

#### **Voinovich School of Leadership and Public Service**

presents

**SROI** analysis for OMEGA Regional Public Transit and Transportation Providers

## **Voinovich School of Leadership and Public Service**

Ohio University's Voinovich School of Leadership and Public Service is a leader among public service schools, working in publicprivate partnerships to find solutions to challenges facing communities, the economy and the environment.

The Voinovich School is more than a think tank. We think about big problems – then we collaborate to activate research-based solutions that help communities solve economic and environmental challenges. The Voinovich School hosts projects in every county in Ohio, and then works to scale these solutions across Appalachia, the country, and the world. Our interdisciplinary educational approach helps us give students unique learning experiences with real clients and organizations, all centered around outcomes. Our distinction among public service schools is our ability to build partnerships with nonprofit organizations, government, and industry to boost our resources and expand our impact.

# What is the SROI ratio for OMEGA Transportation & Transit?

Social Return on Investment (SROI) is a framework for calculating and communicating social impact using the universal language of money. SROI measures the social value created by an organization's activities by including social, economic, and environmental impacts in a total measure of social value.

FOR EVERY \$1 INVESTED OMEGA Transportation and Transit GENERATED

\$5.43 - \$9.13

**OF SOCIAL VALUE** 



This dollar amount reflects the ripple effects created by transportation providers in the OMEGA region

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## What did we measure?

Social Value measures impact to individuals and groups of people in areas such as health, wellbeing, safety, and belonging. This SROI was designed to measure impact to Riders, Families & Friends of Riders, Communities, Staff, Employers, and Medicaid.

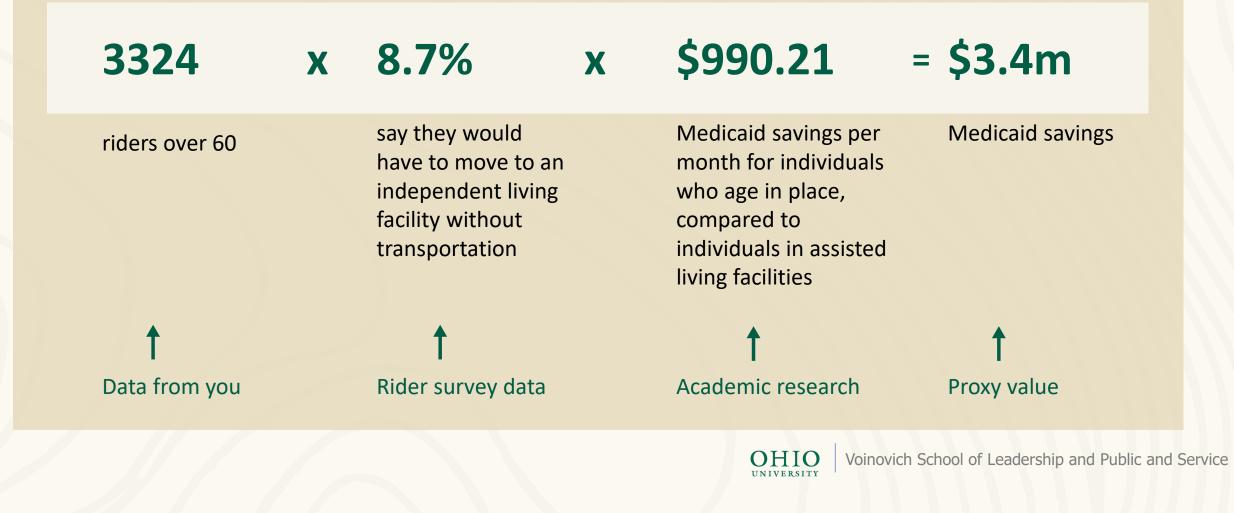
This presentation is going to explain the stories behind this number (proxies) and how to use this number to talk about what additional value transportation could provide your communities if it were adequately funded.



