselor	Orleans County Job Development
Mary Furness	Employment and Training Counselor	Orleans County Job Development
Kristina Gabalski	4-H Program Coordinator	Orleans Cornell Cooperative Extension
Carolyn Graff	Teacher	Orleans/Niagara BOCES
Melinda Grimble	Teacher	Orleans/Niagara BOCES
Renee Hungerford	Executive Director/CEO	Community Action of Orleans and Genesee
Julie Johnson	Case Manager	Orleans/Niagara BOCES
Kelly Kiebala	Director	Orleans County Job Development
Bonnie Malakie	Director of Children and Youth Services	Community Action of Orleans and Genesee
Jennifer Moreland	Case Manager/Teacher	Orleans/Niagara BOCES
Kimberly Myers	Senior Account Clerk	Orleans County Job Development
Linda Redfield Shakoor	ESL/US Civics Teacher Program Director	Orleans/Niagara BOCES World Life Institute
Greg Reed	Executive Director	Orleans County YMCA
Paul Saskowski	Director of Business Services	Arc of Genesee Orleans
Don Snyder	President	Orleans-Recovery Hope Begins Here, Inc.
Jessica Sutch	Employment and Training Counselor	Orleans County Job Development
Sara Taylor	Digital Literacy Librarian	Nioga Library System
Evhen Tupis	CIO	Representing himself/his community

Over the three sessions the participants examined seven priority ideas for addressing digital literacy needs in Orleans County. The participants, in exploring those ideas, selected three key themes that were further designed into two strategic priorities that, together, they believed would make a significant difference and made sense to implement together as one Initiative.

The Orleans County Digital Literacy Initiative

The following Initiative design is considered Phase One of a community effort to address digital literacy in Orleans County. In addition to this effort, it should be acknowledged that the Orleans Legislature is in the process of preparing a submission for funding to "close the last mile" in Orleans County and making the case that financial investments being made available to the State for broadband should be directed toward the many needs of Orleans County.

Phase One of the Orleans Digital Literacy Initiative is composed of two Strategic Priorities:

1. Community Mentors facilitate digital literacy in Orleans County

2. A Public Campaign engages the community in digital literacy and better internet access

Perhaps the simplest way to think of these two strategies is that Strategy One is making access to the internet and digital skills more equitable and accessible while Strategy Two is about motivating access to existing programs that help. Both inspire change.

The strategic priorities were chosen to address needs and take advantage of strengths in the community.

There are many organizations within Orleans County that have strong relationships within the community. The ability to build a solution that leverages the trust of those relationships and build the solutions closer to the needs of community members was very attractive to the design team.

A Community Mentor will be an individual (usually attached to a nonprofit or government agency) who receives special training on digital literacy. This Community Mentor will provide one-on-one or small group instruction to community members on using the internet and their devices in a way that is meaningful to them.
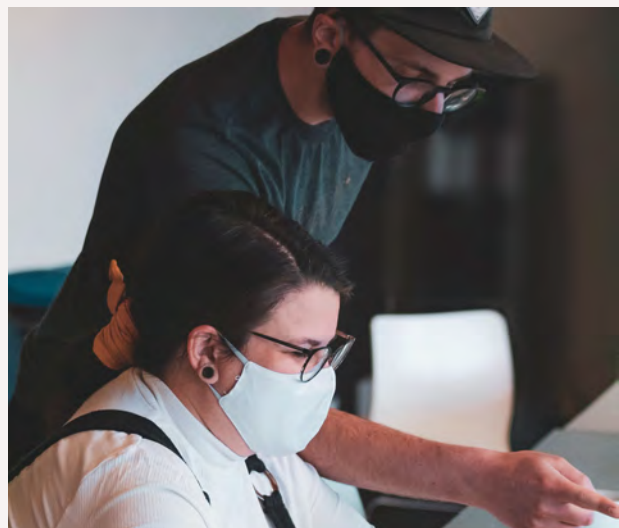
Below are examples of how this instruction might work:

- A Meals on Wheels volunteer trains as a Mentor. The Volunteer/Community Mentor helps an older adult he visits add apps to his cell phone to help him use Instacart and listen to podcasts. He also helps him to install Zoom on his laptop and helps him to successfully Zoom with his granddaughters. Later, when he discusses the desire to have a telemed appointment the Mentor helps him upgrade his computer so that he has proper security in place for his telemed appointment.

- A displaced worker is interested in an advertised position. In addition to assisting with resume writing and interview prep, an Employment and Training Counselor/Community Mentor helps her to set up an email account. The Mentor teaches her how to attach documents and to set up her phone with alerts for when emails arrive. Later, the Mentor teaches the basics of Word, and helps her to navigate the online registration for a more advanced Word class offered locally.

- An older veteran arrives at the Office of Veterans Services with a new medical diagnosis. He will be traveling to Buffalo several times a month for appointments and is inquiring about mileage reimbursement. In addition to explaining the program, the Director/Community Mentor assesses the situation, and helps the Veteran to identify where there is a hotspot near where he lives to access WiFi so that he doesn't use too much data on his phone. They also practice connecting from his phone. The Mentor helps him to navigate the website for mileage reimbursement and also shows him some websites that might be helpful for him as he learns more about his medical diagnosis. In doing so, the Mentor explains best practices for internet searches.

- A parent is in his local library with his children. Through discussion the Librarian/Community Mentor hears how frustrated he is about online schooling. The Mentor spends time to learn what the concerns are, and then gives one-on-one instruction to the father on what a Chromebook can and can not do. They then include the children and run through a real assignment his oldest daughter has. The Mentor also helps the Father to sign up for the school portal and the Community Mentor assists the Father in sending his first message to his youngest child's teacher. They discussed the older children's desire to be on social media, and the Mentor discussed best practices related to safety.

- A seasonal worker has desire to become more proficient in the English language. His ESL Teacher/Community Mentor helps him to use translation options on his tablet and to access learning tools. In the process, the Mentor helps him to establish a relationship with the local clinic as he is experiencing dental issues. The Mentor helps him to successfully schedule himself in for the next available appointment.

Photo courtesy of the Orleans Hub

- A family experiencing economic hardship arrives at a local nonprofit hoping to find a less expensive place to live. The program manager/Community Mentor teaches the Mother how to search for and apply for rental properties while at her office. The Mother complains of cost of data for her phone. The Mentor teaches her what the term hotspot means and how to connect to them. They locate several options that are convenient for her. The Mentor also discusses the option to use her local library explaining that she may use the computers at the library to continue her efforts. She makes sure she can complete a search herself before she leaves the office.

