

# ECONOMIC AND ENVIRONMENTAL BENEFITS OF PERFORMANCE MANAGEMENT CONTROLS IN HUMAN SERVICE TRANSPORTATION PLANNING

Sara Willox<sup>\*</sup>, Jennifer Morin<sup>\*\*</sup>

<sup>\*</sup> Corresponding author, University of Central Florida, Orlando, the USA  
Contact details: University of Central Florida, 12744 Pegasus Dr. Orlando, FL 32816, the USA  
<sup>\*\*</sup> University of Central Florida, Orlando, the USA

## Abstract

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Sustainability strategies are being implemented in organizations as best practices demonstrate that these initiatives not only provide environmental and social benefits but also financial benefits (Nawaz & Koç, 2019). The problem addressed is that community-based human service organizations often rely upon their own vehicles or the personal vehicles of their employees to transport clients, but the skills and resources to apply and implement sustainable transportation best practices are lacking (Busko & Saltzman, 2021). The purpose is to demonstrate how the application of process mapping and systems approach can reduce fuel usage and greenhouse gas emissions, and save time and financial costs which can, in turn, be used to improve the quality of life of those served by these organizations. The methodology is a qualitative grounded theory approach applied by conducting a textual analysis of conceptual approaches that could be applied to transportation in this industry. The results demonstrate that if human service organizations adopt process mapping and systems approach for their transportation, economic and environmental benefits can be achieved. The conclusion reviews the findings and recommendations. This research is relevant because small businesses and nonprofit organizations need to be lean to stay competitive and to provide the best services to their clients.

**Keywords:** Sustainability, Transportation, Small Business, Process Mapping, Systems Approach

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## 1. INTRODUCTION

Sustainability is becoming a more pressing issue due to the impact of transportation on the environment (Sayyadi & Awasthi, 2020). Many small businesses and non-profit organizations have their own transportation department, or they pay their

employees to drive their personal vehicles. For this research, non-profit human service organizations that provide residential and vocational services to adults with disabilities will be evaluated. However, the concepts discussed can be applied to any company or organization involved in the transportation of people or products.

Much research has been conducted on the sustainable benefits of using public transportation (Chan, Wan Ibrahim, Lo, Suaidi, & Ha, 2020) and of large companies saving fuel and time by purposefully planning their transportation routes (Sultana, Salon, & Kuby, 2019). However, there is a gap in the literature regarding the benefits of smaller companies and organizations implementing the same best practices. This is more of a challenge for this type of organization because of the limited administrative resources available to pre-plan transportation processes. Thus, the purpose of this research is to address the gap in the literature by outlining a theoretical framework that demonstrates the benefits of implementing process and system approaches for transportation processes.

The problem that will be addressed in this evaluation is the time and resources wasted in the use of transportation services in human service organizations. Generally, transportation is provided to and from places of employment, community access and events, and medical appointments. Several options will be addressed that could help the company to be more socially, economically, and environmentally responsible. Using more fuel-efficient vehicles and carpooling or transporting multiple patients within the same trip will be evaluated (Greene, Sims, & Muratori, 2020). Given the various abilities of the clients, some or all of the vehicles need to be able to accommodate the equipment that the individuals rely upon.

The research aim is to demonstrate the value to human service organizations of implementing a theoretical framework that would require minimal effort for administrative professionals to adopt in small, unique settings.

The research questions that will be explored in this article include:

*RQ1: How can a process approach be used to aid non-profit human service organizations in reducing time spent transporting and the financial costs associated with fuel and maintenance?*

*RQ2: How can a systems approach be used to aid non-profit human service organizations in reducing time spent transporting and the financial costs associated with fuel and maintenance?*

Pojasek (2007) explains the conceptual frameworks of the process mapping and systems approach that are applied through the lens of sustainable planning. The purpose of process mapping is to break down the major processes that a company or organization performs. Non-profit human service companies provide services to people who need additional assistance to live and work successfully in the community. The major processes include providing residential support, vocational support, and transportation. However, public funding typically comes from contracts for residential and vocational support whereas transportation is typically assumed to be an included additional support. Thus, organizations typically focus on best practices for residential and vocational services as there are goals that need to be met for those services to obtain and maintain funding. For this article, the major process of transportation is the focus. Systems mapping is used to simplify a complex situation. When addressing the major process of transportation, system mapping breaks down the steps and demonstrates alternative methods, or in this case routes, that can be used to

streamline the process, thus reducing wasted time and fuel along with their associated costs.