## How do we calculate value?

Reduced family	strain (labor)												
	6392	2 # of unique riders											
	52.00%	6 % of riders 60+											
	3324	# of unique riders age 60+											
	13.40%	% of adults 65+ who rely on un		(The Economic Impact of Caregiving, 2021, P 3)									
	445	# riders assisted by unpaid care	egivers										
	1	Assuming 1 unpaid caregiver p	er rider										
	50	weeks per year that caregivers	are assisting										
	83%	6 Percent of caregivers who organize/perform transportation at least weekly					(NADTC National Poll: Transportation Needs and Assessment, 2018, P 9)						
	39%	Percent of caregivers who prov	ride transportation	to a family r	nember at least we	ekh (NADTC Na	ational Poll:	Transport	ation Need	ds and Asse	essment, 20	018, P 25)	
	144	# Caregivers who organize/prov	vide transportatio	n for a family	member for 5 or m	ore hours a we	eek						
	36043.55	# of hours spent annually (low)											
	72087.11	# of hours spent annually (high	)										
	28%	Percent of caregivers who prov	ride transportation	to a family r	nember at least we	ekh (NADTC No	ational Poll:	Transport	ation Need	ds and Asse	essment, 20	018, P 25)	
		# Caregivers in the OMEGA reg	the second s	provide trans	portation for a fam	ily (NADTC Na	ational Poll:	Transport	ation Need	ds and Asse	essment, 20	018, P 25)	
		5 # of hours spent annually (low)			1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.					111	111		
		# of hours spent annually (high											
		Percent of caregivers who prov							ation Need	ds and Asse	essment, 20	018, P 25)	
		# Caregivers in the OMEGA reg		provide trans	portation for a fam	ily member fo	r 1-2 hours	a week					
		# of hours spent annually (low)											
		5 # of hours spent annually (high											
		Total hours spent annually by u	A second s			_							
		Total hours spent annually by u		high)									
ş		Hourly economic value of cares				(Reinhard	et al., 2023)	)					
	868,485.16	368,485.16 Total value of labor of unpaid caregivers who provide transportation (low) 575,391.69 Total value of labor of unpaid caregivers who provide transportation (high)											
ş													

### How do we calculate value? EXAMPLE: Increased ability to age in place



## How do we make sure we get the values right?

- Dropoff outcome effects will be reduced over time
- Deadweight % of the outcome that would have happened anyway
- Attribution giving credit to the contribution of others
- Sensitivity Analysis helps account for uncertainties in data and assumptions



## All studies have limitations. What are this study's limitations?

- Data limitations
- Regional application only
- Benefits to stakeholders can be negative to other stakeholders



# What proxy was used to measure each outcome?

**Increased physical health Increased ability to age in place Decreased social isolation Increased dignity and autonomy Increased choice/ability to obtain sustainable employment Decreased costs per patient to Medicaid Increased ability to age in place (Medicaid) Reduced strain to families Increased employee retention** Increased accessibility to basic needs **Reduced burden on social services** Increased secondary trauma to staff



## **Increased physical health for riders**

Riders are more likely to attend more health appointments for their chronic conditions, resulting in a longer, healthier life.

In 2022, this generated

# \$27,742,546 - \$36,990,062

in decreased mortality rates



35 people received the healthcare they needed to avoid premature death thanks to OMEGA-area transportation providers.

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#### **Communication strategy** Increased physical health for riders

- Individuals who miss 2 or more chronic care appointments annually increase their chance of death (mortality rate) by 300%.
- Public transportation riders who had at least one chronic condition were able to attend 4 more of those appointments, on average, and prevent that 300% increase.
- As a result, an estimated 35 premature deaths were avoided in the OMEGA region, which saved \$27,742,546 \$36,990,062 in mortality costs.

#### For the public

Mortality costs averted = the value of more time to be close with with Grandma/Grandpa, more years left to garden and enjoy the seasons, not having to grieve the loss of a loved one taken prematurely due to preventable death by a chronic disease.