While the Community Mentors are dispersed throughout the community making meaningful one-on-one differences with families and individuals, all will be exposed to messages designed to motivate residents to learn more and alert them to existing resources within the community.

One thing that became very clear throughout the Assessment Phase and the Solutions Phase of this Initiative, is that there are many existing programs that can help people with digital literacy. Several of these programs are also sustainable because they are paid per person served. While there are some restrictions in who can be served in some, many more people qualify than currently participate. Each of these programs, however, has little to no money allowed in their budget to market their programs.

Through participation in this Initiative, natural networking and sharing of resources occurred, and more collaborative efforts are now already in place. However, the existing efforts and the developing collaborative efforts are largely unknown to the community that needs them. The campaign is designed to not only raise awareness of the benefits of digital literacy but connect their desire to learn more to the existing programs.

Another major barrier discussed during the Assessment and Solutions Phase is a resistance to change. Many employees in Orleans County work in jobs that require little to no computer skills (although that is changing) and so the motivation to learn is low. Because there are so many gaps in internet accessibility, as well as economic barriers, there is also a built-in discouragement to learning.

The Public Campaign, designed to break down some of the resistance to change, build a need, and channel that need to existing programs is viewed by the design team as foundational to any further activities taken on collectively or through individual agency efforts.

The other enormous benefit to this Public Campaign plan is that all the updates to internet access anticipated (through increased government funds) will be integrated into the efforts so that the learning curve can be shortened.

Strategic Priority One: Community Mentors facilitate digital literacy in Orleans County

Lag Measure: 2000 people are reached one-on-one or in small groups by end of 2023 through Community Mentor Program increasing digital literacy in Orleans County.

GOAL 1: INFRASTRUCTURE FOR COMMUNITY MENTOR PROGRAM IS DEVELOPED.

Objectives

1.1 Leadership structure of Orleans Digital Literacy Initiative is defined to guide development of plans.
1.2 Community Mentor Coordinator position is outlined and developed.
1.3 Community Mentor Coordinator job description is written and position hired.
1.4 Needed resources for Community Mentors are identified.
1.5 Job description and role expectations are defined for Community Mentors.
1.6 Data tracking and measurement protocols are developed.
1.7 Contracts are developed that defines expectations and compensation for Community Mentor roles.
1.8 Devices, hotspots and other identified resources are secured for Community Mentor Program.

Resources

- Budgeted dollars for Coordinator position and administrative costs
- Budgeted dollars for devices, hotspots, and materials
- Legal advice for contracts
- Vendor contract for purchase of devices, software suites, and hotspots to be used by Community Mentors

Lead Measures

- Coordinator is hired to work with Mentors and manage program
- Community Mentor job description clearly defines role and expectations
- Sufficient devices and hotspots are secured for delivery of Community Mentor Program
- Programs and services already integrated with residents participate in Community Mentor program (i.e.: older adults, disabilities, Spanish-speaking, Veterans, economic barriers)

GOAL 2: STAFF AND VOLUNTEERS OF PARTNERING ORGANIZATIONS ARE IDENTIFIED TO SERVE AS DIGITAL LITERACY COMMUNITY MENTORS.

Objectives

2.1 Process and materials to motivate staff and volunteers to become Community Mentors is developed.
2.2 Agencies and nonprofits agree to recruit volunteers and staff to serve as Community Mentors.
2.3 Recruitment of Community Mentors is implemented.
2.4 Contracts with organizations are signed and equipment allocated for Community Mentor roles.

Resources

- Budgeted dollars to compensate organizations providing Community Mentors

Lead Measures

- Contracts are signed for 8 - 10 Community Mentors by end of 2021
- Community Mentors reflect the diversity of Orleans County

GOAL 3: TRAINING IS DEVELOPED AND DELIVERED TO ENABLE COMMUNITY MENTORS TO INCREASE COMMUNITY'S DIGITAL LITERACY.

Objectives

3.1 Vendors to deliver or consult on training design and delivery and ongoing professional development are identified.
3.2 Vendors are interviewed for possible engagement.
3.3 One or more vendors are contracted with to train Community Mentors.
3.4 Community Mentors receive training to develop skills in teaching/coaching others and in digital literacy/basic IT skills.
3.5 Community Mentor Coordinator receives train-the-trainer from training vendor to enable Coordinator to fill some training needs.

Resources

- Budgeted dollars for training design and delivery
- Location or technology for training
- Research for possible Continuing Education Credits

Lead Measures

- Training program is designed to certify skills of Community Mentors
- Community Mentors demonstrate basic digital literacy and IT skills to receive certification
- Internet safety and security is a key content area in the training
- Community Mentor training is offered annually

<table>
<tr><td>**GOAL 4:**</td><td>**SUSTAINABILITY PLAN FOR COMMUNITY MENTOR PROGRAM IS DEVELOPED AND IMPLEMENTED**.</td></tr>
</table>

Objectives

4.1   Ongoing professional development is designed and delivered to Community Mentors by selected training vendor and/or Community Mentor Coordinator.

4.2   Ongoing recruitment mechanism to add to Community Mentors roster and replace exiting Community Mentors is designed and implemented.

4.3   Opportunities to connect Community Mentors to other related efforts are considered and reinforced where appropriate.

Resources

- Budgeted dollars for professional development
- Location and/or technology for professional development

Lead Measures

- 8 – 16 Community Mentors are on contract at all times
- Community Mentors receive professional development on updates to internet access
- Numbers reached through Community Mentor Program:
  - 250 – first 6 months
  - 400 – second 6 months
  - 600 – third 6 months
  - 750 – fourth 6 months

<table>
<tr><td>**GOAL 5:**</td><td>**INTERNSHIP PROGRAM IS DEVELOPED FOR COLLEGE AND HIGH SCHOOL STUDENTS**.</td></tr>
</table>

Objectives

5.1   Colleges, School Districts, and youth employment are engaged in concept.

5.2   Internship opportunities are defined and documented.

5.3   Recruitment strategy is developed to engage students.

5.4   Training process is created to train interns.

5.5   Interns are trained and oriented to Community Mentor Program.

5.6   Interns are integrated into Community Mentor Program to serve as Community Mentors and support Community Mentor Program.

Resources

- College, high school, and youth employment engagement
- Budgeted dollars for training process

Lead Measures

- 8 – 12 interns receive credit for Community Mentor roles beginning in September 2022
- Interns embedded in 4 or more organizations

Strategic Priority Two: A Public Campaign engages the community in digital literacy and better internet access.

Lag Measures: 35% overall increase in participation in existing digital literacy and IT classes and services in Orleans County by 12/2023. Community Survey shows a 25% measurable improvement in internet access and reliability.