The results of this article are relevant and significant to human service administrators because the application of transportation best practices leads to financial savings by reducing the time that employees are transporting and reducing the use of vehicles which leads to lower fuel and maintenance costs. Administrators need to balance their constraints to achieve the best outcome possible (Yeung, 2018). In this situation, administrators have limited funds to pay for employees and other overhead costs with the mission of providing quality service to the clients. Freeing up time and financial resources, typically associated with transportation, allows for these resources to be better utilized by providing more direct care or coaching time to improve the quality of life of those served. In addition, the methods discussed in this article are not limited to only human service organizations. They can be applied to any company or organization that identifies transportation as one of its major or minor processes.

The methodology used in this article entails a qualitative grounded theory approach that identified conceptual models used broadly in other industries that could be applied specifically to a smaller service industry that by nature has a strong emphasis on social responsibility but has historically not emphasized environmental impacts.

The major findings explain the benefits that can be realized by small companies and organizations if they emphasize implementing best practices for providing transportation to clients served by streamlining the process through planning destinations and routes that both meet the needs of clients to achieve a higher quality of life while simultaneously strategically reaching those destinations through routes and vehicles that reduce time and costs spent traveling.

The rest of this paper is structured as follows. Section 2 comprises a literature review that provides more information about the type of organization discussed in the article, the positive view, the sustainability footprint of these organizations, process mapping, and the systems approach. Section 3 describes and analyzes the methodology used to apply conceptual models to transportation in the human service industry. Section 4 provides an overview of the results. Section 5 discusses the implication of the results. Finally, Section 6 outlines recommendations for future research and concludes the article.

## 2. LITERATURE REVIEW

The purpose of the literature review is to provide information on the types of organizations discussed in this article. This gives context to specific challenges and opportunities available. Literature is then reviewed that shows how the positive view indicates that the application of sustainable transportation plans to human service organizations is appropriate. This leads to a review of the sustainability footprint of these organizations, and finally information on the conceptual frameworks of process mapping and the systems approach that are applicable to this theoretical article.

## 2.1. Organizational overview

In non-profit human service organizations that serve people with developmental or physical disabilities, the individuals receiving services live and work in the community, and they access and utilize community services through organizations specializing in residential and vocational services. Some of the diagnoses of those served include cerebral palsy, Down syndrome, autism spectrum disorder, and intellectual disability (Burke, Wagner, Marolda, Quintana, & Maddux, 2019). Individuals may be ambulatory, or they may require assistance from walkers, canes, or wheelchairs. These individuals are often referred to as clients of the organizations and are encouraged to use self-directed services (DeCarlo, Bogenschutz, Hall-Lande, & Hewitt, 2019). Self-directed services encourage clients to have a higher quality of life by choosing the type of services they will receive rather than being assigned services by a social worker. Thus, they choose the company with which they will contract, they look at apartments or homes and sign leases, they choose utilities such as internet and cable, and they choose their own medical professionals. Other types of human service organizations serve populations needing assistance such as community corrections, mental health, and those needing assistance due to socio-economic conditions.

The mission of many human service organizations in this field is to provide quality care to individuals with respect and dignity while also incorporating community involvement to achieve a high quality of life (Yokomizo, 2020). The emphasis on social responsibility has not been a result of wanting to create a sustainable organization, but rather the desire to serve this population through a non-profit organization. The missions of these organizations strongly reflect the importance of providing quality service that improves the quality of life of those served and the benefits to both the clients and the community in which they live.

Funding for these organizations is limited and is provided by different levels of government, donations, and individuals with families who can provide private payment (Koschinsky, Marwell, & Mansour, 2022). This funding is supplemented by grants and fundraisers. Given the limited financial resources available, it is essential that the leaders of these organizations are aware of how to best manage the constraints of money and time.

The positive view evaluates the long-term impacts on the triple bottom line of economic, environmental, and social responsibilities if a sustainable transportation plan is implemented. The core values of these companies are to assist individuals in achieving the highest quality of life, encourage individual learning and growth, provide care with dignity and respect, and promote community integration and acceptance (Yokomizo, 2020). Due to frequent budget cuts in funding from county and state sources while being faced with increased costs of onboarding and retaining employees, these organizations often realize that they no longer can provide temporary fixes to alleviate the cuts and that they need to research the possibility of changing some of their processes. The motivating factor for taking a positive view is the economic challenges that they are facing, but

as a human service organization, they are also aware of the social and environmental responsibilities that can be addressed by beginning this process.

