MOBILITY MANAGEMENT STUDY

FINAL REPORT

Prepared for *The Collaborative*

Texas A&M Transportation Institute

AlphaRoute

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Texas A&M Transportation Institute

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EXECUTIVE SUMMARY

ES.1 Introduction

This Mobility Management Study was commissioned by *The Collaborative*, a group of eight human service agencies in suburban Chicagoland. The study was funded by a Federal Transit Administration (FTA) Section 5310 grant administered by the Regional Transportation Authority (RTA) of Northeastern Illinois. The study was conducted by the Texas A&M Transportation Institute (TTI), in association with the Massachusetts-based AlphaRoute, under contract to the Ray Graham Association, which served as the grant's administrative lead for the project on behalf of The Collaborative.

ES.2 The Collaborative

The eight agencies in The Collaborative include Blue Cap, Clearbrook, CTF Illinois, the Little City Foundation, New Star, Park Lawn, the Ray Graham Association, and Sertoma Centre. These agencies provide services to individuals with intellectual or development disabilities ("individuals"), commonly abbreviated IDD. The focal point of these services are day programs, which are provided by each of the agencies at one or more of their facilities. Participating in these day programs are individuals who live out in the community, as well as individuals that live in agency-operated group residences (called community Integrated living arrangements or CILAs), agency-operated apartments, and agency-operated intermediate care facilities (ICFs), which might best be described as CILAs for individuals who have a higher need of medical care.

ES.3 The Collaborative's Transportation Services

Transportation from all of these different types of residences to the day programs is mostly provided by the agencies and operated by agency employees. The routes operated to serve individuals living out in the community are called "community routes". The routes operated to serve individuals living in CILAs are called "CILA routes." In some cases, individuals instead rely on family or friends or public paratransit (Pace ADA paratransit and municipal dial-a-ride services to get to/from the day programs. Providing these individuals with access to their community is important; indeed, a common goal of the Collaborative agencies is to integrate the individuals they serve into the community. This is what transportation is so important. Accordingly, the agencies provide transportation from their day program facilities (and sometimes from the CILAs) to work and volunteer opportunities, training sites, medical appointments, recreation, shopping and social venues, often as group trips.

In 2022, roughly 700,000 trips were provided. The average cost per trip for the four largest agencies (in terms of number of trips) ranged from $5.33 to $8.03 per passenger trip. Despite the efficiency, the agency's cost for providing this service is not fully covered by the daily per person rates that can be billed to the Illinois Department of Human Services (DHS). A portion of these rates, as set by the Illinois DHS, purportedly includes the cost of transportation. However, in reality, the rates cover only a very small percentage of that cost. Consequently, to meet their mission and the transportation needs of the individuals they serve, the agencies are forced to seek additional funding to cover their transportation costs. For some of the larger agencies in The Collaborative, one such source has been the FTA's Section 5310 Program, which funds organizations that provide transportation to seniors and to persons with disabilities, which is administered by the RTA.

ES.4 The Premise for the Study

First introduced as a mobility management concept in the RTA's *Human Services Transportation Coordination Update* (2020), one objective of this study was to identify actions that can be implemented within the transportation programs of each agency, as well as among the agencies in a coordinated or consolidated fashion, that will create even more cost/service efficiencies than the agencies have already been able to achieve. A second objective of this study was to identify how the savings from these actions might be used to provide additional mobility options to these individuals to increase their access to the community at large, which is again the ultimate goal. Both of these objectives are at the heart of mobility management.

ES.5 The Study Task Force

The study team's efforts were guided by a Task Force comprised of representatives from each of the eight agencies involved in *The Collaborative*, CSP, and the RTA of Northeastern Illinois.

ES-6 Study Tasks

The study focused first on identifying existing conditions. For each agency, the report provides details of the agencies' day programs, group residences (CILAs, apartments, and ICFs), community routes, CILA routes, mid-day outings, medical trips, work trips, and other transportation services, vehicle fleet (and sources of the vehicles), trips and costs, and constraints and challenges.

A SWOC analysis was then performed for each agency that created a baseline and set the stage for identifying opportunities that would increase the cost efficiency of the current routing. These opportunities manifested themselves intra-agency and coordinated inter-agency routing. Cost reductions were then estimated based on these opportunities. Additional recommendations for expanding mobility options that could be funded by these savings were then explored. Recommended strategies to implement over a two-year cycle were then detailed and costed out.

ES.7 Summary of Trips and Cost

The table below compares ridership, operating cost, and operating cost per trip for six of the eight agencies (New Star and Sertoma Centre were not included due to a lack of cost data). The six agencies are listed in rank order based on the 2022 operating cost per trip (from low to high), noting that Blue Cap provided only partial cost information, and that CTF Illinois and Park Lawn costs reflected FY 2021–2022 costs.

TABLE ES-1: COMPARISON OF OPERATING COST PER TRIP (2022)

Agency	Passenger Trips	Operating Cost	Operating Cost per Passenger Trip
Ray Graham	162,575	$866,395	$5.33
Clearbrook	288,030	$1,886,770	$6.55
CTF Illinois	92,716	$610,653	$6.59
Little City	81,219	$652,523	$8.03
Blue Cap	35,552	$471.410[1]	$13.26[1]
Park Lawn	23,904	$525,000	$21.96

[1]Does not include Blue Cap's labor costs of drivers and DSPs (while driving).

Collectively, the six agencies served nearly 684,000 trips. Including Sertoma Center and New Star, TTI estimates that the total ridership for all eight agencies is closer to 700,000 trips. It is also noteworthy that the four agencies with the higher ridership levels have the lower operating costs per passenger trip, ranging from $5.33 per trip to $8.03 per trip. Among the five agencies with complete cost information (all but Blue Cap), Ray Graham Association was most cost-efficient in providing transportation services. Another interesting observation is the near equivalent operating cost per trip figures for Clearbrook and CTF Illinois despite CTF Illinois' ridership level being 1/3 of Clearbrook's ridership level.

ES.8 Constraints and Challenges to Routing Improvements

Constraints that Impact Routing and Scheduling

- Five-Hour Billable Program Time – This impacts the scheduling of community route and CILA route arrival and departure times, as well as midday outings, medical trips, and (some) work trips.
- Varying Individual Day Program Participation – Some Individuals participate in day programs daily; others don't. Some individuals go to different locations on certain days. Some individuals only need to be picked up in the morning and use other transportation in the afternoon.
- Maximum Onboard Travel Time - No individual may be on a vehicle for more than one hour per the Illinois DHS. This limitation can result in the splitting of routes and double runs.
- Pickup Windows, Driver Wait-Times, and No-Shows for Community Routes – Generally, agencies use a 15-minute pick-up window and a 5-minute driver wait time.
- Rider Safety/Incompatibility - Personality or behavioral conflicts between certain individuals can pose a challenge when grouping individuals together in vehicles.
- Driver/DSP Retention and Call-Outs – Agencies have struggled to recruit and retain both drivers and direct service professionals (DSPs); the latter are staff whose primarily provide services at CILAs and/or day programs but who also have driving duties.
- Vehicle Size - At some CILA locations, bigger vehicles are needed to accommodate all individuals and their mobility devices. If such vehicles are not available, two runs may be required to transport everyone to their day program. Other vehicle-related bottlenecks occur when larger-sized vehicles are not available for outings and when vehicles must be swapped to accommodate maintenance activities.
- Training and Other Requirements/Restrictions for Pace Vehicles - The opportunity to lease vehicles from Pace comes with certain requirements that limit the benefits, especially given the driver/DSPs shortages. The most significant issue with the certification process is that potential drivers struggle to pass the physical exam. The drug test has also been a challenge due to legalized marijuana in the state of Illinois. Stringent driving record requirements have also eliminated driver/DSP candidates from becoming certified. SR22 insurance is harder to obtain. The Pace training site is in Arlington Heights—a far distance from some of the agencies. Drivers must also be recertified every one or two years. Agencies must show evidence that the Pace vehicle is being regularly used for service. The use of Pace vehicles is also restricted geographically.

Constraints that Impact Route Timeliness

- Home Coverage – A driver must wait for verification that the parent or guardian is present before the driver can depart for the next drop-off; parents or guardians not being at home when the community route vehicle arrives for a drop-off can delay subsequent drop-offs for other riders onboard.

Constraints that Limit Mobility Options

- Reliability - More independent individuals are encouraged to use transportation providers/public transportation whenever possible and as appropriate. However, the inconsistency with drivers (i.e., not always having the same driver) can be an obstacle for some individuals. On-time performance/reliability issues can also be problematic for these individuals.

Constraints that Limit Program Outings/Participation

- Availability of WAVs – WAV availability – or lack thereof - for outings can present an obstacle for including individuals who use wheelchairs.

- Parking for Downtown Outings – Most parking garages in downtown Chicago cannot accommodate large vehicles.

- CILA Coverage - Groups of individuals living in CILAs cannot be left unattended at the CILA, on the vehicle, or at a destination. Therefore, all CILA trips to day programs or after-hours/weekend outings must involve all of the CILA residents unless a second DSP is available.

ES.9 Summary of Routing Simulations

Intra-Agency Route Consolidation

The results of intra-agency routing simulations, using AlphaPlan, are shown in Table ES-2. These simulations, run for each agency, resulted in an overall reduction of up to 46.5 percent in the number of vehicles required to serve the same trips compared to current operations. The potential reduction in vehicles should be seen by each agency as an opportunity cost rather than a straightforward measure of the agency's current efficiency. Not surprisingly, the potential reduction in vehicles increased as the agency size and the complexity of the transportation operations increased.

The reduction in the number of vehicles resulted from two main drivers:

1. **Number of passengers per run:** By using larger vehicles (already in agency possession) and combining multiple CILAs into the same run, the simulation achieved an average of 7.56 passengers per run across all agencies routed individually—a 42.95 percent increase in ridesharing.

2. **Number of runs per vehicle:** Under the current operations, CILA vehicles typically take a group of individuals to a single day program and return to the CILA in the morning and afternoon (two runs per vehicle per day). By increasing vehicle utilization, the simulations achieved an average of 2.43 runs per vehicle per day across all agencies routed individually—a 21.56 percent increase in vehicle utilization.

TABLE ES-2: SIMULATION RESULTS

Metric	Blue Cap	Clearbrook	CTF Illinois	Little City	New Star	Park Lawn	Ray Graham	Sertoma
Number of passengers transported (passengers)	50	275	139	160	115	35	133	44
Number of active day programs (programs)	1	10	6	3	1	3	4	1
Number of vehicles utilized (vehicles)	8 vs. 9	23 vs. 63	18 vs. 26	11 vs. 14	12 vs. 23	4 vs. 8	14 vs. 25	8 vs. 10
Average passengers per run (passengers)	5.0	8.9	5.1	9.7	9.6	7.8	8.9	5.5
Average runs per vehicle (runs)	2.5	2.7	3.0	3.0	2.0	2.25	2.0	2.0
Average ride time (minutes)	12	25	34	19	22	20	20	20
Maximum ride time (minutes)	35	59	58	49	39	35	50	34
Average run duration (minutes)	20	39	48	29	31	28	32	28
Maximum run duration (minutes)	35	59	59	59	40	37	58	40
Average mileage per run (miles)	3	19	28	7	8	5	14	9
Maximum mileage per run (miles)	8	30	34	19	14	8	18	18
Total vehicle hours per day (vehicle-hours)	9:44	63:35	63:37	25:42	24:25	7:17	28:32	13:51

The results of the intra-agency re-routing simulations in turn suggest the following mobility management strategies

- **Need for all CILA vehicles and DSPs to drive to day programs daily**: Combining two or more CILAs into the same vehicle could free up vehicles/DSPs for other transportation needs, alleviate DSP/driver shortages, reduce mileage, lower CO_2 emissions, and lower operational costs. This approach could free up a pool of vehicles and DSPs to handle other trips emanating from the CILAs, which creates an opportunity to focus on individual transportation needs rather than the needs of an entire CILA as an entity. For example, residents could decide to go on an after-hours trip emanating from the CILA or join another CILA group for a trip.
- **Utilization of drivers (not DSPs) for some routes:** CILA routes could be driven by dedicated drivers rather than DSPs doubling as drivers. This could allow agencies to maximize vehicle utilization

without prejudice to day program start and end times and potentially reduce total DSP working hours.

- **Combined CILA and community route stops**. Community routes that incorporate stops at CILAs could result in improved productivity for both the CILA and community route runs.
- **Daily scheduling for outings, work trips, and medical trips.** Opportunities exist to maximize ridesharing for mid-day trips emanating from the day programs. Similar to field trips in school operations, mid-day trips could be requested/booked in such a system up to a certain time the day before the trip date.

Inter-Agency Route Consolidation

Additional simulations were run to assess the additional benefits of inter-agency route consolidations. Two coordinated scenarios were explored in this analysis: (1) all agencies were routed as a single group and (2) agencies were divided into two groups based on geography and service area. The group in the northern part of the region contained the Little City Foundation, the Ray Graham Association, and Clearbrook. The group in the southern part of the region contained Blue Cap, New Start, CTF Illinois, Park Lawn, and Sertoma Centre.

Scenario 1 (All Agencies) -- The results of the simulations indicated that inter-agency coordination allowed for a significant reduction in the number of vehicles required to serve the 951 passengers. In summary, 44 percent fewer vehicles were required to serve all passengers; 55 vehicles were required with inter-agency coordination compared to 99 vehicles when the same passengers were routed independently.

The increase in the average number of runs per vehicle per day from 2.43 to 3.9 reflected a 60 percent increase in vehicle utilization. Under these simulated results, the agencies would transition from using only a few vehicles to using almost all vehicles to serve multiple day programs. The average number of passengers per run increased from 7.56 to 8.8, reflecting a 16 percent increase in vehicle utilization and resulting from combinations of CILA residents going to the same program and/or CILA and community routes commingling. While a different vehicle allocation may be required to serve these coordinated routes, only vehicles in the existing fleets were used in the simulation. Overall, it means that larger vehicles will be assigned to routes where ridesharing is a possibility.

The average time onboard a vehicle remained almost consistent with the previous intra-agency simulation, increasing from 21 minutes when routed independently to 23 minutes with the coordinated service. The maximum run duration and maximum mileage per run stayed the same at 59 minutes and 34 miles, respectively.

Scenario 2 (Two Groups of Agencies) --This second approach allowed for all 951 passengers to be transported with a total of 65 vehicles and 241 total daily transportation hours. Compared to the previous coordinated solution, these results reflected an increase of 10 vehicles but the same number of total daily transportation hours. Clearly, Scenario 2 did not reduce as many vehicles as Scenario 1, but it could represent a significant first step or bridge toward Scenario 1.

Table ES-3 compares the simulation results from these two inter-agency coordination scenarios with those from the intra-agency simulation.

TABLE ES-3: INTER-AGENCY VS INTRA-AGENCY ROUTING RESULTS

Metrics	Intra-Agency Route Optimization	Inter-Agency Route Consolidation: North/South Regions (Scenario 2)	Inter-Agency Route Consolidation: All Agencies (Scenario 1)
Number of passengers transported (passengers)	951	951	951
Number of active day programs (programs)	29	29	29
Number of vehicles utilized (vehicles)	99	65	55
Average passengers per run (passengers)	7.6	8.5	8.8
Average runs per vehicle (runs)	2.4	3.4	3.9
Average ride time (minutes)	21	23	23
Maximum ride time (minutes)	59	59	59
Average run duration (minutes)	29.5	30	31
Maximum run duration (minutes)	59	59	59
Average mileage per run (miles)	8.8	11	11
Maximum mileage per run (miles)	34	34	34
Total vehicle hours per day (vehicle-hours)	Or 236	241	241

The comparative magnitude of estimated operational efficiency benefits achievable through inter-agency route consolidation -- and without a substantial degradation of the individuals' experience -- clearly indicates the potential to consolidate operations. However, the following actions must be taken to accomplish this:

- **Unify operational rules and parameters**: Policies and parameters (e.g., load and unloading times, stop times, vehicle arrival and departure times from day programs) are currently set at the agency level. Any type of consolidation must abide by a unified standard for these parameters, noting that these parameter values already are very similar among the agencies. Also, behavior incompatibility issues would also need to be analyzed across agencies.

- **Increase reliance on dedicated drivers:** The level of vehicle utilization and the number of runs per vehicle in the inter-agency coordinated simulations suggests a migration to a mixture of drivers and DSPs, rather than relying on only DSPs to drive the CILA vehicles. The savings from vehicle reduction should be more than enough to offset the costs of such a change. This increased reliance on dedicated drivers would also mean that shifts for some DSPs would likely change.

- **Assign some CILA vehicles to a centralized yard:** In the inter-agency coordinated scenarios, significantly operational efficiencies would result from moving some CILA vehicles to more centralized locations based on the new routes instead of garaging all CILA vehicles at the CILA locations. This change would significantly reduce deadheading (and the labor costs associated with deadheading). Note though that such a strategy would need to be accompanied by a mechanism to rapidly deploy a vehicle to a vehicle-less CILA in an emergency and a sign-up system for CILA outings, which may limit spontaneous outings.

- **Coordinate/stagger day program start and end times:** Additional operational savings could result from coordinating or staggering the start and end times of day programs; such a strategy would reduce the number of vehicles required.
- **Centralized transportation management:** A systematic approach and strong leadership are required to implement centralized transportation management across multiple organizations. Such a paradigm shift would focus on a centralized fleet (and backup fleet), centralized drivers (and backup drivers), and centralized scheduling. These centralized resources would support the operation of community routes and CILA routes, as well as the scheduling of outings, work trips, medical trips, and other one-time trips.

The potential estimated savings of 44 percent should be viewed as an upper limit. A savings of 20 percent, which reflect fewer radical changes, is perhaps a more realistic goal. Once such route consolidations have been implemented and the savings measured, each agency can opt to ratchet up additional changes to create higher levels of service efficiency as desired.

ES.10 Recommendations, Implementation Schedule, Costs and Benefits

This concluding section of the Executive Summary describes the recommended actions the agencies in *The Collaborative* should pursue in the next two years. Different actions are recommended for implementation in Year 1 vs. Year 2. An implementation schedule for these actions is provided. The potential benefits along with the cost of implementing new efforts are also discussed.

Year 1 Recommendations

Pilot Intra-Agency Route Consolidations

Each agency should consider at least some of the route consolidations suggested by the AlphaPlan simulations. Note that the set of route consolidations has been provided to each agency. Some of these route consolidations will involve removing vehicles from their assigned routes and either sharing vehicles between CILAs and/or stationing vehicles used for CILA routes in a centralized location.

For paired CILAs that share one vehicle and for vehicles that perform double runs in the morning and afternoon, decisions must be made about DSP re-assignments. Agencies will also need to develop a process for DSPs at a vehicle-less CILA to sign up for a vehicle for after-hours or weekend trips. The agency would also need to develop a mechanism for rapid deployment of a vehicle in case of an emergency (if the emergency is not too time-sensitive).

Such a roster of backup resources (drivers and vehicles) could also provide the transportation coordinator with more flexibility when midday outings, work trips, or medical trips get delayed and do not make it back in time for the afternoon CILA runs and community routes.

Implementation Plan: Largely because of these considerations, the recommendation is to start slow—with maybe one or two paired CILAs—to better understand the staffing considerations, unforeseen staffing impacts, and logistical challenges. These actions can be accomplished within the first six months of Phase 2. Successful outcomes would pave the way for pairing more CILAs and incorporating CILA routes into community routes. However, because of the changing aspects of service needs—with new individuals entering the agency programs, some current individuals exiting the agency programs, and some current individuals having a change in their circumstances since the study's intra-agency routing simulations were undertaken—technology will need to be developed or licensed.

Develop/License/Implement Supporting Technology

During Year 1, *The Collaborative* agencies should acquire a technology tool that will help them continue to perform the types of simulation analyses already conducted as part of this Mobility Management Study as well as to support operations and data collection. Regrading ongoing operation, such technology should support the scheduling of subscription (recurring) trips like the CILA routes, the community routes, and work trips, as well as the scheduling and dispatching of non-subscription (one-time) trips such as medical trips, and group outings. In addition, *The Collaborative* agencies may wish to seek a technology that can accommodate on-demand trips as well, with community integration as the ultimate goal.

Implementation: Seeking and licensing such technology would likely take place during Year 1, probably via a competitive open procurement if Section 5310 funds are involved. Actions during the first sixth months would involve: (1) retaining assistance in preparing an RFP, if needed; (2) canvassing each of *The Collaborative* agencies regarding their desired level of technology (and related equipment) and their willingness to participate in a group acquisition; (3) developing technology and equipment specifications for the desired routing optimization capabilities, and (4) preparing the RFP. The actual procurement would occur in the second six-month period of Year 1.

Conduct Feasibility Study for Centralized Transportation Management and Support Services

In the second half of Year 1, *The Collaborative* agencies should explore the concept of a third-party transportation management entity assuming responsibilities for transportation planning, fleet management, technology, day-to-day operations, and support functions (e.g., training, procurement, insurance, etc.). Such an entity could include an existing partner like CSP or an established national operational/management company. Centralized transportation management could alternatively be provided through a newly developed framework that does not rely upon either CSP or established national companies.

Implementation: The study team recommends that a feasibility study for such an entity be undertaken during the second half of Year 1. If any of the agencies in *The Collaborative* wish to pursue this model, that procurement (if needed) and implementation should occur during the first six months of Year 2, with services starting in the second half of Year 2.

If the feasibility assessment for centralized transportation management determined (in the middle of Year 2) that it should not be pursued, the agencies in the northern and southern regions could independently pursue inter-agency route consolidations via the licensed technology. However, such pilots must be thoroughly vetted with respect to liability and must include the development of common policies and procedures (especially for when things go awry).

Year 2 Recommendations

Expand Intra-Agency Route Consolidations

Year 2 would begin with technology training and the collection and input of required data, a re-optimization of the routing analyses, and a refinement of the implementation plan to pursue additional intra-agency routing consolidations via the updated simulations. These actions would take place over the first six months of Year 2. Note that agencies who integrate a CILA stop into a community route must implement the same staffing changes described previously for paired CILAs.

Implementation: The study team recommends expanding intra-agency route consolidations—one at a time—during the first half of Year 2, after the new technology is in place and route consolidation

simulations have been conducted. If the new technology will also be used for day-to-day scheduling and dispatching, the agencies who acquire the technology must be trained. Moreover, the scheduling/dispatching parameters may need to be fine-tuned, both before and after the launch date.

Implement Centralized Transportation Management and Support Services/Pilot Inter-Agency Route Consolidations

If the feasibility assessment for centralized transportation management that is conducted in Year 1 suggests that such a system—along with support services for partnering agencies—be pursued, this would be implemented in Year 2. Current transportation coordinators, staff, and drivers would likely be transferred to the new entity. This entity would also likely assume possession of the: (1) current fleets and professional drivers, while operating out of one or more operations/maintenance facilities, and (2) licensing of the technology. In addition to taking over day-to-day operations, the centralized transportation manager would also spearhead the implementation of inter-agency route consolidations.

If centralized management of transportation services is not pursued, collaborating agencies could explore inter-agency route consolidations themselves.

Implementation: If centralized transportation management is pursued, the first six months of Year 2 would focus on the ramp-up, with a midyear launch date. The transfer of day-to-day functions would likely be phased in for each agency, with completion of all partner agencies by the end of Year 2. After the transition to a centralized system is complete—with the centralized transportation management entity providing transportation services for all agencies in *The Collaborative,* along with other necessary support functions related to the technology, fleet management, and driver recruitment and training—the entity and the agencies could consider expanding its role to include other related functions.

Expand SCOOT

One such related function undertaken by the centralized transportation management entity could be the inter-agency expansion of Sertoma Star Services' SCOOT on-demand pilot program. Centralized management of SCOOT would presumably resolve the agency-specific liability issues discussed previously and provide a more streamlined approach to expand this service (i.e., with a single OnSeen licensee and a centralized roster of volunteer DSPs available to individuals served by all partnering agencies).

If centralized management of transportation services is not pursued, we recommend that each agency interested in setting up their own SCOOT program enter into a separate licensing agreement with OnSeen because of the liability issues. While individual programs would be specific to agency-affiliated families and individuals (to address liability issues), nothing would preclude a DSP driver from participating in multiple programs.

Implementation: The study team recommends that the expansion of SCOOT under either model be pursued in the second half of Year 2, after the Sertoma Star Services' program has been implemented and thoroughly tested and refined.

Figure ES-4 displays the proposed implementation schedule for the recommendations discussed above.

FIGURE ES-4: IMPLEMENTATION SCHEDULE

	Year 1		Year 2	
Recommendations	Months 1-6	Months 7-12	Months 13-18	Months 19-24
Pilot Intra-Agency Route Consildations				
Develop/License/Implement Techncology				
Conduct Feasibility Study for CTM and Support Services				
Expand Intra-Agency Route Consolidations				
Implementation of CTM and Support Services				Go Live
Pilot Inter-Agency Route Consolidations				
Expand SCOOT				

Estimated Cost Savings and Implementation Impacts

Estimates on the annual cost savings from routing intra-agency optimizations and inter-agency consolidations are presented in Tables ES-5 and ES-6, respectively. Cost savings from together results from New Star and Sertoma to a single agency to reflect the newly merged Sertoma Star. Table ES-7 presents the costs associated with implementing suggested recommendations.

Intra-Agency Route Consolidations Cost Savings

The intra-agency consolidations would produce operational cost savings through fewer total vehicle hours (TVH) spent driving to and from CILAs within each agency (to be piloted in Year 1, then fully implemented in Year 2). TTI used benchmarks on costs available from Clearbrook (discussed in Section 5.4.2) and applied those impacts to the other six agencies. Clearbrook's estimated TVH baseline (reflecting current transportation hours) for CILA transportation is a factor 1.047 higher than the resulting TVH at absolute full implementation (100%) of the recommended intra-agency consolidations. TTI used the Clearbrook cost benchmark of $24.38 per transportation hour as well as an assumed 240 days annually for transportation service provided for the remaining cost estimation factors.

Table ES-5 reflects the rounded annual estimated cost savings at full (100%), higher bound (67%), medium bound (50%), and lower bound (33%) levels for these intra-agency route consolidations. The higher and lower bound levels reflect lesser cost saving that would be realized if these consolidations were only partially implemented (e.g., half or three-quarters of consolidated occurred).

TABLE ES-5: COST SAVINGS ESTIMATES FOR INTRA-AGENCY ROUTE CONSOLIDATIONS

Agency	Estimated TVH per Day Baseline	Resulting TVH per Day After (100%)	Transp. Cost Per Hour Baseline (Annual)	Estimated Cost Savings			
				Low (33%)	Medium (50%)	High (67%)	Full (100%)
Blue Cap	10.2	9.7	$59,600	$(900)	$(1,300)	$(1,800)	$(2,700)
Clearbrook	66.6	63.6	$389,500	$(5,800)	$(8,700)	$(11,700)	$(17,500)
CTF Illinois	66.6	63.6	$389,700	$(5,800)	$(8,700)	$(11,700	$(17,500)
Little City	26.9	25.7	$157,400	$(2,300)	$(3,500)	$(4,700)	$(7,100)
Park Lawn	7.6	7.3	$44,600	$(700)	$(1,000)	$(1,300)	$(2,000)
Ray Graham	29.9	28.5	$174,800	$(2,600)	$(3,900)	$(5,300)	$(7,800)
Sertoma Star	40.1	38.3	$234,400	$(3,500)	$(5,300)	$(7,000)	$(10,500)
TOTAL	**247.8**	**236.7**	**$1,450,000**	**$(21,600)**	**$(32,400)**	**$(43,500)**	**$(65,100)**

Inter-Agency Route Consolidations Cost Savings

TTI used the same reference transportation cost per total vehicle hour (TVH) to estimate the cost savings for inter-agency route consolidations (to be implemented in Year 2 along with centralized transportation management implementation). A baseline of 295 daily TVHs was established for routes across all agencies, which would be reduced to 241 TVHs with consolidations (at a full 100% level) within the North and South regions as well as for all agencies as one region. TVHs would be further reduced down to 236 daily (at 100% level) were these inter-agency consolidations to occur in concert with intra-agency consolidations.

Table ES-6 reflects the rounded annual estimated cost savings at full (100%), higher bound (67%), medium bound (50%), and lower bound (33%) levels for these inter-agency route consolidations. The higher and lower bound levels reflect lesser cost saving that would be realized if these consolidations were only partially implemented (e.g., half or three-quarters of consolidated occurred).

TABLE ES-6: COST SAVINGS ESTIMATES FOR INTER-AGENCY ROUTE CONSOLIDATIONS

Consolidation Level	Estimated TVH per Day Baseline	Resulting TVH per Day After (100%)	Transportation Cost Per Hour Baseline (Annual)	Estimated Cost Savings			
				Low (33%)	Medium (50%)	High (67%)	Full (100%)
North/South Regions	295	241	$ 1,726,100	$(104,300)	$(158,000)	$(211,700)	$(316,000)
All Agencies							
Combined Intra-Agency		236		$(113,900)	$(172,600)	$(231,300)	$(345,200)

Estimated Implementation Costs

Separately, TTI estimated the costs of implementation that would be incurred by the agencies collectively for each of the six recommended implementations discussed earlier in this section of the report. These estimates attempt to account for procurement costs and estimated staff time spent on the implementation. For procurement costs, TTI developed estimates based on past experience with other consulting projects involving training and procurement of scheduling technology platforms. For staff time, TTI used cost per hour rates of $21.21 or $22.00 for (Blue Cap or the other agencies, respectively).

Table ES-7 reflects the estimated costs for the individual recommended implementations. The elements included within each estimate are summarized in the bulleted list below:

- 1.1 Pilot Intra-Agency Route Consolidations: includes 80 hours of staff time for each of the seven agencies.
- 1.2 Develop/License/Implement Technology: includes costs for developing the technology RFP, direct training costs from AlphaRoute, purchase of tablets for every vehicle, and 40-120 hours of staff time for each agency (depending on whether they've previous gone through technology training with AlphaRoute).
- 1.3 Conduct Feasibility Study for CTM and Support Services: includes estimated costs for 6 months of technical support to conduct the study.

TABLE ES-7: ESTIMATED COSTS OF EACH RECOMMENDED IMPLEMENTATION

Recommendations	Time Period of Implementation				Estimated Cost	
	Year 1		Year 2		Year 1	Year 2
	Months 1-6	Months 7-12	Months 1-6	Months 7-12		
1.1 Pilot Intra-Agency Route Consolidations					$ 12,300	
1.2 Develop/License/Implement Technology					$ 222,500	
1.3 Conduct Feasibility Study for CTM and Support Services					$ 76,200	
2.1 Expand Intra-Agency Route Consolidations						$ 36,700
2.2 Implementation of CTM and Support Services				Go Live	A.	$ 58,800
					or B.	$ 132,300
					or C.	$ 42,900
& Pilot Inter-Agency Route Consolidations					Pilot	$ 18,400
2.3 Expand SCOOT					Central MGMT	$ 80,000
					or Separate	$ 222,300

- 2.1 Expand Intra-Agency Route Consolidations: includes additional direct training costs from AlphaRoute and 80 hours of staff time for each of the seven agencies.
- 2.2 Implementation of CTM and Support Services: separate estimations developed for each of the following options:
    - A. Broadening Role of CSP: includes technical support for setting up centralized management and 40-80 hours of staff time for each agency (depending on whether they're already within CSP).
    - B. Contracting Out Centralized MGMT: includes estimated cost of contracting for service and 80 hours of staff time for each agency.
    - C. Developing a New Framework: includes 280 hours of staff time for each agency
    - & Pilot Inter-Agency Route Consolidations: includes 120 hours of staff time for each agency

- 2.3 Expand SCOOT: separate estimations developed for each of the following options:
    - A. Centralized MGMT: includes technical support for setting up centralized management
    - B. Separate Development: includes 80 hours of staff time and separate licensing agreement with OnSeen for each agency

CHAPTER 1. INTRODUCTION

1.1 Introduction

The Mobility Management Study was commissioned by *The Collaborative*, a group of eight human service agencies in suburban Chicagoland. The study was funded by a Federal Transit Administration (FTA) Section 5310 grant administered by the Regional Transportation Authority (RTA) of Northeastern Illinois. The study was conducted by the Texas A&M Transportation Institute (TTI), in association with the Massachusetts-based AlphaRoute, under contract to the Ray Graham Association, which served as the grant's administrative lead for the project on behalf of *The Collaborative*.

The eight agencies in *The Collaborative* include Blue Cap, Clearbrook, CTF Illinois, the Little City Foundation, New Star, Park Lawn, the Ray Graham Association, and Sertoma Centre. Note that after the bulk of this study was performed, Sertoma Centre and New Star merged and are now called Sertoma Star Services. In this report, we considered them individually except where noted.

A ninth organization was also involved in this study. Community Service Partners (CSP) provides information technology (IT) services to five of the eight agencies (Blue Cap, CTF Illinois, New Star, Park Lawn, and Sertoma Centre). The study team's efforts were guided by a task force comprising representatives from each of the eight agencies involved in *The Collaborative*, CSP, and the RTA of Northeastern Illinois.

1.2 Terms, Phrases, and Acronyms Used in This Report

Individuals with intellectual and developmental disabilities (IDDs): The eight agencies in *The Collaborative* all provide services to individuals with IDDs. Collectively, these agencies use a variety of terms and phrases for these individuals including *clients*, *[program] participants*, *people we serve*, *individuals we serve, people we support,* and *consumers*. For brevity and consistency, we will use the single one-word term—*individuals*. While the term *client* has traditionally been used by the transit industry to describe the people human service agencies serve and is indeed used by two of the eight agencies in *The Collaborative*, some other agencies in *The Collaborative* find the use of this term abhorrent. The most accurate way to describe these people are "individuals with intellectual or developmental disabilities," which stresses that they are individuals first and aligns with the consensus perception of each of these agencies as people centric. Therefore, the study team chose to use the term *individuals* for this report.

Community integrated living arrangements (**CILAs):** Each of the agencies in *The Collaborative* owns and maintains group residences for individuals referred to as CILAs, which typically house up to six to eight individuals. One vehicle is typically assigned to each CILA, with wheelchair accessible vehicles (WAVs) assigned as needed. Much of the transportation provided by these agencies involves transporting residents between the CILAs and various day programs. If stationed at the day programs during the day, some of these vehicles may also be used for outings or other purposes. They are also used for after-hours outings, weekend outings for trips, and, on occasion, emergency trips for trips emanating from the CILA. If an agency has day programs at multiple locations, the agency will typically *map* the residents of a particular CILA to a specific day program. In large part, the mapping of CILAs to day programs can be traced to (1) a state requirement that no individual traveling (e.g., from a residence to a day program) be onboard a vehicle for more than one hour and/or (2) programmatic differences between/among the day program facilities.

Intermediate care facility (ICF): Also requiring transportation are day program participants who live in agency-owned and managed apartment buildings, or in ICFs—long-term care facilities for individuals with higher levels of medical needs. An ICF provides nursing and supportive care to individuals and is designed to provide custodial care for individuals who are unable to care for themselves. An ICF is typically regarded as a lower-level nursing care facility compared to a skilled nursing facility. The two agencies in *The Collaborative* with ICFs have day programs that are tailored to the ICF residents' needs for higher levels of medical care.

Community route: Other day program participants live out in the community, typically at a family residence. *The Collaborative* agencies operate larger vehicles when transporting these individuals between their residences and the day programs (and, for some agencies, other facilities). The vehicles used for these community routes are often used for group field trips during the day (as part of the day program experience). Typically, these community routes are operated by full-time drivers.

Direct service professional (**DSP)**: The term *direct service professional* appears to be unique to Illinois and is not used elsewhere (as far as we were able to determine). In this context, DSPs are employees of *The Collaborative* agencies who have been specially trained to provide services to individuals. They work at the day programs and at the CILAs. While some of the agencies—especially the larger ones—have full-time drivers (as previously mentioned), many of the DSPs are also tasked with driving. For example, DSPs who are on duty at the group residences drive their individuals to/from the day programs during the weekdays and may also drive their CILA residents to/from after-hours and weekend outings.

1.3 Study Background

Broadly speaking, the transportation of the individuals served by each of these eight agencies is the lifeblood of these organizations, bringing individuals from agency group residences and community homes and residences to agency-operated day programs and other specialty programs. Providing these individuals with access to their community is important. These trips offer access to day program facilities, work, volunteerism, training, medical care, shopping, recreation, and social venues.

Historically, sheltered workshops provided these individuals with work opportunities. In the last 50 years, these opportunities have largely been replaced with much broader programs that are designed to integrate these individuals into the community. Hence, transportation is a critical component for not only programmatic purposes but for community access in general and to otherwise meet the mobility needs of these individuals.

Publicly sponsored paratransit services such as Pace ADA Paratransit Services and county-based services such as Ride DuPage can and do address the mobility needs of some higher-functioning individuals (with greater independence). However, these services have operational challenges that prevent them from serving a broader range of individuals. The vast majority of individuals require a more specialized service, with drivers and/or attendants who are specially trained to assist them. Reliability issues can also thwart the day program experience and jeopardize jobs if arrivals are not on time.

To offset the cost of providing transportation for individuals with IDDs, the Illinois Department of Transportation (IDOT) and Pace offer vehicle provision programs to these agencies. Through these programs, vehicles are either: (1) provided to these agencies or (2) leased to these agencies. Participating agencies also offered related services at an attractive cost. Participation in the Pace Advantage Program does require extra training for drivers of their vehicles; in this era of driver shortages, this requirement has limited the effectiveness of the program.

Much of this agency-operated transportation is operated quite efficiently, given that most of the transportation involves group trips from one origin (e.g., a CILA, an apartment building, or an ICF) to one destination where day program services are provided. This efficiency is evidenced by the average cost per trip for the four largest agencies (in terms of number of trips), which ranges from $5.33 to $8.03 per passenger trip. The agency's cost for providing this service is not fully covered by the daily per person rates that can be billed to the Illinois Department of Human Services (DHS). A portion of these rates, as set by the Illinois DHS, purportedly includes the cost of transportation. However, in reality, the rates cover only a very small percentage of that cost.

Consequently, to meet their mission and the transportation needs of the individuals they serve, the agencies are forced to seek additional funding to cover their transportation costs. For some of the larger agencies in *The Collaborative*, one such source has been the FTA's Section 5310 Program, which funds organizations that provide transportation to seniors and to persons with disabilities. As previously mentioned, the regional Section 5310 Program of interest in this study is administered by the RTA of Northeastern Illinois.

If this Section 5310 funding was to disappear or decrease, the reliant agencies would need to severely reduce the transportation services for these individuals, which these agencies perceive to be counterproductive to their mission. Another potential outcome of decreased or eliminated funding could be that more of the higher functioning individuals would need to rely on Pace ADA Paratransit Services and/or some of the local dial-a-ride services. However, as previously mentioned, agency experience suggests that such services cannot be relied upon to get these individuals to time-sensitive day programs and jobs, which adversely impacts both the individuals' program outcomes and their jobs.

1.4 Study Objectives

First introduced in the RTA's *Human Services Transportation Coordination Update* (2020), one objective of this study was to identify actions that can be implemented within the transportation programs of each agency, as well as among the agencies in a coordinated or consolidated fashion, that will create cost/service efficiencies. A second objective of this study was to then recommend how the savings from these actions can be used to provide additional mobility options to these individuals to increase their access to the community at large, which is the ultimate goal. Addressing both aspects of mobility management will help to achieve this goal.

1.5 Report Organization

Following this introductory information, Chapter 2 of this report summarizes the existing conditions. Individual detailed profiles of each of the eight agencies, from which the summary of existing conditions was drawn, are provided in Appendix A–H, respectively. Chapter 3 provides a strengths, weaknesses, opportunities, and challenges (SWOC) analysis for each agency. Chapter 4 provides a detailed look at current operating costs (as a baseline) and opportunities to achieve even greater cost efficiencies through strategic improvements to intra-agency and coordinated inter-agency routing. Chapter 4 also discusses New Star's new on-demand mobility management service, which is tailored to individuals and utilizes off-duty DSPs and their personal vehicles. Chapter 5 presents the potential savings from intra-agency and coordinated inter-agency routing strategies, as well as the possible expansion of New Star's pilot on-demand service to *The Collaborative* agencies. Chapter 6 presents the study team's recommendations and the implementation plans associated with those recommendations.

CHAPTER 2. SUMMARY OF EXISTING CONDITIONS

2.1 Day Programs

Each of the eight agencies in *The Collaborative* operates day programs for the individuals they serve. These day programs operate on weekdays. Some of the agencies only have one facility where the day programs are located or based, while others have multiple facilities.

With multiple facilities, an agency may choose from the following options:

- **Program-specific locations:** An agency may have a different set of programs at each different location. For example, a certain type of facility may provide a broad spectrum of day programs at the facility along with daily outings, while another facility may act simply as a hub for work and volunteerism trips into the community with no real program work conducted at the facility.
- **Locations with different catchment areas:** An agency may alternatively have different facilities serving different geographic catchment areas, with each facility offering the same set of day programs. Multiple facilities may exist because of an agency's very broad reach; each different facility serves a specific geographic region to cut down on the onboard travel time of individuals coming to the day programs.
- **Combination:** An agency may also have a combination of both program-specific locations and locations with different catchment areas.

Day programs at these facilities are staffed with DSPs, sometimes referred to as *community coaches*. The DSPs can also operate vehicles for the agency's transportation programs. Some agencies also operate day programs for ICF residents, whose residents are more medically needy than other individuals the agencies serve. As shown in Table 2-1, 26-day program facilities exist collectively among *The Collaborative* agencies.

Because of the way agencies invoice the Illinois DHS for the day program services provided to individuals, nearly every agency's day program goal is to provide at least five hours of programmatic services to each individual each day that the program is operating. Most day programs run from 9:30 a.m. to 2:30 p.m. or from 10:00 a.m. to 3:00 p.m.

TABLE 2-1: DAY PROGRAM FACILITIES AND VEHICLES ASSIGNED TO DAY PROGRAMS

Agency	Day Program Facilities	ICF Day Program Facilities
Blue Cap	2	
Clearbrook	3	3
CTF Illinois	6	
Little City	2	
New Star	2	
Park Lawn	3	
Ray Graham	4+3	
Sertoma	1	
Total	26	3

2.2 CILAs, Apartment Buildings, and ICFs

Each of the agencies in *The Collaborative* owns and maintains CILAs, which typically house up to 6–8 individuals. Table 2-2 presents the number of CILAs, apartment buildings, and ICFs staffed by each agency. One of the agencies—the Little City Foundation—also owns and maintains apartment complexes where individuals reside. Two agencies—Clearbrook and Park Lawn—have ICFs, which are intended for individuals with higher level medical needs. The ICFs tend to accommodate more residents than CILAs. Three of the four ICFs at Clearbrook, for example, can accommodate up to 16 individuals. Altogether, these agencies have 168 residences for which transportation to/from day programs is provided.

TABLE 2-2: CILAS, APARTMENT BUILDINGS, AND ICFS

Agency	CILAs	Apartment Buildings	ICFs
Blue Cap	9		
Clearbrook	55		4
CTF Illinois	13		
Little City	14	3	
New Star	23		
Park Lawn	8		2
Ray Graham	27		
Sertoma	10		
Total	159	3	6

Regardless of type (e.g., CILA, apartment, or ICF), each residential unit is typically assigned at least one vehicle; additional vehicles may be assigned depending on the size and capacity of the vehicle and the number of individuals living at the residential unit. Where needed, wheelchair-accessible vehicles are provided. These vehicles are primarily used to transport residents to day programs and other programmatic facilities. They are also used after hours and on weekends for group outings. Depending on the agency, they can also be used for medical appointment trips that emanate from the residential units.

2.3 Independent Living Programs

Each of the eight agencies in *The Collaborative* provides services to individuals who choose to live at their family home or who otherwise live independently. Many of these individuals participate in the day programs of the agency providing services to the individual and, in some cases, the day programs of other agencies in *The Collaborative*. While some individuals arrange their own transportation to/from the day programs or use Pace ADA Paratransit Services/local dial-a-ride programs, seven of the eight agencies offer transportation to/from the day programs to these individuals. The routes that emanate from the day program facilities (and sometimes from a DSP home location) to connect individuals are called *community routes*.

2.4 CILA Routes and Transportation Logistics

Most of the agencies have one DSP on duty at each CILA for most of the time, although DSP shifts may overlap. Some agencies may have more than one DSP on duty or one DSP and a house manager on duty at a CILA at certain times. With only one DSP typically on duty, and because one or more individuals cannot

be left behind at the CILA unsupervised, virtually all of the trips that emanate from the CILA are groups trips involving all of the individuals residing at that CILA. The only exception is when an additional DSP can be brought in to assist that portion of the group left behind. For the majority of trips, however, regardless of purpose (e.g. to go to the day program or into the community for shopping, recreation, etc.) it's an *all or nothing* proposition.

Note that the DSPs assigned to the CILAs and other group residential units are not just drivers. Their primary responsibility is caring for the individuals in their CILA during their shift. Depending on the agency, DSP shifts can range from 8 to 18 hours, and many of the shifts include working overnight; cooking breakfast; and making sure that all the individuals are bathed/dressed, have their medications, and are packed for the day before they are transported to the day program.

The DSPs will then transport the individuals to their day program (or other destination), return the vehicle to the CILA, and end their shift. Later that day, another DSP would then commute to the CILA, drive the CILA vehicle to the day program location, take the group home in the afternoon, and then likely spend the night at the CILA before undertaking the morning tasks described previously.

Alternatively, an agency may assign a DSP to a day shift that involves not only driving the CILA group to/from the day program but also performing other duties at the day program. In this case, the CILA vehicle would be stationed at the day program location and could be used for programmatic uses.

Unexpected *curveballs* may cause a CILA transportation run to be late. A DSP may struggle to begin their morning run due to unforeseen early morning snafus and/or may not arrive at the CILA on-time for the day shift. DSP illnesses and vehicle malfunctions can also delay the runs. All such incidents can cause a CILA transportation run or community bus run to arrive at the day program after 9:30 a.m. In cases where a DSP calls in sick or a vehicle is not operable or deemed unsafe, agency staff (typically the transportation manager, transportation coordinator, or director of transportation) are responsible for getting a backup DSP and/or backup vehicle to the CILA. If this substitution is not possible, or if a timelier solution exists, agency day program or transportation staff may be able to transport the CILA group on a community route (described in Section 2.5), via another CILA run (if space is available), or via another CILA vehicle operating a double run. In other instances, the day program staff may adapt to the circumstance and arrange for the CILA run to depart in the afternoon, a minimum of five hours after the morning arrival. Consequently, the afternoon runs back to a CILA may depart well after 2:30 p.m. Because of these snafus, agencies typically provide DSP coverage in the late afternoon (past normal program times) for coverage purposes.

When an agency has day programs in multiple locations, the agency will typically map the residents of a particular CILA to a specific day program. In large part, the mapping of CILAs to day programs can be traced to: (1) a state requirement that no individual traveling (e.g., from a residence to a day program) be onboard a vehicle for more than one hour and/or (2) programmatic differences between/among the day program facilities.

2.5 Community Routes

Six of the eight agencies in *The Collaborative* (all but Blue Cap and Sertoma Centre) operate community routes to transport individuals who participate in the agency's day programs and who live independently in the community (i.e., who do not live in the agency's residential units). These community routes are designed to pick up individuals at their residence (or, in some cases, at another agency's nearby CILA) and transport them to the day program. A total of 66 community routes are operated by six agencies in *The Collaborative*, as shown in Table 2-3.

TABLE 2-3: COMMUNITY ROUTES

Agency	Community Routes
Clearbrook	6
CTF Illinois	13
Little City	13
New Star	12
Park Lawn	9
Ray Graham	13
Total	66

For some agencies, the staff that operate these community routes are employee drivers (i.e., their job is to only drive, not to provide other services). In many cases, the agency might hire a driver on a split shift to operate the morning and afternoon run. The agency might also hire a driver on a straight shift if the driver can perform other driving duties during the day for midday outings, work trips, or medical trips. It is important to note that employee drivers, while well-trained, are drivers and not DSPs. For other agencies, DSPs operate the community routes, and perform other programmatic duties during the day. Some agencies that operate community bus routes with a driver may send along a second staff person (a DSP) on the trip if one of more of the individuals transported needs extra assistance. One such agency, for example, sends along an extra DSP whenever a person in a wheelchair is being transported.

Community routes generally operate larger buses stationed at the day program site because they tend to transport more individuals per run compared to a CILA run. However, none of the larger buses have over a 15-seat capacity. Hence, none of the vehicles currently operated by these agencies requires a driver (or a DSP) to have a commercial driver's license (CDL). However, in the case of vehicles provided by Pace, a driver or DSP must become a *Pace-certified driver* before they are permitted to operate a vehicle provided by Pace (discussed further in Section 2.10).

In most cases, with the minimum five-hour program time for each individual in mind, the core day programs for the agencies run from 9:30 a.m. to 2:30 p.m. or from 10:00 a.m. to 3:00 p.m. Therefore, both CILA runs and community bus runs typically arrive by 9:30 a.m., (or as early as 8:30 a.m. when there are day program DSPs on duty to receive the individuals) and depart at 2:30 p.m.

In addition to the same daily snafus that impacted the CILA runs (e.g., driver illnesses, inoperable vehicles, etc.), no-shows can cause delays on the community bus route, causing individuals to arrive later than normal. This potential for delays suggests the need for flexible, expanded DSP coverage at the day programs.