GOAL 1: EXPERTS AND INTERESTED PARTIES ARE RECRUITED AND/OR HIRED TO DESIGN FRAMEWORK FOR PUBLIC CAMPAIGN.

Objectives
1.1   Participants in the design of the Orleans Digital Literacy Initiative give input into concept of a Public Campaign and develop goals.
1.2   Request for Proposal (RFP) to recruit talent to support Public Campaign is developed and distributed.
1.3   Local businesses, nonprofits, IT businesses, and other organizations/community members are invited to contribute expertise and resources to Public Campaign process.
1.4   Public Campaign design team is identified to advance the rest of the Strategic Priority Goals.
1.5   Structure/leadership of design team is defined and documented.
1.6   Community Mentor Coordinator is positioned to provide administrative support and integrate work into Community Mentor Program.

Resources
- Participants from early phases of Initiative
- Internet/IT experts to guide development of tips
- Marketing experts to guide Public Campaign design

Lead Measures
- Roster of Public Campaign team is documented
- Goals of Public Campaign are documented and agreed to by team
- RFP generates multiple applicants
- Team includes technical experts and marketing experts
- Design Team Charter

GOAL 2: PUBLIC CAMPAIGN IS DESIGNED TO RAISE CONSCIOUSNESS OF THE VALUE OF DIGITAL LITERACY AND CONNECT COMMUNITY TO EXISTING RESOURCES.

Objectives
2.1   Current digital literacy opportunities and efforts are documented for inclusion/influence on Public Campaign.
2.2   Campaign messages are designed.
2.3   Methodologies for sharing messages are designed to include digital and non-digital mediums and participation from multiple sectors.
2.4   Measurement and evaluation process is defined and outlined.
2.5   Timelines are developed for messaging.

Resources
- Orleans County Job Development, ONBOCES, Libraries, GCC, School Districts
- Translation services
- Current measurements (attendance, participation) of existing programs for baseline
- Documented results of 2020/2021 Digital Literacy Community Survey, as baseline

- A documented evaluation plan
- Messages are accessible (languages, abilities, etc.)
- A documented Public Campaign project plan

GOAL 3: **TIPS FOR IMPROVING AND UTILIZING INTERNET ARE DEVELOPED TO INCLUDE IN PUBLIC CAMPAIGN.**

Objectives

3.1   Research to identify tips and best practices for accessing or improving accessibility or strength of internet is conducted.

3.2   Communication of tips into easy-to-understand formats is designed.

3.3   Content is translated into Spanish and made accessible for those with disabilities.

3.4   Dissemination of tips is designed and integrated into Public Campaign messaging.

3.5   Messages are updated to align with new internet options in Orleans County.

Resources
- RTO Wireless
- IT experts
- Orleans County government
- Translators
- Input from those who have or work with those with disabilities

Lead Measures
- Work of Digital Literacy Initiative is integrated into federal and state applications for broadband and wireless improvements in Orleans County
- Community is informed of increased internet accessibility
- Public Campaign supports knowledge of internet connectivity options

GOAL 4: **ROLL-OUT OF PUBLIC CAMPAIGN IS COMPLETED AND EVALUATED**

Objectives

4.1   Public Campaign is implemented according to project plan.

4.2   Evaluation process is implemented.

4.3   Adjustments made to plan in response to evaluation and ongoing shifts in community efforts related to digital literacy and available internet.

Resources
- Budgeted dollars to fund Public Campaign such as media and printing
- In-kind contributions to disseminate messages
- Employers and School Systems for dissemination plan

Lead Measures
- Talent and dollars are designated to existing programs to increase engagement
- Existing digital literacy resources see an increase in utilization quarter over quarter
- Media and business partners support roll out
- Non-digital formats are used
- Digital formats are used
- Content is available in Spanish
- Content is accessible to those with disabilities
- Content is available throughout Orleans County
- Nontraditional formats are utilized (school presentations, employee meetings)

Project Ideas Available

The goal of this community work was to craft an integrated Initiative to address Digital Literacy. However, there are many other ideas worth pursuing. The United Way of Orleans County and the Steering Team encourage nonprofits, community groups, businesses, government, schools, or any interested parties to pursue funding for or develop implementation plans for any of the following ideas.

The data and findings in this report exist such that grant writing may be strengthened. The goal of the Steering Team is for many of these ideas to be implemented throughout the County over the next several years.

The ideas are represented below to include the main goal, objectives, resources, and measurements. This information serves as a starting point only and can and should be adjusted to meet changing community circumstances, available resources, and desires of entity wishing to advance the idea.

Notes about all of the following ideas

1.
Always include information and guidance on internet use safety and security.

2.
Provide translation or interpretation services.

3.
Consider accessibility so that those with disabilities are able to access information.

4.
Consider where efforts are occurring such as to provide opportunity throughout the County.

5.
Consider concurrent programming for adults and children.

6.
Utilize print and non-digital mechanisms to reach those who are not (yet) skilled in digital literacy.

Internet Café to provide internet and increase learning

The concept of an Internet Café (or Cafés) is that there is a place not only to access internet, but that there is help to learn new skills. This concept can be either an open to the public concept, a membership concept, or directed toward a specific audience (such as clients of one or more nonprofits).

Objectives	Resources	Measures
1. Concept for Internet Café is outlined and corresponding budget developed.		
2. Location(s) for Internet Café secured.	• Financial resources to start and maintain Internet Café.	• Increasing visitors to Café
3. Equipment and peripherals are secured.	• Location(s) secured with strong internet	• Learning assessments
4. Policies and procedures are developed.	• Budgeted dollars for multiple devices and peripherals	
5. Appropriate staff is hired.		
6. Marketing and advertising announcing opening of Internet Café is developed.		

Grants for people with economic barriers increase access to internet and devices

Addressing digital literacy needs and improving internet is much more beneficial to those with the financial means to purchase internet and acquire devices appropriate for their needs. A grants program to address economic barriers could address many issues outlined in this Report and make the digital literacy efforts much more impactful.

Objectives	Resources	Measures
1. Funding requests are made to secure dollar for grants. 2. Eligibility requirements are designed. 3. Process for grant requests is designed. 4. Organization(s) to implement process and administer grants are secured. 5. Outreach to alert eligible residents of grants is designed.	• Financial sponsors for startup and maintenance of program • Partnering organizations to implement grants • Equipment vendor • Internet providers	• #'s of grants implemented • Grant recipients liked with resources to teach use of device/internet

A device lending library is created for Orleans County

Many people do not have the devices they need to perform activities which may be important to them during a period of time, such as a job search, online training, educational pursuits, or medical appointments. Finding a way to lend the right device for the right need is the foundation of this idea. Additionally, teaching people how to use the device is a key benefit.