Whenever changes are made to a core process, administrators need to evaluate the problem and goal of the proposed change in order to create a business case that can be understood and accepted by the impacted stakeholders (Taylor, 2021). Thus, it is important for organization administrators to understand the financial aspects of each process, including transportation, in order to understand the benefits of streamlining the process and explaining the change to gain buy-in from stakeholders such as employees and individuals served (Sun, 2018).

When making changes and deciding to change processes, some of the areas examined include the size of the organization, financial and customer outcomes, organizational culture, and governance (Cranmer, 2017). In non-profit human service organizations, traditional quality controls are more difficult to assess as resources are not readily available to dedicate to assessing quality controls that are mandated by governmental funding sources. Therefore, when evaluating options to make changes to processes, it can be helpful to look at both lagging and leading indicators (Nawaz & Koç, 2019).

Leading indicators are especially helpful because they can provide insight into future trends, events, and results (Pojasek, 2009). For human service organizations considering making changes to their transportation policies and processes, leading indicators could be the number of employees currently using their own vehicles for transportation purposes as employees are often reimbursed per mile. Given that wages in non-profit organizations are not usually competitive; employees often rely upon extra income from mileage reimbursement as the required state amount is more than the cost of fuel and maintenance. Before implementing a new process, it would be important to obtain feedback from employees. However, as the cost of vehicles and fuel rises, employees may want to conserve the wear and tear on their own vehicles. Thus, if an organization determines that employees would be receptive to a sustainable transportation initiative, this may be viewed as an indicator that fuel costs and vehicle usage will be reduced by implementing a streamlined process.

It is also important to evaluate lagging indicators such as records of previous transportation costs. This can provide insight into how much has been spent on fuel, and maintenance, and how much employee time has been spent on transporting. Analyzing this information provides a benchmark for past performance and can highlight areas where savings can be achieved, which in turn can provide financial benefits for other areas of the organization and better service for clients (Busko & Saltzman, 2021).

## 2.2. Sustainability footprint

Non-profit human service organizations provide services rather than producing a product. Since these organizations are typically community-based, the organizational processes are similar to those that a family faces when running a household, but on a larger scale. Thus, sustainability considerations may be extended from an individual perspective and

applied to an organizational perspective. People may consider how to use energy in their homes or how to conserve fuel by combining or strategically planning trips. These same considerations can be made by human service organizations while still allowing for individuals served having choices and a voice in their day-to-day activities.

ISO 9000:2010 addresses the systems approach to management and states in part that, "Identifying, understanding and managing interrelated processes as a system contributes to the organization's effectiveness and efficiency in achieving its objectives" (Lauren, 2019). By examining how the micro-processes within the residential, vocational, and transportation major processes are interrelated, it is possible to re-evaluate the full system. Given the mission of improving quality of life, largely in part through community integration, many daily activities revolve around transportation to access jobs or volunteer sites, grocery shopping, banking, and attending social events. Evaluating when and

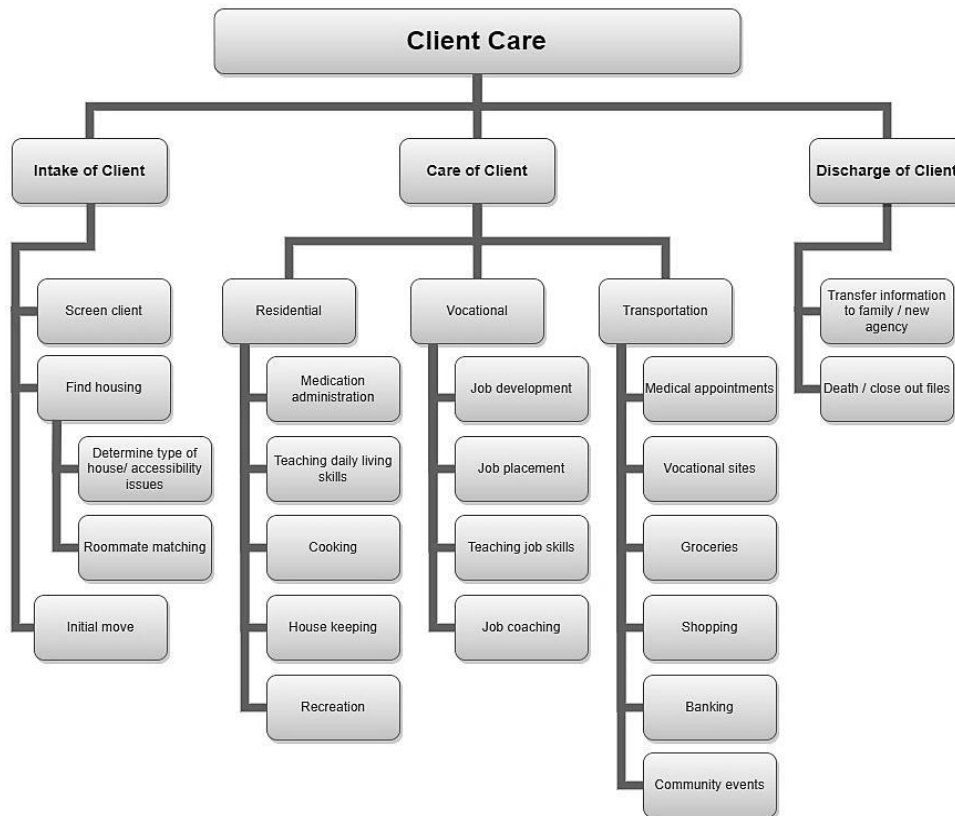
how transportation is occurring can identify areas to improve efficiency.