Many agencies have additional trips (e.g., outings, work trips, medical trips, etc.) on most weekdays that emanate from the day program locations. These trips are generally arranged so that the individuals are back between 1:00 p.m. and 2:00 p.m. at the latest, in time for the 2:30 p.m. departures back home. However, the individuals participating in such trips sometimes do not make it back in time for their trip home. Different agencies handle this problem in different ways. Some agencies will hold up a CILA route or a community route until all the riders are back at the day program location. During the interim, the DSP back at the day program location will involve the other individuals in activities until all riders have returned. For this reason, day-shift day program DSPs often work until 4:30 p.m. Other agencies will dispatch the DSP or driver for their on-time afternoon run. In this case, the DSP who is out in the

community with the individuals will be instructed to drive the individuals directly to their CILA or residence when they are able to do so.

It is worth highlighting that at least two of the agencies in *The Collaborative* operate one or more community routes on a double run. In both cases, this type of operation was not by choice but rather as a response to a shortage of drivers or DSPs. In the first case, the first run departs from the day program location at 7:30 a.m. and returns at 8:30 a.m., spends 10 minutes deboarding, and then makes a one-hour community route run, and returns by 9:40 a.m. In the second case, the first run departs at 7:30 a.m. and completes the second run by 10:00 a.m. In this latter run, the riders do not depart for their afternoon route until 3:00 p.m., five hours after they arrive in the morning.

Note that some individuals living in the community get to and from day programs via family or friends, while more highly functioning individuals use Pace ADA Paratransit Services, local municipal dial-a-ride services or private services (e.g., Uber, Lyft, or taxi).

2.6 Midday Outings, Medical Trips, Work Trips, and Loop Routes

Virtually all of the day programs include day outings. For most of the agencies in *The Collaborative*, the outings are typically scheduled at least a week in advance, but some can be more spur of the moment. Ideas for outings can stem from the individuals themselves or from the day program staff. These outings can include going to a park or a museum, going out to eat, volunteering to help pack meals-on-wheels, or taking a trip to Petco.

Most of the agencies use voluntary sign-up sheets; day program staff may also *nudge* certain individuals to participate to make sure they are getting out into the community. Participation in these outings is ultimately up to each individual; if some individuals decide not to (or to) attend an outing on the day of the event, these changes can impact both vehicle and DSP assignments. Depending on the number of individuals who have signed up for an outing, the agency might assign multiple vehicles and multiple DSPs to the outing.

Typically, the vehicles used for the outing are either the same vehicles that are used for community routes or other vehicles that are stationed at the day program facilities. If vehicles are scarce, CILA vehicles that return to the CILA during the day can also be used for outings. Some agencies have dedicated drivers that operate the vehicles while the DSPs help with other aspects of the outing. In other cases, DSPs also do the driving. For most of the agencies, outings are a daily event; multiple outings may occur on any given day. Generally, individuals depart for outings from the day program location between 10:00 and 10:30 a.m. and return between 1:00 and 2:00 p.m. One agency—the Little City Foundation—has outing destinations on its main campus (which still require transport), as well as outings into the community. Their three on-campus destinations include a horticultural center, an art center, and a recreation facility. After-hours trips emanating from the Little City Foundation's CILAs often go to the on-campus recreational center.

For some agencies, medical trips can also emanate from the day program locations. Not all of the agencies have a specific medical trips program. One agency has one medical trip program that straddles different day program locations. Another agency has a medical trip program that is specific to one day program location. Each agency (or location) with a medical trip program has a medical appointment coordinator. Most of these agencies also have a dedicated set of vehicles and DSPs that are assigned to such trips. In one particular location, the medical trip program is integrated with the outings program. Most medical trips involve one DSP and one individual. However, in one particular case, a dentist's office offers a general drop-in period, allowing the agency to bring in multiple (up to a certain number) of individuals in one trip. Individuals may not be required to make a trip into the community for an in-person appointment. The

medical appointment coordinator may arrange for a virtual appointment, or some agencies may offer on-campus appointments with medical professionals who are either available on campus or willing to make the equivalent of a house call to the agency for a drop-in period.

Work trips are also handled separately though an employment development services (EDS) manager at the day program location or a separate facility. Most work trips emanate from the day program locations, but some can emanate from a CILA. Jobs are arranged through EDS. A job coach will drive and accompany a trainee to the worksite and spend as much time as it takes (sometimes months) for the trainee to feel comfortable with the job and the employer to feel comfortable with the trainee. After this transition period, the individual is transported to and from the worksite at the start and end of their work shift. If the work shift extends beyond the normal CILA run or community route run departure times, the driver or DSP will transport the individual home. As part of one agency's EDS program—Pursuits—participating individuals are transported to a *hub* (a different location than the day program) on their morning CILA run or community route, and from there are driven via a dedicated set of DSPs to the work/training locations. Some EDS have also arranged for groups of individuals to work at an employer site. For example, a group of individuals were hired to work as janitors at a hospital, all on the same shift.

Clearbrook houses an Abilities Program at one of their ICF day program locations. The Abilities Program focuses on occupational therapy and physical therapy services for any of the day program participants. Midday outings can be arranged to and from the Abilities Program from the day program locations or as part of a CILA run. Clearbrook also operates a fixed-route loop route during the midday with a dedicated vehicle. The fixed-route loop connects many of the on-campus destinations and the administrative building (located off campus). With the growing popularity of the Abilities Program, the agency is thinking of adding it as a destination along the loop route. The agency is also thinking of adding a second loop to connect more of its day program locations.

2.7 Management Structures and Trip Scheduling

From a management perspective, most of the agencies in *The Collaborative* have staff that manage the day programs (at each facility) and different staff that manage the CILAs. This separation of duties is maintained with respect to transportation—the day program supervisor/director typically manages the community routes and day program outings (with separate oversight of specific work trip and medical trip programs), while different staff manage CILA transportation. The scheduling function is no different—the more volatile scheduling of community routes and daily outings is performed by day program staff, while the CILA DSP shifts are supervised by different staff under a different management structure. Problems arise when CILA delays affect the day program outings and other midday transportation efforts.

Perhaps in response to this issue, one agency implemented a different management structure that includes a manager at specific day program locations who is also responsible for the DSPs at the CILAs that map into that day program location, providing a more holistic approach to meeting their needs associated with both the day program and the CILAs.

Regarding fleet management, some agencies split the oversight of vehicles between two individuals—one who manages the day program fleet (including vehicles that are used during the midday) and one who manages the CILA fleet. Other agencies assign one individual who is responsible for all vehicles.

2.8 Vehicles

The eight agencies collectively get their fleet vehicles from three primary sources: (1) the Pace Advantage Program, (2) FTA Section 5310 funds for capital purchases (administered by IDOT), and (3) Enterprise's Rent-A-Car fleet services.

2.8.1 Pace Advantage Program

As part of its Advantage Program, Pace provides vans at the rate of $250 per month to not-for-profit human service organizations, workshops, and agencies located in the six-county region. To participate, agencies must hold a current State of Illinois Developmental Training Certification or equivalent and provide work-related transportation service to persons with disabilities. Agencies are responsible for: (1) washing/detailing the vehicles, (2) securing/maintaining insurance, (3) providing its own drivers, and (4) reporting monthly. Pace provides fuel (through a fuel card) and covers the cost of maintenance at Pace-authorized maintenance vendors. One drawback to this program is that Pace-provided vehicles may only be operated by Pace-certified drivers. Pre-hiring requirements include passing a physical exam and having a clean background check and driving record (no at-fault accidents, driving while intoxicated offenses, etc.). New hires must also take a defensive driving class in addition to any disability awareness or other training provided by the agency. The biggest obstacle for agency participation has been the physical exams. Getting a vehicle from Pace is not the obstacle; it is getting enough Pace-certified drivers.

2.8.2 FTA Section 5310 Funds for Capital Purchases

The IDOT's statewide Consolidated Vehicle Program (CVP) receives FTA Section 5310 funding intended to support entities providing services to seniors and persons with disabilities. Through the CVP, Clearbrook, the Little City Foundation, New Star, Park Lawn, the Ray Graham Association, and Sertoma Centre have applied for and received accessible vehicles. Historically, most agencies have sought larger vehicles through the CVP. The retirement age of these vehicles is 100,000 miles or 5 years, whichever comes first. When applying for a vehicle, agencies indicate on the application whether the request is for a replacement vehicle or an additional vehicle. While this program has been a ready source of vehicles for the agencies in the past, recent supply chain issues have caused significant delays. In 2022, for example, no vehicles were issued; vehicles that hit their retirement age in 2021 are still be used at significantly higher operating costs because of the escalating need for maintenance. Associated state issues are also a concern for the agencies. *The Collaborative* agencies are competing for vehicles with agencies throughout the entire state.

2.8.3 Enterprise Fleet Services

Given these issues, some of the agencies have been leasing vehicles from Enterprise for three or five years. One agency leases 75 percent of its fleet from Enterprise. Note that several of the agencies also have a maintenance contact with Enterprise for maintaining non-Pace vehicles. Additionally, some of the agencies have bought vehicles from local dealerships. Table 2-4 lists the total number of vehicles (422 vehicles) by source and type for each of the agencies in *The Collaborative*.

TABLE 2-4: NUMBER OF VEHICLES BY SOURCE AND TYPE

Agency	Pace	IDOT	Enterprise	Agency	Total	Non-WAV	WAV
Blue Cap	0	2	14	3	19	17	2
Clearbrook	5	13	92	8	118	67	51
CTF Illinois	5	13	0	26	44	28	16
Little City	14	25	0	25	64	39	25
New Star	15				50	28	22
Park Lawn	6	15	0	15	36		
Ray Graham	16	26	18	10	72	37	35
Sertoma	7	6	0	2	15	4	11
Total	72				422		

2.9 Summary of Trips and Costs

Table 2-5 summarizes the 2022 ridership for six of the eight agencies in *The Collaborative*. Sertoma Centre and New Star recently merged and were unable to provide data. Collectively, the six agencies served nearly 684,000 trips.

TABLE 2-5: ANNAL RIDERSHIP BY AGENCY (2022)

Agency	Passenger Trips
Clearbrook	288,030
Ray Graham	162,575
CTF Illinois	92,716
Little City	81,219
Blue Cap	35,552
Park Lawn	23,904
Total	683,996

2.10 Constraints and Challenges

2.10.1 Constraints that Impact Routing and Scheduling

Five-Hour Billable Program Time

Agencies cannot bill for an individual's time at a day program for any longer than five hours per day. Hence, CILA and community route arrival and departure times, as well as midday outings, medical trips, and (some) work trips, must be scheduled with this constraint in mind. Billing for outings is supposed to start from the destination. Agencies will therefore strategically schedule outings such that the last person picked up is very close to the destination, providing the start time for billing and maximizing the time spent on the outing.

Varying Individual Day Program Participation

The specific days that individuals participate in day programs can differ; some individuals come five days per week, others come two or three days per week, and others only need to be picked up in the morning and use other transportation in the afternoon. To increase the efficiency of trips, some agencies in *The Collaborative* create day-specific routes and schedules with this in mind. Other agencies operate the same route but without stops as appropriate to keep the pickup schedules fairly consistent from day-to-day.

Maximum Onboard Travel Time

No individual may be on a vehicle for more than one hour per Illinois DHS. This limitation results in the splitting of routes and double runs. Most agencies in *The Collaborative* use Google Maps to determine one-hour travel times and the last pickup location relative to the destination.

Pickup Windows, Driver Wait-Times, and No-Shows for Community Routes

Some agencies use a 15-minute window for pickups based on the anticipated arrival time of the vehicle and a 5-minute driver wait time upon arrival. If the individual or their parent/guardian has not come out to the vehicle within 5 minutes of arriving (within the pickup window), the agency will attempt to call the parent/guardian before resuming the route.

Rider Safety/Incompatibility

Some agencies in *The Collaborative* noted that personality or behavioral conflicts between certain individuals can pose a challenge when grouping individuals together in vehicles. No hard and fast rules exist regarding the compatibility of individuals with each other, but behavioral issues are noted in the individual's paperwork to track their history. These issues do get considered when planning community routes to day programs, and agencies do reserve the right to revoke transportation for an individual if deemed necessary. Upon occasion, the behavior incompatibility of comingled riders presents a danger to themselves or others. In these cases, routing or programmatic alternatives are sought. For example, the staff at Sertoma Centre learn the personalities of different individuals and know when two individuals should not be seated together.

Driver/DSP Retention and Call-Outs

Every agency in *The Collaborative* has struggled to recruit and retain staff for several different positions but especially drivers and DSPs. One agency—CTF Illinois—noted that drivers are hard to hire for two main reasons: (1) split shifts for drivers are undesirable to potential hires, and (2) the distance travelled in the vehicles is not appealing. Another considerable issue is DSP call-outs. Call-outs happen often (at least once per week), forcing the day program and CILA managers to combine or double up routes to day programs, limit the number of outing participants, or cancel an outing altogether.

Vehicle Size

Transportation for CILAs is somewhat constrained by the size of the assigned vehicle. At some locations, a bigger vehicle is needed to accommodate all individuals and their mobility devices. If a sufficiently large vehicle is not available, a CILA DSP must make two runs to transport everyone to their day program. Other vehicle-related bottlenecks occur when larger-sized vehicles are not available for outings and when vehicles must be swapped to accommodate maintenance activities. All eight agencies in *The Collaborative* tend to acquire smaller vehicles (under 15 seats) though to avoid CDL requirements, which is viewed as an obstacle to driver recruitment. However, this tendency toward smaller vehicles can directly impact the number of vehicles needed for community routes and outings.

Pace Driver Certification

The opportunity to lease vehicles from Pace provides a tremendous benefit for these agencies; however, this opportunity comes with certain requirements that limit the benefits, especially given the driver/DSPs shortages. The most significant issue with the certification process is that potential drivers struggle to pass the physical exam (including neck size measurements, sleep studies, etc.), which is particularly onerous for some applicants. The drug test has also been a challenge due to legalized marijuana in the state of Illinois. Stringent driving record requirements have also eliminated driver/DSP candidates from becoming certified. Drivers of Pace vehicles are also required to hold SR22 insurance, which has a higher risk level but is harder to obtain. In addition, the Pace training site is in Arlington Heights—a far distance from some of the agencies. Drivers must also be recertified every one or two years, depending on the driver and determination from Pace. Finally, agencies must show evidence that the Pace vehicle would be regularly used for service. These requirements have caused almost all of the agencies to scale back the number of Pace Advantage Program vehicles in their fleet.

Pace Vehicle Service Area Restrictions

The use of Pace vehicles is also restricted geographically; all Pace vehicles are equipped with a global positioning system (GPS) tracker that alerts Pace managers if one of their vehicles travels outside its designated service area boundary. For example, some New Star outings are in Indiana, relatively close to

Chicago Heights. Because these destinations are outside the designated service area boundary, New Star must request preapproval from Pace for such trips. Permanent exceptions can be sought.

2.10.2 Constraints that Impact Route Timeliness

Home Coverage

Parents or guardians not being at home when the community route vehicle arrives for a drop-off can delay subsequent drop-offs for other riders onboard. In such cases, the driver is instructed to wait for verification that the parent or guardian is present before they can depart for the next drop-off.

2.10.3 Constraints that Limit Mobility Options

Reliability

To foster natural support for more independent individuals, individuals should use family, neighbors, friends, or transportation providers/public transportation whenever possible and as appropriate. While use of Pace ADA Paratransit Services is encouraged, the inconsistency with drivers (i.e., not always having the same driver) can be an obstacle for some individuals. This obstacle can sometimes be mitigated with a subscription service; however, the available capacity for subscription services limits such individuals' use of these services. On-time performance/reliability issues with Pace ADA Paratransit Services and local dial-a-ride services can also dissuade use of these services.

2.10.4 Constraints that Limit Program Outings/Participation

Availability of WAVs

The availability of WAVs for outings can present an obstacle for inclusion of some mobility-challenged individuals in wheelchairs.

Parking for Downtown Outings

Parking downtown is an issue because most parking garages cannot accommodate large vehicles.

CILA Coverage

Groups of individuals living in CILAs cannot be left unattended at the CILA, on the vehicle, or at a destination. Therefore, all CILA trips to day programs or after-hours/weekend outings must involve all of the CILA residents unless a second DSP is available to attend to individual remaining on the vehicle or back at the CILA.

CHAPTER 3. THE SWOC ANALYSIS

3.1 Introduction

Following the documentation of existing conditions for the eight agencies in *The Collaborative*, this study performed a deep dive SWOC analysis of factors impacting the current delivery of transportation services for each agency. During this analysis, the study team focused on internal or external factors that present either a barrier or a benefit for the agency as follows:

- **Strengths:** The study team considered *internal* characteristics (within the agency) that provide an advantage to achieving agency goals.
- **Weaknesses:** The study team considered *internal* characteristics that present a risk to achieving agency goals.
- **Opportunities:** The study team considered *external* characteristics (outside of the agency) that could be advantageous for agency performance.
- **Challenges:** The study team considered *external* characteristics that could limit agency performance.

For this analysis, the study team reviewed the information learned about each agency during field visits and identified key characteristics that served as internal or external factors relative to transportation delivery. Some of the identified factors relate to the transportation programs, day programs, vehicles and drivers, and grouping schemes for the individuals served, which may affect the efficiency of transportation service delivery. Other identified factors relate to external state or agency policies, geographic settings, and alternative transportation mode availability.

Based on the needs for transportation to day programs, outings, work, medical appointments, and other trip purposes, as well as the proximity of home and facility locations that the agency provides trips to and from, the SWOC analysis highlights opportunities and challenges that present possible service delivery alternatives for consideration. Depending on the agency, these alternatives include the following:

1. Consolidating or coordinating routes or other existing agency transportation services.
2. Consolidating, coordinating, or improving support services and technology.
3. Enhancing mobility management services focused on the needs of individuals with IDD and increasing community connections.

The SWOC analysis presented in this chapter is intended for consideration alongside the development and evaluation of alternatives and mobility management services that are discussed in Chapter 4. The findings from the SWOC analysis were utilized by the study team to review findings and answer questions about the suggested considerations.

3.2 Blue Cap

3.2.1 Overview

Blue Cap has two facilities with day programs; one exclusively serves CILA individuals and the other exclusively serves community individuals. The day programs typically plan outings separately but will sometimes conduct joint outings together. Prior to the COVID-19 pandemic, Blue Cap had community routes for individuals in the community but no longer has them in place. Currently, individuals in the community must provide their own transportation to the day program facility.

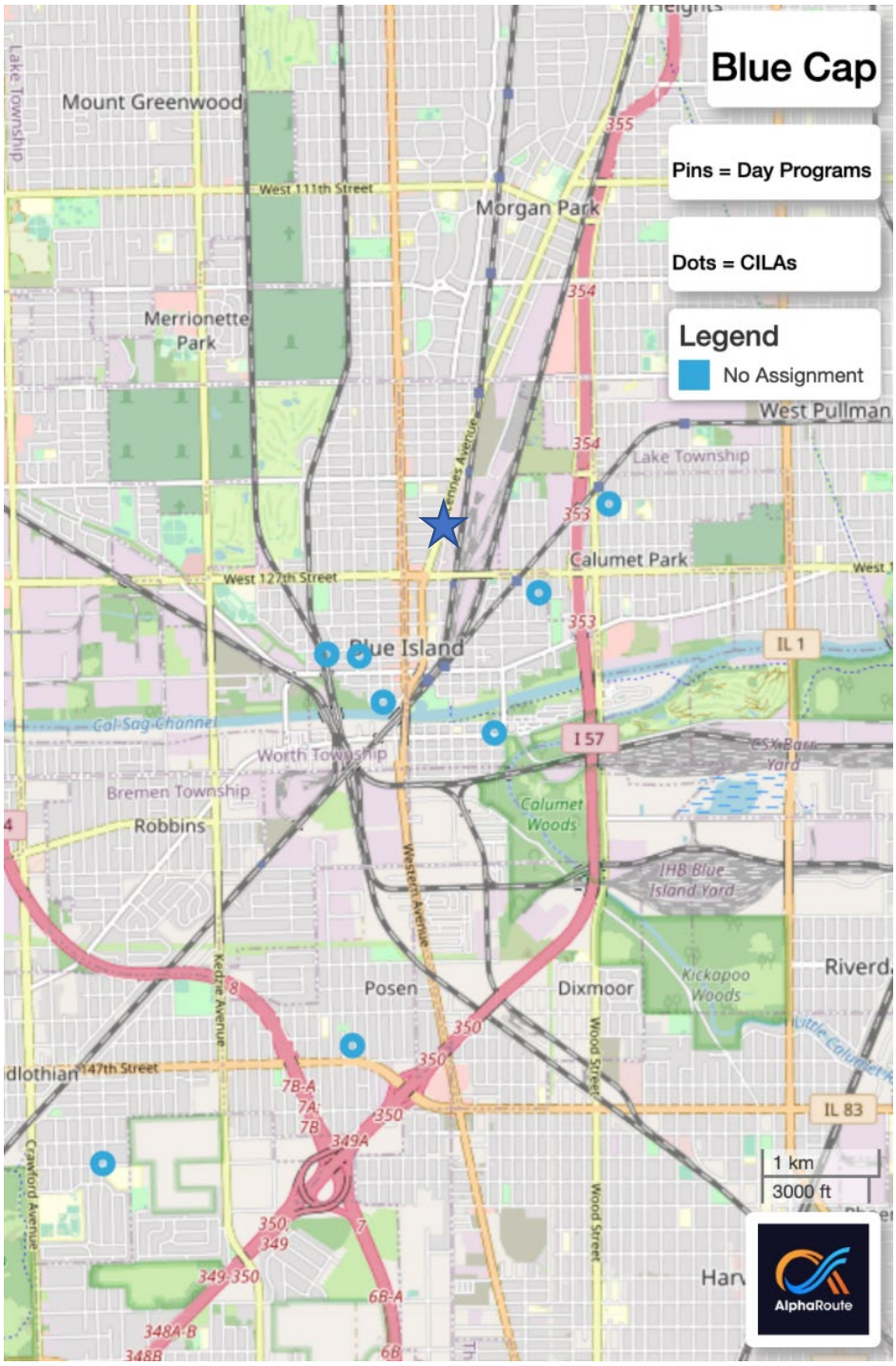
3.2.2 Strengths and Weaknesses

Strengths	Weaknesses
• Communication between the CILA and community day program staff regarding transportation needs. • Ability to find substitute DSPs between each facility to address callouts. • Two DSPs at some CILA locations, depending on needs of individuals. • Designated job coach helps individuals adapt at their place of employment. • Multiple worksites currently in place for some individuals attending day programs. • Multiple individuals working at the same worksite enhances travel efficiencies. • Two vehicles designated for medical appointment trips during the day.	• Monthly calendars between the facilities are tracked separately. • Staff shortages have shut down intermittent CILA program. • Outings that run late require direct transportation back to CILA or residence. • No rule of thumb or distance used when planning outings. • Most (15 of 17) vehicles cannot accommodate individuals with wheelchairs. • Staff time for transportation is not currently tracked. • Some vehicles in the fleet are likely past their useful life (six vehicles have model years before 2016).

3.2.3 Opportunities and Challenges

Opportunities	Challenges
• Consolidated shift times for individuals at worksites for shared-ride trips. • Community routes to encourage day program demand. • Restored community route service for more consistent billing of full-time window. • Coordinated community route service with neighboring agencies working with CSP. • Additional fleet vehicles provided by the Pace Advantage Program. • Grouped CILAs to consolidate trips for double runs (see Figure 3-1). • On-demand services (e.g., New Star On-Demand) to enhance transportation reliability to/from day programs.	• Lower demand for day programs from homebound individuals in the community since the COVID-19 pandemic. • Homebound individuals regularly billed below five-hour maximum due to arrival/departure times. • Frequent late arrivals by Pace ADA Paratransit Service. • Early pickups by Pace ADA Paratransit Services disrupt programming and limit maximum billing. • Observance of yearly and monthly billing caps for CILA individuals.

FIGURE 3-1: BLUE CAP LOCATIONS OF DAY PROGRAMS AND CILAS



3.3 Clearbrook

3.3.1 Overview

Clearbrook separates their day programs (and subsequently their transportation services) for community routes and CILAs into three regions: (1) west, (2) central, and (3) east. Each region has its own designated facility for day programs, and transportation from the community or CILAs in that region feeds solely into that facility. This separation simplifies transportation to and from day programs for the agency.

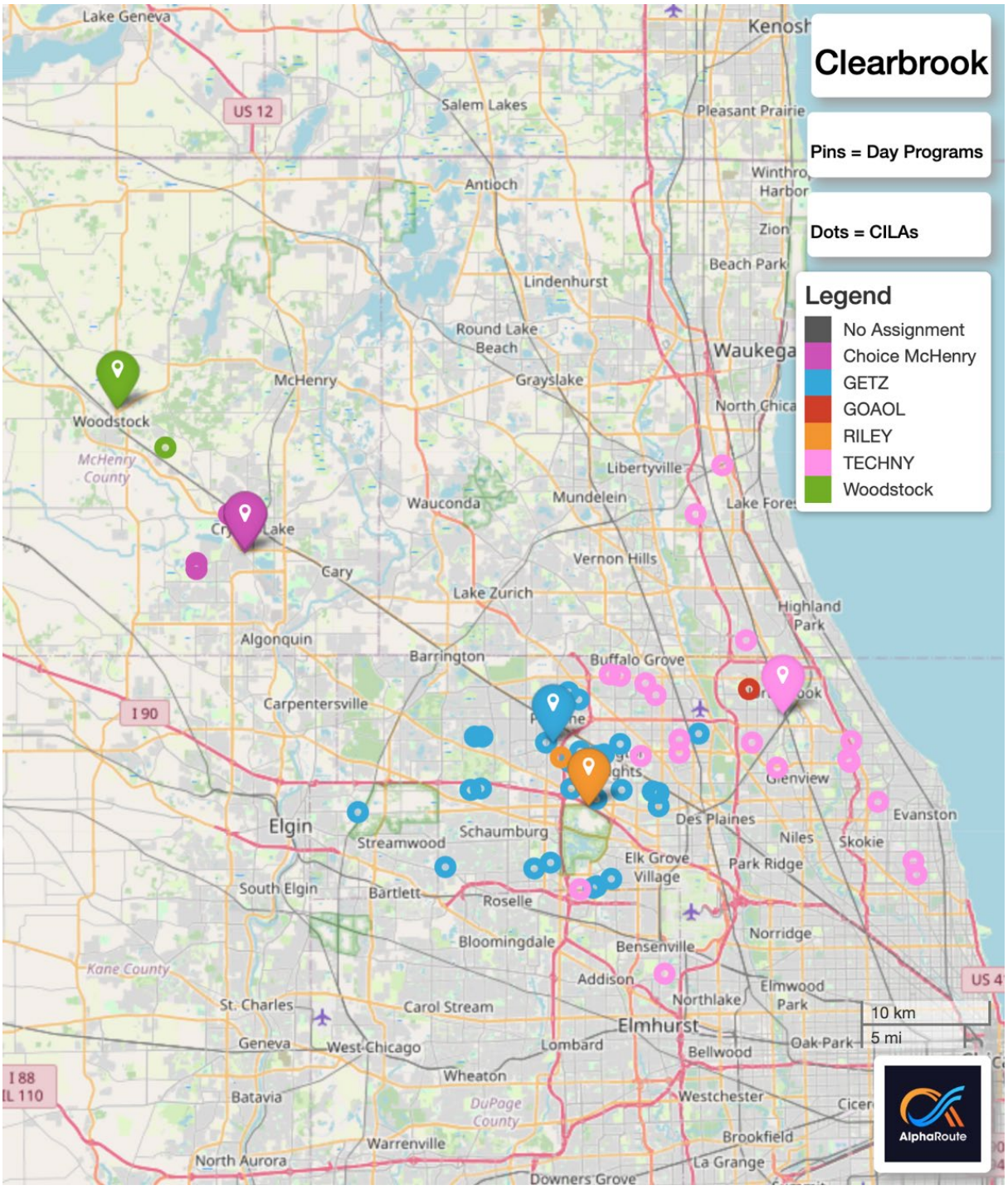
3.3.2 Strengths and Weaknesses

Strengths	Weaknesses
• Medical appointment coordinator arranges medical trips with DSPs. • Work and Pursuits Program coordinators each arrange relevant trips. • Five backup vehicles in the CILA pool with one designated for medical appointments. • Ensure onboard time is less than one hour by operating some double runs. • After-hours activities sometimes scheduled with direct transportation to/from residences. • Four vehicles dedicated to work trips through the Community Employment Services department.	• Only 14 of 68 CILA vehicles are wheelchair accessible. • More than half (67 of 118) of the total vehicles are not wheelchair accessible. • Larger programming requires more drivers and vehicles to cover transportation.

3.3.3 Opportunities and Challenges

Opportunities	Challenges
• Expansion transportation services to include non-Clearbrook CILA residents. • Community and CILA transportation coordination with the Little City Foundation given facility proximities. • Use of Techny facility as a hub for community routes. • Additional midday loop routes to reduce travel times for some individuals.	• Late-running medical appointments require direct transportation to residences by DSPs. • Long wait-times (up to 10 weeks) for Pace ADA Paratransit Services subscription trips. • Number of vehicles from Pace Advantage Program limited by number of Pace-certified drivers (only five) at agency. • Some agency-owned CILAs located far from day program facilities (see Figure 3-2).

FIGURE 3-2: CLEARBROOK LOCATIONS OF DAY PROGRAMS AND CILAS



3.4 CTF Illinois

3.4.1 Overview

CTF Illinois is the largest agency working with CSP, with six facilities offering either day programs or community services. Each facility is distinct with its own programming. The agency sometimes must transport individuals from the same CILA to different program sites. CTF Illinois pairs CILA homes together as *sister homes* to help with transportation and staffing needs.

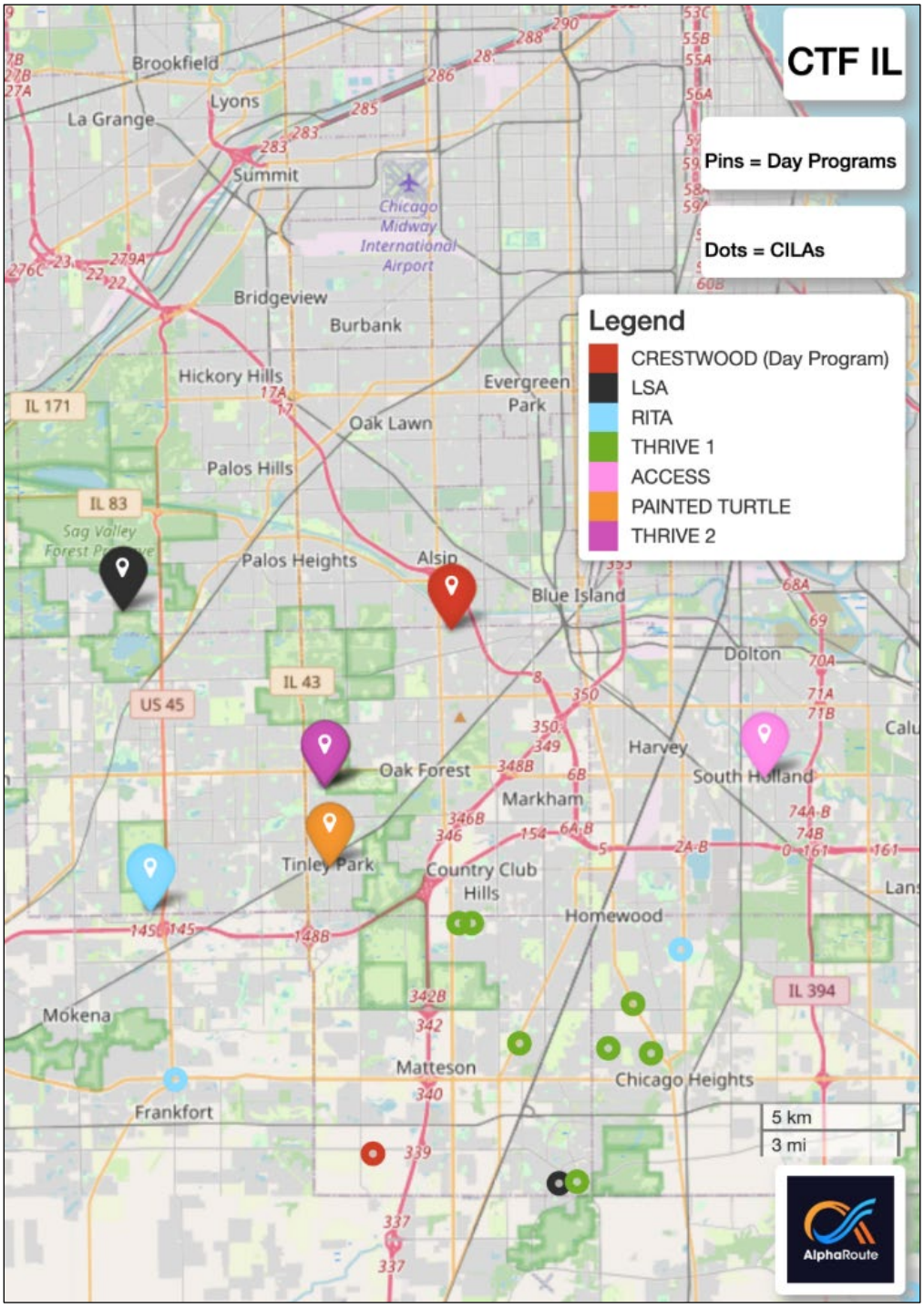
3.4.2 Strengths and Weaknesses

Strengths	Weaknesses
• Community routes adept at routing to multiple agency facilities and CILAs. • Vehicle stationed at RITA facility for outing trips. • Relatively large number (15+) of Pace-certified drivers. • CILAs paired with sister homes to assist with transportation/staffing issues. • Floater DSPs available to support outings as needed. • Dedicated minivan stationed at Thrive facility for daytime medical trips from RITA and Thrive facilities. • Three vehicles stationed at Crestwood for work trips (as part of Community Employment Services program).	• No staff in addition to driver are present on community routes to help individuals. • Drivers use smartphones for navigation (if needed for directions). • House coordinators may need to substitute for drivers during callouts. • At two CILAs, individuals participate in five different day programs requiring to/from transportation. • Individuals on medical trips may need to be transported directly home. • Adjusted seating capacity of vehicles with wheelchair capacity is unknown (difficult to assess total capacity).

3.4.3 Opportunities and Challenges

Opportunities	Challenges
• Expanded routes that include unaffiliated CILAs to fill seating capacity. • Expanded Crestwood and Thrive community route to fill seating capacity. • Rerouted community routes to pick up individuals at CILAs for day programs. • Coordination agreement with local dial-a-ride services to serve RITA facility. • Encouraged use of Pace ADA Paratransit Services by community individuals going to Lifestyles Academy and Crestwood facilities. • Additional Pace Advantage Program fleet vehicles given number of certified drivers. • Proximity of CILAs between Community Service Partner agencies provides opportunity to fully exploit community route capacity.	• Limited Pace ADA Paratransit Services at some facility locations (e.g., RITA). • RITA facility straddles two counties making it hard for individuals to access local dial-a-ride services. • Parents or guardians not being home delays community route drop-offs in the afternoon. • Some agency-owned CILAs located far from day program facilities (see Figure 3-3).

FIGURE 3-3: CTF ILLINOIS LOCATIONS OF FACILITIES AND CILAS



3.5 Little City Foundation

3.5.1 Overview

The Little City Foundation has three primary facility locations: (1) the Palatine campus, (2) the Countryside Center with day programming, and (3) the Grayslake facility with day programming (see Figure 3-4). The Little City Foundation uses a combination of drivers and DSPs for transportation, and sometimes runs double routes from the Grayslake facility based on available capacity.

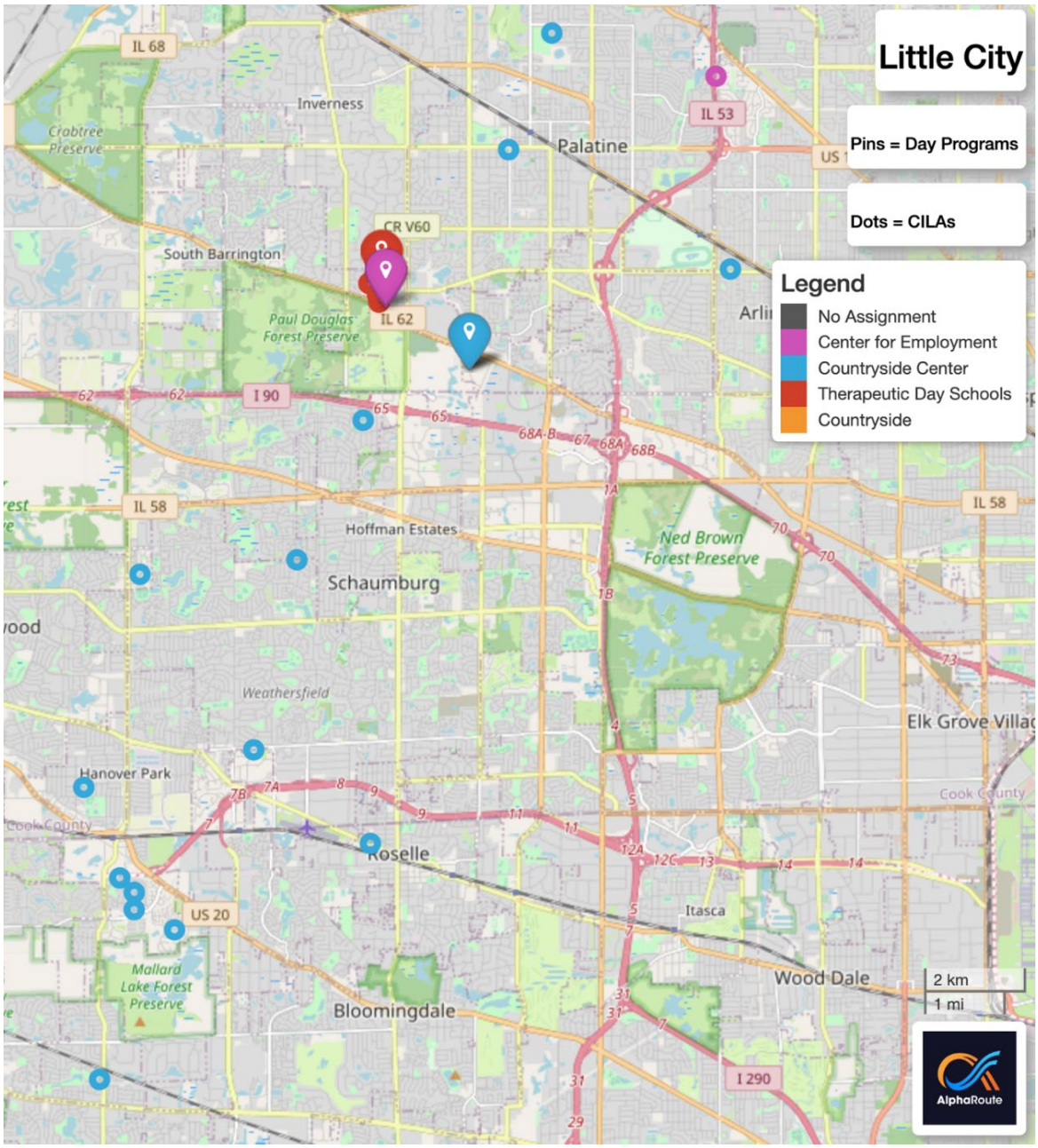
3.5.2 Strengths and Weaknesses

Strengths	Weaknesses
• Five backup vehicles available in CILA fleet (35 percent spare ratio). • Community routes connect to both day program facilities. • Community and CILA routes used for employment trips during the day. • High utilization of the Pace Advantage Program (18 vehicles).	• Too few drivers and DSPs who are Pace-certified. • Spare vehicles routinely needed to fill in for regular CILA fleet. • Driver shortages at the Grayslake facility force facility head to frequently drive. • Double routes run out of the Grayslake facility.

3.5.3 Opportunities and Challenges

Opportunities	Challenges
• Transportation service coordination with Clearbrook to reduce double routes to Grayslake facility. • Transportation service coordination with both Ray Graham Association and Clearbrook to service individuals from neighboring CILAs.	• Pace Advantage Program's stringent driver certification requirements. • Difficulties obtaining replacement vehicles from IDOT. • Rising maintenance costs for vehicles past their useful life.

FIGURE 3-4: LITTLE CITY FOUNDATION LOCATIONS OF DAY PROGRAMS AND CILAS



3.6 New Star

3.6.1 Overview

New Star currently has a single facility that offers day programming (see Figure 3-5). Day program participants are provided transportation to and from the facility using a combination of Pace, IDOT, and agency-owned vehicles. New Star also has a special recreation program for weekend outings (available to non-New Star individuals) and an on-demand service pilot that aims to enable trip options during the day from available off-duty DSPs.

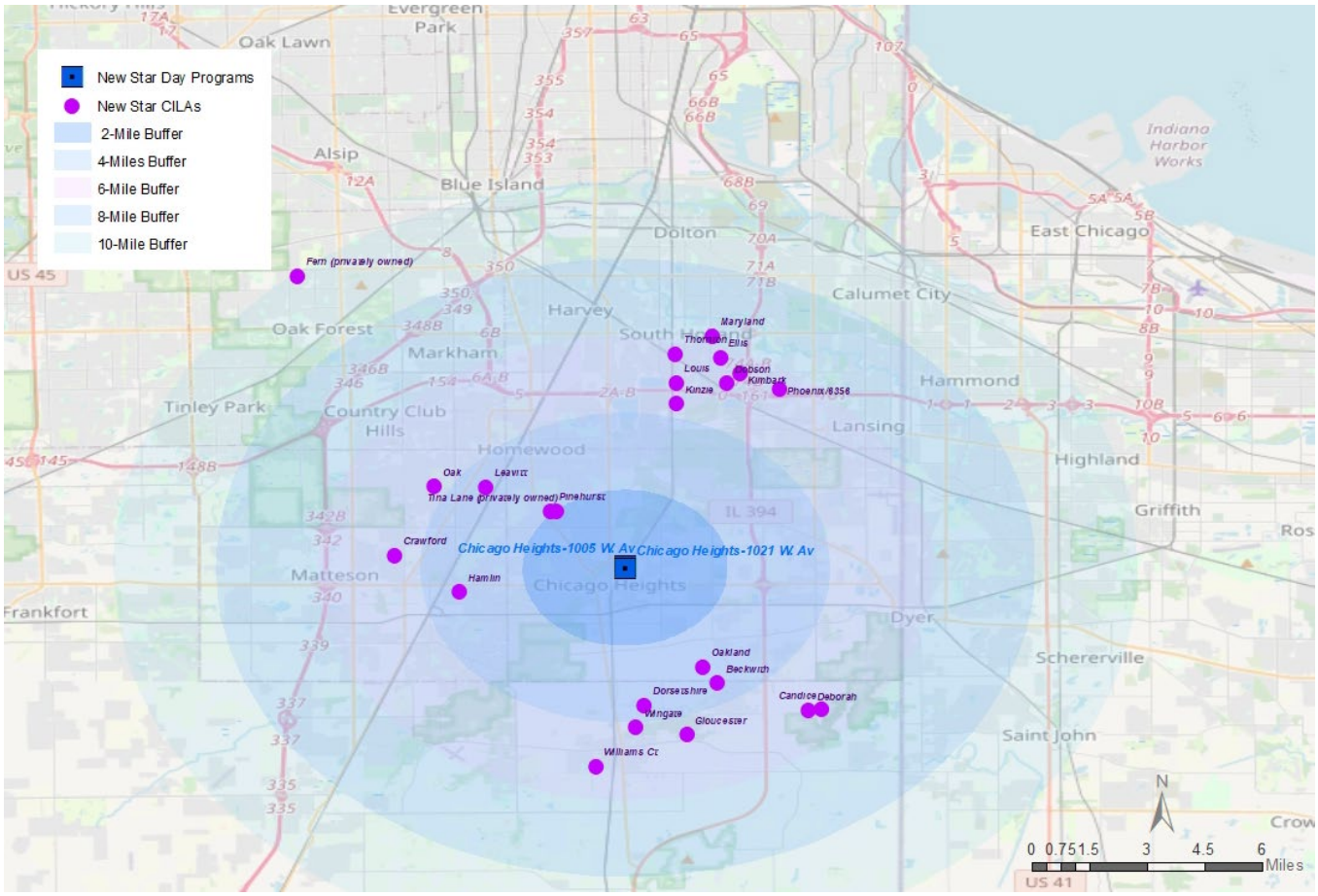
3.6.2 Strengths and Weaknesses

Strengths	Weaknesses
• Unassigned DSPs (1–2) help with backup coverage on community routes. • Transportation Manager arranges for backup CILA coverage if resident cannot attend day program. • Some community routes pick up from other agencies' CILAs. • Some community route vehicles staged at DSP home locations for efficiency. • Ability to mix community and CILA individuals due to excess capacity. • Phones with mounts used in vehicles for navigation as needed (safe practice). • Two vehicles designated for work program trips.	• No drive-only employees; all drivers are DSPs. • Overlapping routing paths because of long travel distances to day program. • DPS call-outs frequently cause backup issues when other staff are unavailable. • DSPs sometimes transport individuals directly home after an outing. • Medical trips from day programs are not provided.

3.6.3 Opportunities and Challenges

Opportunities	Challenges
• Clustered CILAs provide opportunities for efficient routing and double runs. • Coordination of community route service with CTF Illinois on trips from their nearby CILAs. • Expanded coordination of pickups for other agency CILAs for efficiency. • Staging of additional vehicles in the community for better route efficiency. • On-demand pilot could provide relief for individual trips during days/evenings. • Expansion of on-demand pilot to include DSPs outside the agency. • New Star Special Recreation could serve additional non-agency individuals.	• Recent change in insurance providers caused loss of fleet vehicle tracking technology. • Outing trips to the state of Indiana in Pace vehicles requires preapproval. • Scale of demand for on-demand program could prove challenging.

FIGURE 3-5: NEW STAR LOCATIONS OF DAY PROGRAMS AND CILAS



3.7 Park Lawn

3.7.1 Overview

Park Lawn has multiple day program facilities that include transportation services for individuals in the community, CILAs, or ICFs (see Figure 3-6). All community routes use dedicated drivers in shifts, while transportation to/from the CILAs is handled by DSPs at the CILA or the day program facility.

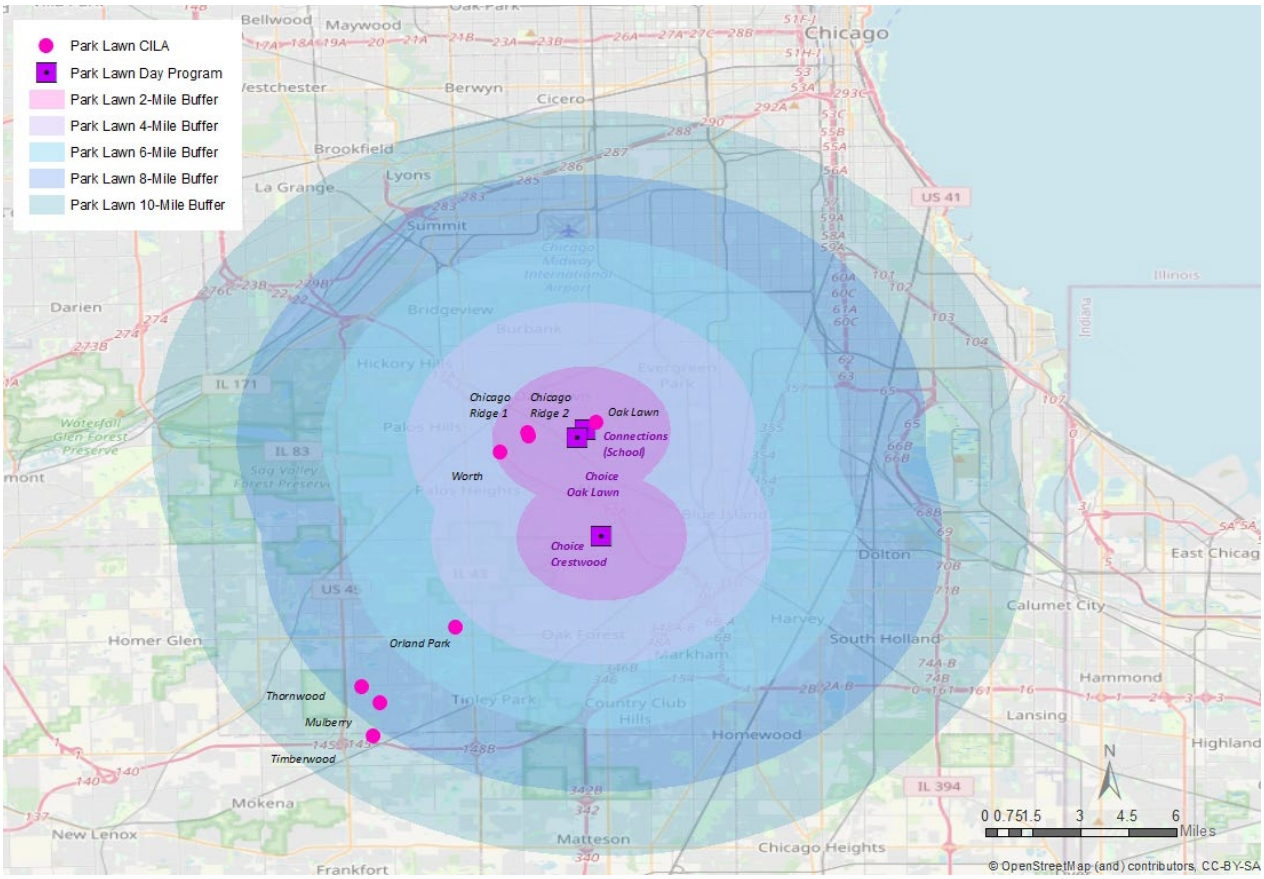
3.7.2 Strengths and Weaknesses

Strengths	Weaknesses
• Clear division of DSP responsibilities between CILA assignments and day programs. • Varied shifts for drivers by day of week (five days, two days, or three days). • Ability of community routes to pick up from a CILA if needed. • Ability of drivers to cover multiple runs to/from different day programs. • Use of multiple staff (DSPs, drivers, community coaches) to assist on outing trips.	• Many CILA, ICF, and community routes travel to multiple day program facilities resulting in inefficient routing. • DSP shortages occur when covering driving from CILAs. • Staff shortages occur when providing medical trips from CILAs and ICFs.