Objectives	Resources	Measures
1. Protocols for lending process are developed and documented. 2. Locations for lending libraries are identified and secured. 3. Equipment for lending libraries are financed and purchased. 4. Curriculum for teaching use of device and digital literacy is integrated. 5. Lending Library staff are trained to provide device instruction. 6. Marketing of lending library is designed and implemented.	• Budgeted dollars for devices and peripherals for lending program • Designated locations for device lending • Curriculum designers	• Protocols are documented for lending of devices • Lending libraries are available throughout County • Lending libraries are integrated into Public Campaign and Community Mentor Program • Those borrowing devices can demonstrate use of device

Telehealth Coaches are embedded in the community

Either as part of the described Community Mentor Program, or an expansion of it, coaches are placed in nonprofits and other organizations to facilitate effective telehealth appointments.

Objectives	Resources	Measures
1. Providers agree on standard processes to enable Telehealth Coaches to meet requirements of multiple providers. 2. Curriculum for successful implementation is designed. 3. Locations for Telehealth Coaches is identified and formal relationships established. 4. Telehealth Coaches are hired and trained. 5. Patients are linked with Telehealth Coaches.	• Telehealth best practices • Private locations • Locations with sufficient internet and devices	• # of successful telehealth appointments • % of no show appointments decreases

Train staff who work with people with disabilities to build digital literacy

A version of the Community Mentor Program, this is designed to be focused on the needs of those with disabilities. Specialized equipment, apps, and approaches to teaching are all of concern to those living with disabilities. Providing targeted training for some staff to serve as mentors to those with disabilities will help facilitate employment, independence, and socialization. Note: internet access and a removal of financial barriers also need to be considered.

Objectives	Resources	Measures
1. Needs of those with disabilities are defined through an assessment. 2. Curriculum is identified or designed to meet needs. 3. Process for recruiting staff, training staff, deploying staff, and compensating staff is developed. 4. Measures of success are identified and process for data collection defined and integrated into existing processes. 5. Staff is recruited and trained.	• Training curriculum that addresses needs of those with various disabilities • Budgeted dollars for training and potentially increased salary for participating staff • Knowledge of apps and specialized equipment	• # of specialized staff • # of people receiving support • Learning assessments

Schools develop service-focused IT Clubs

While the younger generation is usually considered much more digitally literate than the older generations, these advanced skills have their limits according to nearly all those interviewed. Younger people understand their phones, are better at recognizing real information online than adults, and are very adept at social media. The younger population, however, is overall not proficient with keyboarding and computers and many software suites associated with business and even school. Forming IT Clubs could build on existing skills and ideally provide opportunity for Club members to share their developing skills with others in the community, including younger students.

Objectives	Resources	Measures
1. School Districts are engaged in concept for and design of IT Clubs. 2. Students are engaged in design of IT Club and establish goals. 3. Community service opportunities are sought. 4. Recruitment for IT Clubs begins.	• Community opportunities for service learning • Potential CBO partner to help with design and implementation • IT teaching/learning opportunities for students	• # of IT Clubs • # of IT Club members • # of service events • Learning measures

Retired IT professionals
volunteer expertise to address needs

IT expertise in the community is hard to come by. IT positions are hard to hire and those in IT positions are often stretched thin. Expertise is needed though in addressing the digital literacy gaps in the community. One mechanism for meeting this need is developing a structured volunteer group of retired IT professionals to push into existing programs for special events, coaching, or workshops.

Objectives	Resources	Measures
1. Survey of potential volunteers is conducted to determine interest and willingness. 2. Concept of IT Volunteer group is designed and program documented. 3. IT volunteers are recruited. 4. IT volunteers are matched with community efforts and/or events.	• Points of intersection between community and IT Volunteers • Budgeted dollars for program implementation	• Number of IT Volunteers • Number of people served • Learning measures

Shared IT resource for nonprofits

Most of the nonprofits in Orleans County are small and resource-poor. Having strong IT knowledge on staff is rare. This idea is built on the idea of a shared IT Resource for nonprofits.

Objectives	Resources	Measures
1. Dollars secured or allocated to hire or purchase shared IT resource.	• Funding for IT position • Contract development	• Efficiencies measures • Cost savings for nonprofits • Increased data reporting • Improved social media presence
2. Shared resource agreement developed and participating nonprofits secured.		
3. Measurements and evaluation process developed to enable adjustments for equitable access to services.		

Shared IT resource for small business

Similar to the needs of nonprofits, small businesses often do not have access to IT Resources often impacting their ability to manage websites, social media, and add functions to benefit their customers. A shared IT Resource for smaller businesses, perhaps organized around sectors, could be of benefit to businesses and their customers.

Objectives	Resources	Measures
1. Dollars secured or allocated to hire or purchase shared IT resource.	• Budgeted dollars from participating businesses • Contract development	• Efficiencies measures • Improved social media presence • Increased services on web • Better utilization of business technology
2. Shared resource agreement developed and participating businesses secured.		
3. Measurements and evaluation process developed to enable adjustments for equitable access to services.		

Enhancing businesses online presence

One way to drive the desire to learn how to use internet and technology well is by having businesses drive this desire by expanding what is available online. By offering promotions, online sales, and services through the web and social media, they will drive the desire to learn. Many smaller businesses can use technical support in making the most out of their online presence. This project is intended to benefit businesses and consumers.

Objectives	Resources	Measures
1. Sponsor for project is identified to include funding effort and requirements of businesses to participate. 2. Process is designed to audit business online presence and allocate resources to address gaps. 3. Businesses are invited to participate and complete application process. 4. Successful efforts are designed to recruit additional businesses.	• Project sponsor • Website expertise • Social media expertise • Financial resources	• Business websites are mobile compatible • Business websites drive desire for digital literacy • Efforts provide more service options via web • Businesses have increased web traffic and sales • 5 businesses annually complete process • Businesses support digital literacy efforts

Lunch and Learns for business community increases employee skills

As discussed in this Report, there is a disadvantage to employees without digital literacy skills in terms of wages and attaining future job opportunities. One way to address the gaps in the community is for businesses to provide opportunities to increase the digital skills of their workforce.