**2.3. Conceptual approach: Process mapping and systems approach**

It is important to evaluate the business process of an organization (Pojasek, 2009). Process mapping evaluates each of the core processes that occur in a company or organization by mapping the life cycle or product cycle. Process mapping creates a visualization of the relationship between each of the processes.

Figure 1 shows the different core processes that take place during the intake, care, and discharge of a client. For the evaluation of this article, the Care of Client processes are evaluated as they are interconnected with the primary aspects of day-to-day operations.

**Figure 1.** Client care work breakdown structure



The core process of transportation can be broken down into the following tasks: assisting individuals in entering the vehicle, determining the route, driving to the location, and assisting the client with exiting the vehicle. Of these, the task of determining the route is identified as one where time and costs can be reduced by using real-time information to determine the fastest and shortest route. This can be accomplished with relative ease by using GPS on a smartphone. However, if there are multiple individuals that need to be transported to multiple locations with differing required arrival times, the task requires more coordination and planning.

Supporting processes are also vital to ensuring the success of a core process. Human resources and management are supporting processes (Anlesinya & Susomrith, 2020). Human resources professionals are needed to screen potential employees to determine if they are qualified to provide services as well as cleared to drive company and personal vehicles. This is typically done by conducting background checks (Mabry, Hickman, & Glenn, 2020). Management is intended to support employees in all aspects of their job responsibilities including communicating policy or procedure changes. They also reflect the culture of the organization. The critical cultural competence of leaders

supervising diverse social workers, and serving diverse clients, is crucial for the implementation and sustainability of effective practices (Lusk, Terrazas, & Salcido, 2017). Thus, if an organization has made an intentional decision to integrate sustainable best practices, leaders in the organization need to believe in these initiatives and aid in promoting that culture.

Depending on the size of the organization, a new position may need to be created to create transportation schedules. This role would require knowledge of all employees working at each location, the vocational schedules of clients, desired community outings, and client appointments. Based on this information, the scheduler would then work to determine the best routes and order of stops in addition to determining the type of vehicle to be used with the goal of reducing the distance and time spent traveling. If it is not feasible to incur additional human resource costs, it may be possible to reallocate existing task assignments for staff to accommodate the need for scheduling efficiencies, which will contribute to long-term cost savings.

The purpose of using a systems approach is to develop an action plan to implement a strategy that has been determined to be the best approach for reaching a goal or objective (Lopez, Santolaya Saenz, Biedermann, & Serrano Tierz, 2020). Human service organizations can use this approach to determine the best method of creating a sustainable transportation plan.

The bubble up/bubble down process is a method that can help a group determine the best solution from those available (Lopez et al., 2020). These solutions will have been developed during the brain writing session in which all team members are involved and add their input and ideas. The ideas are written on pieces of paper and arranged randomly in a pile. The first two solutions are then compared by the team by performing a forced pair comparison. The team discusses the benefits and disadvantages of each solution and then determines which of those two solutions is best. The team then compares the chosen solution to the next solution in the pile. This process continues until the prioritized order is defined. Often the 80/20 rule can be applied. This means that 80% of the time spent during this process is used to discuss 20% of the possible solutions. Subsequently, 20% of the time is spent discussing 80% of the possible solutions (Steinman, Drawve, Datta, Harris, & Thomas, 2020).