3.7.3 Opportunities and Challenges

Opportunities	Challenges
• Coordination/grouping of trips to the same day program facility to improve routing efficiency. • Community route pickups from additional CILAs if capacity allows. • Expansion of additional runs by drivers to different programs. • Additional Pace Advantage vehicles for the fleet as needed.	• Procurement of new vehicles from IDOT is difficult. • Large number of trips emanate from ICF facilities. • Three CILAs are located 6–8 miles from agency facilities.

FIGURE 3-6: PARK LAWN LOCATIONS OF DAY PROGRAMS, CILAS, AND ICFS



3.8 Ray Graham Association

3.8.1 Overview

The Ray Graham Association has four day program facilities, each with varying levels of programming to meet an individual's needs. To better meet the needs of certain individuals, the agency sometimes transports individuals from CILAs to farther facilities based on the programming available.

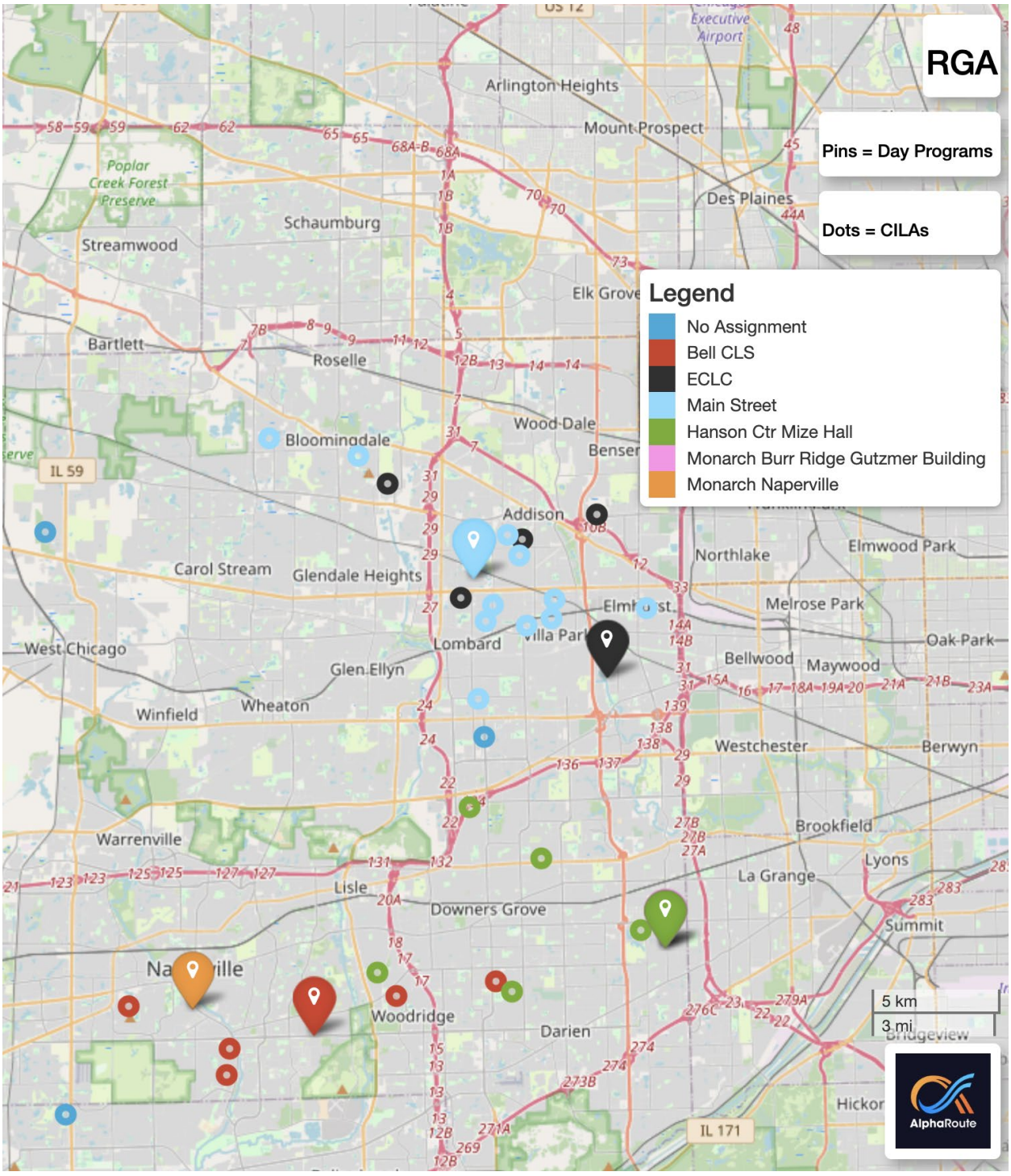
3.8.2 Strengths and Weaknesses

Strengths	Weaknesses
• Doubled-up routes are used from the facilities with Monarch programs. • Medical appointment coordinator arranges medical trips by DSPs. • Work trip coordinator arranges work trips by drivers/DSPs. • All community route vehicles are larger and wheelchair accessible. • Nearly half of all vehicles in the fleet are wheelchair accessible.	• Two CILAs offer transportation to multiple day programs. • CILA trips made to day programs further away instead of closest facility. • DSPs must sometimes cover early arrivals or delayed programs. • Only four spare vehicles for total fleet (6 percent spare ratio).

3.8.3 Opportunities and Challenges

Opportunities	Challenges
• Adjusted CILA groupings to better group trips to similar day programs. • Coordination of trips with Little City Foundation at nearby CILAs.	• Physical exam and defensive drive course for Pace Advantage Program driver certification are a challenge. • CILA locations overlap with their paired facilities in footprint areas (see Figure 3-7).

FIGURE 3-7: RAY GRAHAM ASSOCIATION LOCATIONS OF DAY PROGRAMS AND CILAS



3.9 Sertoma Centre

3.9.1 Overview

Sertoma Centre has a single facility location where day program activities for individuals take place. Prior to the COVID-19 pandemic, the agency operated community routes with its fleet vehicles. This program was discontinued, but the agency still provides in-house preventative maintenance for its vehicles as a remnant of the program. Transportation for janitorial contract services with staff is handled separately from other transportation at the agency. Sertoma Centre has two intermittent CILAs (ICILAs) and one combination CILA/ICILA.

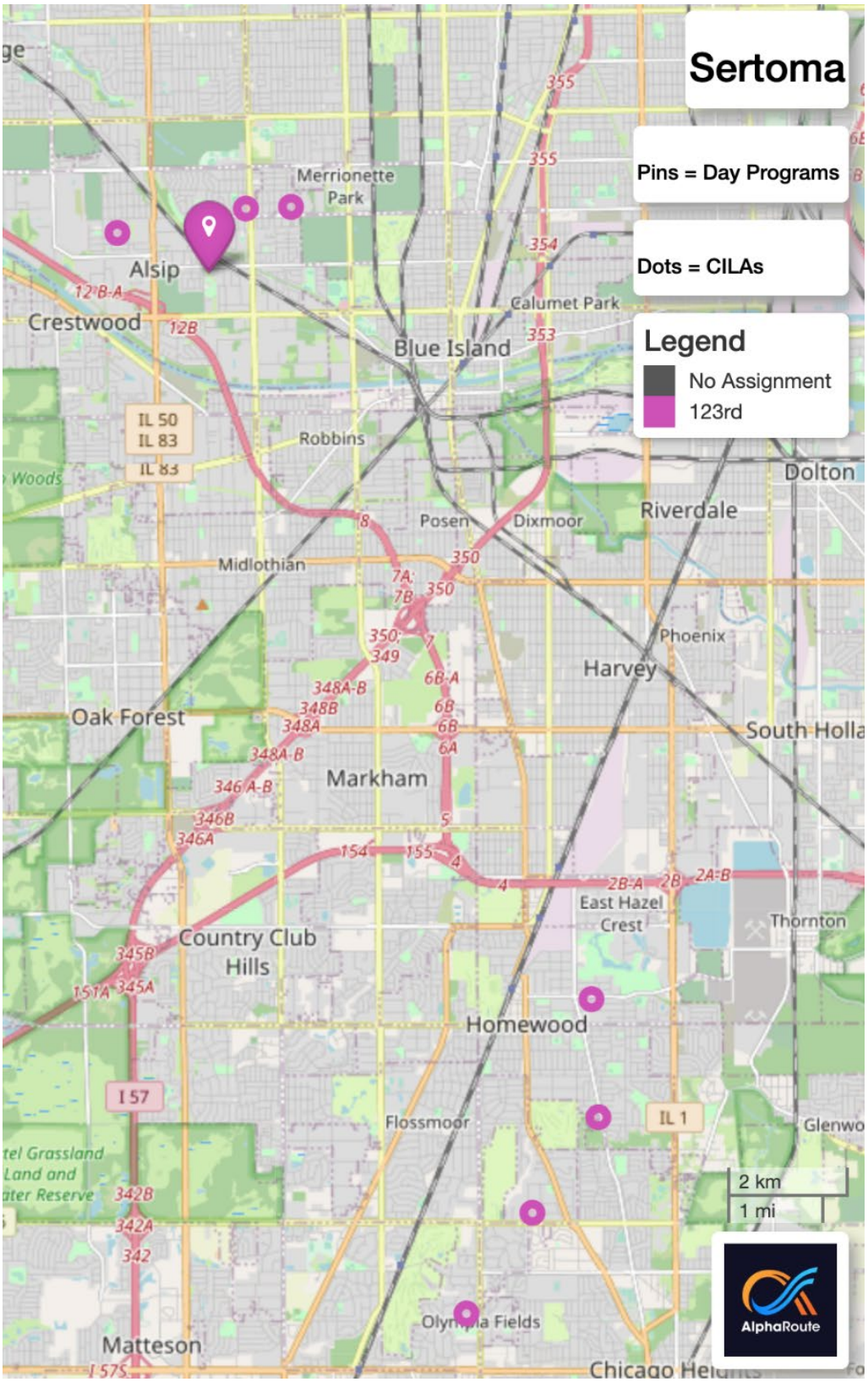
3.9.2 Strengths and Weaknesses

Strengths	Weaknesses
• Single day program location that simplifies transportation needs. • Previous experience with community transportation program and Medicaid trips. • Separate dedicated vehicles for staff involved in janitorial contract services. • Majority of vehicles wheelchair accessible. • In-house preventative maintenance program. • Six vehicles stationed at facility for staff checkout on outing trips.	• Approximately 100 individuals from the community provide their own transportation. • Delayed outings must provide direct transportation home for the resident. • Several individuals require one-on-one supervision at day program. • No spares for Pace Advantage Program fleet vehicles. • Vehicle size as a determining factor for outing capacity (according to staff). • Vehicle checkout system tracked on a calendar but mostly spontaneous.

3.9.3 Opportunities and Challenges

Opportunities	Challenges
• Revamped community routes program that was previously suspended (if needed). • Expanded collaboration with CSP to provide daytime transportation with unused vehicles. • Day trips following morning routes performed by drivers instead of DSPs.	• Expensive to offer day trips with low grant funding support. • Additional medical transportation training requirements and recertifications. • Pace Advantage Program driver certification requirements limit new driver retention (all drivers must be certified following hire).

FIGURE 3-8: SERTOMA CENTRE LOCATIONS OF DAY PROGRAMS AND CILAS



CHAPTER 4. COST EFFICIENCIES

4.1 Introduction

One task in this study was to look at service efficiency metrics (e.g., trips per hour), cost efficiency metrics (e.g., cost per trip), and service quality metrics (e.g., on-time performance) for each agency in *The Collaborative*. Unfortunately, no on-time performance data were available, and the service/cost efficiency data had some limitations from agency to agency.

Regarding the cost data, five of the eight agencies—Clearbrook, CTF Illinois, the Little City Foundation, Park Lawn, and the Ray Graham Association—were able to provide complete information on the number of trips provided and operating costs for either calendar year 2022 or fiscal year (FY) 2021–2022. This cost comparison, which excludes New Star and Sertoma Centre due to a lack of cost data, is presented in Section 4.2. Also, the AlphaRoute analysis included aspects of service efficiency as part of the service scenarios developed from trip information provided by each agency.

4.2 Cost Comparison

Table 4-1 compares ridership, operating cost, and operating cost per trip for the six agencies (New Star and Sertoma Centre were not included due to a lack of cost data). The six agencies are listed in rank order based on the operating cost per trip (from low to high).

Note that Blue Cap provided only partial cost information; the total costs exclude the labor cost of drivers and DSPs while driving but did provide an average hourly rate for DSPs of $15.12 per hour. Also, Blue Cap's annual operating cost was based on a monthly breakdown of vehicle insurance, fuel, leasing, and maintenance expenses that was then annualized. Note also that the 2022 annual costs for CTF Illinois and Park Lawn reflect FY 2021–2022 costs.

TABLE 4-1: COMPARISON OF OPERATING COST PER TRIP (2022)

Agency	Passenger Trips	Operating Cost	Operating Cost per Passenger Trip
Ray Graham	162,575	$866,395	$5.33
Clearbrook	288,030	$1,886,770	$6.55
CTF Illinois	92,716	$610,653	$6.59
Little City	81,219	$652,523	$8.03
Blue Cap	35,552	$471.410[1]	$13.26[1]
Park Lawn	23,904	$525,000	$21.96

[1]Does not include Blue Cap's labor costs of drivers and DSPs (while driving).

As is evident from Table 4-1, the four agencies with the higher ridership levels have the lower operating costs per passenger trip. Among the five agencies with complete cost information (all but Blue Cap), the Ray Graham Association was most cost-efficient in providing transportation services, with an operating cost per trip of $5.33. Another interesting observation is the near equivalent operating cost per trip figures for Clearbrook and CTF Illinois despite CTF Illinois' ridership level being 1/3 of Clearbrook's ridership level.

CHAPTER 5. OPPORTUNITIES FOR IMPROVEMENTS

5.1 Introduction

Based on the study team's assessment of current operations at each agency in *The Collaborative*, several opportunities exist to create even greater cost-efficiencies while abiding by service quality standards and other requirements and constraints. Generally, these opportunities included the following:

- **Optimizing each agency's routings:** Using its AlphaPlan software, TTI teammate AlphaRoute was able to identify ways in which agencies could reduce the number of vehicles and drivers required for service using a snapshot of trips being served. Efficiency improvements were generated by optimizing routing and by doubling up on routes. Some of the agencies noted that doubling up on community routes did not seem feasible because the second run would likely arrive at the day program site after 9:00 a.m. (when the agency needs to start billing). They additionally noted that doubling up is currently only done based on an emergency need. In contrast, other agencies have successfully demonstrated the doubling up of community routes and CILA routes out of necessity (i.e., because of driver/DSP shortages, DSP callouts, the one-hour maximum onboard requirement). In these cases, the agencies have expanded DSP coverage at the day programs, while still maintaining five-hour program times for all individuals. Simulations for intra-agency routing optimizations (as a set) were created in Simulation #1 described in Sections 5.2.3 and 5.11.1.
- **Coordinating/consolidating routes among agencies:** Originating from RTA's *Human Services Transportation Coordination Update* (2020), AlphaPlan was used to simulate opportunities for coordinating and consolidating routes among agencies, further reducing the number of vehicles and drivers required. Clearly, some route coordination/consolidation opportunities exist in the northwestern and western suburbs (Clearbrook, the Little City Foundation, and the Ray Grahm Association) as well as in the southern and southwestern suburbs (Blue Cap, New Star, CTF Illinois, and Sertoma Centre). Simulations for inter-agency routing optimizations (as a set) were created in Simulation #2 described in Section 5.2.3 and 5.11.2.

The specific optimized and coordinated routing opportunities for each agency in *The Collaborative* are discussed in this chapter. This chapter also describes the opportunities for centralized support services as well as coordinated expansion of the new Sertoma Star Service's on-demand pilot program.

5.2 Methodology

5.2.1 Data Collection

During the site visit and throughout the study, TTI and AlphaRoute engaged with staff at each individual agency to understand their: (1) operational standards and (2) available data. To perform simulations, AlphaRoute's optimization software—AlphaPlan—requires detailed trip level information from each agency. Figure 5-1 through Figure 5-4 provide sample data collection templates for CILA and community route transportation; day programs; vehicles; and outings, work trips, and medical trips; respectively.

FIGURE 5-1: DATA TEMPLATE FOR CILA AND COMMUNITY ROUTE TRANSPORTATION

Agency	*CILA/ROUTE NAME*	*Address*	*# of Passengers*	*# of WC Passengers*	*DAY Program 1*	*# of Passengers*	*# of WC Passengers*	*DAY Program 2*	Notes
Park Lawn	Oak Lawn	4701 W. 106th PL. Oak Lawn 60453	6	0	Chicago Ridge CDS	4	0	Choice Crestwood	4 - participnats attend Chicago Ridge CDS & 2 participants attend Choice Crestwwod CDS
Park Lawn	Chicago Ridge 1	5956 W. 109th St. Chicago Ridge 60415	3	0	Chicago Ridge CDS	3	0		1 participant uses a walker
Park Lawn	Chicago Ridge 2	5942 W. 110th St. Chicago Ridge 60415	3	0	Chicago Ridge CDS	3	0		
Park Lawn	Worth	11606 S. Nagle Worth 60482	6	0	Chicago Ridge CDS	5	0	Choice Crestwood	4 - participnats attend Chicago Ridge CDS & 2 participants attend Choice Crestwwod CDS

FIGURE 5-2: DATA TEMPLATE FOR DAY PROGRAMS

Program Name	*Address*	*Start time*	*End time*	*Agency*
Hanson Ctr. MIZE Hall	15W431 59th Street, Burr Ridge 60527	9:00am	2:30pm	RGA
Main Street	1108 N. Main St., Lombard 60148	9:00am	2:30pm	RGA

FIGURE 5-3: DATA TEMPLATE FOR VEHICLES

Vehicle #	Site/Oper/Program	Garage Location	Year	Make	Model	Passenger Capacity	Ambulatory Capacity	Wheechair Capacity
18	Devine	3224 Venard Rd., Downers Grove 60515	2013	Ford	E-350	11	11	0
19	Main Street	1108 N. Main St., Lombard 60148	2018	Chevy	Express	12	12	2

FIGURE 5-4: DATA TEMPLATE FOR OUTINGS, WORK TRIPS, AND MEDICAL TRIPS

				Origin		Destination						
DATE	Start Time	Return Time	Trip Type	Common Name	Address	Common Name	Address	Vehicles Used	Round Trip	Ambulatory Passengers	Wheelchair Passengers	Total Passengers
6/1/2023	6:00pm	7:00pm	CILA Outings	Devine	3224 Venard Rd., Downers Grove 60515	Dollar Tree	7323 Lemont Rd, Downers Grove, IL 60516	1	Y	9	1	10
6/1/2023	11:00am	N/A	Day program - Medical	Main Street	1108 N. Main St., Lombard 60148	Downers Grove Medical Group Pc	1034 Warren Ave, Downers Grove, IL 60515	1	N	1	0	1

5.2.2 Data Processing and Transformation

After several interactions and discussions about the data, AlphaRoute staff received multiple files per agency totaling 2.21 GB of information, provided by the agencies in PDF and Excel formats. AlphaRoute staff transformed these data into standard input files for AlphaPlan. This transformation required making sure the necessary data fields were available, mapping/transforming information from existing files to the standard format, geocoding addresses, calculating travel times with traffic, etc. After these tasks were completed, AlphaRoute staff generated the input files per agency for Simulation #1 and combined sets of input files that represented supply and demand for the entire group of agencies to simulate coordinated/consolidated service for Simulation #2.

Despite multiple attempts to collect or generate the necessary data during this process, AlphaRoute staff determined that some agencies simply do not have or do not track some of the necessary data at the ideal level of detail for running simulations in AlphaPlan. Decisions regarding how to handle the missing information were made with the broader study team, leading the simulations to focus only on the core agency operation of transporting of daily passengers from CILAs to day programs for Simulation #1 and Simulation #2. Only the CTF Illinois simulation included CILA and community routes data.

5.2.3 Simulations

As previously mentioned, AlphaRoute used AlphaPlan to execute two simulations:

- Simulation #1 included a baseline optimization of the core routes for each agency, mimicking current operational policies.
- Simulation #2 included additional optimization opportunities by coordinating service between agencies.

The objective of Simulation #1 was to estimate the operational improvements gained by using computer technology assisted routing instead of manual routing methods. For Simulation #2, the objective was to estimate the operational benefits of transportation service coordination.

For seven of the eight of the agencies in *The Collaborative*, CILA-to-day program transportation and community routes are the two primary pillars of daily transportation activities; all eight agencies operate CILA routes and seven of the eight agencies (all except Sertoma Centre) operate community routes. From a technical vehicle routing perspective, the problem resembles a school bus routing problem, with some unique characteristics regarding the transportation of individuals with IDD. Both CILA routes and community routes need to arrive at a day program at a specific time in the morning and depart at a specific time in the afternoon. However, the number of stops each makes differs. For example, in the morning, CILA routes typically have two stops—boarding at the CILA and dropping off at the day program, while the community routes make multiple stops at each day program participant's residence before dropping off at the day program. As previously mentioned in this report, some individuals require WAVs and/or additional or specialized staff to be in the vehicle as well.

Using the school bus analogy, individuals or groups normally meet at their assigned bus stops for pick up (i.e., CILAs or an assigned community route stop) and travel to one school (i.e., day program) or, in some cases, more than one school (i.e., two different day programs or two different stops at a day program agency's campus) for drop off. Individuals picked up from the same CILA may be dropped off at multiple stops. AlphaRoute staff did not assign any individuals to stops; they instead received the individual-to-stop assignments from the agencies (i.e., the number of ambulatory or wheelchair residents in a CILA or at community routes stops). The agencies also provided the day program that each stop (CILA or community route) is associated with.

A list of all available vehicles (buses) per agency, along with their garage locations and seating capacities, was entered in the system. While the vehicles used for community routes and midday field trips, work trips, and medical trips that emanate from the day program facilities are generally *garaged* at the day program, CILA vehicles and the DSPs who drive the CILA vehicles originate from the CILA. After the morning drop-off, these vehicles are either returned to the CILA if the DSP is at the end of their shift or left at the day program if the DSP spends the day at the day program. Most often, the CILA vehicles are garaged at the CILA during the day. This widely distributed network of vehicles garaged at the CILAs deviates from traditional school bus or transit routing problems and is an important component of this specific vehicle routing problem.

AlphaPlan algorithms ingested all these data and evaluated millions of potential combinations to maximize efficiency by: (1) combining stops (i.e., CILA route or community route stops) into more efficient runs and (2) maximizing vehicle utilization (i.e., combining multiple runs for the same vehicle). AlphaPlan optimized both elements while respecting operational constraints and parameters, such as the maximum individual ride time of one hour.

5.2.4 Constraints and Output

AlphaPlan outputs included route information as driven by staff and ridden by passengers on a regular operational day. This route information included: (1) stop-to-run assignments with stop times and (2) run(s)-to-vehicle assignments with turn-by-turn directions. Passengers-to-stop assignments were treated as a given because passengers were already assigned to their specific CILA or community route by each agency.

The route optimization outputs also included travel times; the traffic factors affecting travel times were calculated using high quality, commercially available data from HERE Technologies. At each stop, loading and unloading times were set to 1.5 minutes per ambulatory passenger and 5 minutes per wheelchair passenger. A maximum time onboard for each passenger was set to one hour, according to local regulations and general practice.

Vehicles were allowed to arrive at the day program between 30 and 5 minutes before the program start time and depart the day program between 10 and 30 minutes after the program end time. Vehicles were set to wait 10 minutes at the day program for passenger loading and unloading before departing for another run or other activity. Route definitions accounted for the vehicle types and maximum seating capacities provided by each agency.

Results were made available to each agency on AlphaRoute's software platform, providing agency managers and staff an opportunity to visualize and evaluate the routes and provide feedback. Nonetheless, not all agencies provided feedback on the routes.

5.2.5 Interpretation and Limitations of the Results

Despite considering most major operational rules, regulations, and routing constraints, the simulations were limited and could not account for all operational constraints and specific requirements from every individual in every agency. These simulation results should be viewed as important for supporting strategic decision-making regarding whether to pursue the coordination of services between *The Collaborative* members but should **not** be viewed as the final routes to be implemented. These results represent an upper bound of potential improvements. A refinement of the simulations results with a focus on implementation—either independently or in coordination—should be sufficient. Most likely these refinements will constrain the algorithms even further or force some routes to be split across two vehicles, which will somewhat temper the strong positive impacts from the original simulation results.

To evaluate the impact of coordination, AlphaRoute staff compared the aggregated metrics from the individually produced routes in AlphaPlan (i.e., intra-agency route consolidation) to the metrics from routes produced in a combined transportation effort under the same parameters in AlphaPlan (i.e., inter-agency route consolidation) utilizing the same datasets for vehicles, passengers, day programs, etc.). This approach allowed AlphaRoute staff to isolate the benefits of the routing algorithms and properly calculate the benefits attributable only to agency coordination.

5.2.6 Baseline (Existing) Conditions

Day Programs

As shown in Table 5-1, 29 different day program facilities exist among *The Collaborative* agencies. Although the total number of day programs was consistent between the agency reported data and the AlphaPlan simulation, the number of day programs for select agencies differed in some cases. These differences could be explained by agency growth or market dynamics such as real estate transactions. Most of the day programs operate from 9:30 a.m. to 2:30 p.m. or from 10:00 a.m. to 3:00 p.m.

TABLE 5-1: DAY PROGRAM FACILITIES

Agency	Day Program Facilities	ICF Day Program Facilities	AlphaPlan Simulation[1] (Active)
Blue Cap	2		2
Clearbrook	3	3	10
CTF Illinois	6		6
Little City	2		3
New Star	2		1
Park Lawn	3		3
Ray Graham	4+3		4
Sertoma	1		1
Total	26	3	29

[1]Includes only day programs with assigned passengers.

CILAs, Apartment Buildings, and ICFs

Table 5-2 presents the number of CILAs, apartment buildings, and ICFs staffed by each agency. Altogether, *The Collaborative* agencies provide transportation to/from day programs for 168 residences. AlphaPlan simulation data contained 165 residences, indicating a small number of residences that do not provide transportation to day programs. The average number of transported residents per CILA was 5.25.

TABLE 5-2: CILAS, APARTMENT BUILDINGS, AND ICFS

Agency	CILAs	Apartment Buildings	ICFs	AlphaPlan Simulation		
				Residences	Transported Residents	Average Transported Residents per CILA
Blue Cap	9			8	50	6.25
Clearbrook	55		4	55	275	5.00
CTF Illinois	13			13	53	4.08
Little City	14	3		26	160	6.15
New Star	23			23	115	5.00
Park Lawn	8		2	8	35	4.38
Ray Graham	27			25	133	5.32
Sertoma	10			7	45	6.43
Total	159	3	6	165	866	5.25
	168			165		

Community Routes

Six of the eight agencies (all but Blue Cap and Sertoma Centre) operate community routes, which are designed to pick up individuals at their residence—or, in some cases, at another agency's nearby CILA—and transport them to their day program. A total of 66 community routes are operated by six agencies in *The Collaborative*, as shown in Table 5-3. Only one of the six agencies—CTF Illinois—provided sufficient data to include community routes in the AlphaPlan simulation.

TABLE 5-3: COMMUNITY ROUTES

Agency	Annual Passenger Trips in 2022 (Estimated or Actual)	Community Routes	AlphaPlan Simulation		
			Community Routes	Passengers	Average Passengers per Route
Blue Cap		0	0		
Clearbrook	48,480	6	0		
CTF Illinois	47,840	13	13	85	6.54
Little City	16,773	13	0		
New Star	2,916	12	0		
Park Lawn	10,584	9	0		
Ray Graham	10,441	13	0		
Sertoma		0	0		
Total		66	13		

Total Number of Passengers Routed

By combining CILA route data with available community route data, AlphaRoute staff constructed a dataset that contained a total of 951 passengers traveling to 29 day programs daily. Table 5-4 shows the distribution of routed passengers across the eight agencies in *The Collaborative*.

TABLE 5-4: COMBINED CILA AND COMMUNITY ROUTE PASSENGERS

Agency	Routed Passengers
Blue Cap	50
Clearbrook	275
CTF Illinois	139
Little City	160
New Star	115
Park Lawn	35
Ray Graham	133
Sertoma	44
Total	951

Outings, Work Trips, and Medical Trips

Table 5-5 summarizes the combined number of outings, work trips, and medical trips provided by the eight agencies in *The Collaborative*. Most outings are scheduled at least a week in advance, although some can be more spontaneous. Considering the dynamic nature of these trips and the potential for delays, the AlphaRoute staff considered these trips separately from the regular day program and community route trips. Some of the necessary fields for routing were missing from the outings data; however, enough information was available to draw limited conclusions.

TABLE 5-5: OUTINGS, WORK TRIPS, AND MEDICAL TRIPS

Agency	Period	Days	Trips	Average Trips per Day	Passengers	Average Passengers per Day
Blue Cap						
Clearbrook						
CTF Illinois	1/11/22–3/11/22	22	358	16.27	693	31.50
Little City	8/7/23–8/11/23	5	24	4.8	115	23
New Star						
Park Lawn	9/18/23–9/22/23	6	42	7	168	28
Ray Graham						
Sertoma	10/2/23–10/8/23	7	210	30	966	138
Total		40	634	15.85	1942	48.55

The data in Table 5-5 show that the number of combined outings, work trips, and medical trips was lower than the number of CILA route and community route trips. Nevertheless, the dynamic element of these trips can often overwhelm agency staff and disrupt daily transportation scheduling and services. Many agencies try to accommodate these trips with their own day program vehicle(s) rather than risk disrupting regular CILA and community routes. The average number of passengers per day (23–138 passengers per day) and trips per day (4.8–30 trips per day) indicated that some agencies conduct more and more frequent outings, work trips, and medical trips than others. Thus, the impacts of optimizing these types of trips may vary from one agency to another. Clearly, all agencies would benefit from a more systematic approach to these trips. Overall, these trips were not included in the simulations results.

Vehicles

The eight agencies in *The Collaborative* collectively obtain their fleet vehicles from three primary sources: (1) the Pace Advantage Program, (2) FTA Section 5310 funds for capital purchases (administered by IDOT), and (3) Enterprise's Rent-A-Car fleet services. Some agencies have also bought vehicles from local dealerships. Table 5-6 shows the total number of vehicles by source and type for each agency.

When constructing the vehicle baseline for the simulations, the 422 vehicles were assigned to either CILA or community routes according to the data provided. As shown in Table 5-7, 185 of the 422 total vehicles were actively in use serving the trips included in the simulations. These vehicles included 172 CILA route vehicles and 13 community route buses. This baseline number of vehicles was used to calculate the benefits of Simulation #1 using routing software. To facilitate the simulations, AlphaRoute staff entered all available vehicle data including garage location, seating capacity, etc. in the system. AlphaPlan algorithms then assigned vehicles to routes based on route characteristics to minimize the overall number of vehicles needed to serve all routes. The simulations results report the actual number of vehicles used.

TABLE 5-6: NUMBER OF VEHICLES BY SOURCE AND TYPE

Agency	Pace	IDOT	Enterprise	Agency	Total	Non-WAV	WAV
Blue Cap	0	2	14	3	19	17	2
Clearbrook	5	13	92	8	118	67	51
CTF Illinois	5	13	0	26	44	28	16
Little City	18				68		
New Star	15				50	28	22
Park Lawn	6	15	0	15	36		
Ray Graham	16	26	18	10	72	37	35
Sertoma	7	6	0	2	15	4	11
Total	72				422		

TABLE 5-7: NUMBER OF VEHICLES BY TRANSPORTATION USE

Agency	All	CILA[1]	Community Routes[1]
Blue Cap	19	8	0
Clearbrook	118	63	0
CTF Illinois	44	13	13
Little City	68	22	0
New Star	50	23	0
Park Lawn	36	8	0
Ray Graham	72	25	0
Sertoma	15	10	0
Total	422	172	13

[1]CILA and community route vehicles included in the simulation data.

5.3 Blue Cap

5.3.1 Existing Conditions/Available Data

CILAs

Blue Cap has nine CILAs—eight are traditional CILAs as part of their residential program, while the remaining one is an ICILA with no assigned location (see Figure 5-5).

Day Programs

Blue Cap operates two day programs (see Table 5-8 and Figure 3-1), although CILA residents are only transported to the day program located at 1962 Broadway Street. Day programs typically operate from 8:00 a.m. to 4:00 p.m. Vehicles from the CILAs arrive between 8:30 and 9:00 a.m. (when the programming starts). Transportation for homebound individuals in the community (either through private vehicles or Pace ADA Paratransit Services) are supposed to arrive in the same time window.

Community Routes

When the COVID-19 pandemic began, Blue Cap ceased providing community routes to the day programs for individuals living independently in the community. Currently, all 29 of these individuals use either Pace ADA Paratransit Services or transportation offered by a parent/guardian. For those using Pace ADA Paratransit Services to get to the day program, Blue Cap provides the individuals with fare tickets.

FIGURE 5-5: BLUE CAP LOCATIONS OF CILAS AND DAY PROGRAMS

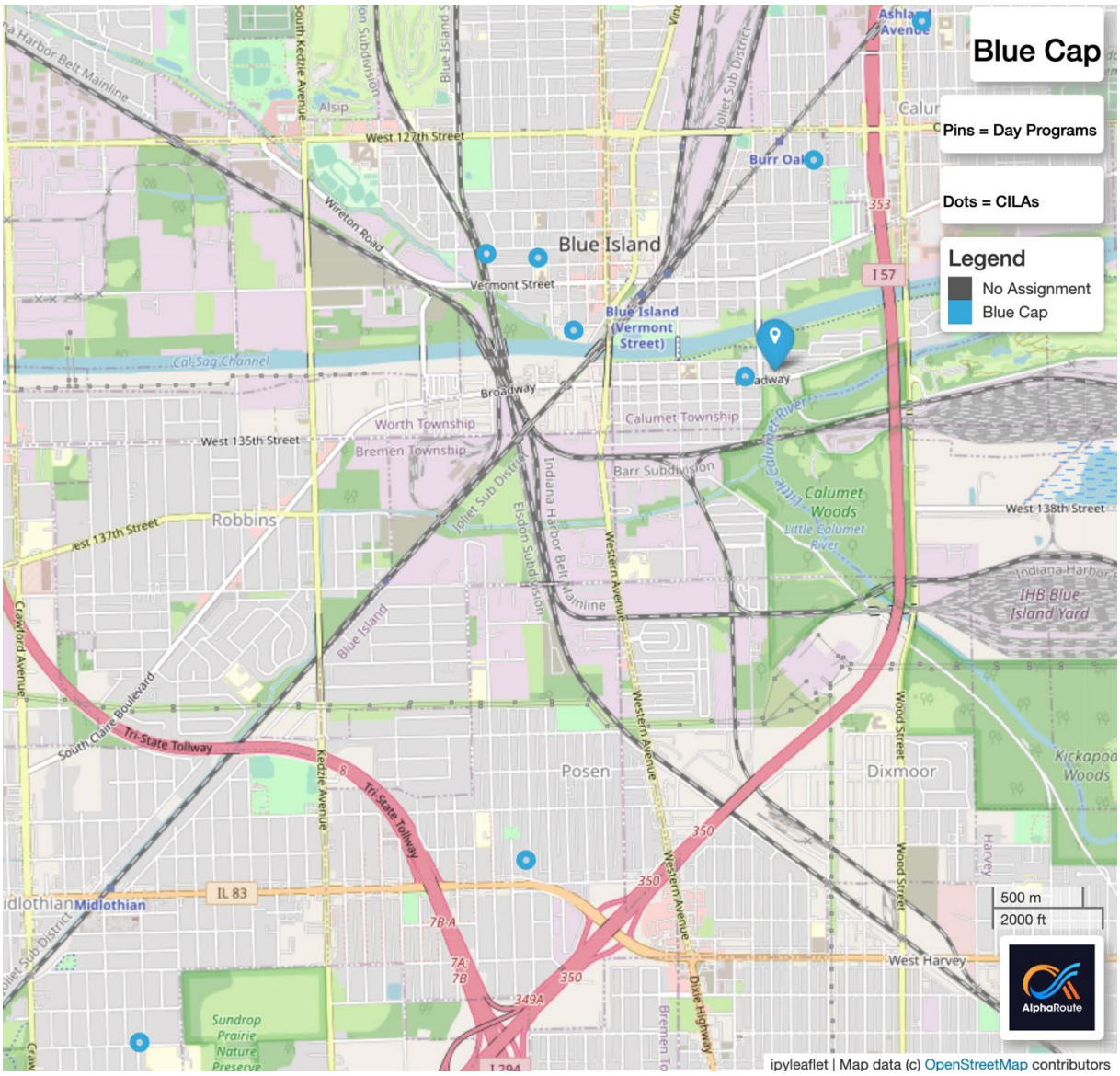


TABLE 5-8: BLUE CAP DAY PROGRAM LOCATIONS AND START/END TIMES

Program	Address	Start Time	End Time	Agency
Life Enrichment	1962 Broadway St. Blue Island, IL 60406	8:30 a.m.	2:30 p.m.	Blue Cap
Life Enrichment	2155 Broadway St. Blue Island, IL 60406	8:30 a.m.	2:30 p.m.	Blue Cap

Outings, Work Trips, and Medical Trips

Outings emanating from the day programs vary depending on the week and the desired destination based on planned activities. The DSPs serve as the drivers for outing trips. Blue Cap provides transportation to work for some individuals attending day programs. Depending on the work schedule, the individual may get transportation from work to the day program or from the day program to their CILA or residence in the community. Blue Cap provides approximately 20 medical trips per week using either vans that are designated for medical trip purposes or other agency vehicles.

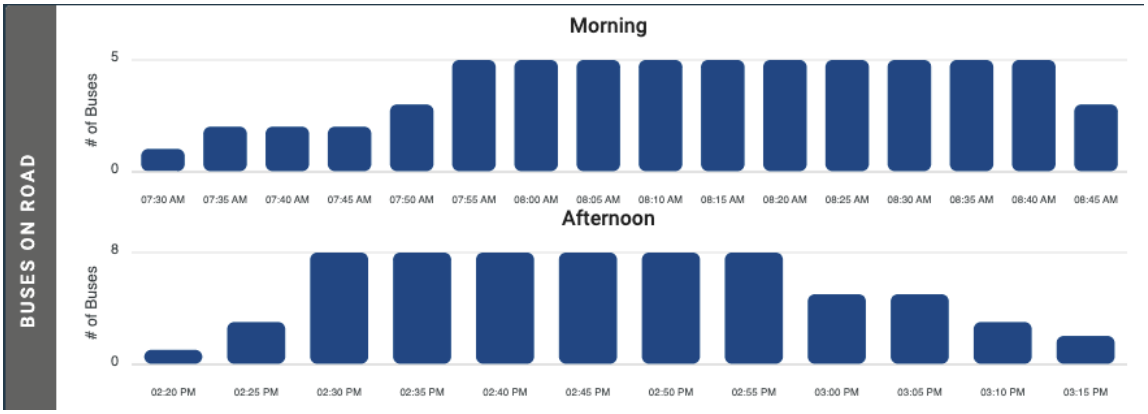
Available Fleet

Blue Cap has access to 19 vehicles that have been obtained from IDOT, leased from Enterprise Rent-A-Car, or purchased by the agency; 9 of these vehicles are assigned for CILA-to-day program transportation.

5.3.2 AlphaPlan Simulation Results

Blue Cap did not provide any additional information for the simulations, requiring some assumptions to be made by AlphaRoute staff. Figure 5-6 shows the AlphaPlan simulation results for Blue Cap based on the vehicle fleet information provided, which included seating capacities and garage locations. A total of eight vehicles were needed to transport passengers from the CILAs to the day programs; AlphaPlan algorithms were unable to reduce the number of vehicles used for the CILA routes.

FIGURE 5-6: BLUE CAP SIMULATION RESULTS: ACTIVE VEHICLES ON THE ROAD PER HOUR



The primary routing statistics from the simulation included the following:

- Number of passengers routed=50 passenger.
- Number of active day programs=1 program.
- Vehicles utilized=8 vehicles.
- Average number of passengers per run=5 passengers.
- Average number of runs per vehicle=2.5 runs.
- Average time in the vehicle=12 minutes.
- Maximum time in the vehicle=35 minutes.
- Average run duration=20 minutes.
- Maximum run duration=35 minutes.
- Average mileage per run=3 miles.
- Maximum mileage per run=8 miles.
- Total daily transportation hours=9:44 hours.

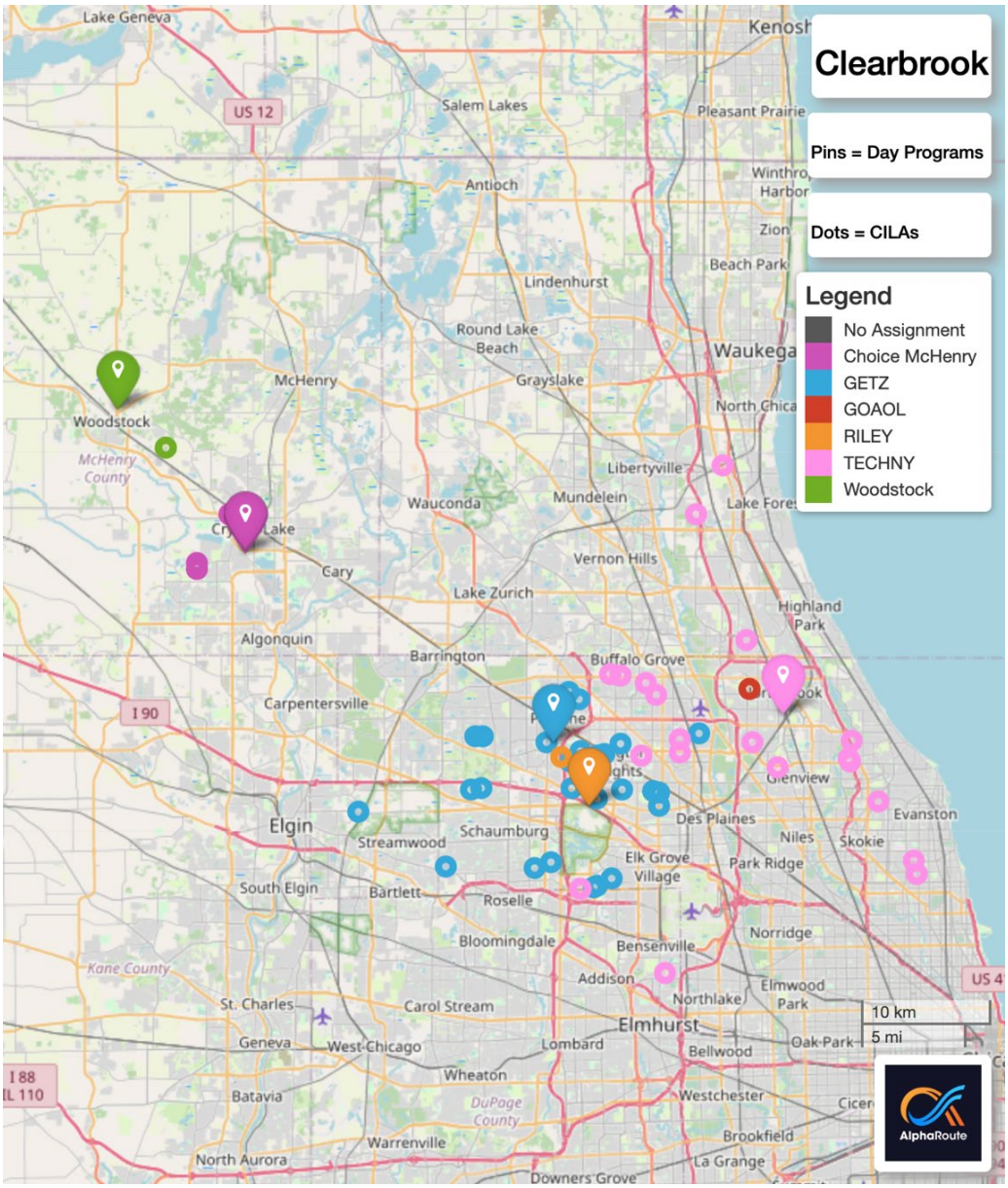
5.4 Clearbrook

5.4.1 Existing Conditions/Available Data

CILAs

Each of Clearbrook's 55 CILAs map to a specific day program: 5 CILAs map the Crystal Lake facility, 24 CILAs map to the Getz facility, and 26 map to the Techny facility. Clearbrook assigns at least one vehicles to each of the 55 CILAs; 8 of the CILAs have two vehicles. Figure 5-7 shows the locations of these CILAs.

FIGURE 5-7: CLEARBROOK LOCATIONS OF CILAS AND DAY PROGRAMS



Clearbrook's data for its 55 CILAs included which residents attend which, if any, day program(s) and which residents have special needs (i.e., requirements for WAVs). AlphaRoute staff constructed a detailed dataset that mapped each individual transportation need to a specific day program. In total, 275 residents were routed—an average of 5 transported residents per CILA.

Day Programs

Clearbrook operates 11 different day programs and also transports individuals to 5 non-Clearbrook operated day programs. Table 5-8 lists the day program locations, along with their start and end times. Data was provided for all 11 Clearbrook operated and 4 of 5 non-Clearbrook operated day programs.

TABLE 5-9: CLEARBROOK DAY PROGRAM LOCATIONS AND START/END TIMES

Program	Address	Start Time	End Time	Agency
Wilke	3802 Old Wilke Rd. Rolling Meadows, IL 60008	N/A	N/A	Clearbrook
DT Aces/Krause	3201 W. Campbell Rd. Rolling Meadows, IL 60008	8:30 a.m.	3:30 p.m.	Clearbrook
Getz	746 S. Vermont St. Palatine, IL 60067	8:30 a.m.	3:30 p.m.	Clearbrook
Techny	1945 Techny Rd., Suite 3 Northbrook, IL 60062	8:30 a.m.	3:30 p.m.	Clearbrook
Commons	3201 W. Campbell Rd. Rolling Meadows, IL 60008	N/A	N/A	Clearbrook
Wright Home	34377 N. Almond Rd. Gurnee, IL 60031	N/A	N/A	Clearbrook
Riley	2100 Golf Rd. Rolling Meadows, IL 60008	9:00 a.m.	3:00 p.m.	Clearbrook
Fairfax	3980 Fairfax Rd. Rolling Meadows, IL 60008	N/A	N/A	Clearbrook
DT North	1225 Tri-State Pkwy. Gurnee, IL 60031	8:30 a.m.	3:30 p.m.	Clearbrook
Choice-McHenry	6500 Northwest Hwy. Crystal Lake, IL 60014	8:30 a.m.	3:30 p.m.	Clearbrook
Choice-Woodstock	1010 North Seminary Ave. Woodstock, IL 60098	8:30 a.m.	3:30 p.m.	Clearbrook
AOL	1963 Johns Dr. Glenview, Il 60025	9 a.m.	4 p.m.	Non-Clearbrook
Goaol	8170 N McCormick Blvd. Skokie, IL 60076	9 a.m.	4 p.m.	Non-Clearbrook
Pioneer	13707 W Jackson St. Woodstock, IL 60098	9 a.m.	4 p.m.	Non-Clearbrook
Avenues	515 Busse Hwy. Park Ridge, IL 60068	9 a.m.	4 p.m.	Non-Clearbrook
Little City	2360 Palmer Dr. Schaumburg, IL 60173	9 a.m.	4p.m.	Non-Clearbrook

Community Routes

Clearbrook also operates six weekday community routes out of the Crystal Lake and Getz day program locations. These routes bring individuals living in the community (i.e., in family residences and in CILAs not affiliated with Clearbrook) to/from their day programs. Generally, the mapping is based on proximity to the day program location to align with the Illinois DHS requirement that prevents any individual from being on a vehicle for more than one hour. Five routes emanate from the Getz facility, while one route emanates from the Crystal Lake facility. Due to a lack of data, however, the six weekday community routes were not included in the simulations and the associated vehicle count was removed from the analysis.