# Increased ability to age in place

More riders can stay in their homes and continue to enjoy their community, family, and autonomy while saving money.

In 2022, this generated



in avoided out-of-pocket costs to riders for institutional care



8.7% of riders 60+ surveyed said that without access to public transportation, they would have to move to an independent living facility

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### **Communication strategy** Increased ability to age in place

- Transportation makes it possible for people to receive the care they need without moving into an assisted living facility. Aging in place like this saves an average of \$71,237 a year in out-of-pocket costs.
- The total savings for the OMEGA region based on riders aged 60+ who were surveyed would be \$15,450,133 - \$20,600,177

#### For the public

62% of rural older adults want to live at home as they age rather than in a facility. The benefits of doing so – community connection, familiarity, proximity to friends, family and neighbors – depend upon transportation. Being able to avoid losing their life savings to institutional care (family wealth transfer) is also an important value to individuals and their families.



### **Decreased social isolation**

Riders get companionship from regular contact with drivers and other passengers, as well as getting the opportunity to go to social activities.

In 2022, this generated

## \$404,519 - \$539,358

in avoided health costs to Medicare by avoiding social isolation



16% of riders said that without regional transportation services, they would not be able to see family or friends at all

11% of riders said that they would get to see family less

48% of riders used regional transportation services at least once a week

### **Communication strategy** Decreased social isolation

- 17% of seniors are estimated to be socially isolated. Social isolation is the objective state of having few or infrequent social contacts.
- People who are socially isolated have higher health costs than those who don't (\$1,989 annually).
- Regular interactions with regional transportation drivers and other passengers, regardless of destination, reduces social isolation, resulting in a reduction of \$404,519 - \$539,358 in health costs for Medicare.

#### For the public

Every rider who was interviewed said that their transportation driver made an effort to connect to them and get to know them. Drivers play an important part in decreasing social isolation. Much greater impact could occur if more riders had the opportunity to ride public transportation to visit friends, family, and attend social events.

#### For funders

The \$ that is saved in this proxy is saved by Medicare. It is likely that Medicaid also saves money, as well as out-of-pocket health costs being saved. OHIO Voinovich School of Leadership and Public and Service

## **Increased dignity & autonomy**

The dignity of being able to work due to access to public transit is important to people.

This generated

## \$1,144,569 - \$1,526,092

in value to riders' sense of self identity



71% of people say work is an important part of who they are

**18%** of those surveyed said they would definitely lose their job without public transit.

# **Communication strategy** Increased dignity & autonomy

- A large-scale study measured the value people placed on having dignity at work, around 6-8% of their annual salary.
- Using a full-time, entry-level salary for someone with a high school degree, we calculated the value of going from not being able to work, to being able to work, valuing that as a 1-unit increase in work-related dignity.

#### For the public

The "dignity of work" is a widely-agreed upon idea that is difficult to quantify. People take a significant portion of their self-identity from how they spend their time and whether they are compensated for that time. Allowing people the opportunity to work through providing transportation not only provides economic value (wages, taxes paid) but also provides additional self-esteem, autonomy, and yes, dignity to individuals.

#### For funders

There is opportunity for bipartisan persuasion as this idea is popular on both sides of the aisle and across nonprofit organizations and private foundations. Example: Sherrod Brown and Transit and the "Dignity of Work"



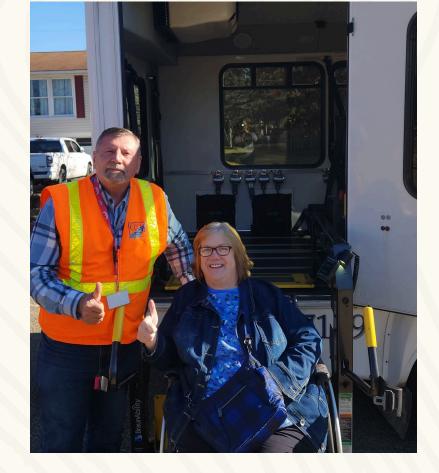
# **Increased choice/ability to obtain sustainable employment**

Being able to work results in gaining on-the-job experience, which is an important contributor to human capital over a lifetime.