Creating an action plan before implementing a new plan will ensure that all areas of responsibility have been assigned and that everyone involved with the new plan is aware and prepared for any situations that may arise during the implementation (Lopez et al., 2020). Based on the results of the bubble up/bubble down process, a draft action plan is then created which identifies how the chosen options can be implemented. Some of these tasks will include researching vehicles, trading, and purchasing and could be delegated to someone with knowledge of the organization's financial standing. Leaders or administrators could be involved in the creation of a transportation schedule as they are often tasked with scheduling appointments and have the most communication with clients' places of employment. Within the systems approach, it is also important to evaluate what is working and identify

areas that should be considered or addressed before making a decision to change a process. When considering the task of transportation, organizations have strengths which may include owning vehicles or employing those who are willing to use their own vehicles. They also have the ability to go back and review the cost that has been incurred through gas, maintenance, insurance, and mileage reimbursement as lagging indicators.

However, many of the vehicles that are appropriate for transporting medical equipment are not fuel efficient as they are larger vans or buses. As a result, it is often a requirement of employment that employees use their own vehicles to transport ambulatory clients. Additionally, carpooling and public transportation are not being fully utilized due to the longer amount of time required and lack of convenience. Another opportunity that presents itself based on these conditions is that it may be advantageous to purchase or lease new, more fuel-efficient vehicles. Purchasing or leasing new vehicles is a substantial cost but doing research prior to purchasing can lead to long-term savings. As new models are developed, they are becoming more efficient. If this is feasible, the organization may see a reduction in fuel costs and environmental emissions would also be reduced. In addition, to determine the best course of action, a cost-benefit analysis can be conducted to determine if trading current organization-owned vehicles for newer more fuel-efficient vehicles would be financially beneficial (Watson, Galford, Sonter, & Ricketts, 2020).

The increasing costs of fuel are a threat that needs to be addressed as the economy often fluctuates. In addition, if there are any motor vehicle accidents, there is a threat of potential lawsuits and of course the bodily harm that could result from an accident. Insurance is in place to protect the company from lawsuits resulting from accidents that could occur while employees are transporting clients in both their personal vehicles and company-owned vehicles. Finally, some human service organizations are larger and thus have a higher amount of money to use for overhead expenses, which can allow for greater flexibility in purchasing fuel, vehicles, and equipment for transportation. Some have wheelchair-accessible ramps that can lift an individual into a vehicle quickly, safely, and with ease without needing to be transferred in and out of the chair.

### 3. RESEARCH METHODOLOGY

For this research, it was determined that a qualitative grounded theory approach would be the best methodology to collect, analyze, and synthesize previous research and theories. Creswell (2003) defines grounded theory research as the "researcher attempts to derive a general, abstract theory of a process, action, or interaction grounded in the views of participants in a study" (p. 14). The grounded theory approach allows for previous research to be reviewed to find themes and connections among analyses conducted in seemingly unrelated fields and has been recently applied in the qualitative analysis of human service organizations (Shier, Turpin, Nicholas, & Graham, 2019). This inductive approach has been utilized to develop theory, specifically, for work organizations, to both

facilitate understanding as well as to identify potential opportunities for improvement in organizational environments (Martin & Turner, 1986). Therefore, the grounded theory approach was chosen because it allowed for an analysis of secondary research that has been conducted over several years to determine the best conceptual model to address the problem of transportation planning in small organizations.

Two searches were conducted using two databases, Web of Science (WoS) and EBSCOhost. WoS was used because of the wide range of articles available related to sustainability and because it has advanced tools that allow for a more specific search to be performed. EBSCOhost was chosen due to its extensive database across multiple subject areas, ease of use, and ability to refine searches through advanced settings. The first part of the textual analysis was conducted by identifying keywords from the problem statement including human service, transportation, and sustainability. This search resulted in 0 articles that specifically researched human service organizations and their best practices for sustainability. This search identified the gap in the literature for addressing the problem. Second, a search was conducted to determine the most appropriate conceptual model or models that could be applied to the industry as a potential solution. This search was also conducted in both, WoS and EBSCOhost. Thirty-eight articles were reviewed, and many discussed expensive technologies and programs available for large-scale supply chain systems. Most of the options were not applicable to smaller organizations with limited budgets. However, three articles were discovered all written by Pojasek, a leading expert in the field of sustainability that specifically focused on the sustainable applications of process mapping and the systems approach. Pojasek's research (2007, 2009, 2012) provided a conceptual framework that could be transferred and applied to processes in smaller-scale operations, that vary from day to day, and that have an additional layer of complexity due to the interrelated relationships with other core processes. Based on an analysis of these theoretical models through the lens of the human service industry, it was determined that the application of these models was appropriate for creating the theoretical argument for the benefits of creating sustainable transportation plans in this industry.