Outings, Work Trips, and Medical Trips

In addition to the CILA vehicles, Clearbrook has a fleet of 15 vehicles—4 at the Crystal Lake facility, 11 at the Getz facility, and 2 at the Techny facility—that are used for community routes as well as midday and after-hours program outings. Eight additional vehicles serve as backup vehicles. Clearbrook also has two programs that focus on providing work opportunities for the individuals it serves. Its Community Employment Services (CES) department, which coordinates most of the work opportunities, has four vehicles dedicated to providing work trips. Clearbrook has a medical appointment coordinator at each day program facility, who arranges for medical appointments and arranges for staff to drive individuals to/from the medical appointments from the day program facilities and stay with individuals during the appointments. At Crystal Lake, their single day program vehicle is also used for travel to/from medical appointments. Each of the other two day program sites have two dedicated drivers and vehicles—four total drivers and four total vehicles—dedicated to trips to/from medical appointments.

Available Fleet

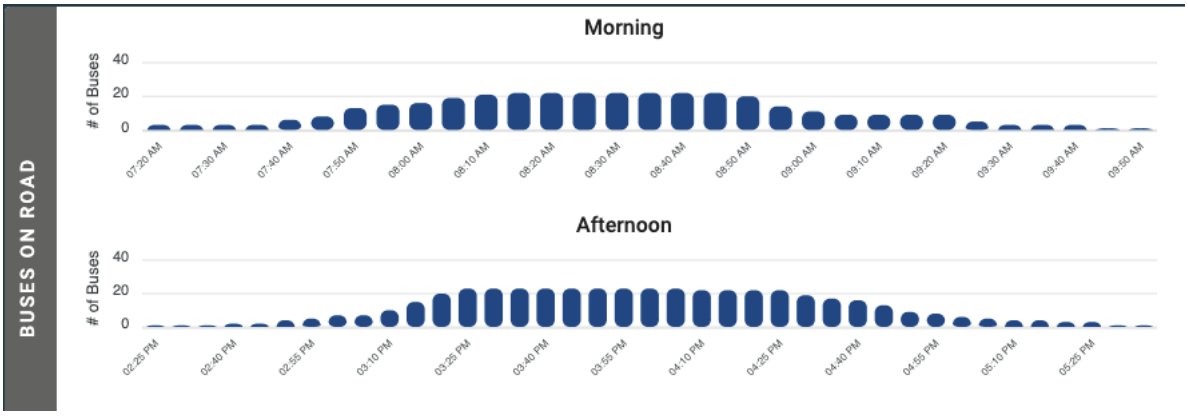
Clearbrook provided a fleet database file that provided information on its 86 vehicles, including seating capacities and garage locations. Of these 86 vehicles, 63 were used for CILA routes.

5.4.2 AlphaPlan Simulation Results

CILA-to-Day Program Routing Results

Based on the Clearbrook data, AlphaPlan algorithms were able to transport 275 CILA residents to 10 active day programs utilizing just 23 vehicles, compared to the 63 vehicles currently utilized to serve Clearbrook's CILA residents. Figure 5-8 shows the hour-by-hour vehicle needs based on simulation. These results were achieved by combining the CILAs into the same runs and allowing CILA vehicles to perform multiple runs in the morning and afternoon.

FIGURE 5-8: CLEARBROOK SIMULATION RESULTS: ACTIVE VEHICLES ON THE ROAD PER HOUR



The primary routing statistics from the simulation included the following:

- Number of passengers routed=275 passengers.
- Number of active day programs=10 programs.
- Vehicles utilized=23 vehicles.
- Average number of passengers per run=8.9 passengers.
- Average number of runs per vehicle=2.7 runs.
- Average time in the vehicle=25 minutes.
- Maximum time in the vehicle=59 minutes.
- Average run duration=39 minutes.
- Maximum run duration=59 minutes.
- Average mileage per run=18.71 miles.
- Maximum mileage per run=30 miles.
- Total daily transportation hours=63:35 hours.

Costs

Utilizing data provided by the agency in the Clearbrook_CILA_DAYPrograms_MAP_5.15.2023 file, AlphaRoute staff estimated a total of 66.57 daily transportation hours under Clearbrook's current operations. Using a reference hourly cost per hour of $24.38, this estimate totals $389,514.38 over 240 annual days of attendance. This cost total includes vehicle leasing payments and costs for the Pace Advantage Program, but excludes capital costs. Applying this same estimation methodology to the AlphaPlan simulation results, AlphaRoute staff estimated a cost of $372,038 over 240 annual days of attendance (63:35 hours×$24.38×240 days=$372,038.60)—a savings of up to $17,475 in operational costs per year for the same group of transported passengers. This estimated savings does not include the reduction in capital costs of the fleet.

5.5 CTF Illinois

5.5.1 Existing Conditions/Available Data

CILAs

CTF Illinois has 13 CILAs with 4–6 beds each (sometimes more). Each CILA has a non-Pace vehicle assigned to its location for transportation to the day programs. CTF Illinois provided data for these 13 CILAs including anonymized information for each resident such as home address, program address, mode of transport, and required accommodations (i.e., requirement for WAV). AlphaRoute staff constructed a detailed dataset that mapped each individual transportation need to a specific day program. In total, 139 individuals were routed, 53 of which were residents. These totals equate to an average of 4.07 transported residents per CILA. Figure 5-9 shows the locations of these CILAs.

Day Programs and Other Destinations

CTF operates five day programs in total: the Access Behavioral Health Program, Crestwood, the Lifestyles Academy, RITA, and Thrive. While not a day program per se, Painted Turtle was also added to the list as a destination. Table 5-9 lists the locations of these day programs, along with their hours of operation.

FIGURE 5-9: CTF ILLINOIS LOCATIONS OF CILAS AND DAY PROGRAMS

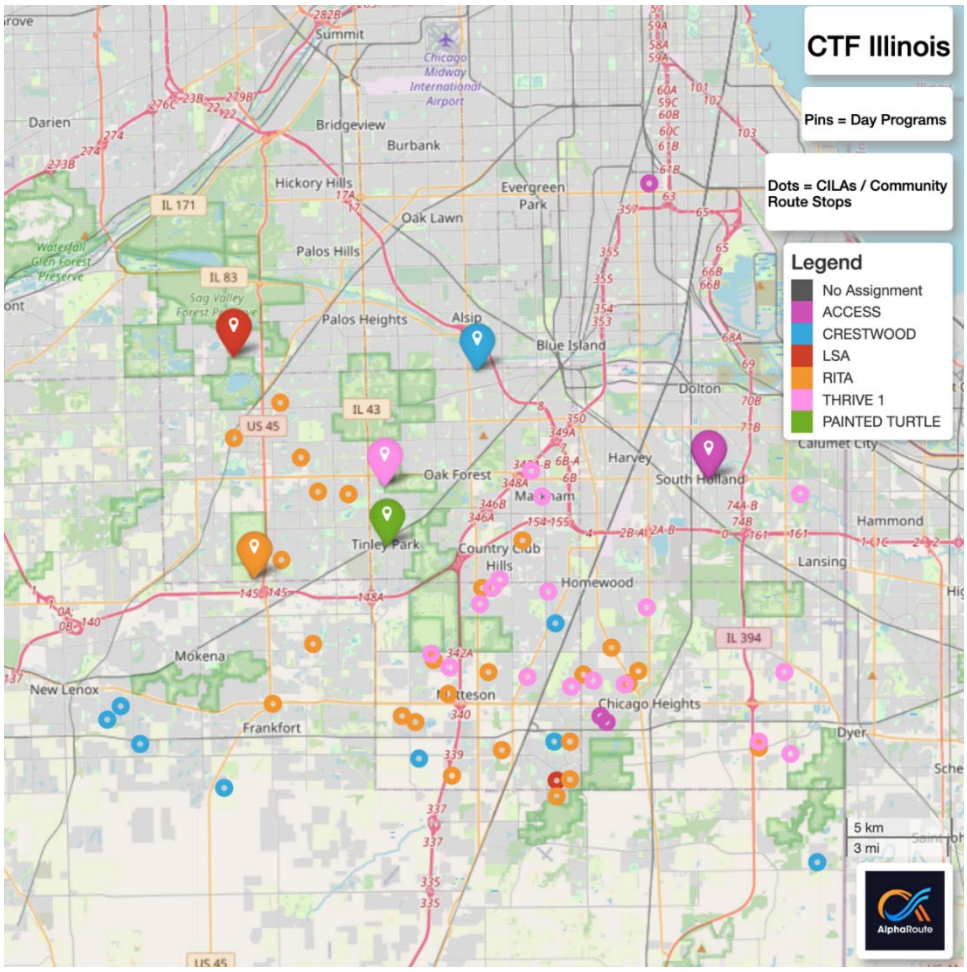


TABLE 5-10: CTF ILLINOIS DAY PROGRAM LOCATIONS AND START/END TIMES

Program	Address	Start Time	End Time	Agency
Access	530 East 162nd St. South Holland, IL 60473	8:00 a.m.	3:00 p.m.	CTF Illinois
Crestwood	4735 West 135th St. Crestwood, IL 60445	7:00 a.m.	2:00 p.m.	CTF Illinois
Lifestyles Academy	10300 West 131st St. Palos Park, IL 60464	8:30 a.m.	2:30 p.m.	CTF Illinois
Painted Turtle	17459 Oak Park Ave. Tinley Park, IL 60477	8:30 a.m.	2:30 p.m.	CTF Illinois
RITA	18230 Orland Pkwy. Orland Park, IL 60467	8:30 a.m.	2:30 p.m.	CTF Illinois
Thrive	6800 Centennial Dr. Tinley Park, IL 60477	9:00 a.m.	3:00 p.m.	CTF Illinois

Community Routes

CTF Illinois currently operates 13 community routes that provide transportation for individuals living in the community to their day programs. Additionally, routes may be used to pick up individuals from non-CTF Illinois CILAs who attend CTF Illinois day programs. These routes collectively transport 86 individuals—an average of 6.61 individuals per community route.

These routes use a mixture of Pace Advantage Program, IDOT, and agency-owned vehicles. Each route is numbered 1 through 13 and has a shorthand name associated with it. All community route vehicles hold between 10 and 14 passengers, and some have wheelchair capacity. The actual number of riders per route can range from 4 to 10 depending on how CTF Illinois sets up the route paths. Vehicles drop off people at different facilities, usually in a big loop. One route is used to transport individuals from the Kings CILA to their day program at RITA on time.

Outings, Work Trips, and Medical Trips

Vehicles used for day program outings are determined based on the attendees and destination. RITA and Thrive both use 2 or 4 vehicles per day for outings transportation. The Lifestyles Academy also has outings that are handled by the DSPs. A variety of destinations exist for day program outings, some going as far as downtown Chicago. The Crestwood facility is an employment center for working individuals served by CTF Illinois. The facility has three vehicles stationed there for outings. Transportation for CILA residents' medical appointments at CTF Illinois is coordinated through the nursing team and CTF Illinois Health Care Coordinator. A minivan with a ramp is stationed at Thrive and is used for medical appointment trips during the day for individuals traveling from the RITA or Thrive locations.

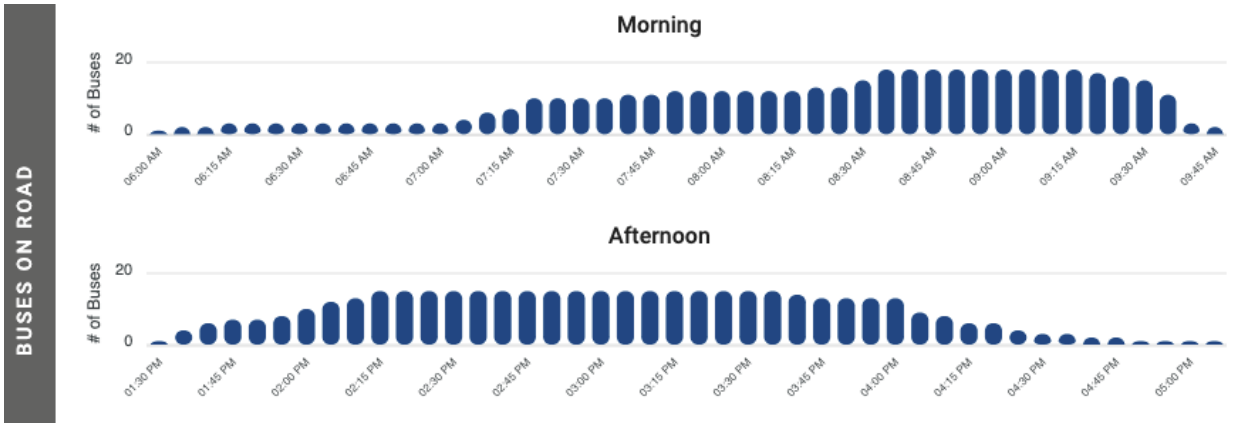
Available Fleet

CTF Illinois has an available fleet of 44 vehicles; 13 are used for CILA transportation and 13 are used for community routes. The AlphaPlan simulation utilized the vehicle data from CTF Illinois' equipment list, which included seating capacities and garage locations.

5.5.2 AlphaPlan Simulation Results

Based on the CTF Illinois data, AlphaPlan algorithms were able to transport 139 passengers to 6 day programs utilizing just 18 vehicles, compared to the26 vehicles currently utilized to serve CTF Illinois' CILA residents and community routes. Figure 5-10 shows the hour-by-hour vehicle needs based on simulation. These results were achieved by combining CILA and community route stops, combining CILAs into the same runs, and allowing CILA vehicles to perform multiple runs in the morning and afternoon.

FIGURE 5-10: CTF ILLINOIS SIMULATION RESULTS: ACTIVE VEHICLES ON THE ROAD PER HOUR



The primary routing statistics from the simulation included the following:

- Number of passengers routed=139 passengers.
- Number of active day programs=6 programs.
- Vehicles utilized=18 vehicles.
- Average number of passengers per run=5.1 passengers.
- Average number of runs per vehicle=3 runs.
- Average time in the vehicle=34 minutes.
- Maximum time in the vehicle=58 minutes.
- Average run duration=48 minutes.
- Maximum run duration=59 minutes.
- Average mileage per run=28.22 miles.
- Maximum mileage per run=34 miles.
- Total daily transportation hours=63:37 hours.

5.6 Little City Foundation

5.6.1 Existing Conditions/Available Data

CILAs and Apartment Buildings

The Little City Foundation has 14 CILAs spread over a broad area in northwest Chicagoland; each CILA houses up to 6 residents. The Little City Foundation also has 3 on-campus apartment buildings that currently house 52 residents. The CILA and on-campus residents who attend day programs all go to the Countryside Center. Some also go to the Center for Employment and Business Opportunities (CEBO) building on campus, which serves as a hub for work trips. No CILAs map to the Grayslake facility. Figure 5-11 shows the locations of these CILAs.

The Little City Foundation assigns one vehicle (usually a minivan or a WAV where needed) to each of the 14 CILAs. The 14 vehicles are used to bring CILA residents to/from the Countryside Center on weekdays. The Little City Foundation also has another 5 vehicles that back up this fleet and other fleets, bringing the total available vehicles to 19. Additional spare vehicles are needed approximately two to three times per week. The Little City Foundation assigns another 8–10 vehicles to the on-campus apartments.

The Little City Foundation provided data for all of its CILAs or group residences, including information for residents such as home address, program address, and accommodations needed (i.e., requirement for WAV). The SLA CILA does not require transportation and the Prairie CILA was closed according to the data. Several CILAs have residents that are split between the Countryside and CEBO programs. AlphaRoute staff constructed a detailed dataset that mapped each individual transportation need to a specific day program. In total, 160 individuals were transported to day programs—an average of 6.15 transported residents per CILA.

Day Programs

The Little City Foundation operates six day programs or other programs, including Countryside Center, Foster Care and Adoption, Main Campus, Grayslake Center, Therapeutic Day Schools, and Center for Employment. Table 5-10 lists the locations and day program start and end times. The locations of the day programs are also shown in Figure 5-11. Note that only three of these programs—Countryside, CEBO, and Therapeutic Day Schools—have associated CILA transportation.

FIGURE 5-11: LITTLE CITY FOUNDATION LOCATIONS OF CILAS AND DAY PROGRAMS

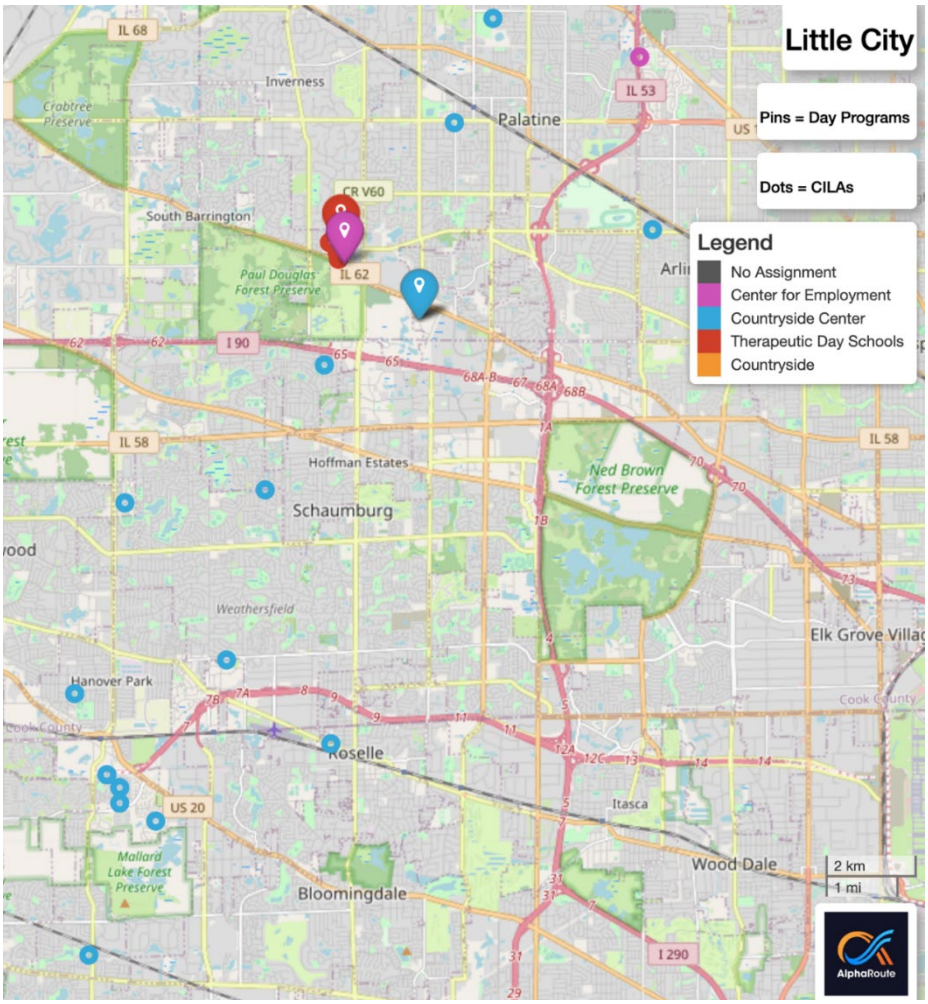


TABLE 5-11: LITTLE CITY FOUNDATION DAY PROGRAM LOCATIONS AND START/END TIMES

Program	Address	Start Time	End time	Agency
Countryside Center	2360 Palmer Dr. Schaumburg, IL 60173	9:00 a.m.	2:30 p.m.	Little City
Foster Care and Adoption	700 N. Sacramento Blvd. Chicago, IL 60612	8:00 a.m.	5:00 p.m.	Little City
Main Campus	1760 W Algonquin Rd. Palatine, IL 60067	8:00 a.m.	4:30 p.m.	Little City
Grayslake Center	144 Commerce Dr. Grayslake, IL 60030	9:00 a.m.	2:30 p.m.	Little City
Therapeutic Day School	1600 Community Way Palatine, IL 60067	9:00 a.m.	3:15 p.m.	Little City
Center for Employment	1700 W Algonquin Rd. Palatine, IL 60067	9:00 a.m.	3:00 p.m.	Little City

Community Routes

The Little City Foundation also operates seven and six community routes out of the Countryside Center and the Grayslake facility, respectively, bringing individuals living in the community (not in affiliated CILAs) to/from these two day programs and to the on-campus CEBO building for work. These community routes operate on weekdays and follow established routes based on the individuals' home locations. At the time of this report's publication, the Little City Foundation had not provided data on their community routes.

Outings, Work Trips, and Medical Trips

Arranged by staff at each of the day program facilities, outings center around volunteerism, shopping, and recreation. Generally, outings take place in the midday, with transportation emanating from the day program facilities. After-hours/evening activities are arranged as well, with drivers typically picking up and dropping off individuals at their residences. At both the Countryside Center and Grayslake, staff use the seven vehicles stationed at each facility for these outings. The Little City Foundation's EDS staff is responsible for arranging for work and training opportunities for individuals, including travel to and from these locations in the community. After dropping off at Countryside, morning community routes and CILA routes drop off EDS workers at the CEBO building, which serves as a hub from where they will be driven to their work or training location using two vehicles dedicated to the EDS program. The staff at each day program facility arrange for medical appointments and for staff to drive individuals to/from the medical appointments from the day program facilities and to stay with the individuals during the appointments. For medical trips in the community, DSPs and CILA vehicles are generally used.

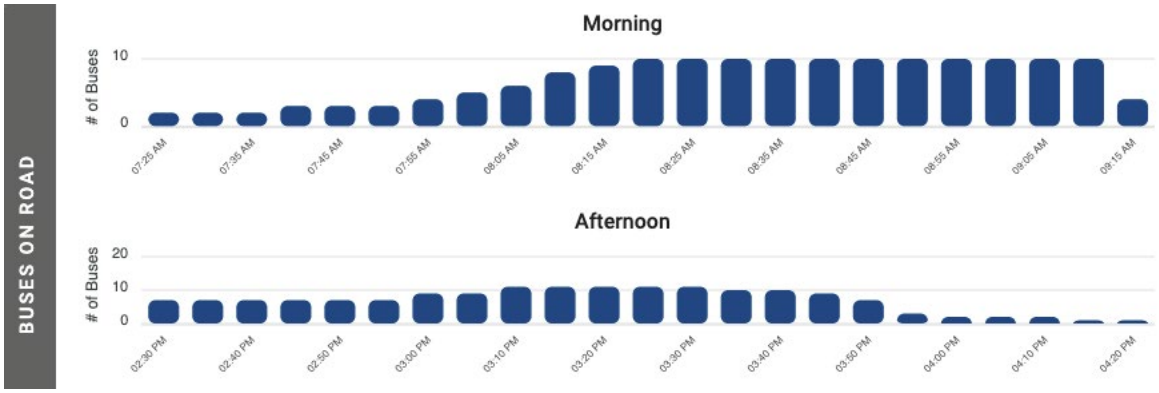
Available Fleet

The Little City Foundation's fleet list showed 68 vehicles used for transportation—50 vehicles are owned or leased by the agency while the remaining 18 are leased through the Pace Advantage Program. Based on the primary user information from the Vehicle Maintenance List file, a total of 44 vehicles are available, of which 14 are used for CILA routes.

5.6.2 AlphaPlan Simulation Results

Based on the Little City Foundation's data, AlphaPlan algorithms were able to transport 160 passengers to the 3 day programs utilizing just 11 vehicles, compared to the 14 and 8 vehicles currently serving CILA and apartment building residents, respectively, at the Little City Foundation. Figure 5-12 shows the hour-by-hour vehicle needs based on simulation. These results were achieved by combining CILAs into the same runs and allowing CILA vehicles to perform multiple runs in the morning and afternoon.

FIGURE 5-12: LITTLE CITY FOUNDATION SIMULATION RESULTS: ACTIVE VEHICLES ON THE ROAD PER HOUR



The primary routing statistics from the simulations included the following:

- Number of passengers routed=160 passengers.
- Number of active day programs=3 programs.
- Vehicles utilized=11 vehicles.
- Average number of passengers per run=9.7 passengers.
- Average number of runs per vehicle=3 runs.
- Average time in the vehicle=19 minutes.
- Maximum time in the vehicle=49 minutes.
- Average run duration=29 minutes.
- Maximum run duration=59 minutes.
- Average mileage per run=7 miles.
- Maximum mileage per run=19 miles.
- Total daily transportation hours=25:42 hours.

5.7 New Star

5.7.1 Existing Conditions/Available Data

CILAs

New Star has 23 CILAs in its residential program—21 are agency-owned and 2 (Fern and Tina) are privately-owned. Each CILA has one vehicle stationed at its location, which the DSPs use to drive individuals to the day program at the Chicago Heights facility, and to medical appointments as needed. Figure 5-13 shows the locations of these CILAs.

New Star provided only limited data for the 23 CILAs. No information was available about the actual number of residents. As such, AlphaRoute staff estimated five residents per CILA going to the Chicago Heights Day Program. AlphaRoute staff constructed a detailed dataset that mapped each individual transportation need to a specific day program. In total, 115 residents were routed.

Day Programs

New Star operates one day program in Chicago Heights. While most individuals come to the day programs in Chicago Heights, many individuals work in the community. Some individuals also are transported to day programs at other agencies. New Star provided data for the one day program. For simulation purposes, all CILA residents were routed to this day program. Table 5-11 lists the location and start and end times for this day program. The location of this day program is also shown in Figure 5-13.

Community Routes

New Star operates 12 community routes that serve its day program at the Chicago Heights facility. These routes pick up individuals who live independently in the community. New Star routes also pick up individuals from CILAs owned by other agencies including Millennium Gardens, Progressive Homes, and CTF Illinois. These locations are naturally integrated into the routes.

Most vehicles are based at the Chicago Heights facility, both starting and ending their routes from there. New Star's 12 community routes with 145 passengers were not included in the simulation due to a lack of required data.

FIGURE 5-13: NEW STAR LOCATIONS OF CILAS AND DAY PROGRAMS

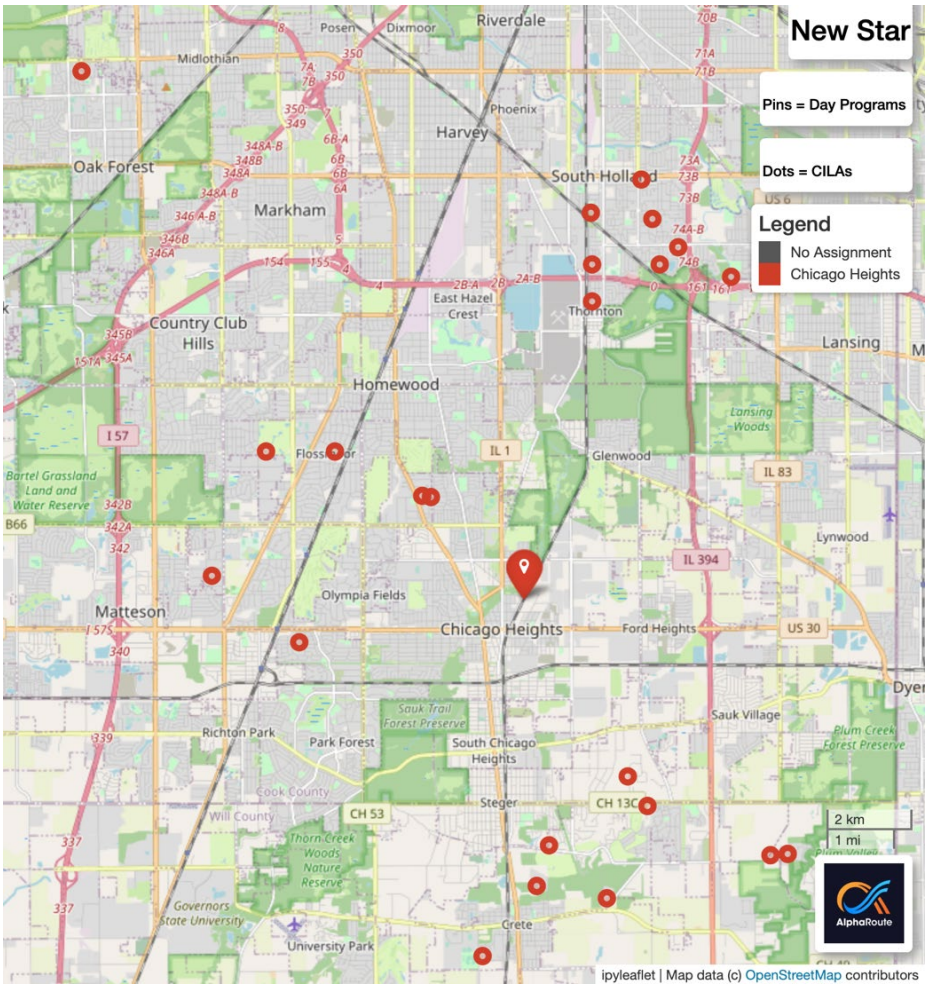


TABLE 5-12: NEW STAR DAY PROGRAM LOCATIONS AND START/END TIMES

Program	Address	Start Time	End Time	Agency
Chicago Heights	1005 West End Ave. Chicago Heights, IL 60411	8:00 a.m.	1:30 p.m.	New Star

Outings, Work Trips, and Medical Trips

The Community Lines program strives to have individuals in the community around 80 percent of the time. Midday outings emanating from the day programs are based on individual and production floor schedules. Nearly all DSPs are assigned to a daily outing trip. Several employment opportunities are provided through New Star's Production Lines and janitorial programs. The production floor at the Chicago Heights facility includes e-recycling and contract work that New Star brings in. Transportation for to/from work programs is administrated through the Transportation Department. Two vehicles are designated for use for these trips and the contract work destinations are set per the contract. The DSPs drive residents to medical appointments originating from the CILAs but not originating from the day program locations.

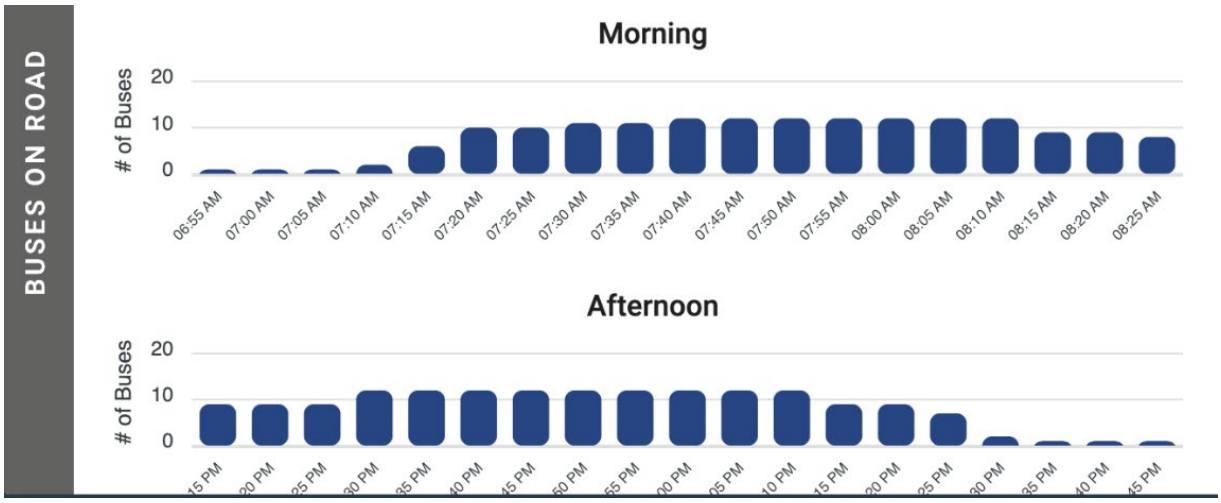
Available Fleet

New Star data shows a total of 46 available vehicles for transportation—23 are assigned to CILAs (one each), 10 are assigned to the day programs, and 2 are assigned to the Recreation Services program. Of these vehicles, 4–5 are spares, currently stationed at the Crete facility. New Star also has 15 Pace Advantage Program vehicles—14 are assigned to the day program site while 1 is stationed at the Crete location. Of the 14 day program vehicles, 2 are used for janitorial program trips.

5.7.2 AlphaPlan Simulation Results

Based on the New Star data, AlphaPlan algorithms were able to transport 115 CILA residents to 1 active day program utilizing just 12 vehicles, compared to the 23 vehicles currently utilized to serve New Star's CILA residents. Figure 5-14 shows the hour-by-hour vehicle needs based on simulation. These results were achieved by combining the CILAs into the same runs and allowing CILA vehicles to perform multiple runs in the morning and afternoon.

FIGURE 5-14: NEW STAR SIMULATION RESULTS: ACTIVE VEHICLES ON THE ROAD PER HOUR



The primary routing statistics from the simulations included the following:

- Number of passengers routed=115 passengers.
- Number of active day programs=1 programs.
- Vehicles utilized=12 vehicles.
- Average number of passengers per run=9.6 passengers.
- Average number of runs per vehicle=2 runs.
- Average time in the vehicle=22 minutes.
- Maximum time in the vehicle=39 minutes.
- Average run duration=31 minutes.
- Maximum run duration=40 minutes.
- Average mileage per run=8 miles.
- Maximum mileage per run=14 miles.
- Total daily transportation hours=24:25 hours.

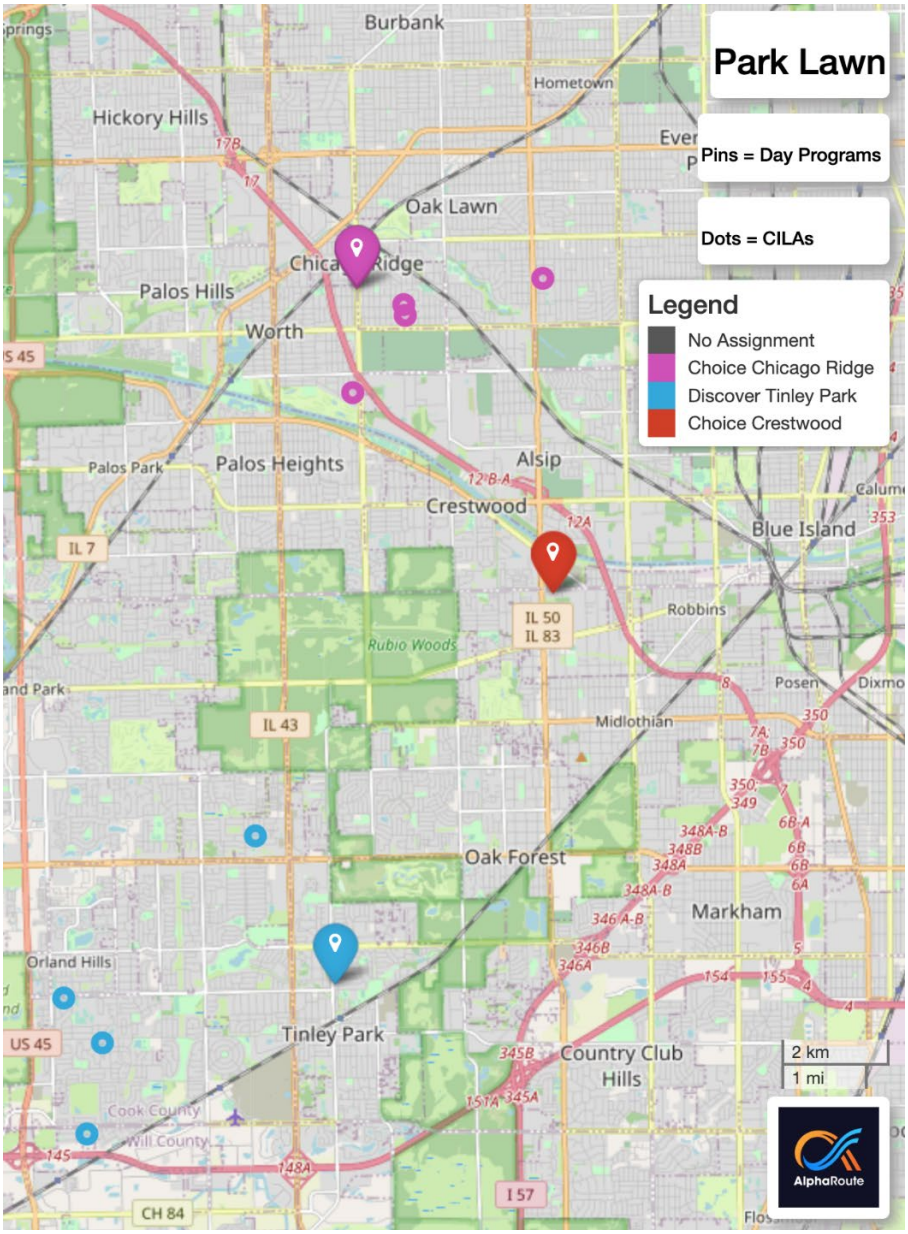
5.8 Park Lawn

5.8.1 Existing Conditions/Available Data

CILAs

Park Lawn owns and operates eight CILAs, each housing 4–6 individuals. The CILAs are single-family homes located in Worth, Oak Lawn, Orland Park, Chicago Ridge (2), and Tinley Park (3). Park Lawn also has two ICFs—Park Lawn Center and Park Lawn Homes. Park Lawn Center in Alsip provides 24-hour supervision and medical services for around 40 residents. Figure 5-14 shows the locations of these CILAs.

FIGURE 5-15: PARK LAWN LOCATIONS OF CILAS AND DAY PROGRAMS



Park Lawn provided data for the eight group residences, including anonymized day program attendance and special needs (i.e., requirement for WAV) for each individual. AlphaRoute staff constructed a detailed dataset that mapped each individual transportation need to a specific day program. In total, 35 residents were routed—an average of 4.375 transported residents per CILA.

Day Programs

Park Lawn operates five day programs—Connections, Choice-Crestwood, Choice-Chicago Ridge, Discover-Palos Heights, and Discover-Tinley Park. Table 5-12 lists the locations and day program hours of operation. The locations are also shown in Figure 5-15.

TABLE 5-13: PARK LAWN DAY PROGRAM LOCATIONS AND START/END TIMES

Program	Address	Start Time	End Time	Agency
Connections	10833 S. Laporte Ave. Oak Lawn, IL 60453	8:30 a.m.	3:30 p.m.	Park Lawn
Choice-Crestwood	4715 W. 135th St. Crestwood, IL 60418	8:30 a.m.	2:30 p.m.	Park Lawn
Choice-Chicago Ridge	6101 W. 107th St. Chicago Ridge, IL 60415	8:30 a.m.	3:30 p.m.	Park Lawn
Discover-Palos Heights	7530 College Dr. Palos Heights, IL 60463	8:30 a.m.	2:30 p.m.	Park Lawn
Discover-Tinley Park	17007 Oak Park Ave. Tinley Park, IL 60477	8:30 a.m.	3:30 p.m.	Park Lawn

Community Routes

Park Lawn currently has eight full-time drivers and one part-time driver who operate nine community routes that transport persons living in ICFs and the community. These individuals have different schedules for commuting to day programs; some participate five days a week, while others participate two or three days per week. In one case, a community route picks up individuals from a CILA because of DSP shortages. The number of people on each of the nine routes ranges from three to eight individuals. Due to a lack of data, Park Lawn's community routes were not included in the simulation and the associated vehicle count was removed from the analysis.

Outings, Work Trips, and Medical Trips

Midday programmatic outings are usually provided on most days, with departures from the day program facilities scheduled between 9:30 and 10:00 a.m. and arrivals to the day program facilities any time between 1:00 and 1:45 p.m. Park Lawn also provides transportation for CILA and homebound individuals traveling to worksites. Work trips always depart from and return to the day program facility. Park Lawn does not provide any medical trips from day program sites; all medical trips originate from CILAs, ICFs, or residential areas. A return trip from a medical appointment may, however, transport an individual to a day program for the remainder of the program day.

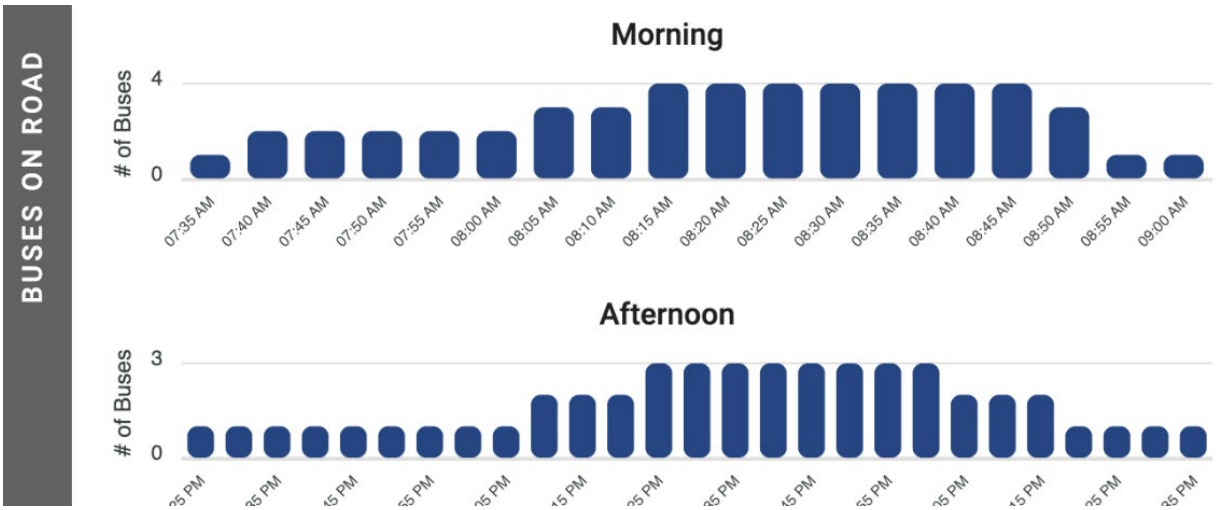
Available Fleet

Park Lawn has 15 of their own vehicles, 15 IDOT vehicles, and 6 Pace Advantage Program vans, totaling 36 vehicles. Choice-Oak Lawn and Choice-Crestwood each have two non-Pace vehicles for their outings. Five of these Pace vehicles operate daily, and one is a spare vehicle. Currently, eight vehicles are used for CILA routes.

5.8.2 AlphaPlan Simulation Results

Based on the Park Lawn data, AlphaPlan algorithms were able to transport 35 CILA residents to 3 active day programs utilizing just 4 vehicles, compared to the 8 vehicles currently utilized to serve Park Lawn's CILA residents. The Figure 5-16 shows the hour-by-hour vehicle needs based on simulation. These results were achieved by combining CILAs into the same runs and allowing CILA vehicles to perform multiple runs in the morning and afternoon.

FIGURE 5-16: PARK LAWN SIMULATION RESULTS: ACTIVE VEHICLES ON THE ROAD PER HOUR



The primary routing statistics from the simulations included the following:

- Number of passengers routed=35 passengers.
- Number of active day programs=3 programs.
- Vehicles utilized=4 vehicles.
- Average number of passengers per run=7.8 passengers.
- Average number of runs per vehicle=2.25 runs.
- Average time in the vehicle=20 minutes.
- Maximum time in the vehicle=35 minutes.
- Average run duration=28 minutes.
- Maximum run duration=37 minutes.
- Average mileage per run=5 miles.
- Maximum mileage per run=8 miles.
- Total daily transportation hours=7:17 hours.

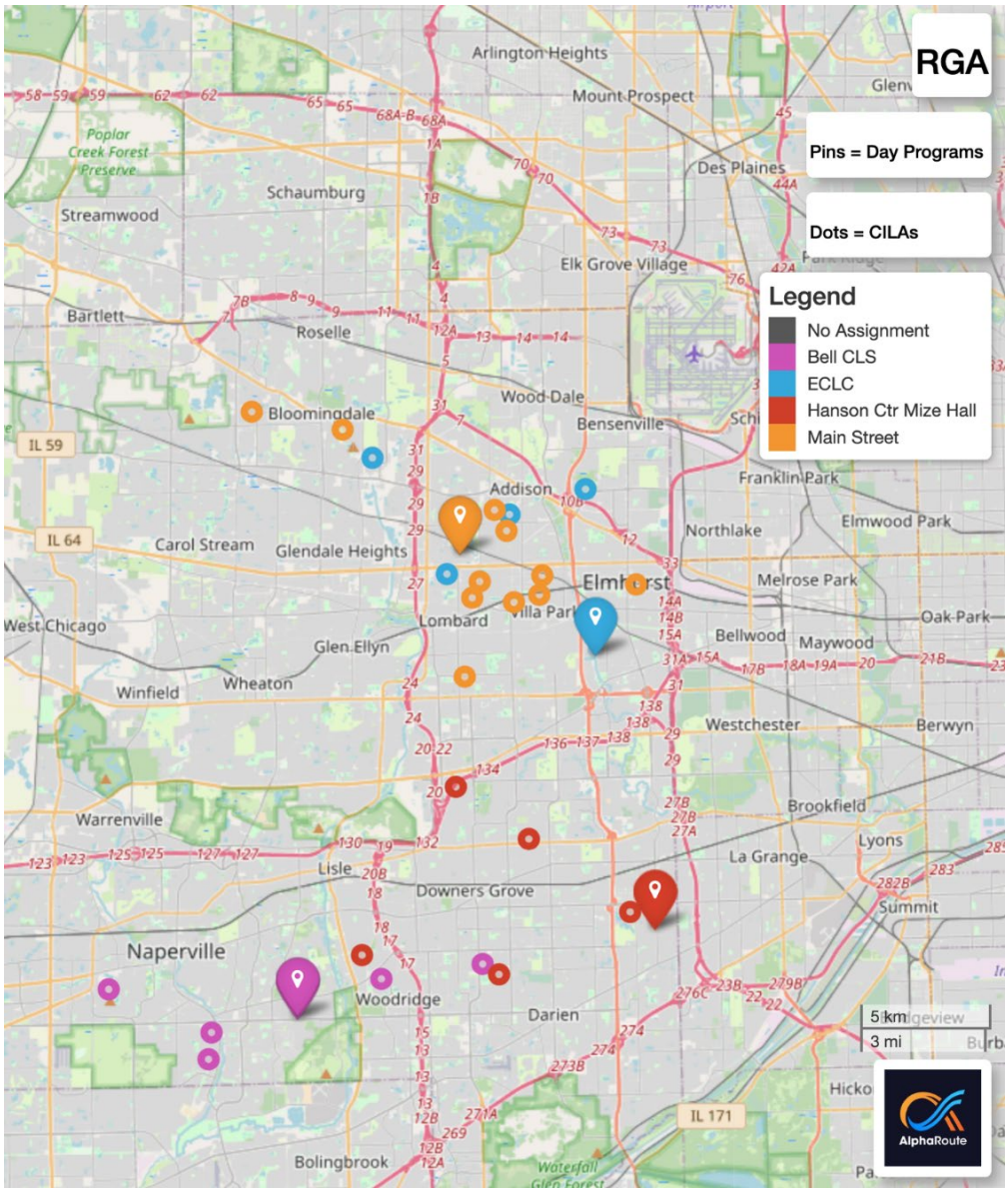
5.9 Ray Graham Association

5.9.1 Existing Conditions/Available Data

CILAs

The Ray Graham Association has a residential program with 28 CILAs scattered about DuPage County. Almost all CILAs map to a specific day program (or multiple day programs in two cases), meaning that residents from a specific CILA are taken to a specific day program site each weekday or each day of attendance. Residents of three of the CILAs—Highland, S. Jerue, and W. Chicago—do not attend day programs. Most CILAs house no more than eight residents. The Ray Graham Association assigns a minivan or a WAV to a CILA to bring CILA residents to the day programs. Figure 5-17 shows the locations of the CILAs.

FIGURE 5-17: RAY GRAHAM ASSOCIATION LOCATIONS OF CILAS AND DAY PROGRAMS



The Ray Graham Association provided data for 28 group residences, including anonymized information for each CILA resident such as home address, program address, mode of transport, and accommodations needed (i.e., requirement for WAV). AlphaRoute staff constructed a detailed dataset that mapped each individual transportation need to a specific day program. In total, 133 individuals were transported—an average of 5.32 transported residents per CILA.

Day Programs

The Ray Graham Association offers four day programs—Belle Center, Elmhurst, Hanson Center/Mize Hall, and Main Street. The Ray Graham Association also offers two Monarch programs in Burr Ridge and Naperville that are tailored to the transition needs of young adults. Table 5-14 shows the locations and hours of operation for the day programs. The locations are also shown in Figure 5-17. Note that CILA residents only attend the first four day programs listed; they do not attend the two Monarch programs.

TABLE 5-14: RAY GRAHAM ASSOCIATION DAY PROGRAM LOCATIONS AND START/END TIMES

Program	Address	Start Time	End Time	Agency
Belle Center	2035 E. 75th St. Naperville, IL 60565	9:00 a.m.	2:30 p.m.	Ray Graham
Elmhurst	420 W. Madison St. Elmhurst, IL 60126	9:00 a.m.	2:30 p.m.	Ray Graham
Hanson Center/ Mize Hall	15W431 59th St. Burr Ridge, IL 60527	9:00 a.m.	2:30 p.m.	Ray Graham
Main Street	1108 N. Main St. Lombard, IL 60148	9:00 a.m.	2:30 p.m.	Ray Graham
Monarch-Burr Ridge	15W431 59th St. Burr Ridge, IL 60527	9:00 a.m.	2:30 p.m.	Ray Graham
Monarch-Naperville	815 S. Washington Naperville, IL 60540	9:00 a.m.	2:30 p.m.	Ray Graham

Community Routes

Community routes are operated to transport individuals who live in the community (not in affiliated CILAs) to the day programs. The Ray Graham Association operates a total of 13 community routes—5 run out of Main Street, 3 run out of Elmhurst, 2 run out of Belle Center, and 3 run out of Hanson Center/Mize Hall. Although some information was available, the Ray Graham Association did not provide all necessary information required to simulate the community routes.