Objectives	Resources	Measures
1. Assessment of business IT/digital literacy needs is designed and implemented. 2. Curriculum is designed or sourced to address needs. 3. Logistics are planned per business or shared sessions. 4. Evaluation plan is designed and implemented.	• Curriculum designer • Budgeted dollars for training	• Increasing attendance at sessions • Learning measures

Hotspots on Public Transportation

When there are discussions about barriers, transportation always comes up regardless of the topic. One way to address the need for internet access is to include internet on all busses in the County. Much of the fleet will be replaced over the next several years, and these new busses would serve the community well if residents could access free internet while utilizing public transportation. In a second phase, school busses could also add internet using Lyndonville Central Schools as a model, as they are already doing this. This will help students without internet at home.

Objectives	Resources	Measures
1. Advocacy effort is organized to ask for free internet access on busses. 2. Dollars to include internet on busses is allocated or raised through alternative means. 3. All new busses are launched with internet. 4. Signage for busses is designed and posted.	• Advocacy directed toward decision makers • Budgeted dollars to include internet on busses	• All busses in Orleans County have free, reliable internet for riders • Easy to understand directions are posted on busses • Public Campaign messages are posted in busses

Appendices

Orleans Digital Literacy Initiative

EMPLOYMENT · EDUCATION · EQUITY

These are our reasons to build digital literacy and address gaps in service across Orleans County

Our County has been provided generous funding to plan for our approach to bridging the digital divide. And over a dozen organizations (so far) are leading the way.

OUR GOALS — WE ARE BUILDING A PLAN SO THAT WE CAN:

- Bridge the digital divide by increasing access to hi-speed broadband internet for those who do not have access today
- Increase digital literacy skills, being sure to implement equitably so we support all our community members
- Expand access to employment opportunities, enabling promotion of the county as a desirable place to live and work

YOUR PART — WE ARE ASKING FOR YOUR INVOLVEMENT BY PROVIDING YOUR INSIGHT, YOUR PERSPECTIVE, AND YOUR IDEAS. TOGETHER, LET'S:

- Support employers and employees as they strive to work remotely securely and efficiently
- Assist the job seeker in navigating the job search with more confidence and success
- Help families to access online education, shop online, take advantage of telehealth and therapies, and stay connected
- Enable businesses to recruit workers with increased digital literacy and expand technology solutions for their business

LEADING THE WAY (AND MAKING ROOM FOR YOU)...
Lead Agency: The United Way of Orleans County

The Arc of Genesee Orleans · Orleans County Cornell Cooperative Extension · P. Raising Kids Child Care Center · Orleans County YMCA Orleans County Adult Learning Services · Community Action of Orleans and Genesee · Claims Recovery Financial Services · Liftoff WNY The Genesee Orleans Ministry of Concern · Boy Scouts of America – Iroquois Trail Council · Orleans County Job Development Agency Representation from the Orleans County Legislature · Orleans Economic Development Agency · Orleans Microenterprise Assistance Program · Orleans County Tourism · Orleans County Association of Municipalities

How we will get from Need to Solutions: Process Instructions

Ideation (Type on Sticky Notes)

Brainstorming Guidelines:

- Go for quantity vs. quality
- No judgements as you proceed of self or others (positive or negative)
- S-T-R-E-T-C-H
- Encourage wild ideas
- Build on ideas

Sorting (Move Sticky Notes to Sorting Boards)

Just Do It – Small effort – Can do quickly – Owned by one organization

A good idea needing development – Medium effort

BIG gain for many if implemented – longer term – Involves multiple organizations – Will take resources and substantial planning

Prioritizing (Each Person Votes)

Vote on those ideas (individually) which you believe will **make the biggest difference for the effort expended.**

Use your votes across all three frames (Small, Medium, and Big Effort)

Developing Ideas (Group Documents "How To")

One member of your group opens a Word document and takes notes for the group. Take assigned ideas and work to add detail to the idea by exploring – **What – Why – How – When – Where – Who**

Make sure the ideas are identified and email to marybeth@programsavvy.com following the session.
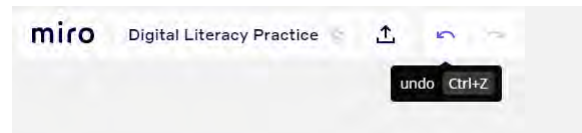
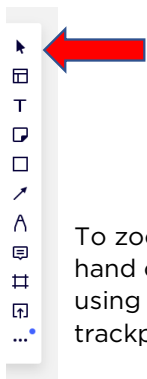# Appendix C – Miro Instruction Page

Miro Instructions

Hint: Made a Mistake?

If at any point you do something you didn't intend to do, there is an undo button located at the top left corner. You may also undo the action by pressing Ctrl and Z on your keyboard.

How to Move on the Miro Board/Change Your Cursor

To move around on the Miro board, click the cursor icon turning your arrow cursor into a hand cursor allowing you to grab the board (hold down with left mouse clicker) and drag it. (You turn the hand back to an arrow cursor by clicking the same icon.)

To zoom in and out on the board use the area in the right-hand corner of the screen. You may also zoom in or out by using the wheel on the mouse or pinching in and out on the trackpad.
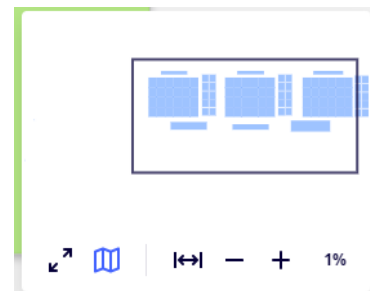
Sticky Notes

To **_type on the sticky note_** double click with the left clicker of your mouse or mouse track. The size of the text will adjust once typing begins to assure it will fit on the sticky note.

To **_move the sticky note_**, click on it once with the click of your mouse or mouse track so the blue outline should appear. Once the blue outline is present, hold down the left clicker and move your mouse to the location of where you want to place the sticky note.

Voting

A plus sign (+) will be present on each of the sticky notes, to vote click on the "+" sign.

If someone has already voted for that sticky note a number will appear. (In this example, 2 people have already voted for that sticky note before me.) To vote on that sticky note click the number of votes (2). (In this example, the vote changes from 2 to 3.)
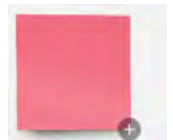
The timer will show you how much time you have to vote. All of the sticky notes you voted on will be present on the left-hand side in the "voting session" area.
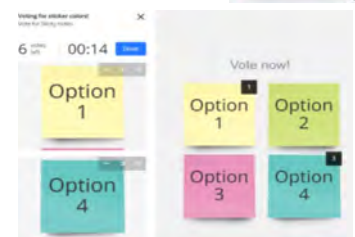
Source - Miro Help Center

NIAGARA–ORLEANS REGIONAL ALLIANCE

NORA is a county government collaboration between Niagara and Orleans Counties to identify and capitalize on shared servicers, common ideas, experience, and opportunities for the betterment of our citizens, and the conservancy of tax dollars.