#### 4. RESULTS

Based on the results of the textual analysis described in the previous section, the purpose of this article is to review and analyze the benefits of using process mapping and a systems approach within the non-profit human service industry in regard to the core process of transportation. If human service organizations decide to implement a new transportation program and they see positive effects, this may lead to an interest in adopting an encompassing sustainability view. Using process mapping and the system approach allows organizations to systematically plan transportation plans that will lead to reduced travel times and emissions. This could lead to eventually addressing areas for opportunity to be more sustainable in every area of the company. They could prioritize and

address areas including food, housing, and cleaning chemicals. Each residential setting utilized by clients provides several opportunities to be more sustainable from purchasing updated appliances, windows, and doors, they could even install solar panels to use solar energy rather than use the local power.

After an organization decides to put an emphasis on sustainability and make it part of its culture, it is possible to identify other opportunities to address. "Sustainability is the ability of an organization to manage transparently its responsibilities for environmental stewardship, social well-being, and economic prosperity over the long-term while being held accountable to its stakeholders" (Pojasek, 2012, p. 94). Human service organizations that address these responsibilities and incorporate the perspectives of their stakeholders are well-positioned to make changes to their processes that will improve the financial stability of their organizations while becoming leaders in providing quality service. Thus, it is important to engage with stakeholders and address their concerns and desires to gain buy-in (Sun, 2018).

#### 5. DISCUSSION

Typically, it is the responsibility of the individual employees to determine the most efficient routes (Maleku et al., 2020). The employees usually do not communicate or coordinate with one another regarding their daily transportation plans. Thus, there is a need to train employees on the new initiative and the advantages of creating a more sustainable and efficient transportation plan (Wriston, 2007). Depending on the size of the organization, the task of planning routes may be delegated to individual employees, or it may be conducted by managers.

##### 5.1. Environmental responsibility

If human service organizations adopt a systems approach and incorporate process mapping, it will be possible to reduce the number of miles driven. For example, currently, if a client from location A has an appointment at location C and a client from location B has a 2-hour volunteer position a few blocks away from location C, two employees are driving both clients individually. If there was a master schedule that indicated all scheduled appointments and vocational/recreational activities, transportation schedules could be created to encourage carpooling, so that the employee working with the client at location A could stop and pick up the client and employee at location B, and they could all travel to location C together. Streamlining this transportation schedule would require more coordination, but for schedules that remain the same day to day or week to week, it would not take a significant amount of time to create a routine. Given that the population served is aging and has more medical issues, there will be unplanned medical appointments that may not fit into the transportation schedule, but if the culture of the company is to reduce miles driven, employees may communicate more with one another to find efficient solutions to getting the clients to these appointments.

## 5.2. Social responsibility

ISO 26000:2010 emphasizes some key areas of social responsibility including human rights, labor practices, consumer issues, and community involvement and development (International Organization for Standardization [ISO], 2010). In human service organizations, social responsibility comes naturally to management and employees because they often are drawn to the field due to a passion for the people and the work. Thus, there is naturally a strong emphasis on social responsibility embedded in the culture of the organizations. Each process is either directly or indirectly focused on improving the quality of life of those that are served. By providing transportation to the clients, the clients are able to receive medical care from providers that they choose, and providers located at various locations. This increases the ability to see specialists. Clients can also choose to participate in community activities. By providing transportation via public transportation and updated fuel-efficient vehicles, clients can attend these events at a lower cost to the company and the city and community could have a slightly better quality of life due to increased quality of air from reduced fuel emissions.

By having extra funding from saved resources, employees can help clients to find alternative funding and resources to improve their economic situation. If employees have additional paid time with the clients, they can also help to promote human development and lifelong learning by teaching the clients daily living skills such as how to prepare meals, use public transportation, balance a checkbook, and even how to perform job tasks in a vocational setting. Community members can increase their knowledge of diversity and acceptance when there is more exposure to those with different abilities through community immersion. This helps both children and adults to learn more about treating others with respect.