Outings, Work Trips, and Medical Trips

Outings are arranged by the day program staff and often involve sign-up sheets. Generally, these outings take place in the midday during program hours, with transportation emanating from the day program facilities. Drivers and DSPs are used to drive the vehicles. After-hours/evening activities (e.g., going to the movies, going out to dinner) are arranged as well. In these cases, drivers typically pick up and drop off individuals at their residence. The agency's work trip coordinator utilizes both vehicles based at the day programs. For individuals who a more independent and have a job, the work trip coordinator helps arrange work trips using Pace ADA Paratransit Services and Ride DuPage. The agency's medical appointment coordinator works with day program and CILA staff to arrange for medical appointments and for staff to drive individuals to/from the medical appointments from the day program facilities and to

stay with the individuals during the appointments. The medical appointment coordinator also utilizes Monarch program staff and vehicles for Monarch program participants going to medical appointments.

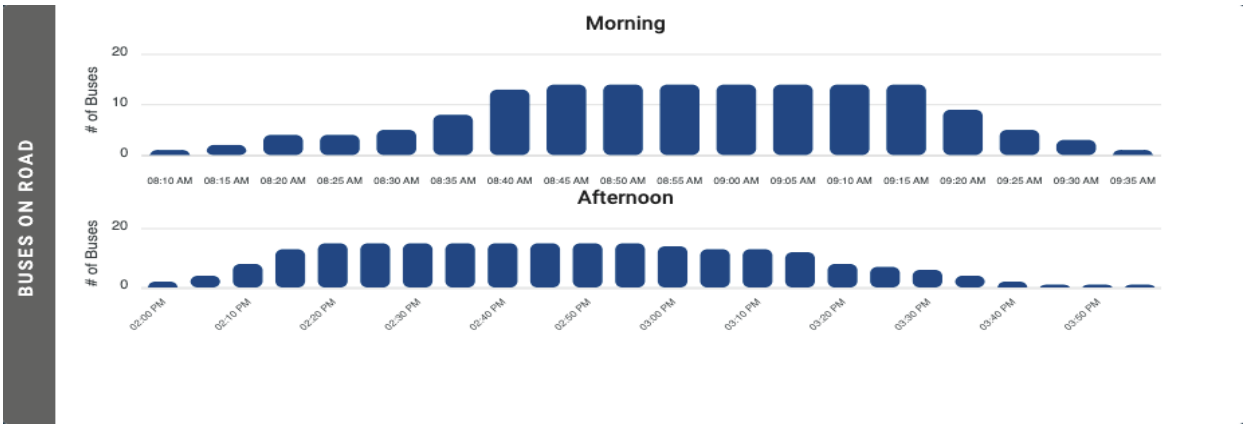
Available Fleet

Not including the 2 vehicles dedicated to the Gateway program, the Ray Graham Association's fleet list totals 72 vehicles used for the transport of individuals. The fleet is split evenly between non-accessible vehicles (37) and WAVs (37). Of these 72 vehicles, 25 plus 4 spares are utilized for CILA-to-day program transportation.

5.9.2 AlphaPlan Simulation Results

Based on the Ray Graham Association data, AlphaPlan algorithms were able to transport 133 passengers to 6 day programs utilizing just 15 vehicles, compared to the 25 vehicles currently utilized to serve the agency's CILA residents. Figure 5-18 shows the hour-by-hour vehicle needs based on simulation. These results were achieved by combining the CILAs into the same runs and allowing CILA vehicles to perform multiple runs in the morning and afternoon.

FIGURE 5-18: RAY GRAHAM ASSOCIATION SIMULATION RESULTS: ACTIVE VEHICLES ON THE ROAD PER HOUR



The primary routing statistics from the simulations included the following:

- Number of passengers routed=133 passengers.
- Number of active day programs=4 programs.
- Vehicles utilized=15 vehicles.
- Average number of passengers per run=8.9 passengers.
- Average number of runs per vehicle=2 runs.
- Average time in the vehicle=20 minutes.
- Maximum time in the vehicle=50 minutes.
- Average run duration=32 minutes.
- Maximum run duration=58 minutes.
- Average mileage per run=14.04 miles.
- Maximum mileage per run=18 miles.
- Total daily transportation hours=28:32 hours.

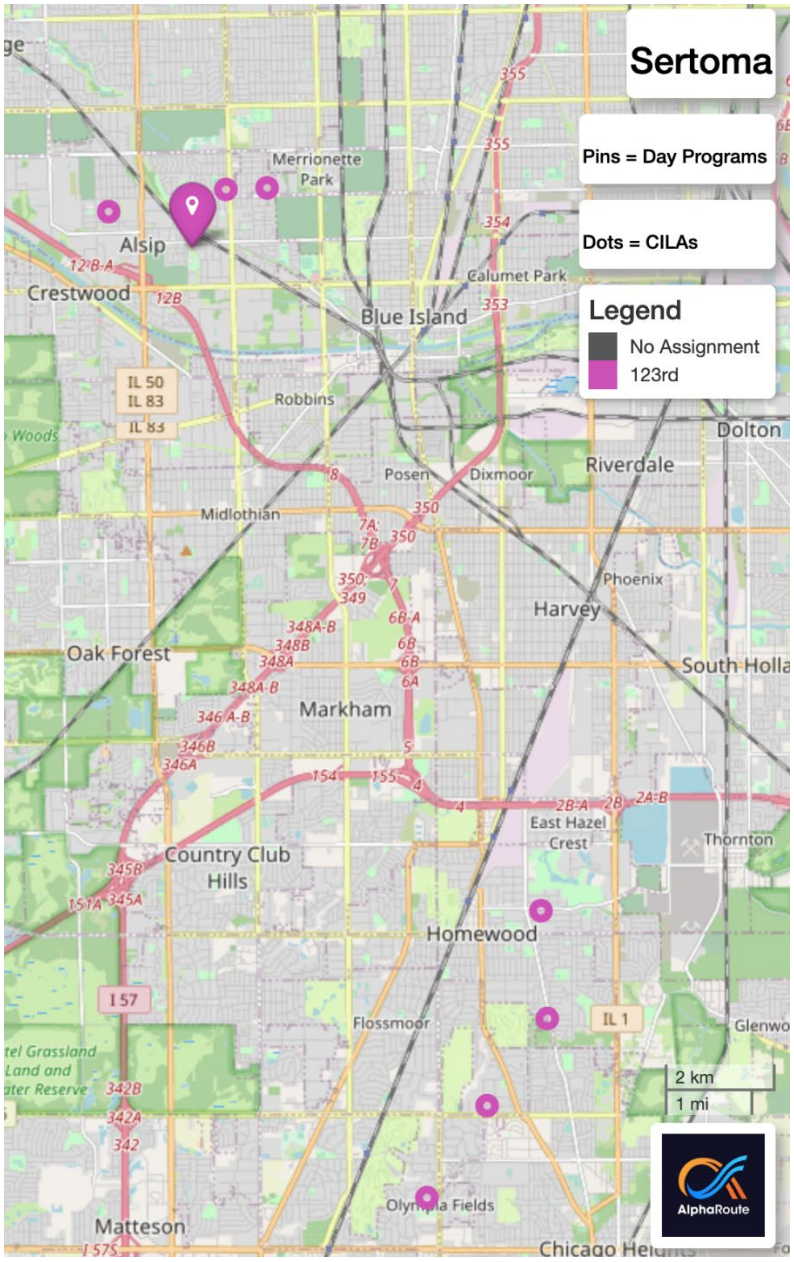
5.10 Sertoma Centre

5.10.1 Existing Conditions/Available Data

CILAs

Sertoma Centre has 10 CILAs and 2 ICILAs (the Ridgeway CILA is also an ICILA). Sertoma Centre assigns one non-Pace vehicle to each CILA for transportation to/from the day programs and for after-hours and weekend outings. Residents of the ICILAs, who are more independent, arrange for their own transportation (either through family or friends or through Pace ADA Paratransit Services). Figure 5-19 shows the locations of these CILAs.

FIGURE 5-19: SERTOMA CENTRE LOCATIONS OF CILAS AND DAY PROGRAMS



Sertoma Centre provided data for seven of the group residences, including anonymized information for each resident such as home address, program address, mode of transport, and accommodations needed (i.e., requirement for WAV). AlphaRoute staff constructed a detailed dataset that mapped each individual transportation need to a specific day program. In total, 45 individuals were routed—an average of 6.42 residents per CILA.

Day Programs

Sertoma Centre offers one day program at their 123rd Street location in Alsip for individuals from the community or from CILAs in Sertoma Centre's network. Table 5-15 lists the location and start and end times for this day program. The location of the day program is also shown in Figure 5-19.

TABLE 5-15: SERTOMA CENTRE DAY PROGRAM LOCATIONS AND START/END TIMES

Program	Address	Start Time	End Time	Agency
123rd Street	4343 W. 123rd St. Alsip, IL 60803	9:00 a.m.	2:30 p.m.	Sertoma

Community Routes

Unlike the other agencies in *The Collaborative*, Sertoma Centre does not operate any community routes.

Outings, Work Trips, and Medical Trips

Outings are arranged based on informal communication between staff and day program supervisors. Outings generally depart around 10:00 a.m. and return no later than 1:30 p.m. If an outing trip goes long, the DSP will drive the individuals directly back to their CILA. Sertoma Centre has dedicated 20 vehicles to transport individuals to/from janitorial contract services. These vehicles are used for business purposes only because the individuals in the vehicles are designated as staff. Medical trips can originate from the day program facility, a CILA, or a home location. For these medical trips, the vehicle from the CILA is used. Only a few midday medical trips per month are required across all CILAs.

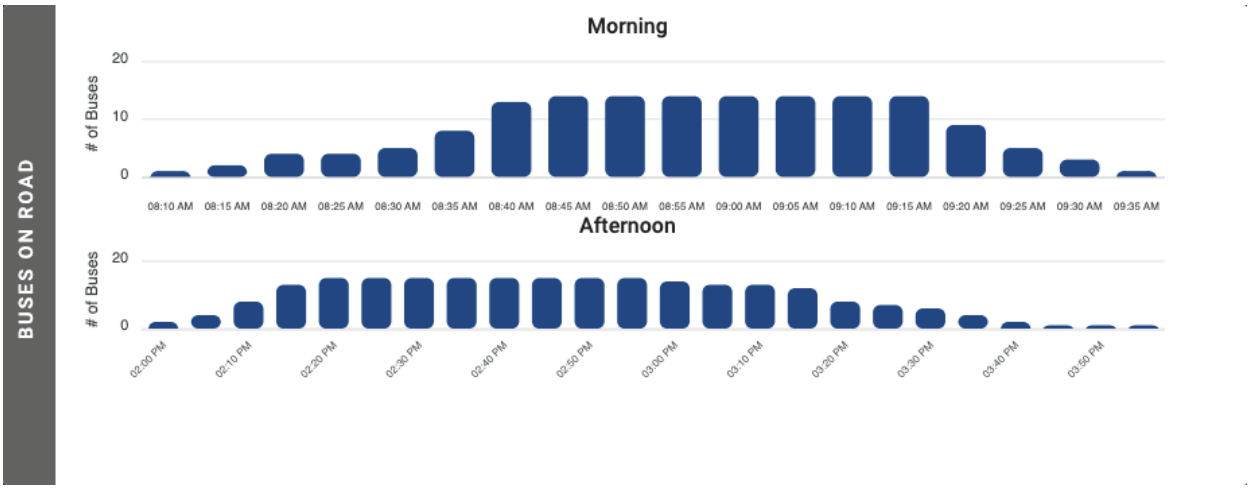
Available Fleet

A fleet of 15 vehicles is used for the transportation of individuals served by Sertoma Centre. This list does not include janitorial contract vehicles; vehicles that are aged out of CILA transportation use are typically designated to the janitorial program for business purposes.

5.10.2 AlphaPlan Simulation Results

Based on the Sertoma Centre data, AlphaPlan algorithms were able to transport 44 passengers to 1 day program utilizing just 8 vehicles, compared to the 10 vehicles currently utilized to serve the agency's CILA residents. The Figure 5-20 shows the hour-by-hour vehicle needs based on simulation. These results were achieved by combining the CILAs into the same runs and allowing CILA vehicles to perform multiple runs in the morning and afternoon.

FIGURE 5-20: SERTOMA CENTRE SIMULATION RESULTS: ACTIVE VEHICLES ON THE ROAD PER HOUR



The primary routing statistics from the simulations included the following:

- Number of passengers routed=44 passengers.
- Number of active day programs=1 programs.
- Vehicles utilized=8 vehicles.
- Average number of passengers per run=5.5 passengers.
- Average number of runs per vehicle=2 runs.
- Average time in the vehicle=20 minutes.
- Maximum time in the vehicle=34 minutes.
- Average run duration=28 minutes.
- Maximum run duration=40 minutes.
- Average mileage per run=9 miles.
- Maximum mileage per run=18 miles.
- Total daily transportation hours=13:51 hours.

5.11 Summary of Simulation Results

This section discusses the findings from the simulations and identifies possible opportunities to improve service efficiencies and enhance community access. Potential next steps to further advance possible changes in the way transportation is delivered are subsequently discussed.

5.11.1 Intra-Agency Route Consolidation

Agencies currently operate under the model of assigning one vehicle per CILA with a DSP as a driver because of: (1) rider compatibility (riders are already compatible by virtue of the fact that they live together) and (2) vehicle availability for after-hours trips in the community. Without optimization software, it would be challenging to seek opportunities for service efficiency improvements from among the set of CILA routes and community routes that transport day program participants to/from the day programs.

In addition, the need to serve or route more dynamic trips such as outings further complicates the vehicle routing problem. The current transportation staff at each of *The Collaborative* agencies do an exceptional job running the complex transportation operations given the tools they have available.

Computerized scheduling systems have been developed to support similar operations but the use of off-the-shelf industry products by *The Collaborative* agencies is challenged by: (1) nuances in the transportation of individuals with IDDs, (2) distinctions in each agency's operations, (3) overarching regulations, and (4) the general business model for these types of services. To the extent possible, AlphaRoute staff leveraged and customized its portfolio of routing algorithms to solve this unique routing problem. To fully solve this unique routing problem, the routing algorithms must be further tailored and a combination of different routing algorithms must most likely be used.

After adjusting the vehicles used to serve individuals in the data for each agency, AlphaPlan simulation results indicated an overall reduction of up to 46.5 percent in the number of vehicles required to serve the same trips compared to current operations. Table 5-16 details the estimated reduction for each agency. Other routing statistics listed in this table confirm that the simulated routing was able to abide by various requirements, such as the maximum time onboard vehicles.

The potential reduction in vehicles should be seen by each agency as an opportunity cost rather than a straightforward measure of the agency's current efficiency. Not surprisingly, the potential reduction in vehicles increased as the agency size and the complexity of the transportation operations increased. Figure 5-21 shows the number of stops per vehicle per day per agency. Agencies can achieve different levels of ridesharing, but almost all exceed the current level of two stops per vehicle per day (one vehicle per CILA) in the CILA-to-day program transportation. By combining community route and CILAs, CTF Illinois demonstrated the ridesharing levels that could be achieved (see Figure 5-21). The number of stops does not include stops at the day programs.

Figure 5-22 shows the combined locations of all CILAs and day programs for agencies in *The Collaborative*. Spatial distribution directly affects the efficiency of operations. Note that some agencies are concentrated in smaller geographical areas, while others are spread out across the region. For example, Blue Cap has an average mileage per run of only 3 miles, while Clearbrook and CTF Illinois have an average mileage per run of 18 miles and 28 miles, respectively. Local traffic conditions can also play a factor, with average speeds ranging from 9 mph for *local* agencies that primarily operate over local roads up to 34 mph for more *regional* agencies that operate over major arterials and highways.

TABLE 5-16: INTRA-AGENCY OPTIMIZATION ROUTING RESULTS

Metric	Blue Cap	Clearbrook	CTF Illinois	Little City	New Star	Park Lawn	Ray Graham	Sertoma
Number of passengers transported (passengers)	50	275	139	160	115	35	133	44
Number of active day programs (programs)	1	10	6	3	1	3	4	1
Number of vehicles utilized (vehicles)	8 vs. 9	23 vs. 63	18 vs. 26	11 vs. 14	12 vs. 23	4 vs. 8	14 vs. 25	8 vs. 10
Average passengers per run (passengers)	5.0	8.9	5.1	9.7	9.6	7.8	8.9	5.5
Average runs per vehicle (runs)	2.5	2.7	3.0	3.0	2.0	2.25	2.0	2.0
Average ride time (minutes)	12	25	34	19	22	20	20	20
Maximum ride time (minutes)	35	59	58	49	39	35	50	34
Average run duration (minutes)	20	39	48	29	31	28	32	28
Maximum run duration (minutes)	35	59	59	59	40	37	58	40
Average mileage per run (miles)	3	19	28	7	8	5	14	9
Maximum mileage per run (miles)	8	30	34	19	14	8	18	18
Total vehicle hours per day (vehicle-hours)	9:44	63:35	63:37	25:42	24:25	7:17	28:32	13:51

FIGURE 5-21: NUMBER OF STOPS PER VEHICLE PER DAY

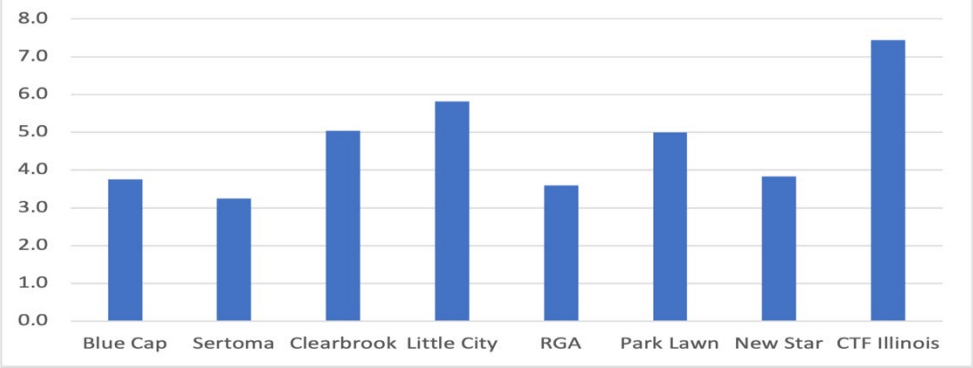
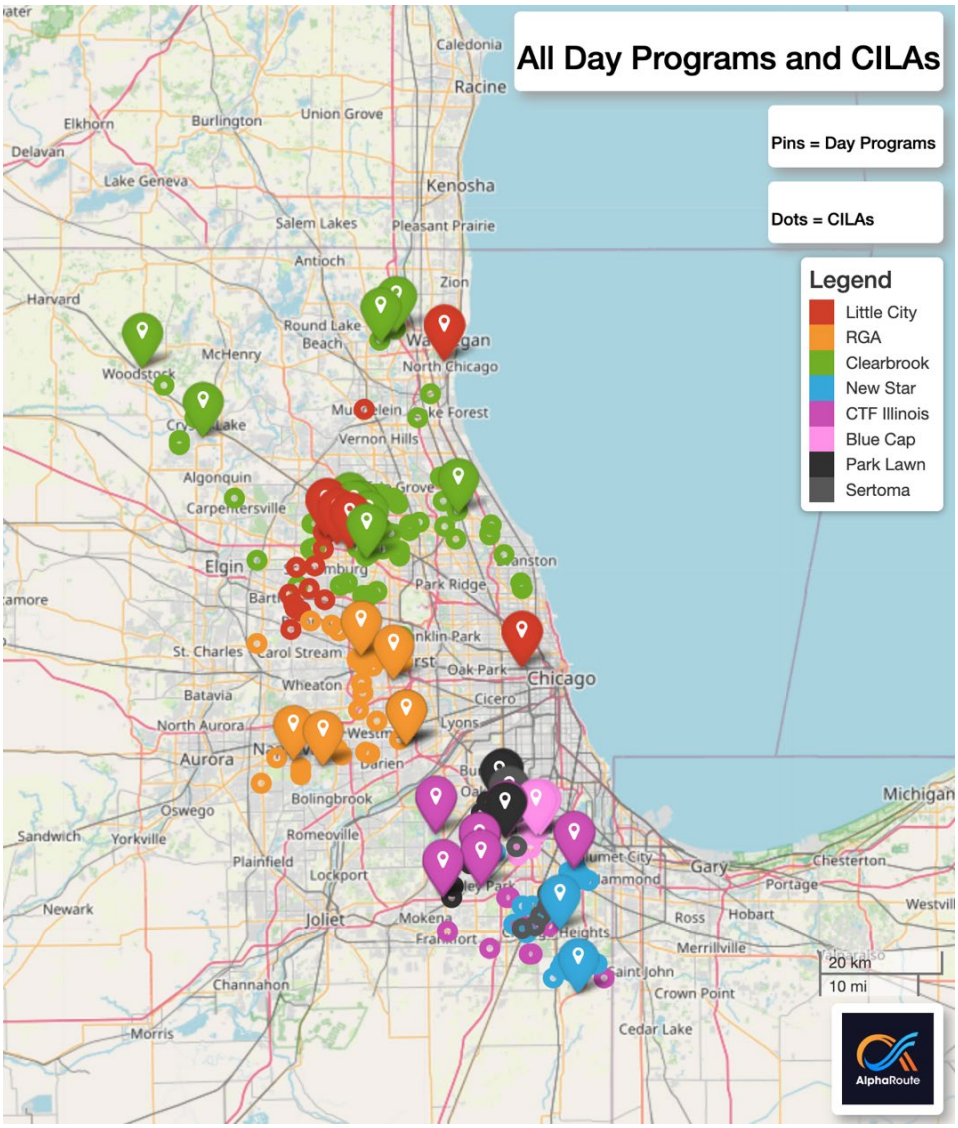


FIGURE 5-22: LOCATIONS OF CILAS AND DAY PROGRAMS FOR ALL AGENCIES



The reduction in the number of vehicles resulted from two main drivers:

1. **Number of passengers per run:** The baseline had a single run per CILA, with 5.29 passengers per run. By using the additional vehicle seating capacity and combining multiple CILAs into the same run, AlphaPlan algorithms achieved an average of 7.56 passengers per run across all agencies routed individually—a 42.95 percent increase in ridesharing. Some of these runs may require vehicle reallocation (to fit more passengers and/or reduce deadheads), but no new run would require a vehicle that does not exist in the current fleet.

2. **Number of runs per vehicle:** Under the current operations, CILA vehicles typically take a group of individuals to a single day program and return to the CILA in the morning and afternoon (two runs per vehicle per day). A few CILA vehicles are already used for medical trips or to perform double runs, which was exactly the intent of this element of the optimization. By increasing vehicle utilization, AlphaPlan algorithms were able to achieve an average of 2.43 runs per vehicle per day across all agencies routed individually—a 21.56 percent increase in vehicle utilization. When opportunities exist to combine runs using the same vehicle, changes in DSP shift times or new driver-only hires may be required to perform multiple runs with the same vehicle in the morning and afternoon.

Despite the increase in the number of stops per run and the number of runs per vehicle, individual experiences and on-time performance were carefully structured in the routing process to closely simulate day-to-day operations. The overall average time onboard across all agencies was 21 minutes—well below the maximum time on board of one hour. At each stop, loading and unloading times were set to 1.5 minutes per ambulatory passenger and 5 minutes per wheelchair passenger. Route results also included travel times with other traffic. Vehicles were set to arrive between 30 and 5 minutes before the program start time and depart between 10 and 30 minutes after the program end time. Vehicles were set to wait 10 minutes at the program to load and unload passengers before leaving for another run. These elements increased the reliability and on-time performance of the routes created.

Based on our conversations with agency staff, other operational aspects such as DSP shifts, behavioral incompatibility among riders, and driver certification requirements for the Pace Advantage Program may limit these AlphaPlan simulation results. Each agency's situation is unique. Nonetheless, the simulation results should prompt an honest, open-minded, data-driven conversation between agency leaders and staff to re-evaluate the current operational model in search of operational efficiencies. Backed by the use of modern routing technology, a re-evaluation of the following four main transportation elements is recommended:

- **Need for all CILA vehicles and DSPs to drive to day programs daily**: As with traditional carpooling programs, a schedule that would combine two or more CILAs into the same vehicle could free up vehicles/DSPs for other transportation needs, alleviate DSP/driver shortages, reduce mileage, lower CO_2 emissions, and lower operational costs. This approach could free up a pool of vehicles and DSPs to handle other trips emanating from the CILAs, which creates an opportunity to focus on individual transportation needs rather than the needs of an entire CILA as an entity. For example, residents could decide to go on an after-hours trip emanating from the CILA or join another CILA group for a trip.

- **Utilization of drivers (not DSPs) for some routes:** Vehicles with the opportunity to combine multiple runs in the morning and in the afternoon should be driven by dedicated drivers rather than DSPs doubling as drivers. Limitations regarding DSP availability and shift hours may require

agencies to deploy multiple vehicles instead of a single vehicle that could serve multiple runs. For example, a DSP coming off a night shift might not be able to drive for any additional hours on top of their existing schedule. Strategically using drivers for these routes could allow agencies to maximize vehicle utilization without prejudice to day program start and end times and potentially reduce total DSP working hours.

- **Combined CILA and community route stops**. Community route stops usually entail a small number of passengers per stop. Therefore, stops should always be evaluated for any possible feasibility to add these passengers to an existing CILA route instead of an existing community route. If the CILA route can pick up additional passengers living in the community on the way to the day program, that would free up a stop the community route previously needed to serve, potentially leading to improved productivity for both the CILA and community route runs.
- **Daily scheduling for outings, work trips, and medical trips.** From a technical perspective, opportunities exist for maximizing ridesharing and in-use vehicle utilization for these types of trips but realizing these benefits would require: (1) a systematic trip planning process and (2) a technology element. We envision a system very similar to the ones utilized for field trips in school operations, combined with some elements of paratransit scheduling operations. Individual or group trips would be requested/booked in the system up to a certain time the day before the trip date. On a daily cycle, the system would allocate individual or group trips to available vehicles, respecting the requested times for pickup or drop-off and any other passenger needs.

AlphaPlan routing was performed using a snapshot of each agency operations, which does not adequately capture the day-to-day reality of these agencies. Elements that add to the dynamism (e.g., new participants, DSP callouts, vehicle maintenance and breakdowns, etc.) suggest the need to frequently reoptimize the transportation plan. AlphaRoute staff suggest dividing transportation needs into two elements for scheduling and re-optimization: (1) CILA-to-day programs and community routes and (2) outings, work trips, and medical trips.

For the first element—CILA-to-day programs and community routes—service would ideally be re-optimized quarterly or semesterly accordingly to the number of changes in the period. For the second element—outings, work trips, and medical trips—the dynamic nature of these trips would require that all future trips be scheduled at the close of business the day prior, creating a daily optimal schedule for drivers and re-optimizing as needed in view of day-of-service changes. These elements of routing, scheduling, and re-optimization would put the transportation operations of *The Collaborative* agencies on par with the latest routing technologies in transportation.

The intra-agency routing simulation results indicated that all agencies could benefit from a computerized scheduling system to assist with daily and/or seasonal tasks to route vehicles. More robust data collection, vehicle tracking, and transportation planning would also be strong positive secondary effects of the use of a computerized scheduling system.

For both the intra-agency and inter-agency routing simulations (described next in Section 5.11.2), it became apparent that the agencies—individually or collectively as a group—must create a process to determine passenger behavior incompatibility as an input to any routing software to achieve an efficient computerized scheduling system. Modern algorithms, including AlphaPlan, can model this type of data but the agencies must first provide these inputs.

5.11.2 Inter-Agency Route Consolidation

To create the inter-agency route consolidation simulation and evaluate its results, AlphaRoute staff first combined the metrics of all agencies routed independently as per the intra-agency route consolidation simulation. Second, AlphaRoute staff used the same dataset and parameters to route all 951 passengers in a consolidated or coordinated manner (i.e., the same vehicles were available as a pool of resources), allowing the AlphaPlan algorithms to explore routes that maximized vehicle utilization while serving one or multiple agencies. Two coordinated scenarios were explored in this analysis: (1) all agencies were routed as a single group and (2) agencies were divided in two groups based on geography and service area. The group in the northern part of the region contained the Little City Foundation, the Ray Graham Association, and Clearbrook. The group in the southern part of the region contained Blue Cap, New Start, CTF Illinois, Park Lawn, and Sertoma Centre.

To reduce the complexity of the coordinated routes and to reflect the limits of comingling riders or groups of riders (from different CILAs) who may not be behaviorally compatible, we allowed only passengers going to the same day program to be onboard the vehicle at the same time. Further efficiencies could be gained if vehicles could serve passengers going to multiple day programs and/or if hub stops (where group of passengers will encounter to go to a final destination) could be added. These solutions would, however, be much more complex operationally and most likely require an in-vehicle technology to help drivers navigate its complexity.

The same day programs, CILA locations, start and end times, passenger-to-day program assignments, etc. used in the intra-agency route consolidation simulation were used in the inter-agency route consolidation simulation. This approach allowed us to identify and isolate the potential effects of coordination, which were significant.

Prior to discussing the results, the study team wishes to point out that while this level of coordination is achievable, it will require a strong effort and strong leadership by *The Collaborative* agency management team. As with the simulations, a standardization of operational rules and individual experiences would be required, as well as high levels of information sharing among agencies. For example, behavior incompatibility within each agency would also need to be analyzed across agencies. The coordinated routing problem is technologically complex, but it can be solved with existing modern routing algorithms and transportation software.

The results of the simulations indicated that inter-agency coordination allowed for a significant reduction in the number of vehicles required to serve the 951 passengers. In summary, 44 percent fewer vehicles were required to serve all passengers; 55 vehicles were required with inter-agency coordination compared to 99 vehicles when the same passengers were routed independently.

One important element in the coordinated simulation was the vehicle assignment (i.e., garage location). Given that *The Collaborative* agency vehicles are distributed among hundreds of CILAs across the region, the coordinated simulation was able to reduce deadheads but was unable to eliminate all vehicle assignment mismatches with the new coordinated routes. Further evaluation is required to avoid unnecessary deadheads in a final coordinated solution.

In an initial coordinated simulation, with the vehicles assigned to the same locations and the routes coordinated, the total daily transportation hours were estimated to be 295 hours. By running a simple vehicle reassignment algorithm and basically swapping vehicle garage locations to better match required

seating capacities and wheelchair capabilities for the coordinated routes, AlphaPlan was able to reduce total daily hours to a level consistent with the intra-agency route consolidation simulation (241 hours in the inter-agency simulation versus 237 hours in the intra-agency simulation), maintaining the reduced number of 55 vehicles. We are confident that this vehicle assignment can be improved even further in a refined simulation, resulting in additional savings in terms of total daily transportation hours. Discussions with *The Collaborative* agencies on the possibilities to reallocate vehicles would be needed to define the final parameters for a vehicle assignment optimization.

The increase in the average number of runs per vehicle per day from 2.43 to 3.9 reflected a 60 percent increase in vehicle utilization. Under these simulated results, the agencies would transition from using only a few vehicles to using almost all vehicles to serve multiple day programs. The average number of passengers per run increased from 7.56 to 8.8, reflecting a 16 percent increase in vehicle utilization and resulting from combinations of CILA residents going to the same program and/or CILA and community routes commingling. Again, a different vehicle allocation may be required to serve these coordinated routes, but only existing vehicles were used in the simulation. Overall, it means that larger vehicles will be assigned to routes where ridesharing is a possibility.

From an individual experiences perspective, the average time onboard a vehicle remained almost consistent with the previous intra-agency simulation, increasing from 21 minutes when routed independently to 23 minutes with the coordinated service. Despite this two-minute increase in onboard time, this duration remained well below the maximum allowable onboard time of one hour. The average mileage per run also increased slightly, from 8.75 to 11 miles. The maximum run duration and maximum mileage per run stayed the same at 59 minutes and 34 miles, respectively.

To evaluate a second approach, AlphaRoute staff constructed a second potential coordinated solution that divided *The Collaborative* agencies by the northern part of the region (the Little City Foundation, the Ray Graham Association, and Clearbrook) and in the southern part of the region (Blue Cap, New Start, CTF Illinois, Park Lawn, and Sertoma Centre). The dividing line was around Interstate 55 in the region.

This second approach allowed for all 951 passengers to be transported with a total of 65 vehicles and 241 total daily transportation hours. Compared to the previous coordinated solution, these results reflected an increase of 10 vehicles but the same number of total daily transportation hours. Clearly, the alternative coordinated solution did not provide for the maximum reduction in the number of vehicles, but it could represent a significant first step toward a potential overall service coordination for *The Collaborative*.

Table 5-17 compares the service statistics for these two coordinated approaches and for the previous combined intra-agency route consolidation.

The magnitude of estimated operational efficiency benefits achievable without a substantial degradation of the individuals' experience clearly indicates the potential to consolidate operations. However, the following actions must be taken to accomplish this:

- **Unify operational parameters**: Policies and parameters (e.g., load and unloading times, stop times, vehicle arrival and departure times from day programs) are currently set at the agency level. Any type of consolidation must abide by a unified standard for these parameters, noting that these parameter values already converge across a small range.

TABLE 5-17: INTER-AGENCY OPTIMIZATION ROUTING RESULTS

Metrics	North/South Regions	All Agencies	Combined Intra-Agency
Number of passengers transported (passengers)	951	951	951
Number of active day programs (programs)	29	29	29
Number of vehicles utilized (vehicles)	65	55	99
Average passengers per run (passengers)	8.5	8.8	7.6
Average runs per vehicle (runs)	3.4	3.9	2.4
Average ride time (minutes)	23	23	21
Maximum ride time (minutes)	59	59	59
Average run duration (minutes)	30	31	29.5
Maximum run duration (minutes)	59	59	59
Average mileage per run (miles)	11	11	8.8
Maximum mileage per run (miles)	34	34	34
Total vehicle hours per day (vehicle-hours)	241	241	236

- **Increase reliance on dedicated drivers:** Given the level of vehicle utilization and the number of runs per vehicle in the coordinated simulations, *The Collaborative* agencies would most likely need to move to a driver-based operation or, as some agencies already have now, a mixture of drivers and DSPs instead of relying on only DSPs to drive the CILA vehicles. The operational savings from 44 percent fewer vehicles should be more than enough to offset the costs of these changes. This increased reliance on dedicated drivers would also mean that shifts for some DSPs would likely change; for example, overnight DSPs may no longer be responsible for driving their CILA residents to the day program.

- **Assign some CILA vehicles to a centralized yard:** In a coordinated scenario, *The Collaborative* agencies would significantly benefit from moving some CILA vehicles to more centralized locations based on the new routes instead of garaging all CILA vehicles at the CILA locations. This change would significantly reduce deadheading (and the labor costs associated with deadheading). Such an approach would need to be accompanied by a mechanism to rapidly deploy a vehicle to a vehicle-less CILA in an emergency and a sign-up system for CILA outings, which may limit spontaneous outings.

- **Coordinate/stagger day program start and end times:** Similar to the work done with medium and large school districts, *The Collaborative* agencies could benefit from coordinating or staggering the start and end times of day programs to reduce the peak number of vehicles required for transportation.

- **Centralize transportation management:** A systematic approach and strong leadership are required to implement centralized transportation management across multiple organizations.

Such a paradigm shift would focus on a centralized fleet (and backup fleet), centralized drivers (and backup drivers), and centralized scheduling. These centralized resources would support the operation of community routes and CILA routes, as well as the scheduling of outings, work trips, medical trips, and other one-time trips.

The potential estimated savings of 44 percent from the intra-agency and inter-agency route consolidations should be viewed as an upper limit. A savings of 20 percent, which reflects less radical changes, is perhaps a more realistic goal. Once such route consolidations have been implemented and the savings measured, each agency can opt to *ratchet up* additional changes to create higher levels of service efficiency as desired.

5.12 Other Partnership Opportunities

5.12.1 Centralization of Support Services

Currently, five of the eight agencies in *The Collaborative* utilize Community Services Partners for IT services. This concept can be expanded to other services that support transportation.

One possibility, mentioned by a few of the agencies, is an inter-agency driver training program for drivers and DSPs. Such training would also help in formalizing what drivers should do in particular situations (e.g., if an individual has an epileptic seizure or if a vehicle has a mechanical breakdown).

As a related idea, one of the agencies on behalf of *The Collaborative* or a third-party entity could maintain a roster of on-call backup Pace-certified drivers to fill in at moment's notice. This approach would serve as an alternative, in part, to a centralized transportation management system. Such a roster could also serve as a minor-league system for replacing Pace-certified drivers/DSPs as vacancies occur or as service expands with more Pace vehicles.

Park Lawn expressed interest in group procurement opportunities for vehicles, as well as group maintenance agreements with vendors. The combined weight of multiple agencies in these efforts could result in lower costs and/or improved service.

5.12.2 Expansion of Sertoma Star Services On-Demand Pilot

In 2018, New Star commissioned the development of a smartphone app for an on-demand service that would allow certified DSPs (not necessarily working for New Star) using their own vehicles to drive individuals for trips from their home residences. The chief executive officer of New Star developed this concept after seeing the communication challenges faced by numerous families with for-hire ride services (e.g., Uber, Lyft). New Star completed a request for proposal (RFP) process to win an Illinois Council for Developmental Disabilities grant from the state for $75,000; this funding was used to develop the app and support project administration for approximately six months. New Star hired a developer—SimPalm—who completed about 80 percent of the smartphone app before the project funding ended and the COVID-19 pandemic began.

New Star has since restarted the project, winning additional state money and hiring another developer—OnSeen—who has worked with IDD transportation providers in Ohio. New Star's new app will be a variation of OnSeen's existing platform. Under this business model, OnSeen will collect 50 cents in fees for each ride, with a desired minimum of 100 rides per month. At launch, DSPs who sign up will choose their fee for service, up to $1 per mile maximum. New Star is not aiming to be involved in transactions and will only serve as the administrator of the service. Because financial transactions will occur between

the passenger and DSPs, and DSPs will be using their own vehicles, New Star does not believe it will need to be additionally insured for this service.

The original concept was to focus primarily (but not solely) on subscription (recurring) trips, which would lead to more consistent matching of drivers with individuals; however, on-demand requests would be available. New Star would then review the data from the pilot to determine the times of day when the service is used and where individuals are traveling to and from to try and meet any gaps. Note that the design of the program did not include a trip limit or a requirement to share rides between individuals. It was also originally envisioned to be more of a backup for existing transportation services provided by the agency.

One of the goals of the pilot is to provide detailed information about the rider's needs to the DSP driver matched to the trip. At the same time, information about the DSP driver would be provided to the rider and caregivers. Such information may include their certifications (e.g., DSP, cardiopulmonary resuscitation, American Sign Language, etc.).

Financial transactions will occur directly between the passenger and the DSPs; Sertoma Star Services would not be involved in the financial transaction in any way and therefore would not be required to take on additional insurance requirements. Liability is also limited because the agency does not have to clear/certify the driver; they are already certified by the state. If multiple agencies were involved on the platform, Sertoma Star Services may potentially need to recertify a DSP that has been certified by a different agency.

Both New Star and OnSeen will market the app to families of individuals and DSPs to encourage sign-ups. OnSeen will provide most of the upgrades and maintenance for the app unless a major upgrade is needed.

This new on-demand service was named Stronger Community Opportunities through Organized Transportation or SCOOT. The initial implementation plan called for New Star to beta test the SCOOT platform with a small group of riders and drivers for several weeks, surveying both groups at different stages to learn about their experiences. The trips provided during the pilot would be more schedule-focused trips (i.e., subscription trips) rather than on-demand trips to allow more consistent matching of drivers with riders. The potential for on-demand trips on the platform is still possible with the technology but is likely further down the road after the technology and demand are proven.

In September 2023, New Star (prior to the merger) began reaching out to DSPs to begin signing up to drive on SCOOT and began telling some families the agency works with about the service. Anyone who is already a DSP can be a driver on SCOOT as long as they meet the state-required insurance requirements and have a car in good condition no more than 10 years old; additional insurance coverage is recommended but not required. Their initial goal was to launch the SCOOT app broadly by November 15, 2023; as of the publication of this report, the current status of the beta testing and future launch date for SCOOT were unknown.

Only families signed up with Sertoma Star Services will be able to access the platform, and the agency will only serve as the administrator for the service because of requirements from the state and insurance carriers with respect to liability if an agency were to be involved with financial transactions. Because of these concerns, Sertoma Star Services does not have any plans to expand SCOOT to additional agencies in *The Collaborative*. However, staff did say that any state-certified DSP would be able to apply to drive on SCOOT once the platform is fully launched. Each driver in SCOOT will be able to specify how far they are willing to drive according to zip codes, meaning a rider could conceivably travel further out than the Sertoma Star Services geographic area if drivers set zip codes beyond the agency's footprint. The SCOOT

app would then allow the trip to be scheduled and matched based on mutual availability. A higher number of available drivers increases the likelihood that an individual would be able to get a ride.

Given the above requirements, the study team considered other ways that SCOOT could be expanded to families associated with other agencies in *The Collaborative*. One approach would be for other agencies to partner with OnSeen (the technology vendor) and launch their own on-demand/scheduled service platform in a manner similar to New Star. The partnership between Sertoma Star Services and OnSeen allows OnSeen to use the same technology with other agencies. Each SCOOT partnership would have their own agency branded smartphone app to foster familiarity with the families already served by that agency. However, if another agency (or agencies) had their own SCOOT app, the multiple SCOOT platforms would be distinctly separate and not linked together on the back end, meaning riders would not be able to match with drivers signed up on a different platform. Again, this separation is needed to limit agency liability and prevent them from acting in a financial intermediary role.

Another approach for expanding SCOOT is to vest management with a third-party entity such as CSP who would assume responsibility for managing a single SCOOT platform for multiple agencies in *The Collaborative*. Either CSP or another entity would oversee and manage the financial transactions taking place on the platform and divide up the dollars paid by riders between the DSP drivers from different agencies. This third-party entity would also likely need to be able to certify the DSPs themselves.

Ultimately, the feasibility of such a setup must be reviewed after the technology and demand for service are proven at Sertoma Star Services to see if the additional liability and administration responsibilities for a managing entity were worth it.

CHAPTER 6: RECOMMENDATIONS AND IMPLEMENTATION PLANS

6.1 Phase 2, Year 1 Recommendations

As described in Chapter 5, while the intra-agency and inter-agency routing simulations indicate the potential for a savings of up to 44 percent, the implementation of more modest routing efficiencies would likely generate a savings of 20 percent. A 20 percent savings is still significant and perhaps more readily achievable, while being less disruptive to the daily schedules of individuals and staff. Based on the promising results of the simulation analyses, the study team recommended a series of actions, which should result in immediate cost efficiency benefits.

6.1.1 Pilot Intra-Agency Route Consolidations

Each agency should consider at least some of the route consolidations suggested by the AlphaPlan simulations. Note that the set of route consolidations have been provided to each agency. Some of these route consolidations involve removing vehicles from their assigned routes and either sharing vehicles between CILAs and/or stationing vehicles used for CILA routes in a centralized location.

For paired CILAs that share one vehicle and for vehicles that perform double runs in the morning and afternoon, decisions must be made about DSP staffing. One approach would be to assign a DSP who spends the day at the day program to these double runs. This reassignment may relieve the overnight DSPs of their driving duties and may also require some shifts in the day program staffing to cover the staggered program hours for the two sets of CILA residents. Economies of scale at the day program site would result if more pairs of CILAs double up their routes. The study team understands that this may be disruptive, especially for DSPs with seniority who have long settled into their shifts and developed personal relationships with the CILA residents. Because it is currently a challenge to recruit and retain drivers and DSPs, each agency must weigh whether the cost savings justify such a disruption. This strategy reflects a paradigm shift in staffing.

Staff also need a coordinated way for DSPs to sign up for a vehicle for after-hours or weekend trips with CILA residents at a vehicle-less CILA. These vehicle requests could be handled through each agency's transportation coordinator. The idea would be to maintain a set of backup vehicles at the given agency's day program facility (or transportation facility for some of the larger agencies) and a roster of drivers available for such prescheduled events. Having DSPs instead of (or in addition to) drivers who would be available for such purposes would also allow specific individuals to remain at the CILA if they did not wish to make the trip. The agency would also need to develop a mechanism for rapid deployment of a vehicle in case of an emergency (if the emergency is not too time-sensitive).

Such a roster of backup resources (drivers and vehicles) could also provide the transportation coordinator with more flexibility when midday outings, work trips, or medical trips get delayed and do not make it back in time for the afternoon CILA runs and community routes.

Implementation Plan: Largely because of these considerations, the recommendation is to start slow—with maybe one or two paired CILAs—to better understand the staffing considerations, unforeseen staffing impacts, and logistical challenges. These actions can be accomplished within the first six months

of Phase 2. Successful outcomes would pave the way for pairing more CILAs and incorporating CILA routes into community routes. However, because of the changing aspects of service needs—with new individuals entering the agency programs, some current individuals exiting the agency programs, and some current individuals having a change in their circumstances since the AlphaPlan analysis was undertaken—technology will need to be developed or licensed.

6.1.2 Develop/License/Implement Supporting Technology

Outside the scope of this study (outside of Phase 1, but with Phase 2 in mind), the agencies in *The Collaborative* have already reached out to AlphaRoute to arrange a test-drive of AlphaPlan. As of the publication of this report, a one-hour training session with Clearbrook, the Little City Foundation, and the Ray Graham Association staff was completed and a recording of the session was sent to the other agencies in The *Collaborative*. Each of the agencies have access to AlphaPlan, allowing staff to explore the system with new, updated data with some limitations. For a full understanding and appreciation of AlphaPlan's capabilities with the new data, some additional training and agency-specific assistance from AlphaRoute staff is required.

This additional training and support could be funded privately by the agencies, although in this era of constrained funding, the potential for this is limited. Another possibility is FTA Section 5310 funding as part of Phase 2; however, if any technology and technical support is licensed or includes additional customization, a competitive procurement may be required. An argument could be made, however, that AlphaRoute's staff possess a unique understanding of the needs of the agencies and that AlphaPlan offers unique capabilities specific to the transportation of individuals with IDDs.

If the pilot route consolidations recommended above provide the predicted benefits and the agencies wish to pursue more widespread intra-agency and inter-agency optimization strategies, *The Collaborative* agencies should develop (or contract to develop) a technology RFP in the second six months of Year 1. Given that the needs are ever-changing, we recommend—at a minimum—the licensing of a technology tool that could perform the types of simulation analyses that were performed in Phase 1. With ongoing use of such technology in mind, not only for optimization analyses, we also recommend acquiring tablets for the drivers/DPSs with software designed to collect the data needed for these types of analyses and performance evaluation in general. For *The Collaborative*'s consideration, the agencies may also want to license technology that could handle the scheduling of subscription (recurring) trips like the CILA routes, the community routes, and work trips, as well as the scheduling and dispatching of non-subscription (one-time) trips such as medical trips, and group outings. In addition, *The Collaborative* agencies may wish to seek a technology that can accommodate on-demand trips as well, with community integration as the ultimate goal.

Implementation: As previously mentioned, these actions would likely take place during the second half of Year 1. *The Collaborative* agencies would be responsible for the development of the RFP, potentially with the assistance of a third-party consultant. If third-party assistance is needed, TTI could perform this function (unless RTA directs *The Collaborative* that a separate competitive procurement process is necessary). Actions during the first three months of this six-month period would involve: (1) acquiring assistance, if needed, (2) canvassing each of *The Collaborative* agencies regarding their desired level of technology (and related equipment) and their willingness to participate in a group acquisition, (3) developing technology and equipment specifications for the desired routing optimization capabilities, and (4) preparing the RFP. The actual procurement would occur in the second half of the six-month period.

6.1.3 Conduct Feasibility Study for Centralized Transportation Management and Support Services

Clearly, the deployment of the technology licensed in Year 1 is required before more complex routing consolidations (i.e., integrating CILA routes into community routes and consolidating inter-agency routes) can be attempted. At the same time, the study team believes it may be in the best interest of *The Collaborative* agencies to explore the concept of a third-party transportation management entity assuming responsibilities for transportation planning, fleet management, technology, day-to-day operations, and support functions (e.g., training, procurement, insurance, etc.). Such an entity could include an existing partner like CSP or an established national operational/management company. As it happens, two such entities—National Express and Transdev—are headquartered in *The Collaborative*'s service area. Transdev recently contracted with the Met Council in Minneapolis/St. Paul, Minnesota, to provide waiver transportation services tailored to the needs of individuals with IDD via Home and Community Based Services, which recently split off from Metro Mobility, the ADA paratransit service in that region. Note that centralized transportation management could also be provided through a newly developed framework that does not rely upon either CSP or established national companies.

Implementation: The study team recommends that a feasibility study for such an entity be undertaken during the second half of Year 1. If any of the agencies in *The Collaborative* wish to pursue this model, that procurement (if needed) and implementation should occur during the first six months of Year 2, with services starting in the second half of Year 2.

If the feasibility assessment for centralized transportation management determined (in the middle of Year 2) that it should not be pursued, the agencies in the northern and southern regions can independently pursue inter-agency route consolidations via the licensed technology. However, such pilots must be thoroughly vetted with respect to liability and must include the development of common policies and procedures (especially for when things go awry).