In 2022, this generated

# \$10,058,736 - \$15,973,423

in increased value of human capital of riders.



18% of OMEGA riders surveyed said they would definitely lose their job without public transportation.

# **Communication strategy**

# Increased choice/ability to obtain sustainable employment

- Human capital: the skills, knowledge, and qualifications of a person, group, or workforce considered as economic assets
- Work experience makes up 40% of the total value of an individual's human capital, which is typically \$890,000-\$1,060,000 over a lifetime.
- 1 year of work experience results in **\$10,058,736 \$15,973,423.91** in human capital for those who relied upon OMEGA-region public transits to get to work in 2022.

#### For foundations and local government

People who gain more work experience acquire more knowledge, soft skills, and networks which help them earn more over a lifetime than people who are unable to work for periods of time. Providing employment so individuals can work as steadily as possible not only increases short-term earnings, but also has significant effects on long-term earning potential.

#### For employers

Providing transportation for workers results in individuals with additional knowledge and social skills. OHIO Voinovich School of Leadership and Public and Service

### **Decreased costs per patient**

Medicaid patients who can follow their doctor's treatment recommendations have fewer health costs billed than those who cannot follow recommendations because they do not have access to Non-Emergency Medical Transport.

In 2022, this generated

# \$15,449,076 - \$89,026,830

in decreased patient health costs for Medicaid



\$11,798 in annual costs are averted by Medicaid per Diabetes patient when they have access to NEMT

\$50,993 in annual costs are averted by Medicaid per Dialysis patient when they have access to NEMT

### **Communication strategy** Decreased costs per patient

- Chronic care patients' adherence to recommended protocols saves Medicaid millions of dollars annually just in the OMEGA region. 48% of Ohio adults have at least one chronic care condition.
- Using a low range (Diabetes patients) and a high range (Dialysis patients), it is
  possible to estimate the costs Medicaid avoids through patients having access to
  NEMT \$15,449,076 \$89,026,830.

#### For Medicaid

Pointing out the clear ROI for Medicaid is possible with this proxy. Medicaid alone gets nearly \$1:1 to \$1:\$4 with current transportation activities in the OMEGA region. If they reimbursed no-show trips, they would still see a positive ROI. If Medicaid increased funding in some way to bridge the capacity gap that they could realize further costs avoided.



## **Increased ability to age in place** (Medicaid)

Patients who receive at-home services rather than living in an institution reduces annual costs per patient to Medicaid, even when Medicaid pays for those at-home services.

In 2022, this generated

\$2,577,087 - \$3,436,116

in saved patient health costs for Medicaid.



8.7% of riders 60+ surveyed said that without access to public transportation, they would have to move to an independent living facility

#### **Communication strategy** Increased ability to age in place

When patients can live at home and receive paid care there, Medicaid saves \$11,882.52 annually per patient on average, even after paying for that at-home care.

#### For Medicaid

By 2030, 1 in 5 adults will be over the age of 65. There will be more senior citizens then children. Medicaid will be looking for ways to reduce dependence on institutional care, and keeping beds open for patients who really need that care. They will also be looking for ways to cut costs per patient. Discussing the rapidly aging population and the importance of preparing communities to assist older adults to age in place may be an effective way to use this proxy.