## 5.3. Economic responsibility

Economic responsibility is a primary consideration due to the constraints in receiving funding. Financial management needs to be given significant consideration to best allocate the limited funds. Given that this population is aging, they are requiring more services. As individuals age, their needs are increasing, but the financial support required to provide additional hours of service is not available. Thus, organizations have needed to be creative in the ways in which they provide services as they try to meet the changing and growing needs of the population while receiving the same or less amount of funding.

## 5.4. Nexus

Organizations, communities, and government funding sources are truly interconnected. The organizations exist because the community recognized a need and thus as a society created government policies and funds through taxpayer dollars to provide services. Many organization leaders such as administrators are on county or state boards to advocate for the needs of those that they serve. These are volunteer groups that advocate for all people with

disabilities. They frequently meet with local politicians to show how budget cuts are harmful to this population and how and why more funding is needed. This advocacy is necessary to ensure that the funds provided keep up with the needs of those served. When leaders of human service organizations collaborate with leaders of their competitors, they can create a community of practice (CoP) in which the synthesis of their combined efforts lead to greater benefits for all (Mavri, Ioannou, & Loizides, 2021). By collaborating with other organizations, transportation can be further addressed by carpooling with clients that receive services from different companies but may live near one another or may be going to the same location (Busko & Saltzman, 2021). These types of collaborations are also ways to show goodwill towards funding sources which improve relationships with those stakeholders.

## 5.5. Role of the individual

Individual employees play a key role in providing care and quality of life. Since some of the employees work within client homes and others work with them in the community, there is a sense of community within the company. To a degree, there is a sense of family because the clients see many of the employees more often than they see their own families. Thus, strong relationships are formed with the knowledge that professional boundaries need to be maintained. This does create a sense of belonging with the clients but also within the company as a whole. Seeing clients learn and grow can raise esteem. Although there are several challenges, it can be a very gratifying position. As an employee stays with the company longer, they typically develop a need to understand. This can refer to understanding how the funding works, how management makes decisions, and the medical reasons behind some of the challenges that the clients face. Employees who are passionate about their work find value in the work that they perform beyond their paycheck. There are many life lessons and gratifying moments that can occur on any given day. Sometimes, it is inspiring just to see how happy the clients are despite their challenges. Some do not even realize that they are different.

Clients are also visible parts of the community through the community integration program. Their common goals are to find the least restrictive environment in which to live. The basic levels of restriction are long-term care facilities, nursing homes, and institutions, followed by assisted living, and finally independent living within home assistance. Since these organizations provide in-home assistance, it is important that each client receives the number of hours necessary to allow them to live independently. By reducing transportation costs, more money can be allocated to providing staff hours, which in turn helps the clients to remain in their homes for a longer period of time.

## 5.6. License to operate

The company locations are licensed individually by the state. State inspections occur at each location at least biannually. In addition to the state inspections, quality could be improved by doing more frequent

and comprehensive internal quality assurance inspections. It is important to remain in compliance with licensing and regulatory bodies but creating a social license to operate is also an important consideration (Greene et al., 2021). In the past, there has been a negative stigma about people with disabilities. Until the 1970s many were housed in large institutions, so the “normal” population was not aware of how these individuals could be a benefit to the community (ADL Education, 2022). This lack of knowledge and understanding led to fear. In some neighborhoods where the clients live, this stigma still exists, so it is helpful for the company to make decisions that reflect favorably upon them in the community.

Vocationally, the work that clients perform adds value to the community because they often fill some of the lower-paying service positions. When a company in the community hires one of these individuals, they receive the work that the client performs, but also the assistance of a job coach hired to help the individual perform the job correctly. The job coach assists to ensure that the job responsibilities have been fully met to the levels of quality expected by the employer. In the community, transportation is required for employees to get to their jobs. When transportation occurs by using more fuel-efficient vehicles, through efficient routes or via public transportation, employers will have fuel-efficient vehicles in their parking lot which can be a signal to passersby that the company is frequented by those with a sustainable philosophy, or more parking spaces can be available if public transportation such as the local bus system can be used.

Human service organizations can also have the company logo imprinted on the windows or side of fuel-efficient vehicles that they purchase for transporting their clients. This will bring more visibility to the company and the services that they provide to those in the community.

### 5.7. Engaging stakeholders

The stakeholder theory explains that all individuals or groups of individuals who have a vested interest in the operations and outcomes of an organization are stakeholders (Rahman & Qattan, 2021). Non-profit human service organizations have several stakeholders including the individuals receiving services and their families, employees, funding sources, and the communities in which people live and work.