6.2 Phase 2, Year 2 Recommendations

6.2.1 Expand Intra-Agency Route Consolidations

Year 2 would begin with technology training and the collection and input of required data, a re-optimization of the routing analyses, and a refinement of the implementation plan to pursue additional intra-agency routing consolidations via the updated simulations. These actions would take place over the first six months of Year 2. Delays in this process may or may not be a function of whether further developments or refinements of the technology are required. If no such changes are required, additional route consolidations that involve pairing CILAs and/or integrating the CILA routes and community routes can occur based on the updated simulation results.

Note that agencies who integrate a CILA stop into a community route must implement the same staffing changes described previously for paired CILAs. That is, the agency must assign a DSP to spend the day at the day program for CILA residents arriving via the community route.

Implementation: The study team recommends expanding intra-agency route consolidations—one at a time—during the first half of Year 2, after the new technology is in place and route consolidation simulations have been conducted. If the new technology will also be used for day-to-day scheduling and dispatching, the agencies who acquire the technology must be trained. Moreover, the scheduling/dispatching parameters may need to be fine-tuned, both before and after the launch date.

6.2.2 Implement Centralized Transportation Management and Support Services/Pilot Inter-Agency Route Consolidations

If the feasibility assessment for centralized transportation management determined that it should be pursued, such a system—along with support services for partnering agencies—would be implemented in Year 2. As previously mentioned, this centralization may be pursued by broadening CSP's responsibilities (and partner agencies, as only five of the eight agencies currently utilize CSP for IT services), by contracting for such services with one of the two prominent national contenders headquartered in the Chicago suburbs, or by developing a new framework for providing such services. In any of these cases, current transportation coordinators, staff, and drivers would likely be transferred to the new entity. This entity would also likely assume possession of the: (1) current fleets and professional drivers, while operating out of one or more operations/maintenance facilities, and (2) licensing of the technology.

In addition to taking over day-to-day operations, the centralized transportation manager would also spearhead the implementation of inter-agency route consolidations. If centralized management of transportation services is not pursued, collaborating agencies could explore inter-agency route consolidations themselves.

Implementation: The decision regarding whether or not to create a centralized transportation management system would be reached at the end of Year 1. If this structure is to be pursued, the first six months of Year 2 would focus on the ramp-up, with a midyear launch date. The transfer of day-to-day functions would likely be phased in for each agency, with completion of all partner agencies by the end of Year 2. After the transition to a centralized system is complete—with the centralized transportation management entity providing transportation services for all agencies in *The Collaborative,* along with other necessary support functions related to the technology, fleet management, and driver recruitment and training—the entity and the agencies could consider expanding its role to include other related functions.

6.2.3 Expand SCOOT

One such related function undertaken by the centralized transportation management entity could be the inter-agency expansion of the SCOOT on-demand pilot program, currently being implemented at Sertoma Star Services (see Section 5.12.2). Centralized management of SCOOT would presumably resolve the agency-specific liability issues discussed previously and provide a more streamlined approach to expand this service (i.e., with a single OnSeen licensee and a centralized roster of volunteer DSPs available to individuals served by all partnering agencies).

If centralized management of transportation services is not pursued, we recommend that each agency interested in setting up their own SCOOT program enter into a separate licensing agreement with OnSeen because of the liability issues. While individual programs would be specific to agency-affiliated families and individuals (to address liability issues), nothing would preclude a DSP driver from participating in multiple programs.

Implementation: The study team recommends that the expansion of SCOOT under either model be pursued in Year 2, after the Sertoma Star Services' program has been implemented and thoroughly tested and refined following the initial pilot.

Figure 6-1 displays the proposed implementation schedule for the recommendations discussed in this chapter.

FIGURE 6-1: IMPLEMENTATION SCHEDULE

	Year 1		Year 2	
Recommendations	Months 1-6	Months 7-12	Months 13-18	Months 19-24
Pilot Intra-Agency Route Consildations				
Develop/License/Implement Techncology				
Conduct Feasibility Study for CTM and Support Services				
Expand Intra-Agency Route Consolidations				
Implementation of CTM and Support Services				Go Live
Pilot Inter-Agency Route Consolidations				
Expand SCOOT				

6.3 Estimated Cost Savings and Implementation Impacts

For the recommendations for Intra-Agency and Inter-Agency Route Consolidations, TTI developed estimates on the annual cost savings to fully implement each recommendations based on AlphaRoute's analyses and current cost data collected. TTI also developed estimated costs for implementing each of the 6 recommendations discussed earlier in this chapter. These estimates for annual cost savings and implementation costs also sum together results from New Star and Sertoma to a single agency to reflect the newly merged Sertoma Star.

6.3.1 Intra-Agency Route Consolidations Cost Savings

The intra-agency consolidations would produce operational cost savings through fewer total vehicle hours (TVH) spent driving to and from CILAs within each agency (to be piloted in Year 1, then fully implemented in Year 2). TTI used benchmarks on costs available from Clearbrook (discussed in Section 5.4.2) and applied those impacts to the other six agencies. Clearbrook's estimated TVH baseline (reflecting current transportation hours) for CILA transportation is a factor 1.047 higher than the resulting TVH at absolute full implementation (100%) of the recommended intra-agency consolidations. TTI used the Clearbrook cost benchmark of $24.38 per transportation hour as well as an assumed 240 days annually for transportation service provided for the remaining cost estimation factors.

Table 6-1 reflects the rounded annual estimated cost savings at full (100%), higher bound (67%), medium bound (50%), and lower bound (33%) levels for these intra-agency route consolidations. The higher and lower bound levels reflect lesser cost saving that would be realized if these consolidations were only partially implemented (e.g., half or three-quarters of consolidated occurred).

6.3.2 Inter-Agency Route Consolidations Cost Savings

TTI used the same reference transportation cost per total vehicle hour (TVH) to estimate the cost savings for inter-agency route consolidations (to be implemented in Year 2 along with centralized transportation management implementation). AlphaRoute's analysis determined a baseline of 295 daily TVHs for routes across all agencies, which would be reduced to 241 TVH with consolidations (at a full 100% level) within the North and South regions as well as for all agencies as one region. TVH would be further reduced down to 236 daily (at 100% level) were these inter-agency consolidations to occur in concert with intra-agency consolidations.

Table 6-2 reflects the rounded annual estimated cost savings at full (100%), higher bound (67%), medium bound (50%), and lower bound (33%) levels for these inter-agency route consolidations. The higher and lower bound levels reflect lesser cost saving that would be realized if these consolidations were only partially implemented (e.g., half or three-quarters of consolidated occurred).

TABLE 6-1: COST SAVINGS ESTIMATES FOR INTRA-AGENCY ROUTE CONSOLIDATIONS

Agency	Estimated TVH per Day Baseline	Resulting TVH per Day After (100%)	Transp. Cost Per Hour Baseline (Annual)	Estimated Cost Savings			
				Low (33%)	Medium (50%)	High (67%)	Full (100%)
Blue Cap	10.2	9.7	$59,600	$(900)	$(1,300)	$(1,800)	$(2,700)
Clearbrook	66.6	63.6	$389,500	$(5,800)	$(8,700)	$(11,700)	$(17,500)
CTF Illinois	66.6	63.6	$389,700	$(5,800)	$(8,700)	$(11,700)	$(17,500)
Little City	26.9	25.7	$157,400	$(2,300)	$(3,500)	$(4,700)	$(7,100)
Park Lawn	7.6	7.3	$44,600	$(700)	$(1,000)	$(1,300)	$(2,000)
Ray Graham	29.9	28.5	$174,800	$(2,600)	$(3,900)	$(5,300)	$(7,800)
Sertoma Star	40.1	38.3	$234,400	$(3,500)	$(5,300)	$(7,000)	$(10,500)
TOTAL	**247.8**	**236.7**	**$1,450,000**	**$(21,600)**	**$(32,400)**	**$(43,500)**	**$(65,100)**

TABLE 6-2: COST SAVINGS ESTIMATES FOR INTER-AGENCY ROUTE CONSOLIDATIONS

Consolidation Level	Estimated TVH per Day Baseline	Resulting TVH per Day After (100%)	Transportation Cost Per Hour Baseline (Annual)	Estimated Cost Savings			
				Low (33%)	Medium (50%)	High (67%)	Full (100%)
North/South Regions	295	241	$1,726,100	$(104,300)	$(158,000)	$(211,700)	$(316,000)
All Agencies							
Combined Intra-Agency		236		$(113,900)	$(172,600)	$(231,300)	$(345,200)

6.3.3 Estimated Implementation Costs

Separately, TTI estimated the costs of implementation that would be incurred by the agencies collectively for each of the 6 recommended implementations discussed earlier in this section of the report. These estimates attempt to account for procurement costs and estimated staff time spent on the implementation. For procurement costs, TTI developed estimates based on past experience with other consulting projects involving training and procurement of scheduling technology platforms. For staff time, TTI used cost per hour rates of $21.21 or $22.00 for (Blue Cap or the other agencies, respectively).

Table 6-3 reflects the estimated costs for the individual recommended implementations. The elements included within each estimate are summarized in the bulleted list below:

- 1.1 Pilot Intra-Agency Route Consolidations: includes 80 hours of staff time for each of the seven agencies.
- 1.2 Develop/License/Implement Technology: includes costs for developing the technology RFP, direct training costs from AlphaRoute, purchase of tablets for every vehicle, and 40-120 hours of staff time for each agency (depending on whether they've previous gone through technology training with AlphaRoute).
- 1.3 Conduct Feasibility Study for CTM and Support Services: includes estimated costs for 6 months of technical support to conduct the study.
- 2.1 Expand Intra-Agency Route Consolidations: includes additional direct training costs from AlphaRoute and 80 hours of staff time for each of the seven agencies.
- 2.2 Implementation of CTM and Support Services: separate estimations developed for each of the following options:
    - A. Broadening Role of CSP: includes technical support for setting up centralized management and 40-80 hours of staff time for each agency (depending on whether they're already within CSP).
    - B. Contracting Out Centralized MGMT: includes estimated cost of contracting for service and 80 hours of staff time for each agency.
    - C. Developing a New Framework: includes 280 hours of staff time for each agency
    - & Pilot Inter-Agency Route Consolidations: includes 120 hours of staff time for each agency
- 2.3 Expand SCOOT: separate estimations developed for each of the following options:
    - A. Centralized MGMT: includes technical support for setting up centralized management
    - B. Separate Development: includes 80 hours of staff time and separate licensing agreement with OnSeen for each agency

TABLE 6-3: ESTIMATED COSTS OF EACH RECOMMENDED IMPLEMENTATION

Recommendations	Time Period of Implementation				Estimated Cost	
	Year 1		Year 2		Year 1	Year 2
	Months 1-6	Months 7-12	Months 1-6	Months 7-12		
1.1 Pilot Intra-Agency Route Consolidations					$ 12,300	
1.2 Develop/License/Implement Technology					$ 222,500	
1.3 Conduct Feasibility Study for CTM and Support Services					$ 76,200	
2.1 Expand Intra-Agency Route Consolidations						$ 36,700
2.2 Implementation of CTM and Support Services				Go Live	A.	$ 58,800
					or B.	$ 132,300
					or C.	$ 42,900
& Pilot Inter-Agency Route Consolidations					Pilot	$ 18,400
2.3 Expand SCOOT					Central MGMT	$ 80,000
					or Separate	$ 222,300

APPENDIX A: PROFILE OF BLUE CAP

A.1 Agency Background and Programs

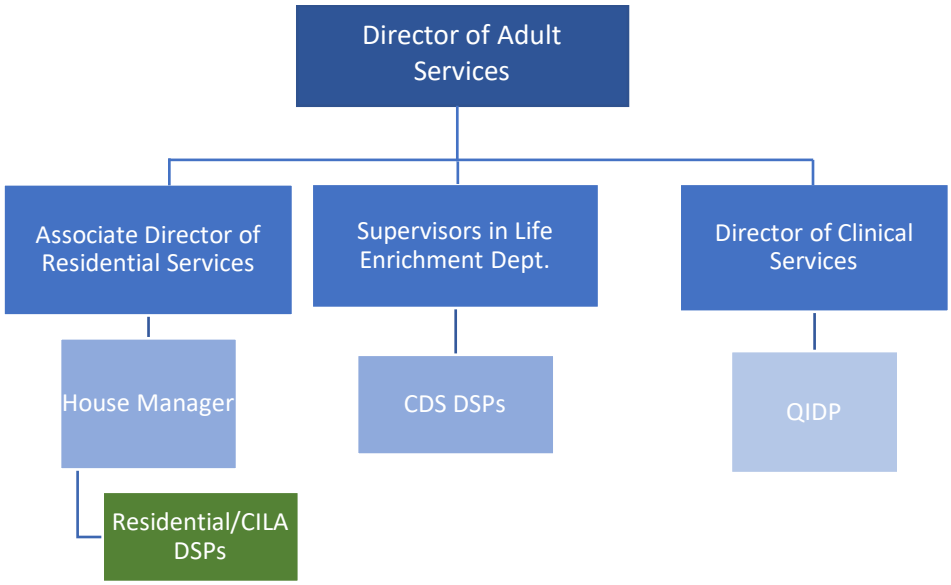
Blue Cap is located in Blue Island, Illinois. Blue Cap has two facilities located within a minute from each other for day programs. The two facilities are distinct in their programs; the facility at 1962 Broadway Street has a program specifically for residential (CILA) individuals, while the other facility at 2155 Broadway Street has a program specifically for homebound individuals living in the community. Both facilities host the Life Enrichment Program.

Since the COVID-19 pandemic, Blue Cap does not provide any transportation for homebound individuals to and from their day programs. All DSPs at Blue Cap are available to drive/transport individuals.

A.2 Organization Chart and Staffing

For the CILAs, qualified intellectual disabilities professionals (QIDPs) report to the director of Clinical Services. Residential/CILA DSPs report to their house manager. The DSPs in Community Day Services (CDS) report to their supervisors in the Life Enrichment Department. Residential/CILA house managers report to the associate director of Residential Services. Residential/CILA associate directors and Life Enrichment Department supervisors report to the director of Adult Services.

FIGURE A-1: BLUE CAP ORGANIZATION CHART



Two supervisors—one at each facility—schedule outings using a monthly calendar. Each facility creates their own outings schedules, although sometimes joint outings are organized for individuals to travel together from both facilities. The outings calendar is entered into Excel for tracking purposes.

The DSPs are present at each facility location during the day. The DSPs in Residential Services are with the individuals in their CILA group at all times during their shift. The DSPs drive CILA individuals to/from the day programs and any outing trips. The DSP coverage at the CILAs is structured in three shifts as follows:

- First Shift: either 7:00 a.m.–3:00 p.m. or 8:00 a.m.–4:00 p.m.
- Second Shift: 3:00–11:00 p.m.
- Third Shift: either 11:00 p.m.–7:00 a.m. or 11:00 p.m.–9:00 a.m.

In the event of callouts, Blue Cap managers communicate with each other to find available DSP substitutes from Residential Services or CDS.

A.3 CILAs

Table A-1 describes Blue Cap's nine CILAs (as of January 2023), and Figure A-2 shows their locations, along with the locations of Blue Cap's two day program facilities. Each CILA has an assigned house manager; some house managers manage multiple CILAs. Each CILA has its own monthly activity calendar. Blue Cap currently has eight CILAs as part of their residential program, as well as one ICILA that has no physical location. This program aimed to take individuals on outings in the evenings, but Blue Cap is not currently running this program due to staff shortages since the COVID-19 pandemic.

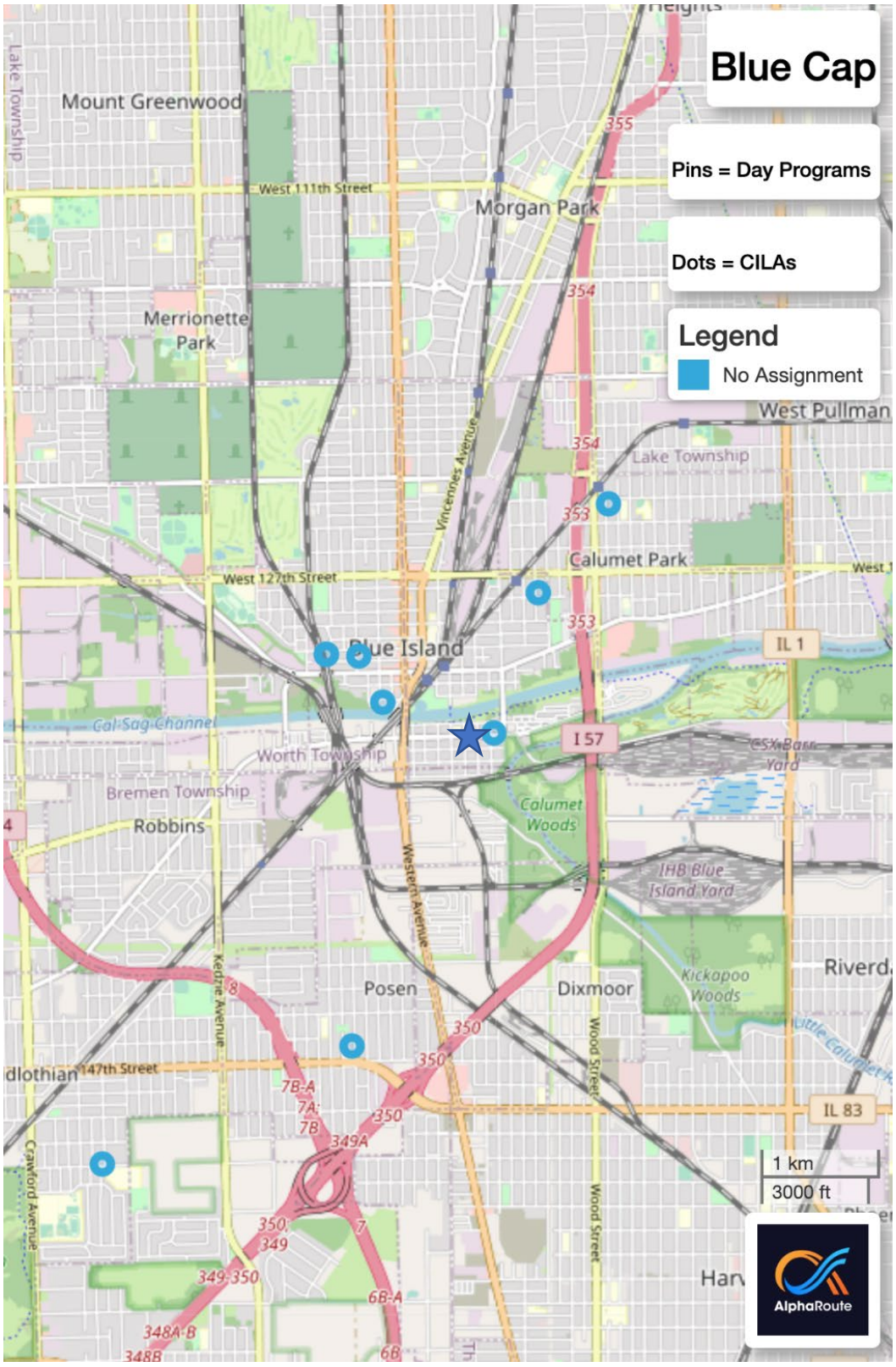
Day programs typically run between 8:00 a.m. and 4:00 p.m. Vehicles from the CILAs will arrive between 8:30 and 9:00 a.m. (when the programming starts). Transportation for homebound individuals in the community (either through private vehicles or Pace ADA Paratransit Services) are supposed to arrive in the same time window as well; however, Blue Cap staff noted that Pace vehicles are frequently late causing individuals to arrive after 9:00 a.m. Similarly, day programs end at 2:30 p.m., and vehicles depart for the CILAs between 2:30 and 3:00 p.m. Sometimes the Pace vehicles will arrive much earlier than scheduled (e.g., at 1:15 p.m.) to pick up individuals, which is both disruptive and cuts into the billing for individuals at the day program.

Weekend and evening trips from the CILA are handled by the DSPs on shift using vehicles stationed at the CILA. Medical trips from the CILA are also handled by the DSPs and occur between 8 a.m. and 4 p.m.

TABLE A-1: BLUE CAP CILAS

CILA	Address	Residents	DSPs
Broadway	2022 Broadway St., Blue Island, IL 60406	5 (2 vacancies)	2
Honore	12747 Honore, Blue Island, IL 60406	6	1
James	2457 W. James St., Blue Island, IL 60406	7	2
Justine	12409 Justine St., Calumet Park, IL 60827	6	1
Lawndale	15058 Lawndale Ave., Midlothian, IL 60445	6	1
Maple	13015 Maple Ave., Blue Island, IL 60406	7	1
Posen	14616 Blaine St., Posen, IL 60469	6	1
York	2715 York St., Blue Island, IL 60406	7 (1 vacancy)	2
Intermittent	No physical address	3	1

FIGURE A-2: BLUE CAP DAY PROGRAMS AND CILAS



A.4 Community Routes and Pace ADA Paratransit Services

When the COVID-19 pandemic began, Blue Cap ceased providing community routes to the day programs for individuals living independently in the community. Currently, all 29 individuals enrolled in the day program and living in the community either use Pace ADA Paratransit Services or are transported to the day program by a parent/guardian. For those using Pace ADA Paratransit Services to get to the day program, Blue Cap provides the individuals with fare tickets.

A.5 Midday Outings

Outings emanating from the day programs vary depending on the week and where individuals want to go based on planned activities. The DSPs serve as the drivers for outing trips. Sometimes outings will run late and not return to the day program site until after 3:00 p.m.; in those instances, the individuals are transported directly back to their CILA or residence in the community.

Prior to each trip, the DSP checks out a vehicle and picks up a pouch that contains the vehicle mileage sheet, a gas card, a cellular phone, and a key to the vehicle. The pouch also contains insurance information in case of an accident. No limits for outing times exist, and no rule of thumb for distance is used in planning outings. Individuals need a permission slip signed by a parent/guardian to attend an outing.

Examples of destinations for day program outings include public libraries, fast food and casual restaurants, the Biela Center, bowling alleys, grocery stores, hospital visits, the Blue Island Park District, the Illinois Holocaust Museum and Education Center, horse camps, bingo venues, Chicago festivals, minor league baseball games, and the Lincoln Park Zoo.

A.6 Medical Trips

Blue Cap provides approximately 20 medical trips per week, either using vans that are designated for medical trip purposes or using any other agency vehicle. During medical appointments, the DSP stays inside the health facility center with the individual to provide support/advocacy and get a summary of the appointment.

A.7 Work Trips

Blue Cap provides transportation to work for some individuals attending day programs. Depending on the person's work schedule, the individual may be transported from work to the day program or from the day program to their CILA or residence in the community. The individual is never charged for the trip. Blue Cap has a designated job coach who travels to worksites as needed to help an individual get situated.

Table A-2 lists the worksites, locations, and number of individuals employed through Blue Cap services.

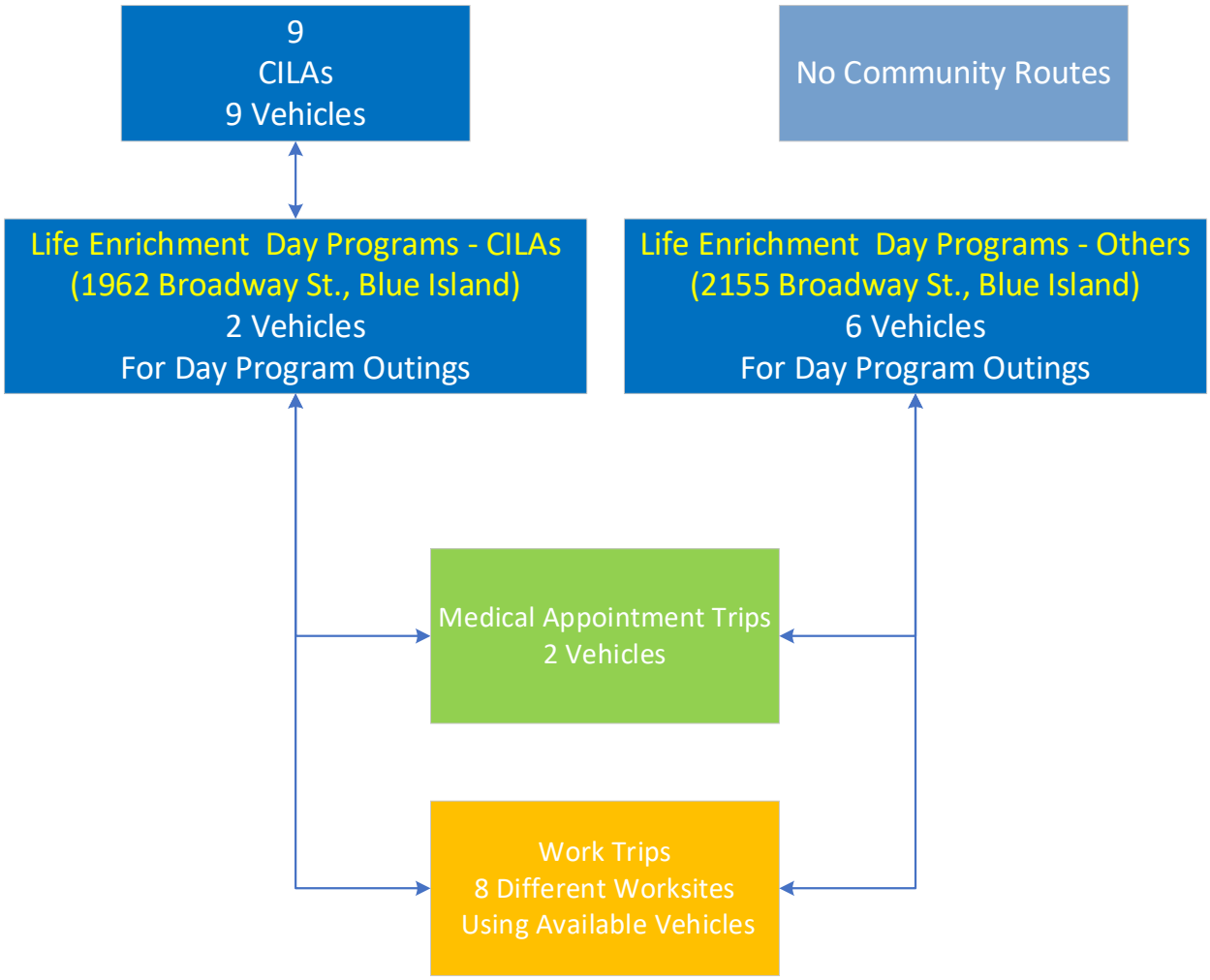
TABLE A-2: BLUE CAP WORKSITES

Employer	Address	Individuals Employed
Blue Island City Hall	13051 Greenwood Ave., Blue Island, IL 60406	5
Blue Island Recreation Center	2822 141st Pl, Blue Island, IL 60406	5
Christ Church	2440 York St., Blue Island, IL 60406	1

Employer	Address	Individuals Employed
CW Resources	536 S. Clark St., Chicago, IL 60605	5 (four from CILAs)
Demco Products	4644 W. 92nd St., Oak Lawn, IL 60453	2 (one via Pace)
EB Bronson	12826 Irving Ave., Blue Island, IL 60406	1
Gaskoa Company	16928 State St., South Holland, IL 60473	2 (one via Pace)
Jewel Food Store	12001 S. Pulaski Rd., Alsip, IL 60803	1

A.8 Transportation Services Schematic

FIGURE A-3: BLUE CAP ORGANIZATION CHART



A.9 Ridership

Table A-3 details the estimated annual ridership for 2022. Data are estimated based on contextual information provided by the agency.

TABLE A-3: BLUE CAP RIDERSHIP

Annual Passenger Trips-2022	
Transportation to day programs	
CILA routes	27,560
Community routes	0
Trips from day programs	
Outing	1,560
Medical	1,152
Work	4,992
Trips from CILAs	
Outing	288
Total	35,552

A.10 Fleet and Fleet Maintenance

Blue Cap's fleet includes vehicles from IDOT, vehicles leased from Enterprise Renta-A-Car, and vehicles owned by the agency (see Table A-4). Blue Cap does not have any vehicles from the Pace Advantage Program. Vehicles are stored in the parking lots at the Blue Cap facilities. Blue Cap does not have any vehicles in their fleet designated as spares. Fleet maintenance for Blue Cap vehicles is handled by nearby local shops.

Blue Cap's vehicles from Enterprise are each available on a five-year lease. When the lease period is completed, Enterprise picks up the vehicle from Blue Cap and sells it; the proceeds from the sale go toward the next vehicle leased.

TABLE A-4: BLUE CAP FLEET

Source	Year	Vehicle ID	Location	Make/Model	Passenger Seating	
					With Wheelchair	Total
Enterprise	2019	W94990	Posen	Dodge Grand Caravan		6
Enterprise	2019	W127601	Supported Employment Program-main building	Dodge Grand Caravan		6
Enterprise	2020	CA61562	Main building	Dodge Grand Caravan		6

Source	Year	Vehicle ID	Location	Make/Model	Passenger Seating	
					With Wheelchair	Total
Enterprise	2013	V210679	Old medical car[1]	Honda Civic	Enterprise picked up in March	4
Enterprise	2014	V286044	Honore CILA	Honda Odyssey		6
Enterprise	2014	V286045	Lawndale CILA	Honda Odyssey		6
Enterprise	2021	CS42658	York CILA	Chrysler Voyager LX		6
Enterprise	2018	W98505	Main building	Dodge Grand Caravan		6
Enterprise	2017	1887909B	Chris CILA	Nissan NV 200		2
Enterprise	2019	S325468	James CILA	Dodge Grand Caravan		6
Enterprise	2018	W211325	Broadway CILA	Dodge Grand Caravan		6
Enterprise	2015	38933CV	Justine CILA	Honda Odyssey		6
Enterprise	2018	40555CV	Maple CILA	Ford Transit		8
Enterprise	2022	DV85503	New medical car	Nissan Sentra		4
Agency	2015	X745421	Pat Thies	Honda Accord		4
Agency	2007	22685CV	Maintenance #1	Ford Econo		8
Agency	2002	30050CV	Main building	International		2
IDOT	2018	42970CV	Main building	Braun Ability-Grand Caravan	3+1 wheelchair (wheelchair side)	3+1 wheelchair
IDOT	2019	44525CV	Main building	Dodge Braun	(wheelchair side)	3+1 wheelchair

[1]Retired in March 2023

A.11 Costs

Blue Cap reports billing through the Reporting of Community Services (ROCS) System. The IT services for the Health and Safety Management System (HSMS) are provided remotely by a full-time programmer from CSP. Participation by homebound individuals in the day program is supported by 31U funding from the state. Some individuals participate for less than the maximum allowable five hours if their transportation is late to arrive in the morning. According to the rate table from the Illinois DHS, the current rate for 31U fundings is $15.03 per hour (up to 1,200 annual hours maximum) or $18,036 annually per individual.

Funding for CILA individuals comes from the state's 60D program, which has yearly and monthly caps for billing. Blue Cap reports their information on billable hours through the ROCS system to the Illinois DHS. For S51 payments to the agency, the billing rate is between $50 and $60 per individual.

Blue Cap provided the following cost estimates for their transportation-related services:

- All vehicles.
    - $37,000.00 per month for vehicle insurance.
    - $1,778.00 per month for fuel (gasoline).
- Enterprise Rent-A-Car.
    - $386.18 per month per vehicle lease (based on $4,428 to lease 11 vehicles).
    - $120.00 per month for vehicle maintenance (all vehicles).
- Pace ADA Paratransit Services fares.
    - $682 per month to individuals served (in the form of fare tickets purchased).
- Staff reimbursements.
    - $65.50 per mile of personal vehicle use for the transport of individuals served.
- Staff rates.
    - $15.12 per hour for DSPs.
    - $17.50 per hour for house managers.
    - $21.21 per hour for QIDPs.

APPENDIX B: PROFILE OF CLEARBROOK

B.1 Agency Background and Programs

Founded in the mid-1950's, Clearbrook is a nonprofit human service agency that provides services to over 8,000 adults and children impacted by IDDs in northwest suburban Chicagoland. With corporate headquarters located in Arlington Heights, Illinois, Clearbrook maintains three different day programs at Crystal Lake in the western portion of its catchment area, at the Getz Center Palatine in the central portion of the area, and the at the Techny Center in Northbrook to the east. Avenues, Arts of Life, and the Little City Foundation are secondary stops for Clearbrook's CILA routes.

B.2 Organizational Chart and Staffing

Figure B-1 shows Clearbrook's organizational chart. Key Clearbrook staff who manage/oversee transportation services and vehicles include the following:

- Day program QIDPs at each site route community routes and schedule outings.
- CILA DSPs drive CILA routes to day programs and for after-hours CILA outings.
- Medical appointment coordinators arrange for DSPs to drive medical trips.
- CES Work and Pursuits coordinators arrange work trips for those two programs.
- ICF day program supervisors at each site route community routes and schedule outings.
- ICF DSPs drive routes to ICF day programs and for after-hours ICF outings.
- The director of transportation manages fleet maintenance and reporting for all vehicles.

Staff who drive vehicles obtained through the Pace Advantage Program must become Pace-certified, as detailed in Section 2.8.1. As of the publication of this report, Clearbrook had four Pace-certified drivers with a fifth due to complete training in May 2023.

B.3 CILAs

Clearbrook's 55 group residences (i.e., CILAs) each map into specific day programs—5 CILAs map to the Crystal Lake facility, 24 map to the Getz facility, and 26 map to the Techny facility.

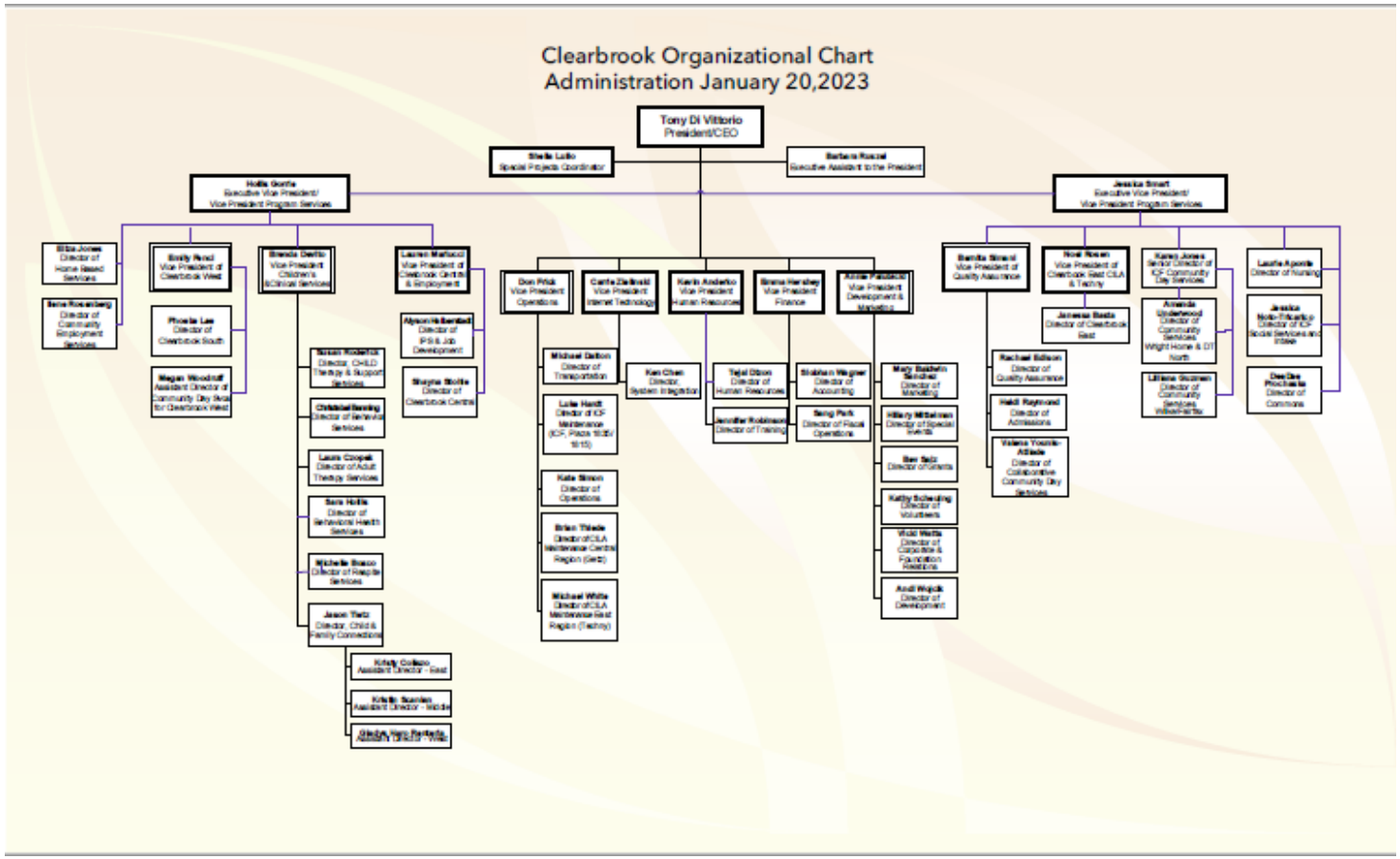
Clearbrook assigns one to two vehicles to each of the 55 CILAs—47 of the CILAs have one vehicle and 8 of the CILAs have two vehicles, for a total of 63 CILA vehicles. Five additional vehicles in the CILA fleet serve as backup vehicles, including an additional floater vehicle used for medical appointment trips emanating from the CILAs.

The vehicles used for the CILA routes are generally a minivan or a WAV, but some sedans are used as well. Thirteen of the CILA vehicles and one of the CILA backup vehicles are wheelchair accessible.

The CILA vehicles are used to bring CILA residents to/from the day programs on weekdays. A WAV is assigned to the CILA if a resident at the CILA is in a wheelchair. Clearbrook also maintains four additional vehicles as spares. The CILA vehicles are also used after-hours and on weekends for group trips into the community (for shopping, recreation, a meal, etc.).

The employees driving these CILA vehicles are DSPs. The DSPs have other duties at the CILAs besides driving. Some DSPs on the day shift also have additional duties at the day programs.

FIGURE B-1: CLEARBROOK ORGANIZATIONAL CHART



B.4 Community Routes

Clearbrook also operates six weekday community routes out of the Crystal Lake and Getz day program locations. These routes bring individuals living in the community (i.e., in family residences and in CILAs not affiliated with Clearbrook) to/from their day programs. These community routes operate on weekdays and travel along established routes that are based on each individual's home location. Generally, the mapping is based on proximity to the day program location because the Illinois DHS requires that no individual be onboard a vehicle for more than one hour.

Five of the six routes emanate from Getz, while one route emanates from Crystal Lake. These routes tend to be operated with larger vehicles and by employee drivers rather than DSPs, although DSPs do drive these routes in some cases. No community routes are operated out of Techny. In addition to the CILA vehicles, Clearbrook has a fleet of 15 vehicles—4 at Crystal Lake, 11 at Getz, and 2 at Techny—that are used for community routes, as well as midday and after-hours program outings. Eight additional vehicles serve as backup vehicles.

Clearbrook day programs typically provide five hours of programmatic services, roughly between 9:30 a.m. and 2:30 p.m. Therefore, the day program's community routes and CILA routes from the various CILAs to the day programs must arrive at the day program facility by 9:30 a.m. Most vehicles arrive in the morning between 8:00 and 9:05 a.m. and depart in the afternoon between 3:10 and 4:15 p.m.

In some cases, however, a double run will be operated, with the first run arriving between 8:30 and 9:00 a.m. and the second run (using the same vehicle and driver) arriving by 9:30 a.m. The determining factor for double runs is whether any rider would be on the vehicle for more than one hour. In the afternoon, the double run is essentially reversed. To accommodate double runs, CILA trips that arrive late to the day program, and return medical trips that arrive late, day program staff coverage is scheduled to begin at 8:00 or 8:30 a.m. and run through 4:30 p.m. In some cases, DSPs will transport individuals whose medical appointments run late directly to their residences if they are likely to miss their afternoon ride home.

B.5 Midday Outings

Day program outings center on volunteerism and recreation. These outings are arranged by the day program staff and often involve sign-up sheets. Generally, these outings take place midday during program hours, with transportation emanating from the day program facilities. Drivers and DSPs are used to drive the vehicles. The larger vehicles, used for the day program community routes, are often used for outings because of the large group size. After-hours/evening activities (e.g., going to the movies, going out to dinner) are arranged as well. In these cases, drivers typically pick up and drop off individuals at their residence.

B.6 Medical Trips

Clearbrook has a medical appointment coordinator at each day program facility, who arranges for medical appointments and for staff to drive individuals to/from the medical appointments from the day program facilities and to stay with the individuals during the appointments. Generally, the medical appointments are made such that the individuals can return to the day program facility in time for the return trip home.

At Crystal Lake, their single day program vehicle is also used for travel to/from medical appointments. Each of the other two day program sites have two dedicated drivers and vehicles(four drivers and four vehicles in total) dedicated to trips to/from medical appointments. At each of these two sites, one driver provides transportation for medical appointments in the northern part of their catchment area, while the

other driver provides transportation for medical appointments in the southern part of the area. In cases where an appointment runs late into the afternoon, staff will drive the individual back to their residence after the appointment.

B.7 Work Trips

Clearbrook has two program that focus on providing work opportunities for the individuals it serves. Most opportunities are provided through its CES department, which has four vehicles dedicated to providing transportation for work trips. The Pursuits day program, based in Buffalo Grove, Illinois, provides work opportunities in a one-on-one format. The DSPs accompanying each individual will typically use their own personal vehicle to travel to/from the worksite and stay with the individual while at work. Some of the more independent individuals served by Clearbrook use Pace ADA Paratransit Services; however, subscription service wait-times can be lengthy (up to 10 weeks).

B.8 Loop Route

An additional vehicle, based at Getz, is used to operate a loop route during the midday. This loop route connects Clearbrook facilities for staff or individuals needing to go from one facility or program to another. For example, Clearbrook runs an Abilities Occupational Therapy/Physical Therapy Program based at the Riley facility in Rolling Meadows, which is served by the loop route. Hence, an individual coming in to a day program from their family residence or CILA could transfer onto the loop route to get to the Abilities program. Clearbrook's Community Mental Health Center is also served by the loop route. Indeed, the loop route has proven to be so useful that Clearbrook is planning to add a second loop route, which would cut down on travel time.

B.9 ICFs

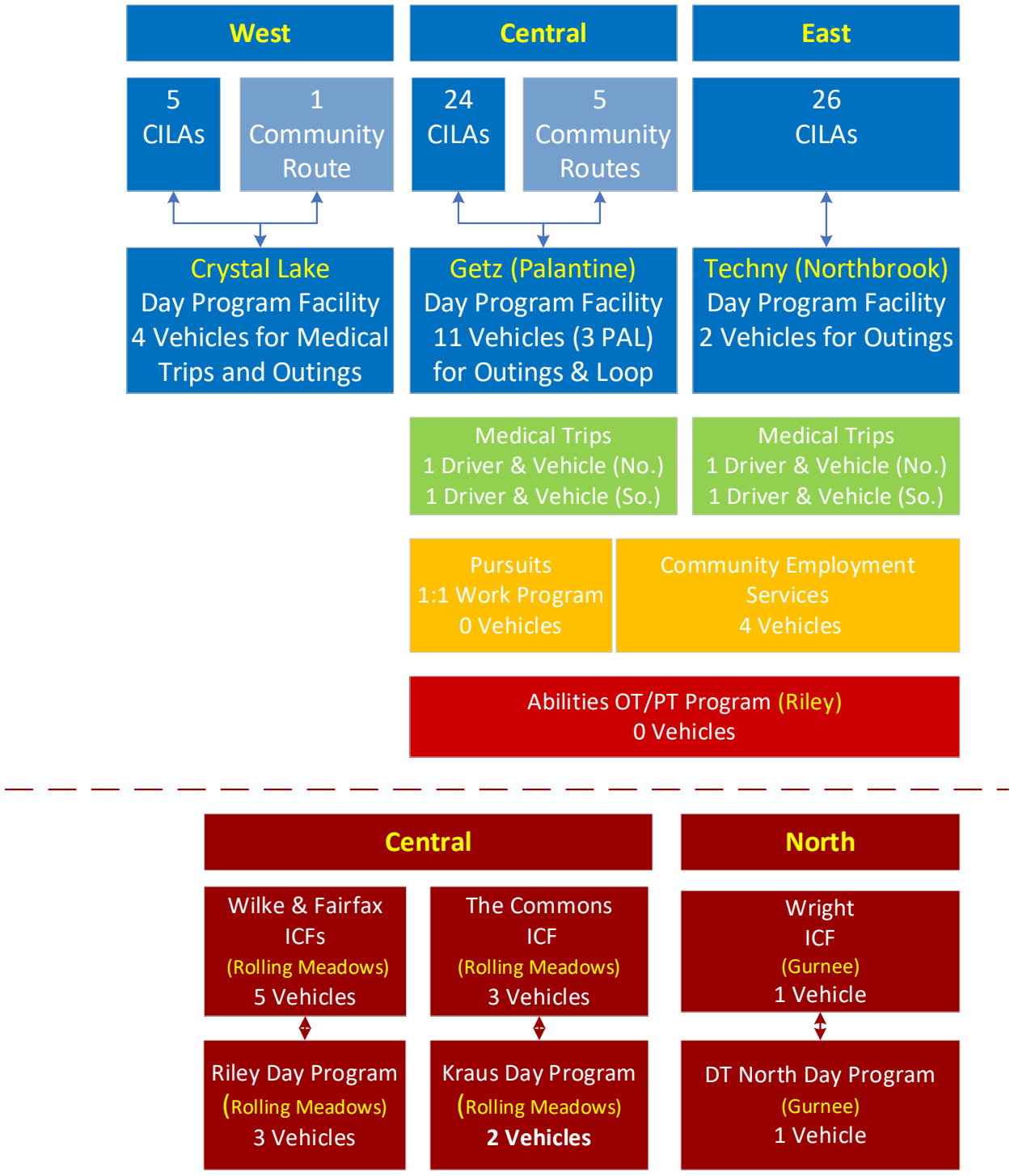
Clearbrook also maintains four ICFs, which are group residences for individuals with IDDs who are more medically needy. Three of the four ICFs can accommodate up to 16 residents. Clearbrook also staffs three day programs for these ICF residents. All within Rolling Meadows, the Wilke and Fairfax ICFs map into the Riley day program, while the Commons ICF maps into the Kraus day program. The Wilke and Fairfax ICFs have four to five shared vehicles for outings that are used to transport ICF residents to/from the day programs at Riley, and the Riley day program has four additional vehicles available for outings.

Similarly, the Commons ICF has two dedicated vehicles, and the Kraus day program has three additional vehicles available for outings. To the north, the Wright ICF maps into the DT North day program—both are located in Gurnee. The Wright ICF has two dedicated vehicles, and the DT North day program has three additional vehicles available for outings. As with the CILAs, the ICF vehicles are available for trips emanating from the ICFs.

B.10 Transportation Services Schematic

Figure B-2 shows Clearbrook's transportation services related to the CILAs, the day programs, the community routes, midday outings, medical trips, work trips, the loop route, and the ICFs.

FIGURE B-2: CLEARBROOK TRANSPORTATION SERVICES



B.11 Ridership

As of the publication of this report, Clearbrook had not provided a detailed breakdown of its annual passenger trips in 2022. Table B-1 provides the estimated annual ridership information that was available.

TABLE B-1: CLEARBROOK RIDERSHIP

Annual Passenger Trips-2022	
Transportation to day programs	
CILA routes	132,000
Community routes	48,480
ICF routes	NA
Trips from day programs	
Outing	NA
Medical	NA
Work	NA
Trips from CILAs	
Outing	NA
After-hours	NA
Trips from ICFs	
Outing	NA
After-hours	NA
Total	288,030

B.12 Fleet and Fleet Maintenance

As summarized in Table B-2, Clearbrook uses 118 vehicles to transport individuals to/from Clearbrook facilities. The fleet of 67 non-WAVs and 51 WAVs equates to a 57/43 percentage split. Of the 118 vehicles, 13 were obtained from IDOT, 7 were purchased by the agency, 5 were obtained through the Pace Advantage Program, and the remaining 92 (78 percent of the fleet) were obtained from Enterprise Rent-a-Car through three- or five-year leases. The vehicles acquired through IDOT are on a 5-year/100,000 miles program (their useful life).

Fleet maintenance and all related reporting is coordinated by Clearbrook's director of transportation. The maintenance of Pace vehicles is provided by contractors in Pace's network of maintenance providers. All other vehicles are maintained through Enterprise's maintenance program that utilizes local vendors and dealerships.

B.13 Costs

Table B-3 summarizes the cost information for transportation services provided by the agency. This cost information reflects annualized costs based on the best available data from January through August 2022. Fringe costs include Federal Insurance Contributions Act (FICA), workers compensation, and 403(b) deductions. Clearbrook noted that monthly fuel expenses increased by roughly 40 percent between January and August 2022.

Expenses that are billable to the RTA include total personnel costs plus other non-personnel related expenses. Annual estimated DSP wages for transportation are estimated separately based on the daily costs for DSPs (estimated hours per day × salary rate with fringe benefits × an estimated 240 days per year of day program attendance for CILAs). Together, RTA billable expenses plus total DSP wages for transportation duties were estimated at nearly $1.9 million per year in 2022.