Determining the gap in the digital divide with any sense of accuracy cannot be done by the use of vendor-supplied maps or FCC statistics because they are incomplete and over inflated. This is due to the fact that ISP vendors report their coverage based on census blocks using the scheme, "If one house in a census block has coverage, the entire block is considered served."

NORA completed its' analysis by putting feet-on-the-street and driving every road, in every town across the entire two counties of Orleans Niagara. A visual inspection of the presence, or lack of presence of Internet infrastructure was recorded and correlated with the actual addresses along each route.

Excel spreadsheets documented every unserved address-point, which were used to generate maps highlighting each unserved road with starting and ending addresses. Percentages of served and unserved addresses were also calculated to help identify those areas with the least service.

The final number of addresses that do not have Internet service are as follows:
          Orleans County = 1,351
          Niagara County = <u>1,045</u>
                  Total = 2,396

Side Note: New York State has made statements that 40% of our homes do not have adequate Internet. Conversely, sources at Microsoft says that only 40% are using the Internet at broadband speeds. So, in reality (based on those estimates) 60% of our homes and businesses are NOT using broadband at FCC defined speeds of 25Mbps download and 3Mbps upload.

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Appendix F – Map of Internet Gaps in Orleans County

The following map, developed by Orleans County Planning and Development, shows the location of internet gaps in the County. The red dots represent the beginning and/or end of a road without fiber broadband connectivity. The line demonstrates a gap along that general route between the start and end points. The interactive version of this map allows you to see down to a specific address.

Orleans Digital Literacy Initiative
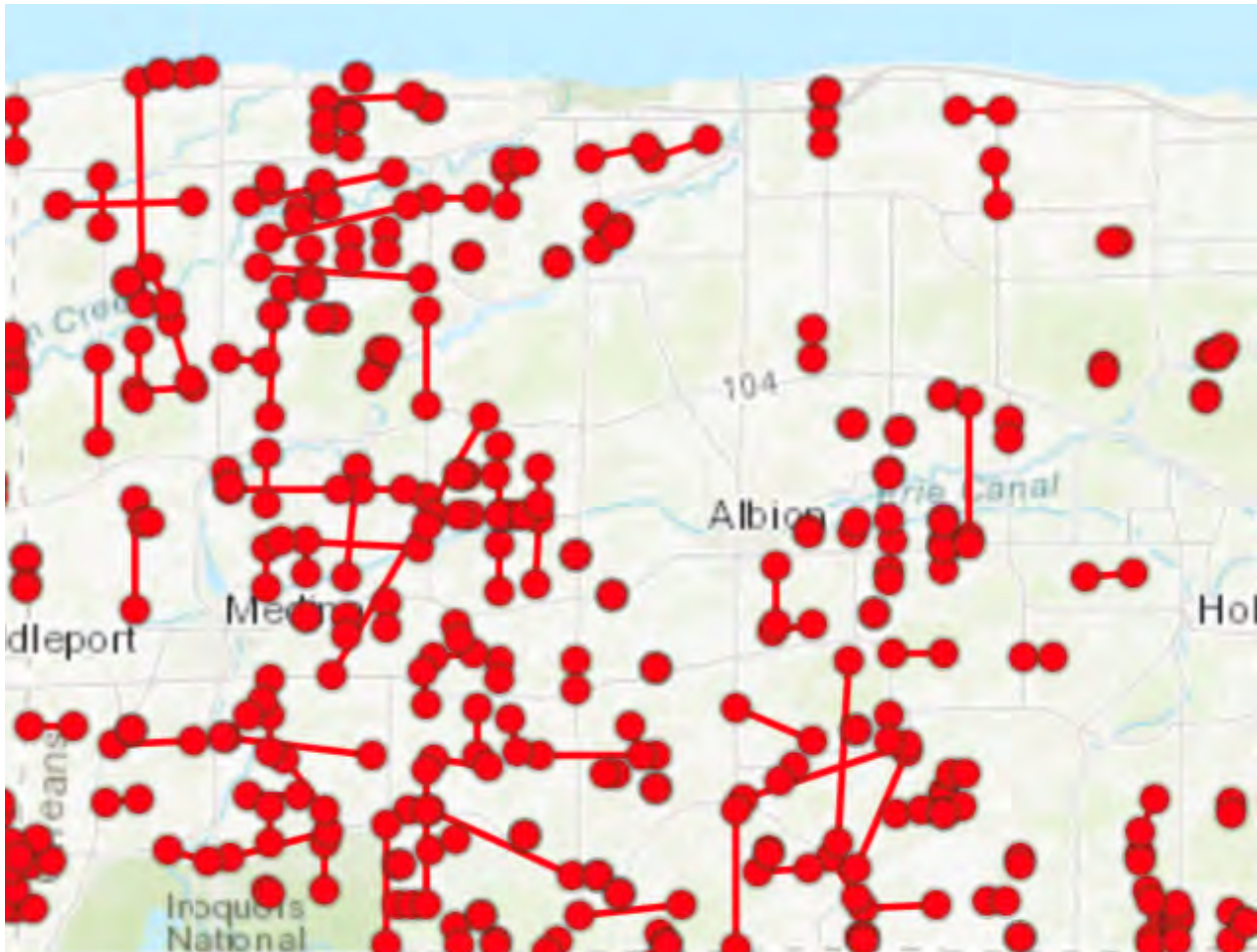
Appendix G – Orleans County Consolidated Agriculture District