The individuals who receive services are directly impacted by any process change that occurs within an organization that provides services to them. If organizations develop and implement a sustainable transportation strategy, the quality of their lives will be improved as there will be additional resources available to address their wants in addition to their needs.

The families of those served desire quality in terms of safety and quality of care and life. If an organization implements a sustainable transportation policy, these requirements will be met as the quality of care and life will be improved. Planned routes also typically avoid crossing traffic and situations of high traffic volume which reduces the risk of accidents. In addition, if an organization

shows an interest in being sustainable, it is more likely that its focus on human interest is greater. This can be a great marketing point to draw more clients by creating a great sense of trust in the intentions of the company (Grove, Clouse, & Xu, 2021).

Human service organizations provide jobs to people in the community, and it also helps other companies to remain profitable by hiring clients at a lower rate. There are ethical considerations regarding this because it could be argued that the work the clients provide is as valuable or even more so given the aid provided. Most individuals receiving community services are not capable of working a full-time job to support themselves due to physical or mental restrictions, and thus, government assistance is required. The community is also interested in the value that the clients can provide. If organizations create a sustainability policy focused on transportation, the clients will be able to be more integrated into the community and the community will be more appreciative of the value brought by the clients and the effect of reducing fuel emissions.

### 5.8. Implementation

Depending on the size of the company, implementation can happen in phases or in one action. Purchasing or leasing new vehicles may take time especially if there is low vehicle stock. However, route changes can happen concurrently as client schedules are created. As each phase is implemented, there should be training for employees and potentially for clients as well so that they are aware of and understand the changes. ISO 9001:2015 provides an overview of the basic steps for competency and training by requiring the organization to first establish what training is necessary, to provide such training, to evaluate whether it was effective, to make sure that the personnel who are trained understand its importance, and finally, to maintain appropriate records of the training (ISO, 2015). Training will provide employees with an understanding of why and how the changes will impact their daily activities, which eases resistance to change.

### 5.9. Continual improvement

Once a sustainable transportation plan has been implemented, the related costs and time used should be reviewed regularly to ensure that maximum efficiency is achieved. As traffic patterns change and new more fuel-efficient vehicles are produced, organizations may regularly need to make changes to their routes and vehicle fleets to ensure maximum savings.

In addition, organizations can look at their other operations to determine areas of improvement. Often, improvement initiatives are implemented after a state inspection, and the improvements are directly based on the recommendations of the inspectors. The inspectors do not review sustainability procedures. Their focus is on the health and safety of the clients who receive services. Organizations are expected to conduct voluntary internal quality assurance inspections quarterly. In addition to tracking transportation



information, the company may consider also tracking food, energy, and quality of life during these formal inspections.

Many programs exist that provide certifications such as the Green Business Certification Inc. (<https://gbci.org/>). If a non-profit human service organization invested the time and effort to obtain a certification, it may find other areas in which it could reduce waste and costs. It would also set a standard for best practices and set the organization apart from its competitors when seeking additional funding. This type of certification may also be attractive to new potential clients and their families.

## 6. CONCLUSION

Thinking about transportation in human service organizations is not always a priority. Ensuring the health, safety, and happiness of the individuals served while helping them to meet their personal goals are the primary objectives where most considerations and efforts are focused. However, the findings of this article are that intentionally addressing and pre-planning transportation can aid in the achievement of goals by reducing resources used that can in turn be utilized in meaningful ways for those served. Intentionally making these efforts can also spark a culture change to value other sustainable initiatives that further the organizations' missions of providing services that maximize the quality of life.

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The implications of this article can be applied to any human service organization that provides transportation to those that they serve, but the conceptual approaches of process mapping and subsequently applying a systems approach to transportation or other core, or even supporting, processes can be applied to any small to a moderate-sized company that does not have a separate transportation department. Any company that provides services located off-site and needs employees to drive company-owned or personal vehicles can benefit from applying these methods.

One limitation of this article is that the focus is specifically on non-profit human service organizations. While the results are applicable to any industry that requires driving, the results would be less applicable to larger organizations and those that contract transportation companies or have the resources to have their own transportation departments that use more expensive and complex supply chain models to plan their routes.

While this is a theoretical article, the field could benefit from conducting research that reviews past transportation data from human service organizations and the impact of applying process mapping and a systems approach to their current transportation methods to create a more sustainable plan. This research would enhance the argument for the benefits of taking such actions.

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