TABLE B-2: CLEARBROOK FLEET

Vehicle Source	Non-WAVs by Seating Capacity						
	4	5	6	7	8	12	Total
Enterprise	11	4	25	8	13		61
IDOT				4		1	5
Pace							0
Agency				1			1
Total	11	4	25	13	13	1	67

Vehicle Source	Non-WAVs	WAVs	Total
Enterprise	61	31	92
IDOT		13	13
Pace	5		5
Agency	1	7	8
Total	67	51	118

Vehicle Source	WAVs by Seating Capacity/Wheelchair Spaces										
	6/1	6/2	7/1	7/2	8/2	8/4	12/1	12/2	12/4	14/5	Total
Enterprise	2	16	1	9	1	2					31
IDOT				3			2		3	5	13
Pace											
Agency	1				1			2	1	2	7
Total	3	16	1	12	2	2	2	2	4	7	51

TABLE B-3: CLEARBROOK ESTIMATED TRANSPORTATION EXPENSES

Category	Description	2022	
		~January–August	Annualized
Direct labor	Driver/transportation	$210,023	$315,035
Fringe	FICA/other benefits	$42,735	$64,103
	Total personnel costs	$252,759	$379,138
Fuel	WEX bank	$140,758	$211,136
Maintenance	Repair	$67,858	$101,787
Lease	Vehicle payment	$375,257	$562,886
Pace	Pace buses	$18,000	$27,000
Insurance	Auto insurance	$139,715	$209,573
Car wash	Car wash	$2,875	$4,313
Safety	Safety inspection	$948	$1,422
	Total expense	$745,411	$1,118,117
	RTA billable	$998,170	$1,497,255
	Estimated DSP annual transportation wages		$389,514.38
	Total with DSP wages		$1,886,769.57

APPENDIX C: PROFILE OF CTF ILLINOIS

C.1 Agency Background and Programs

CTF Illinois is located in Orland Park, Illinois, and offers both residential and lifestyle support services for the individuals the agency serves. The agency estimates that currently between 130 and 170 people are served by CTF Illinois across their various programs that are located within the RTA service areas. Day programs, operating on weekdays only, are provided to CTF Illinois' CILA residents and individuals living independently in the community. These day programs include the following:

- RITA provides a broad-based day program focused on the arts.
- Thrive is a day program for lower-functioning individuals.
- The Lifestyles Academy provides post-secondary education and training for young adults.
- The Access Behavioral Health Program provides treatment for individuals with mental health disorders.
- Crestwood is a community service/employment center program.

Each of CTF Illinois' 13 CILAs has a vehicle that is used to transport CILA residents to the day programs and for after-hours and weekend outings, social/recreational trips, family visits, and shopping trips emanating from the CILAs.

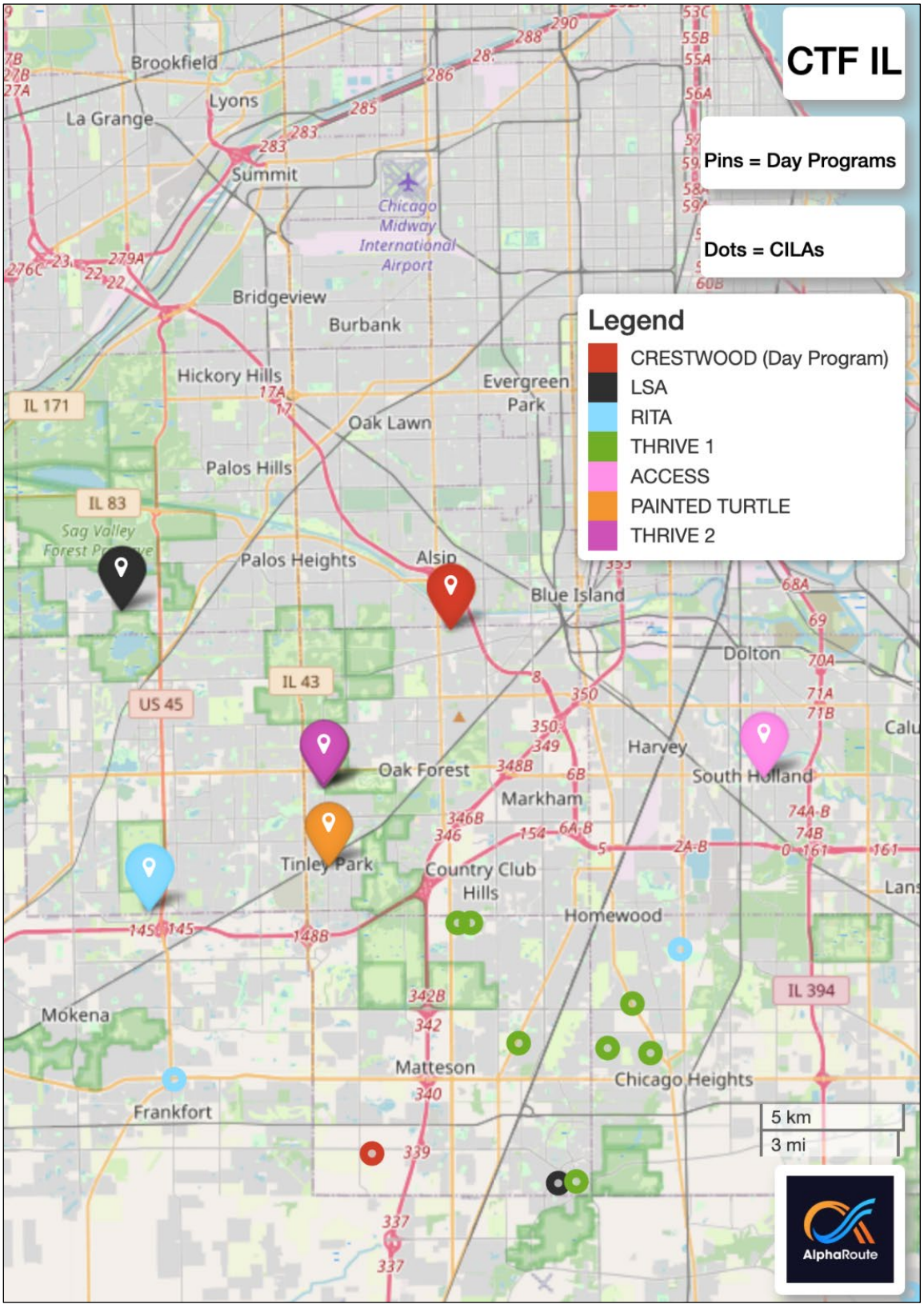
Transportation services include the CILA-to-day program transportation from the agency's CILAs, seven community routes to RITA, and six community routes to Thrive, as well as various programmatic outings, social trips, shopping trips, medical trips, and work trips (including trips to job interviews). For Access participants, CTF Illinois also operates three daily routes to transport individuals to/from mental health therapy and counseling appointments. The Painted Turtle facility is a shop in Tinley Park where RITA artists sell their work. CTF Illinois stations one vehicle there to pick up individuals and facilitate outings from this location. CTF Illinois also provides some home-based care for individuals as part of their program offerings.

Table C-1 lists the locations of these facilities. Figure C-1 shows the locations of these facilities, as well as the locations of CTF Illinois' 13 CILAs.

TABLE C-1: CTF ILLINOIS FACILITIES AND DAY PROGRAMS

Program Name	Program Type	Address
RITA	Day program	18230 Orland Pkwy., Orland Park, IL 60467
Access	Day program	530 East 162nd St., South Holland, IL 60473
Crestwood	Community services	4735 West 135th St., Crestwood, IL 60445
Lifestyles Academy	Day program	10300 West 131st St., Palos Park, IL 60464
Painted Turtle	Day program	17459 Oak Park Ave., Tinley Park, IL 60477
Thrive 1 and 2	Day program	6800/6820 Centennial Dr., Tinley Park, IL 60477

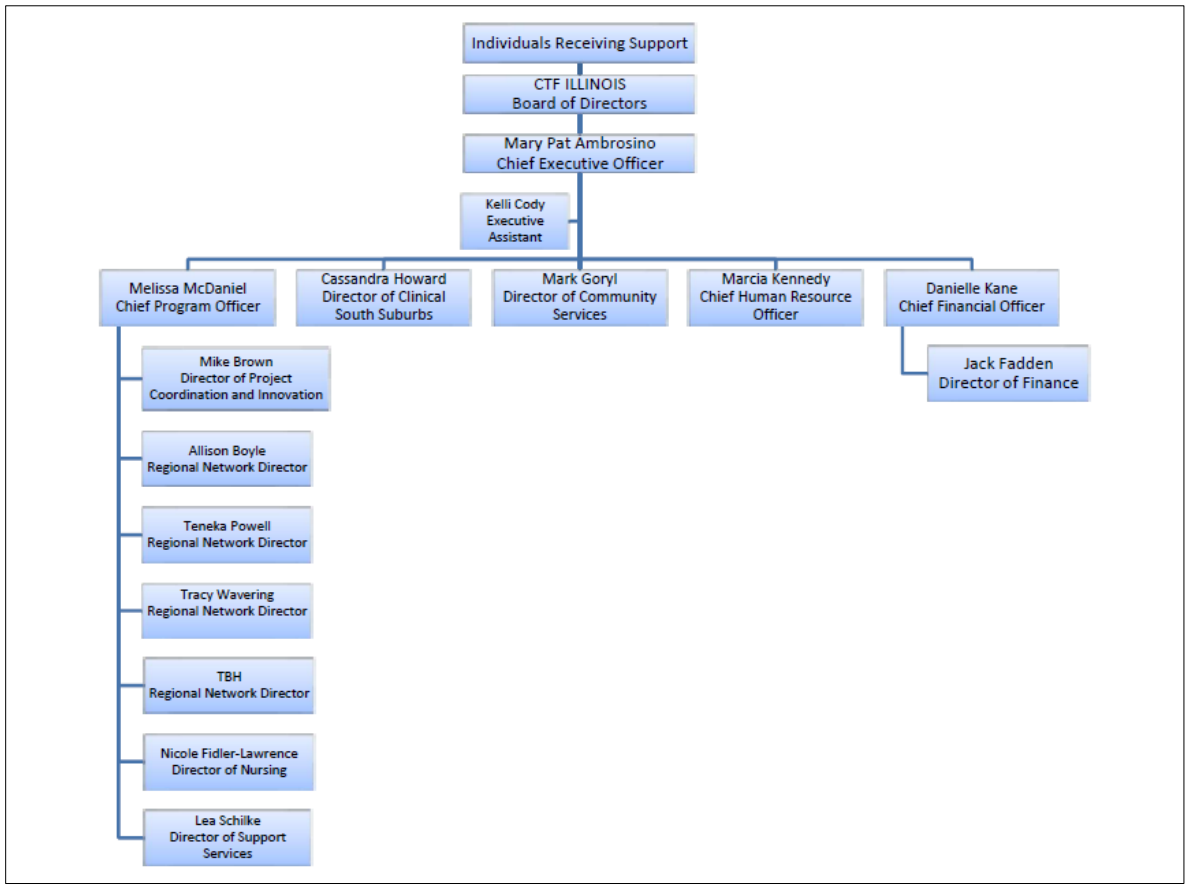
FIGURE C-1: CTF ILLINOIS FACILITY AND CILA LOCATIONS



C.2 Organization Chart and Staffing

CTF Illinois provided several organizational charts for different aspects of the organization. Figure C-2 shows the primary executive level structure for CTF Illinois. CTF Illinois staff member positions include case managers, drivers, and DSPs. The DSPs at the CILAs report to their house supervisor, who reports to the associate director.

FIGURE C-2: CTF ILLINOIS EXECUTIVE LEVEL ORGANIZATIONAL CHART



Day program participants must arrive at the agency's facilities between 8:30 and 9:00 a.m. because the programming starts at 9:00 a.m. and runs until 2:00 p.m. Individuals can use the lunchroom to wait if they arrive any time before 9:30 a.m. (ideally before 9:15 a.m.).

The day program supervisor informs other CTF Illinois staff of any changes that occur during the day. Case managers reach out to the CILA house supervisors if changes occur in the program scheduling or transportation. The house supervisors coordinate with the associate director of transportation regarding any planned outing activities for the day, who then approves the vehicles to be used for those outings.

Most driving responsibilities are handled by the DSPs, particularly for the day programs and the CILAs. The DSPs at the CILAs are staffed in three different shifts that can vary depending on the CILA. Staff are also assigned to the CILA from 6:00 to 10:00 a.m. and overnight from midnight to 8:00 a.m. CTF Illinois additionally uses some *floater* DSPs who work part-time shifts; these staff are used to support the day

programs, which includes assisting with outings and driving. Example DSP shift times for the first shift include the following:

- 7:00 a.m.–4:00 p.m.
- 7:30 a.m.–2:30 p.m.
- 7:30 a.m.–3:30 p.m.
- 7:30 a.m.–4:30 p.m.
- 8:00 a.m.–4:00 p.m.
- 8:15 a.m.–4:15 p.m.

CTF Illinois has 14–15 Pace-certified driving staff (either DSPs or drivers) with an additional 3 in training. At CTF Illinois, Pace-certified drivers get an additional $1 per hour (regardless of whether or not they drive a Pace vehicle). For non-Pace-certified drivers, the agency requires that they have a valid driver's license, personal car insurance, and clearance from the Illinois Department of Motor Vehicles.

CTF Illinois also has two full-time drivers and several part-time drivers who are typically used on the community routes; this driving task does not require DSP qualifications. Drivers work in split shifts in the morning and afternoon. An additional staff member is not usually on the route unless requested.

When a driver is hired and/or assigned to a new route, the driver is trained on the route by another driver for a trial period. Drivers utilize GPS navigation apps on their phone to find unknown address locations (note that no phone holders currently exist in the vehicles); however, the routes are fairly consistent day-to-day, limiting the need for GPS for directions. CTF Illinois also provides each driver with a training and procedures document that describes proper vehicle checks and procedures for loading/unloading individuals, safely operating the vehicle, and reporting accidents/incidents.

C.3 CILAs

CTF Illinois' 13 CILAs typically have four to six beds (sometimes more). Individuals at CILAs have 24-hour supervision from staff, who are supervised by a community living director. Table C-2 lists the locations and number of residents for each of the CILAs.

TABLE C-2: CTF ILLINOIS CILAS

CILA	Address	Residents
184th	4701 W. 184th Pl., CCH, IL 60478	4
185th	4420 185th St., Country Club Hills, IL 60478	6
Cedar	2957 Cedar Ln., Crete, IL 60417	8
Frankfort	9549 W. Lincoln Hwy., Frankfort, IL 60423	3
Hawthorne	194 Hawthorne Ln., Chicago Heights, IL 60411	4
Ithaca	20449 Ithaca Rd., Olympia Fields, IL 60461	4
Kings	18844 Kings Rd., Homewood, IL 60430	8
Neola	343 Neola St., Park Forest, IL 60466	4
Onarga	322 Onarga St., Park Forest, IL 60466	7
Tiburon	22331 Tiburon St., Richton Park, IL 60471	6
Tina	1649 Tina Ln., Flossmoor, IL 60422	4
Travers	20533 Travers Ave., Chicago Heights, IL 60411	6
Warwick		4

Each CILA has a non-Pace vehicle assigned to its location for transportation to the day programs. Typically, a CILA route enroute to a day program departs the CILA at 8:00 a.m. or after and arrives at the day program around 9:00 a.m. The return trip in the afternoon typically departs between 2:00 and 2:30 p.m. Transportation for individuals at the CILA is handled by the DSP on shift. House supervisors at the CILA will sometimes assist with providing trips.

Each CILA is paired with a *sister* CILA nearby to help with any transportation or staffing issues that may occur from time. For example, if a CILA's vehicle is not working or a DSP calls off from work, the house supervisor will determine available alternatives for transportation and staffing.

Two CILAs have individuals going to five different day programs—Thrive, RITA, the Lifestyles Academy, Painted Turtle, and Crestwood. This routing requirement challenges the staffs' ability to get all individuals to their programs on time. If one of the DSPs for the CILA calls out for the day, the driver must make multiple back-and-forth trips to transport individuals to each day program location.

Weekend and nighttime trips from the CILAs are handled by the DSPs and house supervisors using the vehicle stationed at the CILA. Each vehicle has mileage sheets to track its usage and the trip destinations. These outings typically occur an average of three times per week from a given CILA.

C.4 Community Routes

CTF Illinois currently has 13 community routes that provide transportation for individuals living in the community to their day programs. Additionally, routes may be used to pick up individuals from other CILA facilities not affiliated with CTF Illinois who attend CTF Illinois' day programs. These routes rely on a mixture of Pace Advantage Program, IDOT, and agency-owned vehicles. Each route is numbered 1 through 13 and has a shorthand name associated with it.

All community route vehicles hold between 10 and 14 passengers; some offer wheelchair capacity as well. The actual number of riders per route can range from 4 to 10 depending on the route paths. Typically following a big loop, vehicles drop off individuals at different facilities. One route also picks up individuals from the Kings CILA to get them to their day program at RITA on time.

Routes are designed by the associate director of transportation using Google Maps with the goal of geographically clustering individuals in the community that can be served by the route while spending no more than one hour onboard the vehicle. The planned routes include a 5-minute wait time for pickups (not including boarding) and around 5–10 minutes of traffic delays along the way. Routes typically start between 7:30 and 8:00 a.m., depending on the route circumstances. In the afternoon, routes typically depart at 2:30 p.m. but will sometimes leave earlier if needed for double routes.

One issue that can delay an afternoon route's schedule is when a parent/guardian is not at the home. In such cases, CTF Illinois staff must wait for verification that the parent/guardian is present before they can depart for the next drop-off.

C.5 Pace ADA Paratransit Services/Municipal Dial-A-Ride Services

Some homebound individuals use Pace ADA Paratransit Services to travel to/from the day programs. CTF Illinois staff noted that they would encourage the use of these Pace services more if the RITA facility was within Pace's service area. Currently RITA falls outside the ADA-required buffer area from fixed-route transit service. The Lifestyles Academy and Crestwood facilities are, however, within the service area. RITA's location is also a challenge for other local dial-a-ride services because the facility straddles Will and Cook Counties.

C.6 Midday Outings

Programmatic midday outings usually happen every weekday, depending on the number of individuals who want to go on the outing. A typical outing might have 30 individuals participating. CTF Illinois plans for these outings using an average 5:1 individual to DSP ratio; however, these ratios vary depending on the attendees and the destination. Vehicles used for day program outings are also determined based on the attendees and the destination. RITA and Thrive both use two or four vehicles per day for outings. The Lifestyles Academy also has outings that are handled by the DSPs. A variety of destinations exist for day program outings, with some preplanned outings going as far as downtown Chicago. All outing trips must return by 1:30 or 2:00 p.m. so that individuals can be transported back home from the day programs. The DSPs driving on outings are determined by which CILA or community group is going. The floater DSPs also support with outings as needed.

C.7 Medical Trips

At CTF Illinois, transportation for CILA resident medical appointments is coordinated through the nursing team and CTF Illinois health care coordinator. Medical trips provided as part of the Access Behavioral Health Program are handled by the coordinator for Access Clinical Direct or assigned staff.

A minivan with a ramp is stationed at Thrive and is used for medical trips during the day for individuals traveling from the RITA or Thrive locations. Depending on the appointment time, individuals are either transported back to their day program after their appointments or straight home in the afternoon.

C.8 Work Trips

The Crestwood facility is an employment center for individuals who work. One community route shared with Thrive is also used to transport individuals from the community to Crestwood. The facility has three vehicles stationed there for outings. The Crestwood day program runs from 8:00 a.m. to 2:00 p.m., abiding by the five-hour billing period.

C.9 Transportation Services Schematic

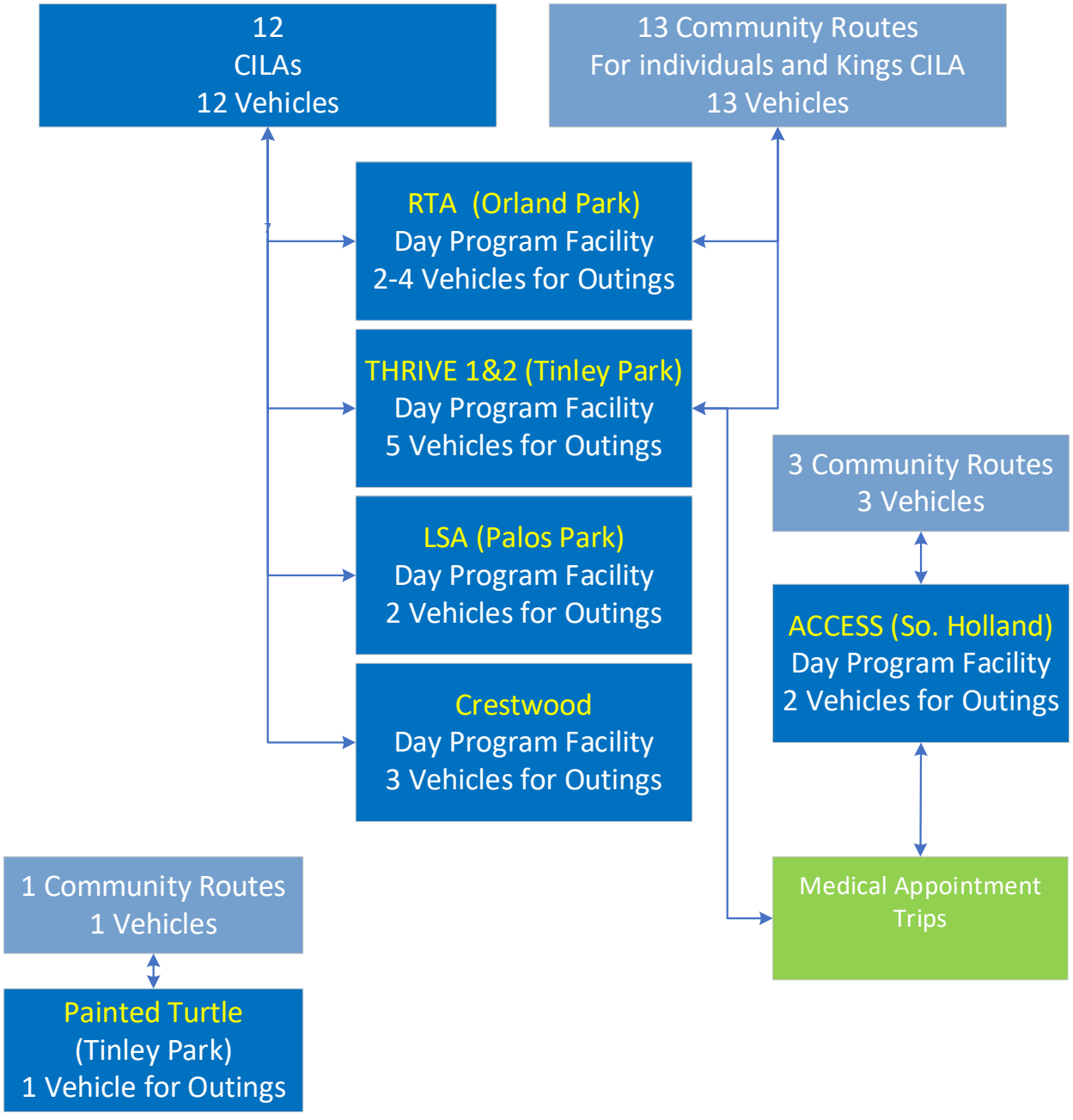
Figure C-3 shows CTF Illinois' transportation services related to the CILAs, day programs, community routes, midday outings, medical trips, and work trips.

C.10 Transportation Data Collection

Drivers on the community routes use transportation sheets to record passenger pickup and drop-off times along the route and vehicle departure and return times from the CTF facility for both the morning and afternoon runs. Each route uses one transportation sheet per day; different drivers may record information on the same sheet between the morning and afternoon runs. The transportation sheet reminds drivers that "all routes must be out by 7:30 a.m. and 2:30 p.m., return by 8:30 a.m." The DSPs have attendance sheets associated with outings that document how many individuals were on the outing and the outing destination. Drivers and DSPs conduct pre-trip and post-trip inspections when using the vehicles. Other data reporting mechanisms and sources include the following:

- Day program/work trips are summarized in Excel.
- Outings are reported to the HSMS.
- CILA evening and weekend trips are recorded on vehicle mileage sheets.
- Medical trips are handled separately.
- Trip and mileage data for Pace Advantage Program vehicles are reported monthly.

FIGURE C-3: CTF ILLINOIS TRANSPORTATION SERVICES



C.11 Ridership

Table C-3 details CTF Illinois' annual ridership by type for 2022. Data were estimated based on contextual information provided by the agency.

TABLE C-3: CTF ILLINOIS RIDERSHIP

Annual Passenger Trips-2022	
Transportation to day programs	
CILA routes	35,360
Community routes	47,840
Trips from day programs	
Outing	3,960
Medical	1,200
Work	0
Trips from CILAs	
Outing	4,356
Total	92,716

C.12 Fleet and Fleet Maintenance

Table C-4 details CTF Illinois' vehicle fleet. CTF Illinois has a mixture of Pace Advantage Program, IDOT, and agency-owned vehicles. To accommodate wheelchair users, the associate director of transportation considers the agency's available WAVs (i.e., vehicles with lifts and wheelchair seating), then determines where to station those vehicles to best meet the needs of the individuals. Pace vehicles are only used for the day programs and are not assigned to the CILAs. Of the seven Pace vehicles, six are used for routes and one is used for outings. Select information regarding vehicle identification numbers and vehicle seating capacities with wheelchairs not provided as of the publication this report; missing information related to seating capacities with wheelchairs is denoted with *NA* in Table C-4.

CTF Illinois has three 12-passenger vans that are used as spares; these vehicles are the oldest and have the highest mileage in the fleet. Maintenance for Pace Advantage Program vehicles is performed by Pace's authorized maintenance providers; maintenance costs are covered by a $250 per month fee per vehicle. All maintenance for Enterprise-leased vehicles and agency-owned vehicles is handled through Enterprise's local maintenance shops.

TABLE C-4: CTF FLEET

Source	Year	Vehicle ID	Location	Make/Model	Passenger Seating	
					With Wheelchair	Total
Agency	2013	18	RITA	Ford E-350	11	11
Agency	2018	19	Crestwood	Chevy Express	12	12
Agency	2001	20	RITA	Ford E-350	11	11
Agency	2015	21	Frankfort CILA	Ford Focus	4	4
Agency	2015	22	Nursing/Behavioral Health	Ford Focus	4	4

Source	Year	Vehicle ID	Location	Make/Model	Passenger Seating	
					With Wheelchair	Total
Agency	2012	23	Painted Turtle	Nissan Altima	4	4
Agency	2017	24	RITA	Chevy Express	12	12
Agency	2012	25	Nursing/Behavioral Health	Ford Focus	4	4
Agency	2014	27	Travers CILA	Ford E-350	12	12
Agency	2019	30	RITA-Route 7	Ford Transit	11	11
Agency	2020	31	RITA-Route 2	Ford Transit	12	12
Agency	2019	33	Tina CILA	Dodge Grand Caravan	6	6
Agency	2018	34	RITA-Route 4	Ford Transit	11	11
Agency	2020	35	Access	Ford Transit	11	11
Agency	2020	36	Crestwood-Route 13	Ford Transit	11	11
Agency	2014	37	Crestwood	Dodge Grand Caravan	6	6
IDOT	2014	40	184th Street CILA	Ford StarCraft	NA+4	12
IDOT	2014	41	185th Street CILA	Ford StarCraft	NA+4	12
Agency	2019	42	RITA-Route 5	Ford E-450	NA+5	16
IDOT	2017	43	Cedar Lane CILA	Ford StarCraft	NA+4	12
IDOT	2017	44	Lifestyles Academy	Ford StarCraft	NA+4	12
IDOT	2017	45	DOWNSTATE	Ford StarCraft	NA+4	12
Agency	2019	46	Thrive-Route 12	Ford Elkhart	NA+4	16
IDOT	2018	47	RITA-Route 3	Ford StarCraft	NA+4	12
IDOT	2018	48	Thrive-Route 8	Ford StarCraft	NA+4	12
IDOT	2018	49	Thrive-Route 10	Ford StarCraft	NA+4	12
IDOT	2018	50	Thrive-Route 9	Ford StarCraft	NA+4	12
Agency	2018	51	Warwick CILA	Ford Transit	11	11
Agency	2010	52	Downstate	Ford E-350	NA+1	5
Agency	2014	53	Kings CILA	Ford E-350	11	11
IDOT	2014	54	Tiburon CILA	Dodge Grand Caravan	NA+1	6
Agency	2019	56	RITA	Dodge Grand Caravan	NA+1	4
IDOT	2018	57	RITA	Dodge Grand Caravan	6	6
Agency	2019	58	Neola CILA	Dodge Grand Caravan	6	6
Agency	2018	59	Hawthorne CILA	Dodge Grand Caravan	6	6
IDOT	2016	60	Ithaca CILA	Dodge Braun Entervan	NA+1	6
Agency	2013	62	Onarga CILA	Ford E-350	10	10
IDOT	2016	65	HCC South Suburbs	Dodge Braun Entervan	NA+1	5
Pace	2016	#0095	Thrive-Route 11	Ford Transit	10	10
Agency	2003		CES/Delivery Truck	International 4300	1	1
Pace	2018	# 50055	Access-MTM Credentialed	Ford Transit	12	12
Pace	2018	#50007	RITA-Route 1	Ford Conversion	12	12
Pace	2016	#0524	Lifestyles Academy	Ford Transit	12	12
Pace	2017	#0646	RITA-Route 6	Ford Transit	12	12

C.13 Costs

CTF Illinois uses financial sheets that calculate total wages and fringe benefits for transportation-related services. Transportation sheet elements directly from the ledger of accounts include total driver wages, fuel, maintenance and repair, licenses, transportation fees, and mileage reimbursements. The earn rate for each DSP in the financial sheet (used to calculate their wages) is determined according to the individual employee. DSP wages are allocated toward transportation using a rate of $8.25 per hour worked each month. Fringe benefit expenses for both DSPs and drivers are then calculated based on the estimated or direct wage expenses, respectively. The financial sheets also provide information for administrative time. Table C-5 details the transportation-related financial costs for CTF Illinois by FY (July–June).

TABLE C-5: CTF ILLINOIS TRANSPORTATION COSTS

Cost Category	FY (July–June)				
	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023[1]
Total wages and fringe	$361,864	387,374	$150,854	$353,359	$177,146
Vehicle fuel	$125,175	$112,512	$43,019	$143,048	$94,970
Vehicle maintenance/repair	$104,353	$80,405	$55,077	$57,792	$53,206
Vehicle licensing	$5,138	$5,187	$8,221	$3,747	$2,571
Transportation fees	$89,553	$76,047	$8,808	$49,383	$30,937
Mileage reimbursements	$13,334	$20,805	$6,188	$3,324	$5,647
Total	$699,417	$682,330	$272,167	$610,653	$364,477

[1]Expenses to date through December 2022

APPENDIX D: PROFILE OF THE LITTLE CITY FOUNDATION

D.1 Agency Background and Programs

Founded in 1959, the Little City Foundation is a nonprofit human service agency offering a comprehensive scope of services to individuals with IDDs in northwest suburban Chicagoland. The Little City Foundation's administrative offices are based in Inverness, Illinois, but its main 56-acre campus is located in Palatine, Illinois. Its primary community service day program is based at the Countryside Center in Schaumburg, Illinois; a secondary day program facility exists to the north in Grayslake, Illinois.

D.2 Organizational Chart and Staffing

Figure D-1 presents the Little City Foundation's organizational chart. Key staff who manage/oversee the agency's transportation services and vehicles include the following:

- Day program managers at each site plan community routes and schedule outings.
- The EDS manager arranges work trips.
- The transportation manager handles fleet maintenance and reporting for Countryside, the CILAs, and EDS; Grayslake vehicles are managed by the Grayslake facility head.

Vehicles are operated by full-time drivers as well as DSPs, who have other duties at the CILAs and day programs besides driving.

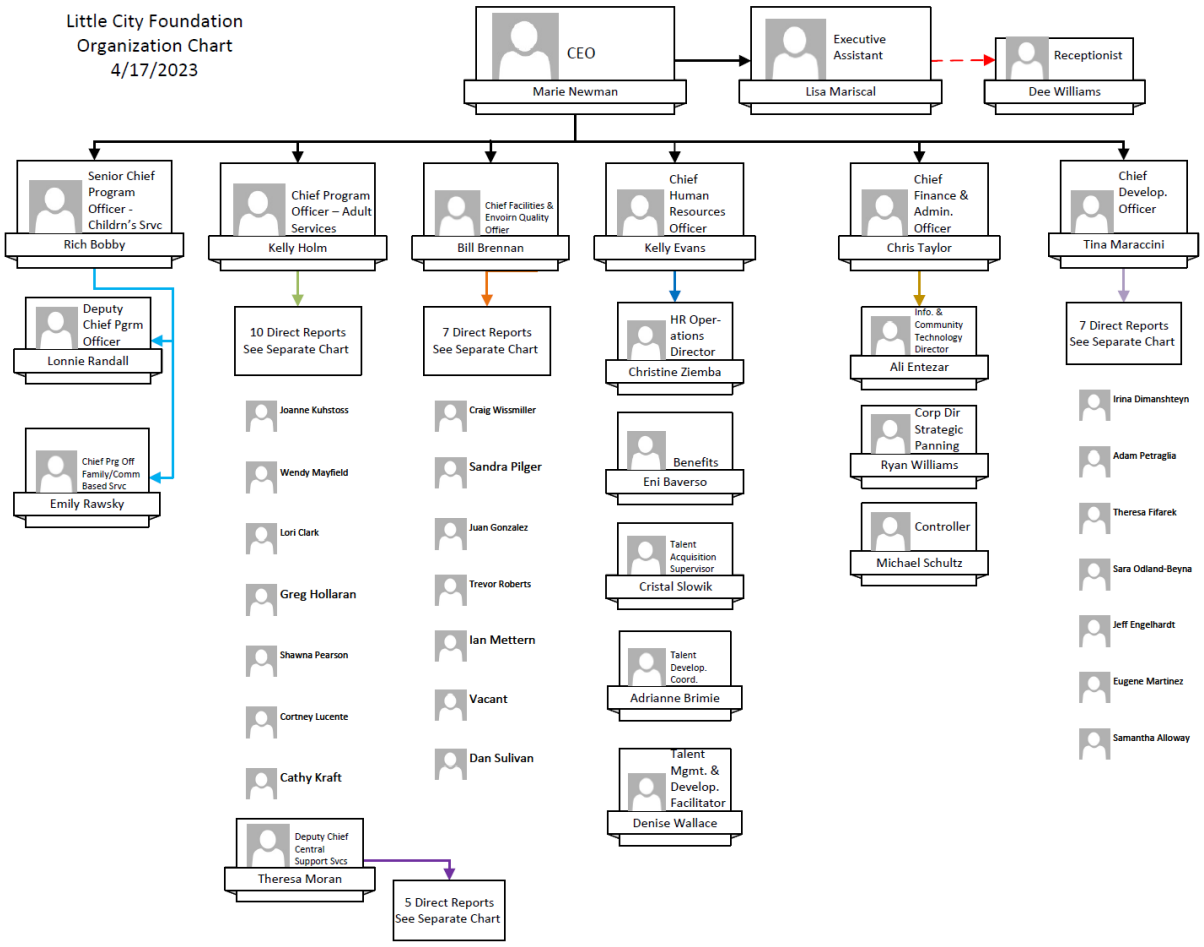
Note that Pace vehicles must only be driven by Pace-certified drivers and DSPs. Pave certification has stringent requirements for applicants, including a physical exam. All applicants who qualify must then take a Pace defensive driving course. Currently, the Little City Foundation has several Pace-certified drivers.

D.3 CILAs and Apartment Buildings

The Little City Foundation has 14 CILAs spread over a broad area in northwest Chicagoland. Each CILA houses up to six residents. The agency also has 3 on-campus apartment buildings that currently house 52 residents. The CILA and on-campus residents who attend day programs all go to the Countryside Center. Some also go to the CEBO building on campus, which serves as a hub for work trips. No CILAs map to the Grayslake facility.

The Little City Foundation assigns one vehicle—usually a minivan or a WAV if needed—to each of the 14 CILAs. The 14 vehicles are used to bring CILA residents to/from the Countryside Center on weekdays. The agency has another five vehicles that serve as backups to this and other fleets, bringing the total available vehicles to 19. Additional spare vehicles are needed approximately two to three times per week. The CILA vehicles are also used after-hours and on weekends for group trips into the community (for shopping, recreation, a meal, etc.). On average, CILA groups have four evening outings per week and one outing on the weekend. The Little City Foundation assigns another 8–10 vehicles to the on-campus apartments.

FIGURE D-1: LITTLE CITY FOUNDATION ORGANIZATIONAL CHART



D.4 Community Routes

The Little City Foundation operates seven community routes out of the Countryside Center and six community routes out of the Grayslake facility, which bring individuals living in the community (but not the agency-affiliated CILAs) to/from these two day programs and to the on-campus CEBO building for work trips as required. These community routes operate on weekdays and travel along established routes based on each individual's home location. The routes tend to be operated with larger vehicles and by employee drivers. The vehicles used for these community routes are also used for midday and after-hours program outings.

The Little City Foundation's day programs typically provide five hours of programmatic services, roughly between 9:30 a.m. and 2:30 p.m. Accordingly, the target arrival time for these seven community routes at the Countryside Center is 9:00 a.m., but arrival times vary anywhere between 8:30 and 9:30 a.m. Countryside day program staff are on duty as early as 8:00 or 8:15 a.m. to greet the day program participants coming in from the community routes and CILA routes. In a typical afternoon, all seven community routes depart by 3:00 p.m. Of the seven vehicles used for these community routes, four are Pace vehicles that seat up to 12 passengers and three are 14-passenger vehicles from IDOT.

Community routes out of the agency's Grayslake facility operate differently because of driver shortages and the one-hour maximum onboard requirement. Indeed, due to driver shortages, the head of the Grayslake facility often has to drive. These circumstances require each of the three drivers to run double routes as follows:

- In the northwest portion of Grayslake's catchment area, the driver starts out on their first run around 7:30 a.m. and returns to the facility about 8:05 a.m. After unloading, they head out on their second run at 8:30 a.m. and return to the facility between 9:30 and 9:45 a.m.
- In the southwest portion of the area, the driver heads out on their first run at 8:00 a.m. and returns around 8:30 a.m. They head out on their second run at 8:40 a.m. and return to the facility around 9:10 a.m.
- In the eastern portion of the area, the driver heads out on their first run at 7:30 a.m., picks up the first individual at 8:15 a.m., and returns to the Grayslake facility at around 9:00 a.m. They then head out on their second run at 9:00 a.m., pick up the first individual at 9:20 a.m., and return to the Grayslake facility by 10:00 a.m.

In the afternoon, these double run routes are operated in reverse.

To accommodate the double runs at Grayslake, as well as return medical trips that run late, day program staff coverage begins at 8:00–8:30 a.m. and runs through 4:30 p.m. Currently, none of the individuals coming into Grayslake for day program services require a WAV.

D.5 Midday Outings

Day program outings center on volunteerism, shopping, and recreation. For example, recreational outings may include horticultural classes, art classes, trips to museums, and trips to sporting events. Some of these outings are to facilities on campus (e.g., the horticultural classes), while others are in the community. These outings are arranged by the day program staff at each of the day program facilities. Participation is solicited using voluntary sign-up sheets; participation may also sometimes be suggested to individuals based on their interests. Generally, these outings take place midday between 10:00 a.m. and 2:00 p.m., with transportation emanating from the day program facilities. Drivers and DSPs (at Countryside) are used to drive the vehicles. After-hours/evening activities (e.g., going to the movies, going out to dinner) are arranged as well. In these cases, drivers typically pick up and drop off individuals at their residence. At both the Countryside Center and at Grayslake, staff use the seven vehicles stationed at each facility for these outings.

D.6 Medical Trips

The Little City Foundation staff at each day program facility arrange for medical appointments and for staff to drive individuals to/from the medical appointments from the day program facilities and remain with the individuals during the appointments. Generally, the medical appointments are made such that the individuals can get back to the day program facility in time for the return trip home from the day program facility.

At Grayslake, the day program fleet is used for medical appointment trips. At Countryside, an on-campus medical professional is available to see individuals. For medical trips in the community, DSPs and CILA vehicles are generally used.

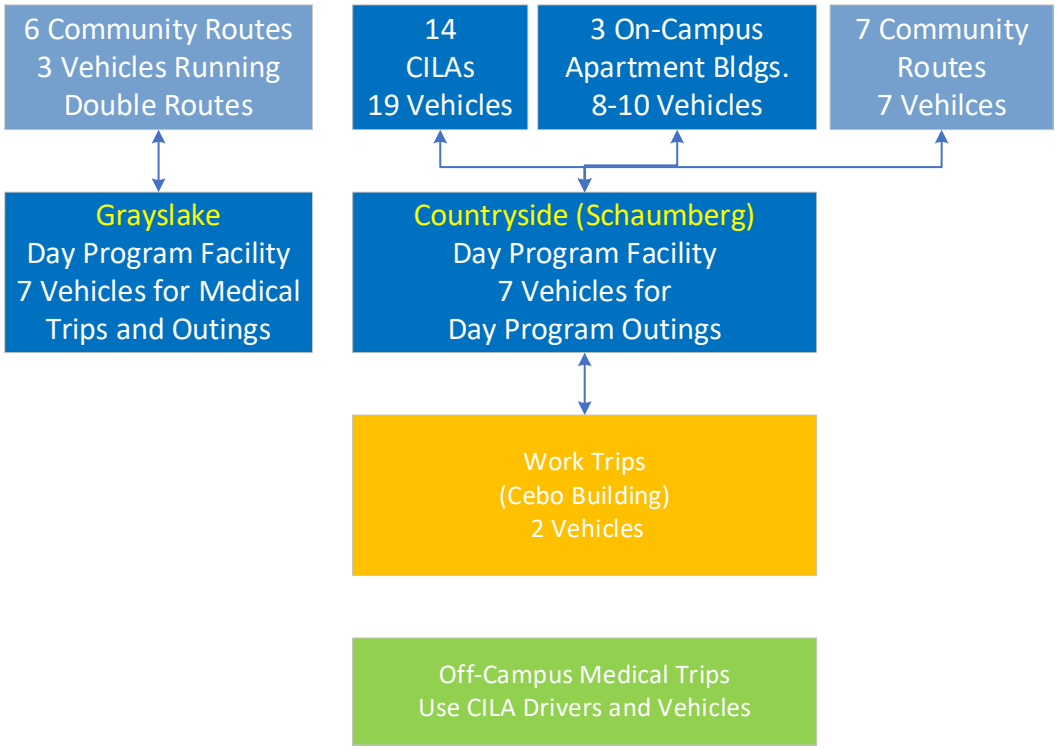
D.7 Work Trips

The Little City Foundation's EDS program is located in the CEBO building on campus. EDS staff are responsible for arranging work and training opportunities for individuals, including transportation to and from these locations in the community. After dropping off individuals at Countryside, morning community routes and CILA routes drop off EDS workers at the CEBO building, where they will then be driven to their work or training location using two vehicles dedicated to the EDS program. One of the main employment sites is a nearby hospital. Some of the more independent participants are able to use Pace ADA Paratransit Services to travel to/from work.

D.8 Transportation Services Schematic

Figure D-2 shows the Little City Foundation's transportation services related to the CILAs, day programs, community routes, midday outings, medical trips, and work trips.

FIGURE D-2: LITTLE CITY FOUNDATION TRANSPORTATION SERVICES



D.9 Ridership

Table D-1 lists the Little City Foundation's annual number of passenger trips in 2022 by month and by location.

TABLE D-1: LITTLE CITY FOUNDATION RIDERSHIP

Month	Main Campus	Countryside Center	Grayslake Center	Total
Jan	3,236	1,643	1,386	6,265
Feb	3,498	1,843	1,455	6,796
Mar	4,197	2,102	1,647	7,946
Apr	4,049	1,690	1,415	7,154
May	3,633	1,809	1,440	6,882
Jun	3,414	1,765	1,393	6,572
Jul	3,926	1,956	1,163	7,045
Aug	3,936	2,301	1,572	7,809
Sep	3,908	2,064	1,300	7,272
Oct	2,427	1,933	1,436	5,796
Nov	3,046	2,006	1,490	6,542
Dec	2,522	1,542	1,076	5,140
Total	41,792	22,654	16,773	81,219

D.10 Fleet and Fleet Maintenance

The Little City Foundation's fleet includes 64 vehicles used for the transport of individuals served by the agency. The fleet includes 39 non-WAVs and 25 WAVs. Of the 64 total vehicles, 25 were obtained from IDOT, another 25 were acquired/leased by the agency, and the remaining 14 were obtained through the Pace Advantage Program. The 25 vehicles acquired through IDOT are on a 5-year/100,000 miles program (their useful life).

The vehicles used for the CILA routes are generally smaller (typically carrying four to six residents). Only a few of these vehicles are wheelchair accessible.

Fleet maintenance and all related reporting is coordinated by the Little City Foundation's transportation manager. Most maintenance for the bulk of the fleet is performed by Casey Automotive in Palatine, Illinois, although services have been sought from several other maintenance service centers, dealerships, towing companies, etc. Maintenance for Pace vehicles is provided by Stephens Automotive in Palatine; by a Ford dealership, Acorn/Goodyear, and Jiffy Lube in Schaumburg; and by Service King in Rolling Meadows.

Concerns were raised by the Little City Foundation staff about the escalating maintenance costs of the IDOT vehicles due to their age (i.e., well past their useful life) and the lack of replacement vehicles due to supply chain issues.

D.11 Costs

Table D-2 details the Little City Foundation's transportation costs for 2021, which totaled $652,523. The Little City Foundation contributed a 1:1 match for the portion of the billed amount submitted to the state for transportation costs.

TABLE D-2: ANNUAL TRANSPORTATION COSTS (2021)

Month	Amount Billed	Agency Match	Combined
Jan	$24,290	$24,290	$48,580
Feb	$24,755	$24,755	$49,509
Mar	$26,759	$26,759	$53,518
Apr	$28,653	$28,653	$57,307
May	$25,881	$25,881	$51,762
Jun	$26,105	$26,105	$52,209
Jul	$27,547	$27,547	$55,094
Aug	$27,483	$27,483	$54,967
Sep	$28,042	$28,042	$56,083
Oct	$29,586	$29,586	$59,171
Nov	$28,351	$28,351	$56,702
Dec	$28,811	$28,811	$57,622
Total	$326,262	$326,262	$652,523

APPENDIX E: PROFILE OF NEW STAR

E.1 Agency Background and Programs

New Star is a nonprofit community organization based in Chicago Heights, Illinois, that provides a variety of training, employment, community, and residential programming for individuals with IDDs. The agency is one of five benefiting from IT services provided by CSP.

New Star has a CDS program for individuals based at or out of their Chicago Heights facility (located at 1005 and 1021 West End Avenue, Chicago Heights, Illinois 60411). This program includes a production floor, community skills, life skills and seniors, and a janitorial training program. New Star also has another facility—Crete campus—located at 25930 S. Cottage Grove Avenue, Crete, Illinois 60417. New Star formerly offered day programs at this site but ceased this offering when the COVID-19 pandemic hit. The site is now only used for offices and vehicle storage. As of the publication of this report, New Star anticipated fully retiring and selling this facility. New Star's day programs include Community Lines, Skill Lines, and the Senior Program. The Skill Lines and Senior Program each offer different types of activities at New Star and in the community; about one day per week individuals participate in outings in the community. The Community Lines program is design for individuals who are more independent, with individuals going on outings in the community 80 percent of the time (or 4 days per week).

New Star also has 23 CILAs under its residential program; these residences are located in Cook and Will Counties and have a vehicle assigned to each, which is used to provide transportation to/from the day programs and for after-hours outings. New Star also has an ICILA that provides services for individuals who live independently but still need outside support. New Star provides day program transportation for these individuals via community routes. Once at the day programs, New Star's vehicle fleet is used to provide programmatic outings, work trips, and medical trips.