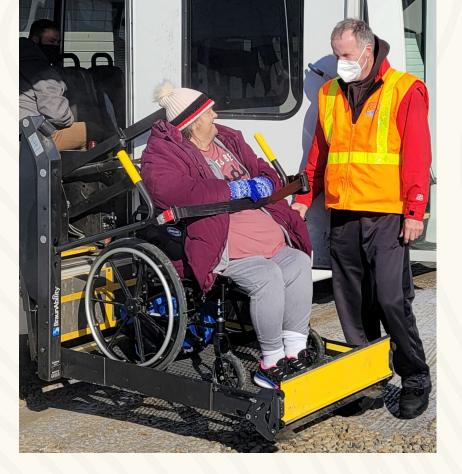
## **Reduced strain to families** (labor)

Caregivers whose family members utilized OMEGA transportation options rather than depending upon them for rides saved time and energy while knowing their loved ones still got the care they needed.

In 2022, this generated

## \$868,485 - \$1,575,391

in value of time saved to caregivers.



83% of caregivers perform transportation at least weekly.

**39%** of caregivers provide transportation for five or more hours a week.

### **Communication strategy** Reduced strain to families (labor)

- Taking some of the burden off caregivers to provide all transportation for their loved ones returns hours back to them: **55,636-100,921** hours.
- Those returned hours are not only a benefit to caregivers, they are also a benefit to employers, caregiver families, and communities. The value of those hours is \$868,485 - \$1,575,391.

#### For Communities

Unpaid caregiving hours result in a value of billions to the economy. At the same time, unpaid caregiver stress results in underemployment, higher health costs, absenteeism and presenteeism. With the need for unpaid caregivers growing as the population ages, communities taking measures to relieve as much of a burden on caregivers as possible will allow them to be healthier and to be more productive.



# Reduced strain to families (travel costs)

Caregivers whose family members utilized OMEGA transportation options rather than depending upon them for rides resulted avoided significant transportation costs.

In 2022, this generated

\$613,296

in decreased travel costs for caregivers.



20% of OMEGA riders would have had to rely on family and friends if not for public transportation and transit

138,512 medical trips were provided by OMEGA public transit and transportation providers in 2022

### **Communication strategy** Reduced strain to families (travel costs)

- Taking some of the burden off caregivers to provide all transportation for their loved ones returns dollars back to them in terms of gasoline and vehicle maintenance.
- On average, rural residents report greater concerns about rising gas prices, and rural trips to medical providers are roughly double the distance of trips that urban patients must take. The value of the trips saved in travel costs is \$613,296.

#### For INDIVIDUALS

Appropriately funding transportation at the county level will result in more families being able to keep loved ones nearby with the knowledge there is a dependable way to ensure they get to their appointments and without straining their own budgets and schedules.



## **PROJECTED Increased employee retention**

If individuals had access to regular bus service, annual employee turnover would decrease by 2.9-3.3% in the manufacturing and retail sectors.

In 2022, this generated

# \$7,552,000-\$8,593,655

in PROJECTED averted costs to employers due to increased employee retention.



34,532 manufacturing jobs in the OMEGA region, with an \$5,910 average cost of turnover per manufacturing worker

24,863 retail jobs in the OMEGA region with a \$2,265.52 average cost of turnover per retail worker

### **Communication strategy** Increased employee retention

- In the OMEGA region, it is estimated that there is an 8.7% turnover rate for employees, with 2.9-3.3% due to transportation issues.
- Employers could avoid \$7,552,000-\$8,593,655 in hiring and training costs in the manufacturing and retail sectors alone if regular bus service were available.

#### For Employers

Employers should work with the OMEGA transportation organizations to support regular transportation service to their locations. This proxy can serve as an example of one type of direct savings for employers, but supporting public transportation would also create a greater potential employee pool and could reduce absenteeism and tardiness from current employees.



## **PROJECTED Increased accessibility to basic needs like food, retail, and social experiences**

If there was one bus with fixed route service per county for a community of at least 10,000, food insecurity would go down 1.6 percentage points, from 12.9%, to 11.3 %.