The map below shows the approximately 47% of agricultural land mass as of August 2019. Prepared by Orleans County Department of Planning and Development.
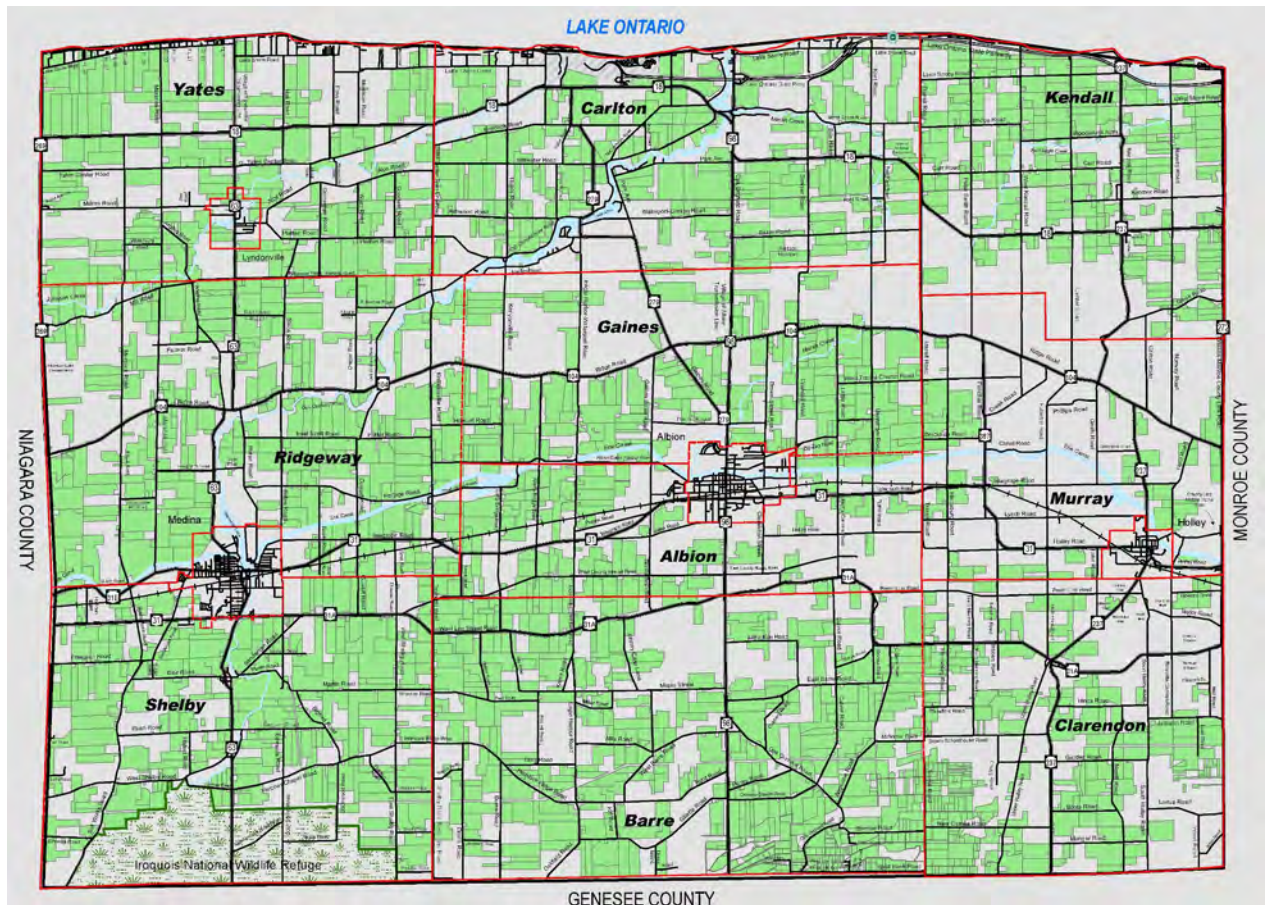
Appendix H – Summary of Existing Digital Literacy Services and Classes in Orleans County

Nioga Libraries

Each of the four libraries in Orleans County is a resource for residents looking for help. Some of their YouTube video library is also designed to support digital literacy.

Additionally, Nioga Libraries has a Mobile Tech van with 10 laptop computers, portable broadband Internet, and a trainer who travels from place to place using existing meeting rooms as digital literacy labs. The Mobile Tech van offers classes in Computer Basics, Internet Basics, Email - Start to Finish, Microsoft Excel, Facebook, Flashdrives and File Management, Gaga for Google: Cut, Copy, Paste, Introduction to LinkedIn, Skills for Job Seekers, Manage Your Digital Life, PowerPoint Basics, Publisher Basics, Windows 10 and Microsoft Word Basics: Cut, Copy, Paste.

Orleans/Niagara BOCES

A provider of technical skills and job training, Orleans/Niagara BOCES also offers topics designed to increase digital literacy, including Microsoft Suite, Typing, Email basics, Google Extensions, Chrome, Firefox, Internet Safety, and Mouse and Keyboard Skills.

The BEST Center – Genesee Community College

The BEST Center was established to serve the workforce and community needs of local businesses and community members. Their mission is to provide high quality training at a reasonable cost to improve business and individual job skills performance. Popular programs include Microsoft Office (Access, Excel, PowerPoint, Word and Publisher), Quickbooks, and Photoshop.

Orleans County Job Development

Counselors connect the job seeker with existing resources to meet needs, including around digital literacy. In addition to their referrals to the other programs listed here, they also have access to NYS Resources that address digital literacy and more advanced computer skills. Access to IT Training and Certificate programs are also facilitated with their clients. Orleans County Job Development also works directly with businesses to provide assistance with recruitment, retainment, job shadowing, transitional jobs, upskilling, supportive services for employees and other needs as identified, including incumbent worker training. A youth/young adult program additionally offers specific curriculum for eligible candidates (age range 14-24) that includes financial literacy, digital literacy, nutrition, and other educational enrichment opportunities integrated into the employment and training program.

There are also many nonprofits that provide general literacy education that have provided targeted digital literacy support to their clients. These organizations will be great candidates for participation in the Community Mentor Program.

Appendix I – Media Coverage

This Initiative and Digital Literacy:

Prior to and during the Orleans Digital Literacy Initiative there were several instances of media coverage of internet, digital literacy, and of this Initiative itself. Some of these media reports are mentioned in the report, others were not.

- **The start of the Orleans Digital Literacy Initiative was reported on:** https://orleanshub.com/united-way-secures-55k-grant-to-target-digital-divide-in-orleans-county/

- **Information about the Community Survey:** https://orleanshub.com/1700-have-filled-out-survey-on-high-speed-internet-access-in-orleans/

- **Article about the Solutions Phase of the Initiative:** https://orleanshub.com/?s=digital+literacy+initiative

- **Article about poor broadband in Orleans County:** https://www.thedailynewsonline.com/news/business/orleans-county-feels-the-bite-of-poor-broadband-access/article_b696e0c4-0fc2-5f83-8e09-574e2ec2ded9.html

- **Article about digital literacy impacting access to vaccines:** https://orleanshub.com/internet-gaps-in-orleans-making-it-difficult-for-seniors-to-sign-up-for-vaccine/

- **Article about broadband impact on farming** (Note: this article is embedded in this larger publication and you need to scroll through to see it): https://www.thedailynewsonline.com/special/2021-business-outlook/article_2c010e86-847c-11eb-9982-77abbba3215f.html

-

Political Coverage

- **Legislature Lynne Johnson wrote a letter to the editor regarding internet coverage in the County:** https://orleanshub.com/governor-should-see-for-himself-the-big-internet-gaps-in-orleans-niagara/

- **In March 2014, broadband issues were addressed in a Congressional field hearing:** https://orleanshub.com/orleans-is-backdrop-for-collins-broadband-focus/

- **Congressman Jacobs held a press conference about this Initiative and the importance of internet coverage**. The press conference was covered by several media outlets (below). He also signed on to a letter to President Biden calling for more funding for broadband for rural communities.