In 2022, this would have generated

# \$8,234,740

in health costs avoided by counties due to food insecurity



15% of those surveyed said they would not be able to grocery shop without access to regional transportation options

11% said they would be able to grocery shop less often

#### **Communication strategy** Increased accessibility to basic needs like food, retail, and social experiences

- Food insecurity is a persistent problem in rural Ohio counties. Research shows that one reason for food insecurity is lack of transportation to grocery stores or local farmers markets.
- The average health costs for a county per food insecurity percentage point is \$571,857.
- Research shows that one fixed bus route per 10,000 people will reduce food insecurity by 1.6 percentage points. If each county had one fixed bus route, the total savings in the OMEGA region would be \$8,234,740

#### For GOVERNMENT

If counties devoted resources to creating fixed bus routes, they would be able to reduce food insecurity while simultaneously providing the other benefits a fixed route brings for employment, socialization, and health care needs. The cost of a fixed bus route should be estimated and compared with the costs of food insecurity.



# Reduced burden on social services

Employees who rely upon public transportation to get to their jobs are less likely to utilize unemployment benefits.

In 2022, this generated

# \$7,729,153 - \$10,305,537

in unemployment benefit costs avoided by government



\$408.47 Weekly average unemployment benefits

22 Average # of weeks an individual is unemployed

### **Communications strategy** Reduced burden on social services

- Because of limited capacity due to funding restrictions, currently only 18% of its current riders are dependent upon public transit to keep their job, according to our survey. This number would likely be much higher if capacity was there.
- Even with that small number, the state potentially avoids an estimated \$7,729,153 -\$10,305,537 in unemployment insurance payouts from people who currently could not work if they had no transportation.

#### For GOVERNMENT

Ohio should fund its public transits at national average levels to reap the full benefit of getting people to work. While the unemployment rate is currently low, that rate only captures the number of people still searching for work. A far larger number have given up on finding a job, with transportation being one of the main barriers for that population. If capacity met actual need, many more people could work, avoiding not just using unemployment benefits, but also other social service resources.



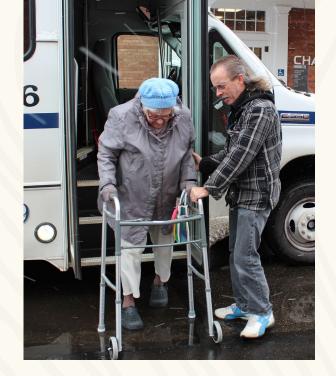
## Increased secondary trauma that comes from not having enough resources to provide what riders need

Surveyed staff reported that they regularly experienced lack of resources to meet rider need and 23% also reported experiencing two or more symptoms of secondary trauma as a result.

In 2022, this generated

-\$145,942-\$194,589

in added health costs to staff due to experiencing secondary trauma



31% of staff surveyed said that lack of funding prevents them from offering needed services on a weekly basis.

63% of those surveyed said that they don't have enough staff to meet riders' needs on a weekly basis

49% said they don't have enough equipment to meet riders' needs on a weekly basis

## **Communication strategy**

# Increased secondary trauma that results from not having enough resources to meet rider needs

- Many staff work directly with riders, developing connection and relationship over time. This is
  especially true of drivers and mobility managers, according to qualitative data from both riders and
  staff.
- 23% of transportation employees surveyed reported two or more symptoms of secondary trauma because of resource constraints that limit their ability to meet client needs.
- Secondary trauma impacts many facets of health and wellbeing. One study showed that a one-unit increase in secondary trauma resulted in a financial opportunity cost of \$19,679 per employee affected due to the increased health costs of coping methods associated with such trauma.

#### For ODOT

Staff are not competitively paid, especially drivers. Many staff are devoted to their riders and have a client/provider relationship with them. Increasing resources would have a positive effect on staff as well, reducing negative health impacts, increasing retention, and attracting mission-centered employees.



# **Next steps**

December meeting – full report Deciding on one pager topics