- **Congressman Chris Jacobs announcement:** https://jacobs.house.gov/media/press-releases/jacobs-local-leaders-hold-virtual-press-conference-raise-awareness-greater

- **WGRZ – Buffalo – Jacobs calls for better broadband access in Orleans County:** https://www.wgrz.com/article/news/local/jacobs-pushes-for-better-broadband-mapping-in-orleans-county/71-c3444a6a-4fe9-4bf8-8cf0-2cc6dd58c519

- **MSN.com – Jacobs promotes broadband survey while pushing for better mapping**: https://www.msn.com/en-us/news/us/jacobs-promotes-broadband-survey-while-pushing-for-better-mapping-in-orleans-county/ar-BB1dvRXk

- **Niagara Frontier Publications – Jacobs, leaders raise awareness:** https://www.wnypapers.com/news/article/current/2021/02/08/145208/jacobs-leaders-raise-awareness-for-greater-broadband-coverage-digital-literacy

Appendix J – Excerpt from Letter from Katie Meindl, Lyndonville Resident, to Orleans County Legislators

I am reaching out to you in hopes that you may be able to help me with my current situation.

Since March 2020, when COVID struck our nation, I have been working remotely as many others have been instructed to do in order to reduce and prevent the spread of the coronavirus. Although I am grateful and fortunate that my employer has given me the opportunity to do so, I have been faced with many challenges with the work from home model all of which stem back to the lack of internet options available.

Upon notification of working from home, I immediately purchased the only internet option available to me...this service is just not adequate to successfully meet my job expectations.

The stress that has become a new normal in my home because of the lack of internet options and inability to do my job is heart wrenching and playing a toll on my family.

A recent announcement from my company revealed that the work from home model that was initially a requirement in March, will now be the new business structure on a go forward due to its success over the past several months. Although this may be a strategic growth opportunity for the company, for me, the light at the end of the tunnel where we would return to the office and I could again be successful at my job, has been extinguished; I am now finding myself in a very difficult position with very few options and this has now become a desperate plea.

The options that I feel I have are:
1. Selling my home which I purchased in 2011 only for the sake of relocating to a new residence where internet options are available or;
2. Resign from my position in which I have been a loyal, dedicated employee for the past 10 years. With the ongoing pandemic other businesses have also identified the financial gains from the work from home model which will make it difficult to secure a position within the industry of my experience where commuting and work within an office is still an option.

With the new business model in place, although these options seem drastic, I am not sure what choices are left. I am writing to you in desperation hoping you may be able to assist in pressing our county to expand the high speed internet coverage to the rural areas that make up your community. How many other residents may be limited to the same options that I have? How many residents may be forced or make life altering changes in 2021 due to lack of internet?

Orleans Digital Literacy Initiative

About the Steering Team

DEAN BELLACK is a resident of Medina with his wife, Carol. Dean spent his 30-year career as part owner of a manufacturer's representative firm. He has many years of community involvement. Dean now serves as the Executive Director of the United Way of Orleans County whose mission is to be a connector of people, resources, ideas, and funding to make the community stronger. They strive everyday to expand the talents of Orleans County's people and motivate all for structural positive change. Most recently they have secured significant foundation dollars to give aid to the most needy in Orleans. They have led the Orleans Digital Literacy Initiative and have convened regular county-wide meetings to share resources, knowledge, and formed groups to tackle collective problems together. and staff retreats, training, and leadership coaching.

ROBERT BATT lives in Orleans County (from where he is a life-long native) with his wife and daughter. Robert has a master's in special education and previously served as the 4-H Coordinator of Cornell Cooperative Extension (CCE). For the past five years Robert has served as the Executive Director of Orleans County CCE. CCE puts knowledge to work in pursuit of economic vitality, ecological sustainability and social well-being. They bring local experience and research-based solutions together, helping New York State families and communities thrive in our rapidly changing world. To accomplish this mission Orleans County CCE provides programming in agriculture, positive youth development, horticulture, nutrition, and other areas as community needs may dictate.

KEN DEROLLER is a resident of Kendall. Ken worked for 38 years at Kodak, retiring 19 years ago in the information technology department as a business analyst. He joined the Fire Department and was an active firefighter for 18 years. He served 25 years on the Town Planning Board, including 15 years as its chairman. Member of the Kendall Lions Club for 30 years "We Serve". Ken has been an Orleans County Legislator since 2014 representing District #4 (Kendall, Carlton, Murray and Village of Holley) elected by the voters within that district. The Legislature is divided into ten Standing Committees to more efficiently carry out the responsibilities of County government.

KELLY KIEBALA is a 4th generation Medinan, mother of two - Tobias and Lily. She was formerly the Director of the Genesee-Orleans Regional Arts Council, Orleans County Chamber of Commerce and a Trustee for the Village of Medina. In addition to her role as the Employment & Training Director for Orleans County, Kelly serves as the Chair of the Leadership Orleans Steering Committee. The Orleans County Career Center is home to the Orleans County Job Development Agency that assists employers, the unemployed, underemployed and the emerging workforce with employment and training needs. The department works closely with a wide range of public and private sector partners. It is part of the GLOW (Genesee-Livingston-Orleans-Wyoming) Workforce Development Area.

GREG REED is married to Tori, and together they have three children, Jassiah, Gideon, and Judson. Prior to his time as Executive Director of the Orleans County YMCA, Greg forged a grass-roots middle and high school physical education and athletic program at DSST: College View Middle & High School as the Campus Director of Athletics & Community Outreach. As a branch of the GLOW YMCA, the Orleans County YMCA serves youth, families, adults and seniors in Orleans County. Its mission is to develop the spiritual, mental, and physical wellness of all people in an atmosphere of Christian Fellowship. The Y builds community and welcomes everyone in their support of children and families while instilling the values of honesty, respect, responsibility, and caring.

MARY BETH DEBUS served as the Consultant for the Orleans Digital Literacy Initiative. She is President of Program Savvy Consulting, whose mission is to strengthen capacity within the nonprofit community. Mary Beth's consulting ranges from multi-year organizational development engagements, community initiatives, strategic planning, Board and staff retreats, training, and leadership coaching.

Orleans Digital Literacy Initiative

FINAL REPORT

Summary of Needs and Desired Next Steps for the Community

2021