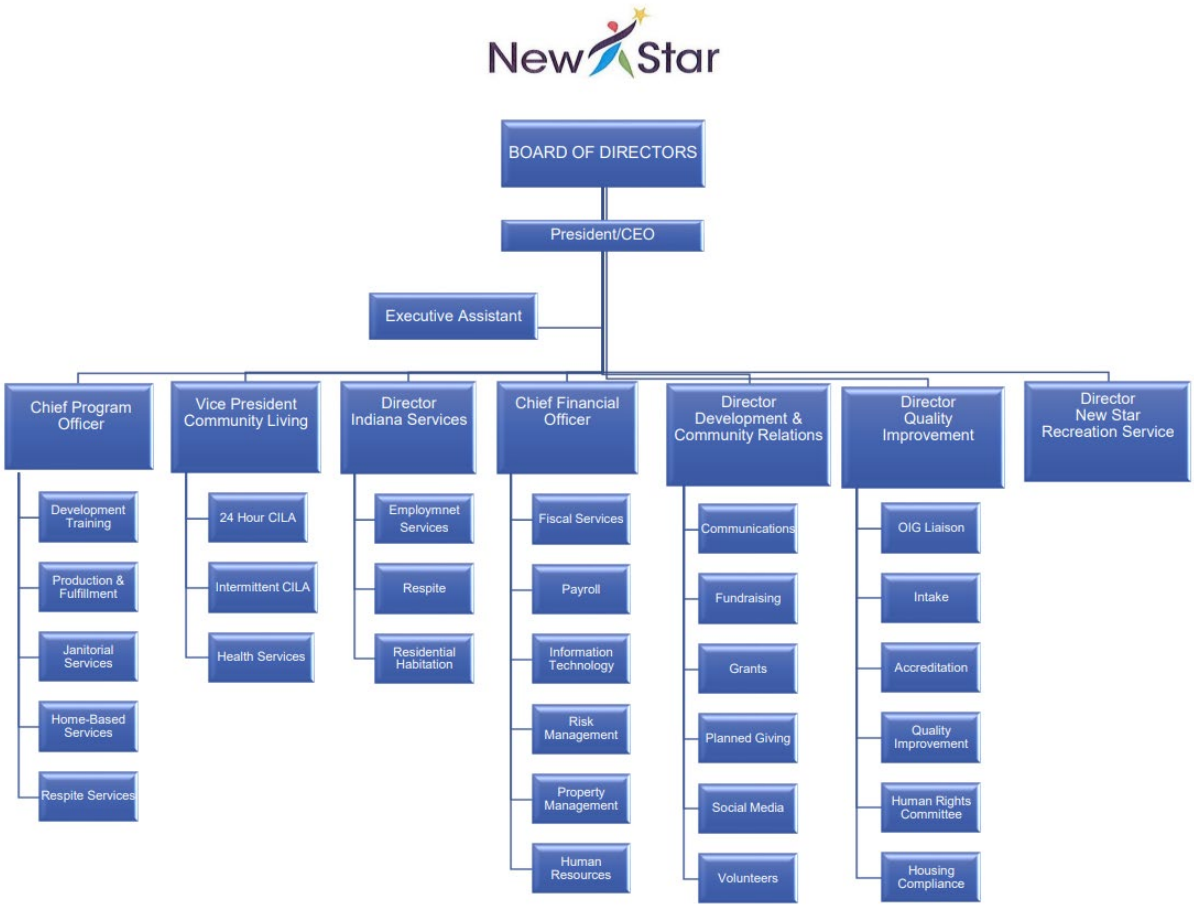
New Star also provides home-based care for individuals who wish to remain at their parent's or guardian's home. If the individuals attend CDS, New Star provides a transportation option for $80 a month. In addition, several individuals travel to New Star's day programs and jobs via Pace ADA Paratransit Services or local dial-a-ride services.

E.2 Organizational Chart and Staffing

Figure E-1 shows New Star's organizational chart. As shown, the chief program officer oversees both the day programs and Community Living. The CDS administrator is responsible for the day programs, overseeing both the transportation manager and the program manager, who in turn oversee the day program staff. The vice president of Community Living is in charge of all the CILAs and ICILAs at New Star, overseeing the CILA house managers, who in turn oversee the CILA staff.

Since the beginning of the COVID-19 pandemic, all the staff at New Star are DSPs. The DSPs are responsible for transporting individuals to/from the day programs and on other trips, as well as supervising/assisting individuals during recreational or other activities within the community. The DSPs assigned to CILAs also assist with transportation for medical appointments from the CILAs. Special recreation staff are responsible for transportation specifically related to the Recreation Services program. Day programs at New Star maintains a staffing ratio at the day programs of 6:1, individuals to DSPs. New Star does not employ any drive-only employees. New Star DSPs earn around $14–15 an hour plus fringe benefits.

FIGURE E-1: NEW STAR ORGANIZATIONAL CHART



Day program hours are weekdays from 8:00 a.m. to 1:30pm. As such, day program DSP shifts are typically from 7:00 a.m. to 3:00 p.m. Some DSPs have shifts that run later (e.g., from 7:15 a.m. to 3:15 p.m.) depending on driving assignments and program responsibilities. New Star also has one to two DSPs who are unassigned to driving routes and who instead help with coverage when other staff have the day off. These DSPs will be added to routes after New Star brings more people back to the program.

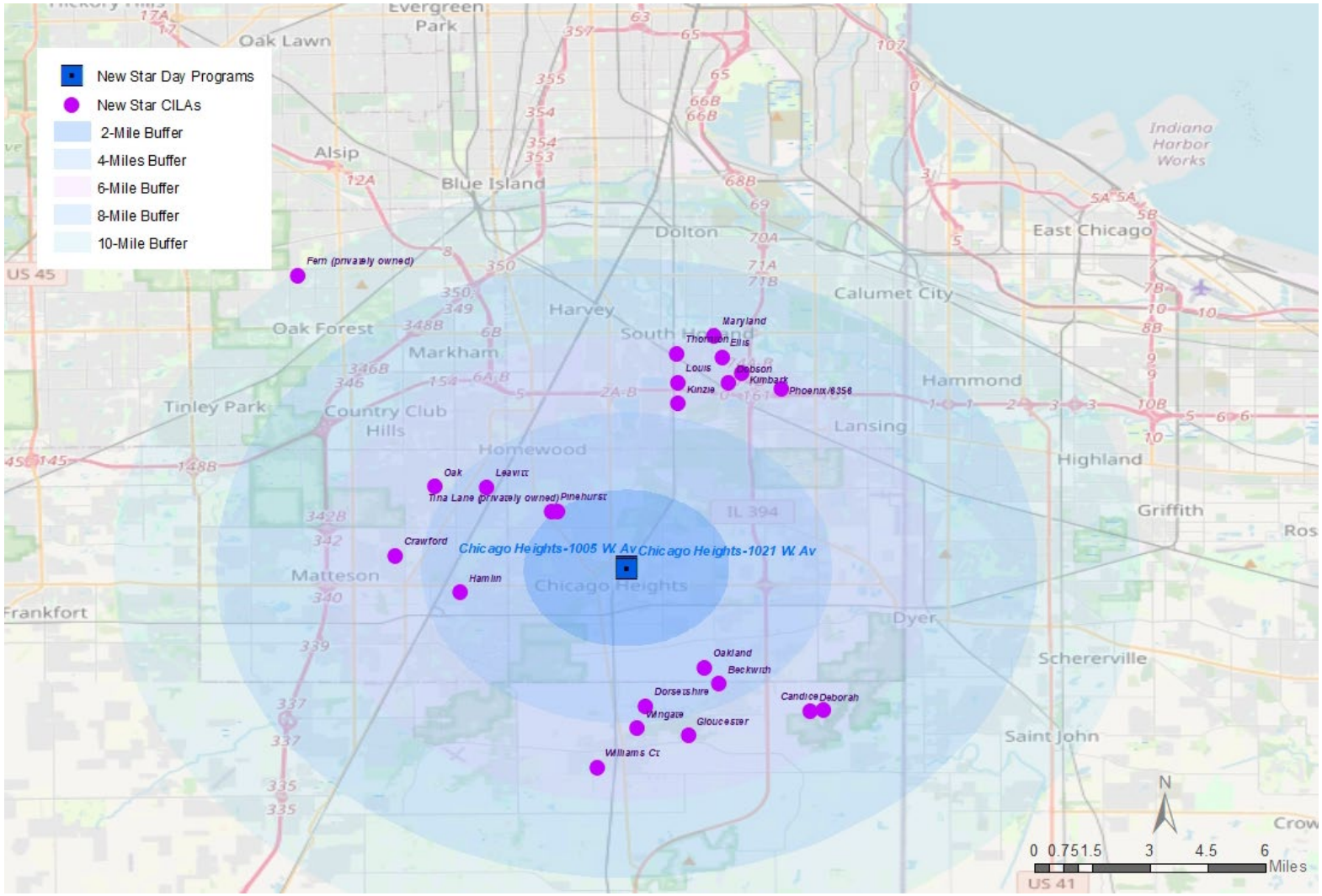
E.3 CILAs

New Star has 23 CILAs under its residential program—21 are agency-owned and 2 (Fern and Tina) are privately-owned. New Star serves as an in-home support services provider for these two privately-owned CILAs. All of the CILAs are residential homes integrated into neighborhoods throughout the Chicagoland area (within both Will and Cook Counties), including Crete, Flossmoor, Thornton, Matteson, South Holland, Steger, Oak Forest, Park Forest. Table E-1 lists the 23 CILA locations, while Figure E-2 shows the locations of the CILAs relative to New Star's day program facility.

TABLE E-1: NEW STAR CILAS

CILA	Agency/Owner	Address
Beckwith	New Star	3409 Beckwith Lane, Crete, IL 60417
Gloucester	New Star	3946 Gloucester, Crete, IL 60417
Crawford	New Star	4126 W. 205th St., Matteson, IL 60443
Dobson	New Star	17227 Dobson, South Holland, IL 60473
Dorsetshire	New Star	884 Dorsetshire, Crete, IL 60417
Louis	New Star	17200 Louis Ave., South Holland, IL 60473
Fern	Private	5425 Fern Ave., Oak Forest, IL 60452
Candice	New Star	23810 Candice Court, Crete, IL 60417
Hamlin	New Star	402 Hamlin, Park Forest, IL 60466
Deborah	New Star	23858 Deborah Court, Crete, IL 60417
Kinzie	New Star	519 Kinzie Place, Thornton, IL 60476
Kimbark	New Star	17015 Kimbark Ave., South Holland, IL 60473
Leavitt	New Star	1038 Leavitt Ave., Flossmoor, IL 60422
Ellis	New Star	16704 Ellis Ave., South Holland, IL 60473
Maryland	New Star	16256 Maryland, South Holland, IL 60473
Oak	New Star	2521 Oak Street, Flossmoor, IL 60422
Oakland	New Star	22834 Oakland Dr., Steger, IL 60475
Pinehurst	New Star	1714 Pinehurst Lane, Flossmoor, IL 60422
Thornton	New Star	16614 Thornton, South Holland, IL 60473
Tina	Private	1537 Tina Lane, Flossmoor, IL 60422
Williams Ct	New Star	1545 Williams Court, Crete, IL 60417
Wingate	New Star	336 Wingate, Crete, IL 60417
Phoenix/6356	New Star	17312 Clyde Ave., South Holland, IL 60473

FIGURE E-2: NEW STAR DAY PROGRAM AND CILA LOCATIONS



At New Star, individuals first choose the CILA that they want to reside at (depending on availability) and then choose the day program(s) at New Star in which they want to participate. Thus, persons living within the same CILA may be involved in different programs. While most individuals come to the day programs in Chicago Heights, many individuals work in the community. Some individuals also are transported to day programs at other agencies.

Each CILA has a vehicle stationed at its location. The DSPs use these vehicles to drive individuals to the day programs at the Chicago Heights facility and to medical appointments as needed. Vehicles usually depart their CILA between 7: 45 a.m. and 8:15 a.m. to arrive at the day program facility no later than 9:00 a.m. In the event a CILA resident is unable to come to the day program, the CILA house manager or DSP communicates this circumstance to the transportation manager, who arranges for CILA coverage while the remaining residents are transported to and from the day program.

Any after-hours outing trips emanating from the CILAs are handled by the DSPs and house managers. For medical appointments, the DSP receives information about the appointments, transports the individuals to/from the health care center, and stays with the individuals during the appointment.

E.4 Community Routes

New Star provides 12 community routes that service its day programs at the Chicago Heights facility. These routes pick up persons who live independently in the community. New Star routes also pick up individuals at CILAs owned by other agencies—Millennium Gardens, Progressive Homes, and a CTF Illinois CILA—because these locations worked naturally into the routes.

Most vehicles are based at the Chicago Heights facility, starting and ending their routes from there. A few community routes begin at a DSP's home location, which is closer to their first pickup on the route. In these cases, the DSP is allowed to park the agency vehicle at their home overnight. Vehicles used for the community routes include a combination of Pace Advantage Program, IDOT, and agency-leased vehicles.

Routing is planned by the transportation manager using Google Maps based on the geographic proximities of individuals traveling to New Star facilities. In some areas, the routing paths overlap because residential houses are located long distances from New Star facilities. The transportation manager is responsible for making changes to the van routes, which may impact DSP shifts.

The DSPs driving the routes use Google Maps navigation to find the shortest travel times. While the routes are generally consistent from day-to-day and involve long-time participating individuals, the DSPs noted that transportation routes are frequently adjusted based on an individual's needs and requirements.

New Star combines individuals coming from residential homes with CILAs residents when routing to day programs if a CILA DSP calls off and another DSP/case manager is not available to fill in or if a CILA vehicle is inoperable or unsafe and a substitute vehicle is not available.

A typical community route includes picking up individuals between 7:00 and 8:00 a.m. and dropping them off between 1:30 and 2:30 p.m. Each community route vehicle has a phone designed for emergency incidents and GPS navigation, as well as a phone mount for use during GPS navigation.

All agency vehicles used to be equipped with GPS devices but these devices are no longer after changing insurance providers. The GPS system was used by the agency to track the vehicle location and safe driving patterns of the drivers and to increase route efficiency. New Star plans to find an affordable alternative device to support vehicle navigation.

E.5 Midday Outings

The Community Lines goal is for individuals to be in the community around 80 percent of the time. Midday outings emanating from the day programs are based on individual schedules and the schedule of the production floor. Nearly all DSPs are assigned to a daily outing trip. As a guideline, outings should arrive back to the day program around 1:15 p.m. The DSPs try to leave the outing trip location to drive back to day program around 12:30 p.m. After returning from the outing, individuals are then transported to their CILAs or to their residence. However, if the DSPs do not have a van available on their route, they will instead drive individuals directly to their CILA or home following the outing.

E.6 Medical Trips

While CILA DSPs drive residents to medical appointments, New Star does not provide medical trips for individuals originating from the day program locations. While individuals do depart from the day program locations for medical appointments, New Star staff is not responsible for these rides/appointments.

E.7 Work Trips

Several employment opportunities are provided through New Star's Production Lines and janitorial programs. The production floor at the Chicago Heights facility includes e-recycling and contract work that New Star brings in. Individuals working on the production floor are paid a piece rate based on the job. As of the publication of this report, around 45 individuals work on the production floor. Shifts for the production floor are either 8:00 a.m. to 1:30 p.m. or 8:30 a.m. to 2:00 p.m. When individuals are working on the production floor, the individual-to-DSP ratio is around 16:1. New Star anticipates not using their subminimum wage certificate by the end of the year. At that time, the workforce will be significantly downsized to a few individuals who are paid minimum wage.

Janitorial services are provided at various locations around the greater Chicago area. Individuals working on janitorial teams are transported to worksites (as determined from the various contracts) from the Chicago Heights facility and their homes.

Transportation to and from the work programs is administrated through the Transportation Department. Two vehicles are designated for use on these trips, and the work destinations are set per the contract. New Star also arranges transportation for some individuals to participate in the Special Olympics twice a year.

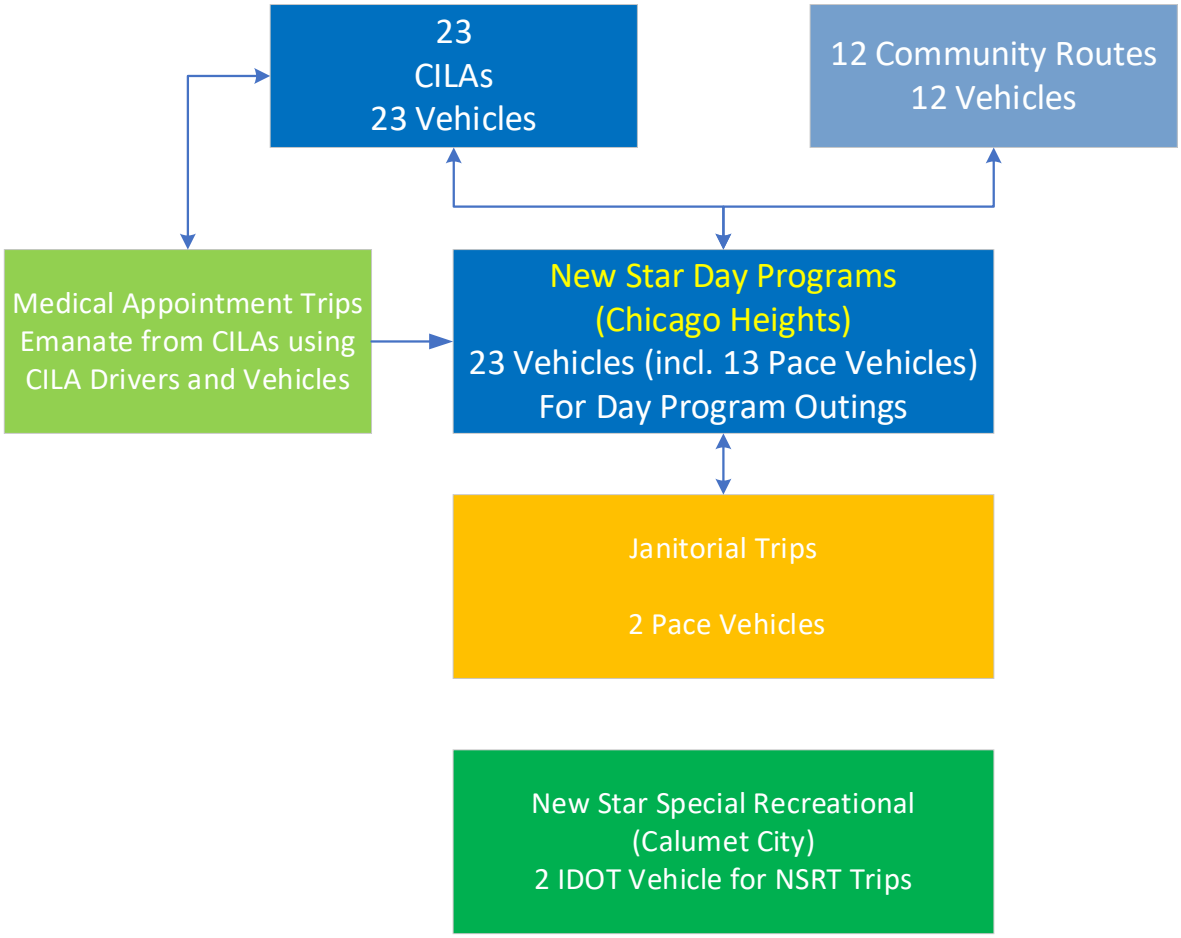
E.8 Special Recreation Transportation

Transportation for New Star's Special Recreation program is run through a separate department at the agency. These community trips for recreational activities are organized by the local parks districts, often based on seasonal activities. Individuals with IDDs who live in a certain area can sign up for these excursions, which typically include swimming, camping, dancing, and hiking. Individuals meet at staging locations (e.g., in Calumet City, South Holland Park District) to travel to the activity. Participation in these activities includes both New Star individuals as well as individuals not affiliated with New Star. Vehicles obtained from IDOT are used for these trips.

E.9 Transportation Services Schematic

Figure E-3 shows a schematic of New Star's transportation services related to the CILAs, day programs, community routes, midday outings, and work trips.

FIGURE E-3: NEW STAR TRANSPORTATION SERVICES



E.10 Transportation Data Collection

New Star uses the following logs, forms, and trip sheets to generally log mileage and document the number of riders per trip:

- **Mileage log**: Mileage for each trip is documented in a spreadsheet; the transportation coordinator sums up the monthly mileage.
- **Pre- and post-inspection form**: To determine vehicle condition, pre-and post-inspection forms are completed before and after each vehicle trip.
- **Riders per vehicle trip sheets**: Trip sheets documenting the number of individuals per vehicle are used to indicate the number of riders on each vehicle trip.
- **Community integration form**: Community integration forms are used to record the vehicle identification number and the number of individuals on each outing.
- **Recreational trip form:** The recreational trip forms are used to record vehicle odometer readings and the number of individuals in attendance for each activity.

In addition, the DSPs who drive vehicles obtained through the Pace Advantage Program are required to document each trip using a Pave ridership log, which requires drivers to check a box beside the corresponding date for each individual picked up and taken to the same destination. The DSPs mark *R* for individuals utilizing a wheelchair. The DSPs complete this log for each route that ends at the same destination, both in the morning and the evening. At the end of the month, the DSPs submit the sum of all trips taken for each date for inclusion in the Pace monthly report. Vehicle maintenance costs are reported separately by Pace's maintenance vendors and by Enterprise Rent-A-Car.

E.11 Ridership

Table E-2 details the total passenger trips performed by New Star in 2022. Data are estimated based on contextual information provided by the agency.

TABLE E-2: NEW STAR RIDERSHIP

Annual Passenger Trips-2022	
Transportation to day programs	
CILA routes	3,888
Community routes	2,916
Trips from day programs	
Outing	3,500
Medical	0
Work	765
Trips from CILAs	
Outing/medical	1,500
Total	12,569

E.12 Fleet and Fleet Maintenance

New Star uses a mixture of Pace Advantage Program, IDOT, and agency-leased vehicles for their transportation services. The Production Line has a box truck that requires a CDL to drive. Most vehicles are stationed at either the Chicago Heights or Crete locations (except for those in the Recreation Services program). Vehicles stationed at the Crete facility are not protected by a fence; one incident of vandalism has occurred at that facility. Table E-3 lists the 23 vehicles assigned to the 23 CILAs. Table E-4 lists the 10 vehicles assigned to the day programs and the 2 vehicles assigned to the Recreation Services program. Of these 12 vehicles, 4 or 5 are spares that can be swapped into service for an inoperable or unsafe vehicle (as determined by the DSP during the pre-trip inspection) or used for an ad-hoc outing. These spare vehicles are currently stationed at the Crete facility. Table E-5 lists the 15 Pace Advantage Program vehicles, of which 14 are assigned to the Chicago Heights day programs (2 are used for janitorial trips) and 1 is stationed at the Crete location.

The transportation manager oversees the daily management of vehicles in the New Star fleet, including the Pace Advantage Program vehicles, and ensures reporting requirements are met. Maintenance for the Pace vehicles is handled through Pace's network of approved maintenance service providers. Enterprise maintains all other vehicles. Local maintenance service providers are also used.

TABLE E-3: VEHICLES ASSIGNED TO CILAS

CILA Vehicle	Type	Make/Model	Year	Seating Capacity/ Wheelchair Spaces	Lift	Garage Capacity
Beckwith	Minivan	Toyota Sienna	2008	7	No	2
Gloucester	Full-size van	Ford Transit 350	2018	7/1	Yes	3
Crawford[2]	Full-size van	Ford E-350	2011	7/1	Yes	Driveway
Dobson	Minivan	Ford Connect	2016	7	No	2
Dorsetshire	Minivan	Toyota Sienna	2013	7	No	3
Louis	Minivan	Toyota Sienna	2013	7	No	2
Fern	Minivan	Toyota Sienna	2014	7	No	2
Candice	Full-size van	Ford Transit 350	2018	7/1	Yes	2
Hamlin	Minivan	Toyota Sienna	2014	7	No	2
Deborah[2]	Full-size van	Ford E-350	2013	12	No	2
Kinzie	Minivan	Chevrolet Uplander	2008	5/1	Yes	2
Kimbark	Minivan	Toyota Sienna	2016	7	No	2
Leavitt	Car	Ford Fusion	2016	5	No	Driveway
Ellis	Full-size van	Ford Transit 350	2016	12	No	2
Maryland	Minivan	Ford Connect	2016	7	No	2
Oak	Minivan	Toyota Sienna	2013	7	No	2
Oakland[2]	Full-size van	Ford Transit 350	2019	7/1	Yes	3
Pinehurst	Full-size van	Ford E-350	2010	7	No	2
Thornton	Car	Ford Fusion	2016	5	No	Driveway
Tina Lane	Minivan	Toyota Sienna	2020	7	No	2
Williams Ct[2]	Full-size van	Ford Transit 350	2018	7/1	Yes	3
Wingate	Minivan	Toyota Sienna	2016	7	No	3
Phoenix/6356	Bus	Ford StarCraft	2014	13/1	Yes	Driveway

[1]Number of vehicles that can be parked at the home.

[2]Used for both residential and day programs.

TABLE E-4: VEHICLES ASSIGNED TO DAY PROGRAMS AND NSRT PROGRAM

Program	Vehicle ID	Type	Make/Model	Year	Seating Capacity/ Wheelchair Spaces	Garage Location
Day services	4227	Bus	Ford StarCraft	2016	12/1	Crete
Day services	5296	Bus	Ford StarCraft	2016	12/1	Crete
Day services	6293	Bus	Ford StarCraft	2014	12/1	Chicago Heights
Day services	6339	Bus	Ford StarCraft	2014	12/1	Crete
Day services	7934	Minivan	Dodge Braun	2017	6	Chicago Heights
Day services	2806	Minivan	Dodge Caravan	2018	6	Chicago Heights
Day services	9297	Bus	Ford Eldorado	2012	12/1	Crete
Day services	9754	Bus	Ford StarCraft	2016	12/1	Chicago Heights
Day services	9755	Bus	Ford StarCraft	2016	12/1	Crete

Program	Vehicle ID	Type	Make/Model	Year	Seating Capacity/ Wheelchair Spaces	Garage Location
Recreation services	973	Bus		2019	12/1	Sandridge Community Center
Day services	2092	Bus	Ford StarCraft	2021	12/1	Chicago Heights
Recreation services	3462	Bus			27	Sandridge Community Center

TABLE E-5: PACE VEHICLES ASSIGNED TO DAY PROGRAMS AND JANITORIAL PROGRAM

Program	Vehicle ID	Type	Make/Model	Year	Seating Capacity/ Wheelchair Spaces	Lift	Garage Location
Janitorial	139	Minivan	Dodge Caravan	2017	7	No	Chicago Heights
Janitorial	479	Minivan	Dodge Caravan	2017	7	No	Chicago Heights
Day services	516	Full-size van	Ford Transit 350	2016	12	No	Crete
Day services	605	Full-size van	Ford Transit 350	2016	7/1	Yes	Chicago Heights
Day services	618	Full-size van	Ford Transit 350	2016	7/1	Yes	Chicago Heights
Day services	660	Full-size van	Ford Transit 350	2017	7/1	Yes	Chicago Heights
Day services	664	Full-size van	Ford Transit 350	2017	7/1	Yes	Chicago Heights
Day services	50015	Full-size van	Ford Transit 350	2018	12	No	Chicago Heights
Day services	50019	Full-size van	Ford Transit 350	2018	12	No	Chicago Heights
Day services	50041	Full-size van	Ford Transit 350	2018	7/1	Yes	Chicago Heights
Day services	50081	Full-size van	Ford Transit 350	2018	12	No	Chicago Heights
Day services	50084	Full-size van	Ford Transit 350	2018	12	No	Chicago Heights
Day services	50091	Full-size van	Ford Transit 350	2018	12	No	Chicago Heights
Day services	50092	Full-size van	Ford Transit 350	2018	12	No	Chicago Heights
Day services	50049	Full-size van	Ford Transit 350	2018	7/1	Yes	Chicago Heights

E.13 Costs

The Pace Advantage Program costs $250 per vehicle per month. New Star did not provide additional information on transportation costs as of the publication of this report.

APPENDIX F: PROFILE OF PARK LAWN

F.1 Agency Background and Programs

Park Lawn offers opportunities for growth through CDS to adults with different levels of abilities. This agency provides day programs and services for individuals with IDDs who are interested in gaining skills by participating in vocational programs with the goal of getting a job. Park Lawn also provides recreational activities for senior individuals. Specifically, Park Lawn's programs and services include the following:

- **Choice:** The Choice day program gives individuals a set of activities in the community from which they can choose to participate in. The individuals participate in community activities through flexible daily activities.
- **Supported Employment Program:** The Supported Employment Program concentrates on person-centered planning. This day program is suitable for individuals interested in finding a job and getting employed. This day program also centers on matching individuals with IDDs with career opportunities in the community.
- **Home-Based Services**: Home-Based Services is based on the Medicaid waiver program that provides federal and state funds to individuals with IDDs for the purchase of needed support and services. Park Lawn is responsible for creating individualized service plans for families/individuals eligible for this program.
- **Residential Services:** Park Lawn provides residential opportunities for adults with IDDs.
- **Helping Other People in Every Way (HOPE) Program**: The HOPE Program at Park Lawn meets the essential needs of those Park Lawn residents with little to no family support. The HOPE Program accepts donations year-round, including clothing for all seasons and other necessities.

Park Lawn has three day program facilities for individuals residing in its eight CILAs, two ICFs, and at home. The day program sites and addresses are as follows:

- Connections, located at 10833 South La Porte, Oak Lawn, Illinois 60453.
- Choice-Oak Lawn, located at 5040 West 111th Street, Oak Lawn, Illinois 60453.
- Choice-Crestwood, located at 4715 West 135th Street, Crestwood, Illinois 60418.

The Choice-Oak Lawn day program building will likely be sold within next six months (as of the publication of this report). After the sale, the program will be split into three different areas, each serving about one-third of the current individuals attending Oak Lawn. The new day program sites and addresses are as follows:

- Park Lawn-Tinley Park, located at 17007 Oak Park Avenue, Tinley Park, Illinois 60477.
- Park Lawn-Palos Heights, located at 7530 College Drive, Palos Heights, Illinois 60463.
- Park Lawn-Chicago Ridge, located at 6101 West 107th Street, Chicago Ridge, Illinois 60415.

Day program schedules generally run from 8:30 a.m. to 2:30 p.m. Individuals arrive between 8:30 and 9:00 a.m., participate in outings or other activities during the day, and then leave from the programs between 2:30 p.m. and 3:00 p.m.

F.2 Staffing

At Park Lawn, three program managers (one for each building) control the weekly schedules of activities. The CILAs have house managers. Park Lawn uses a mixture of DSPs and drivers for driving individuals on trips between sites and for outings.

The CILA and ICF DSPs, who report to the house managers, provide transportation for individuals from the CILAs to the day programs. The DSPs start their shifts by traveling to the CILA locations in the morning, where they load the CILA residents into the vehicles and transport them to their day program locations. The DSPs then return to the CILAs to take care of any individuals that may have stayed at the house (another DSP or house manager remains at the house with these individuals). The CILA DSPs also provide trips for medical appointments and shopping during the day. The DSPs work one of three possible shift times: 6:00 a.m. to 10:00 a.m., 2:30 p.m. to 11:00 p.m., or overnight at the CILA. Park Lawn has a DSP-to-individual ratio of around 1:5.

Drivers provide transportation for individuals commuting to day programs on the morning and afternoon routes; in the middle of the day, either DSPs or drivers provide transportation for individuals to different activities. Other drivers are assigned to pick up homebound individuals and some CILA residents, depending on the day of the week. Drivers report to the program managers. The DSPs who work only at the day program (i.e., community coaches) and who report to the program managers drive vehicles for midday outings emanating from the day program locations.

F.3 CILAs and ICFs

As shown in Table F-1, Park Lawn owns and operates eight CILAs, each housing four to six individuals. The CILAs are single-family homes located in Worth, Oak Lawn, Orland Park, Chicago Ridge (2), and Tinley Park (3). Each CILA provides 24-hour supervision for individuals; at Park Lawn, the population of these CILAs is mostly senior adults. A few of the residents use wheelchairs.

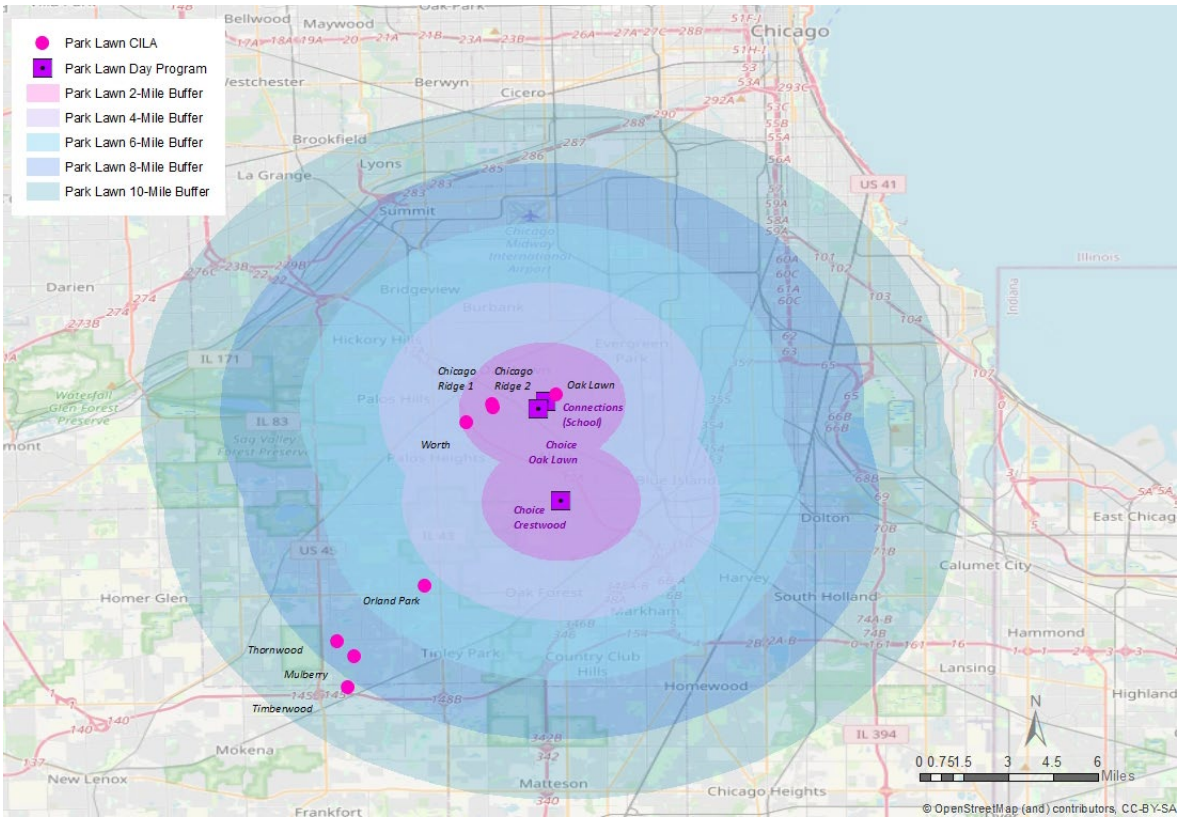
Park Lawn also has two ICFs—Park Lawn Center and Park Lawn Homes. Park Lawn Center in Alsip, Illinois, provides 24-hour supervision and medical services for around 40 residents. Vehicles assigned to this ICF are wheelchair accessible IDOT vans. Residents at Park Lawn Center are transported by drivers to the day programs. Park Lawn Homes in Alsip currently has 15 residents—4 participate in the Connections program, and 11 participate in the Choice program at Oak Lawn. This ICF faced a staff shortage after the COVID-19 pandemic. When/if the Choice program moves from the Oak Lawn location (due to the sale of the property), participating individuals may choose to participate in the Grace program instead.

TABLE F-1: PARK LAWN CILAS

CILA	Address
Worth	11606 S. Nagle Ave., Worth, IL 60482
Mulberry	17517 Mulberry Ave., Tinley Park, IL 60477
Timberwood	9100 Timberwood Ln., Tinley Park, 60477
Oak Lawn	4701 W. 106th Pl., Oak Lawn, IL 60453
Chicago Ridge 1	5956 W. 109th St., Chicago Ridge, IL 60415
Chicago Ridge 2	5942 W. 110th St., Chicago Ridge, IL 60415
Orland Park	7465 Cashew Dr., Orland Park, IL 60462
Thornwood	9230 Thornwood Dr., Tinley Park, IL 60477

Figure F-1 shows the locations of the eight CILAs and the two ICFs.

FIGURE F-1: PARK LAWN CILA AND ICF LOCATIONS



All CILA residents start and end their trips at the day programs, which are offered Monday through Friday, from the CILAs. The general hours of operation for the day programs are 8:30 a.m. to 2:30 p.m. The CILA vehicles start arriving at all three day program facilities at 8:30 a.m. and continue dropping individuals off between 8:30 and 9:00 a.m. Programming at the day programs starts at 9:00 a.m. and ends at 2:30 p.m. Each CILA is assigned one vehicle.

At the Worth and Oak Lawn CILAs, six individuals travel to both Choice-Oak Lawn and Choice-Crestwood—three go to Choice-Oak Lawn and three go to Choice-Crestwood based on their functionality. The day program closest to the CILA is the first drop-off; the program that is further away is the second drop-off.

Outings from CILAs on evenings and weekends are handled by the DSPs on shift at the CILA and coordinated with the house manager.

For ICF transportation, drivers report to the ICF locations to start their shift and transport individuals to the day programs. All but two Park Lawn Center individuals travel to the Oak Lawn day program; two travel to Choice-Oak Lawn. For Park Lawn Homes, 4 individuals travel to the Connections program at Oak Lawn and 11 travel to Choice-Oak Lawn. Drivers for the ICFs use IDOT vehicles that are stationed at the ICF locations and at the Park Lawn School where the other vehicles are kept.

F.4 Community Routes and Pace ADA Paratransit Services

Park Lawn currently has eight full-time drivers and one part-time driver who operate the nine community routes that transport individuals living in the ICFs and the community. These individuals have different schedules for commuting to day programs; some participate five days a week, while others participate two or three days per week. In one case, a community route picks up individuals from a CILA because of DSP shortages.

The number of individuals on each route varies from three to eight. Community routes are generally scheduled so that individuals arrive between 8:30 and 9:00 a.m. and depart between 2:30 and 3:00 p.m.

Full-time driver shifts are set up as split shifts—the driver works from 6:30 to 10:30 a.m. in the morning and from 1:00 to 4:30 p.m. in the afternoon. The part-time driver shift is only in the morning, from 6:30 to 10:30 a.m. All full-time and part-time drivers help with outing trips at the end of their morning shifts or at the beginning of their afternoon/evening shifts. For example, a driver may drop individuals off at the Connections day program by 8:30 a.m. and then drive to the Choice-Crestwood day program to pick up a group of individuals at 9:15 a.m. for an outing. The same driver then picks up the group of individuals from their outing at 11:00 a.m. for their return trip to the Choice-Crestwood day program. After a lunch break, the driver next runs the afternoon community route for the Connections individuals.

Individuals living at home also use Pace ADA Paratransit Services to get to and from day programs. Park Lawn provides these individuals with Pace monthly passes.

F.5 Midday Outings

Midday programmatic outings are usually provided on most days, with departures from the day program facilities scheduled between 9:30 and 10:00 a.m. and return trips to the day program facility arriving any time between 1:00 and 1:45 p.m. Community activities are determined by the program managers at each day program site. Examples of outing locations include local libraries, fast food and casual restaurants, the Crestwood Recreation Center, the McCord Art Gallery, the Chicago Ridge Mall, Arena Lanes, and the Chicago Ridge Park District. Outings are based on a monthly schedule developed by the program managers/directors.

Outings are performed by the drivers and DSPs at the day program location. The DSPs/community coaches sometimes assist the drivers in determining which individuals are supposed to attend. Destinations for outings can include local trips, short-distance trips, or trips to downtown Chicago.

Choice-Oak Lawn and Choice-Crestwood outings: The DSPs/community coaches assist the drivers for outings departing from Choice-Oak Lawn or Choice-Crestwood. The DSPs/community coaches use day program vehicles for these outings; Choice-Oak Lawn and Choice-Crestwood have two (non-Pace) vehicles for use. If the outing includes an individual who uses a walker or a wheelchair (both Choice facilities have individuals who use walkers and wheelchairs and need accommodation for outings), the driver will perform the trip and the DSP/community coach will ride along. Connections program staff do not drive to community outings. Instead, the transportation department will provide transportation for the trip and the DSPs will ride along.

Connections program outings: The Connections program relies upon the transportation department for all their outings. Individuals who use a wheelchair typically need to be transported by certified drivers in Pace WAVs. A combination of full-time and part-time drivers provide the transportation for outings originating from the Connections program.

F.6 Medical Trips

Park Lawn does not provide any medical trips from the day program sites; all medical trips are performed from CILAs, ICFs, or residential areas. A return trip from an appointment might, however, transport an individual to a day program for the remainder of the program day. The CILAs have their own vehicles for medical trips. Sometimes, however, alternate or additional vehicles must be sent to the CILAs or ICFs to provide medical trips due to inoperable vehicles or staff shortages. The transportation department may also assist with the medical trips if needed. The number of medical trips from the CILAs or ICFs are around two to three trips per month.

F.7 Work Trips

Park Lawn currently provides transportation for six CILA and homebound individuals traveling to worksites. The current worksites include My Kidzplay, Little Caesars, White Castle, Freedom Activity Center, and Walgreens.

Work trips always start and end at the day programs (i.e., from the day program to the worksite and then from the worksite back to the day program). Work trips typically depart from the day program between 9:30 and 10:00 a.m. to travel to the workplace and arrive back to the day program by 2:00 p.m.

F.8 Transportation Services Schematic

Figure F-2 shows a schematic of Park Lawn's transportation services.

F.9 Data Reporting

Each of Park Lawn's drivers and DSPs fill out a daily checklist for trips that occur in any of their vehicles (e.g., Pace Advantage Program, IDOT, or agency-owned vehicles). The checklist includes pre-and post-trip inspection information and pickup information for individuals transported that day. The completed forms are copied into Excel spreadsheets by the program manager. This information is also reported to Pace for Pace vehicle trips only.

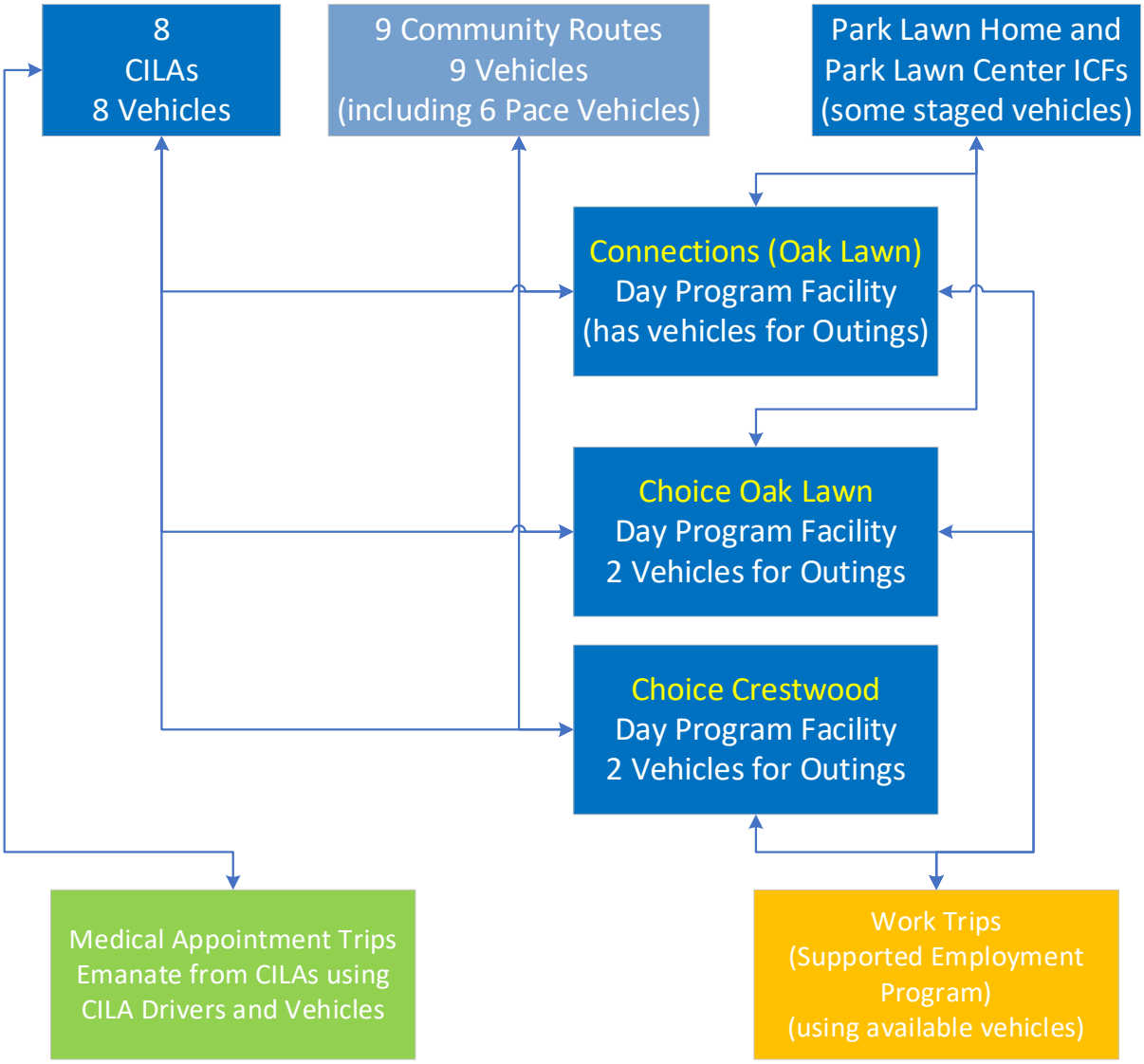
F.10 Ridership

Table F-2 details the annual ridership for Park Lawn in 2022.

TABLE F-2: PARK LAWN RIDERSHIP

Annual Passenger Trips-2022	
Transportation to day programs	
CILA routes	4,800
Community routes	10,584
Trips from day programs	
Outing	6,072
Medical	0
Work	1,872
Trips from CILAs	
Outing	576
Total	23,904

FIGURE F-2: PARK LAWN TRANSPORTATION SERVICES



F.11 Fleet and Fleet Maintenance

Park Lawn has 15 of their own vehicles, 15 IDOT vehicles, and 6 Pace Advantage Program vans. Choice-Oak Lawn and Choice-Crestwood each have two non-Pace vehicles for their outings. Of the six Pace vehicles, five are operated daily and one serves as a spare. Pace vehicles are only driven by Pace-certified drivers—DSPs/community coaches are not Pace-certified. Pace vans are used to pick up homebound individuals and for medical appointments and community outings. Park Lawn recognizes that they can always add additional Pace vehicles if needed. Conversely, the number of vehicles available from IDOT are limited by state grant funding; however, one additional IDOT vehicle might soon be available as a spare.

Park Lawn does not perform any vehicle maintenance themselves. Usually, preventative maintenance or minor repairs are outsourced to local shops. Oil changes for agency vehicles are scheduled every 3,000 to 5,000 miles, depending on the vehicle. For Pace vehicles, oil changes are done every 5,000 miles, and maintenance costs are captured in the $250 per month lease for each Pace vehicle.

F.12 Costs

The costs for Park Lawn outings are supported by 31C funding from the state; 31C–31U funding categories limit the daily maximum funding per individual for each day program to five hours. Park Lawn also receives funding from the parents/guardians of homebound individuals for transportation to the day programs. These individuals are charged a monthly fee based on the distance from the rider's primary residence to their day program location. Table F-3 lists these monthly fee amounts.

TABLE F-3: MONTHLY FEE BASED ON DISTANCE

Distance (miles)	Monthly Fee
0.00–2.49	$75
2.50–4.99	$150
5.00–7.49	$225
7.50–9.99	$300
10.00+	$375

Park Lawn also receives Supported Employment Program funding for the transportation of homebound individuals to their workplaces; these trips occur only from the day program locations. Table F-4 lists the rates for each one-way trip based on distance.

TABLE F-4: ONE-WAY FEE BASED ON DISTANCES

Distance (miles)	One-Way Fee
0.00–2.49	$3
2.50–4.99	$4
5.00–7.49	$5
7.50–9.99	$6
10.00+	$7

Park Lawn pays $250 per month to Pace for each vehicle leased under the Pace Advantage Program. Drivers are paid $21.00 per hour, while DSPs/community coaches who drive are paid $27.00 per hour.

During the COVID-19 pandemic, Park Lawn's expenses decreased dramatically, but their costs have begun to increase again. Estimated transportation-related expenses for a typical year are around $750,000. Park Lawn provided the following actual and budgeted expense amounts for transportation for FYs (from July to June) 2020–2021 through 2023–2024:

- Actual expenses for FY 2020–2021 as of 6/30/2021 were $270,000.
- Actual expenses for FY 2021–2022 as of 6/30/2022 FY were $380,000.
- Actual expenses for half-year FY 2021–2022 as of 12/31/2022 were $335,000.
- Budgeted expenses for FY 2022–2023 as of 6/30/2023 FY were $674,000.
- Budgeted expenses for FY 2023–2024 as of 6/30/2024 FY were $669,000.

APPENDIX G: PROFILE OF THE RAY GRAHAM ASSOCIATION

G.1 Agency Background and Programs

Founded in 1950, the Ray Graham Association is a nonprofit human service agency that—with 350 employees—provides services to nearly 2,000 individuals with IDDs. With corporate headquarters located in Lisle, Illinois, the agency staffs four different day programs (called community learning centers) in Lombard, Elmhurst, Naperville, and Burr Ridge, Illinois, all of which operate on weekdays only. The agency's day programs typically provide five hours of programmatic services, roughly between 9:30 a.m. and 2:30 p.m.

The Ray Graham Association also has a residential program with 27 CILAs throughout DuPage County. Of these 27 CILAs, 25 map to a specific day program (or multiple day programs in two cases), meaning that residents from a specific CILA are taken to a specific day program site each weekday (or on each day of attendance). Residents in two of the CILAs do not attend day programs. Most CILAs house no more than eight residents. The agency assigns a minivan or a WAV to a CILA to bring residents to the day programs; a WAV is assigned if one of the CILA residents uses a wheelchair. The CILA vehicles are also used after-hours and on weekends for group trips into the community (for shopping, recreation, a meal, etc.).

The Ray Graham Association also provides services to individuals who live in the community (but not in group residences). For those individuals that need transportation to/from day programs, the agency operates 13 community routes that travel along established routes based on each individual's home location. These community routes bring these individuals to the day programs on weekday mornings and return them home on weekday afternoons.

The Ray Graham Association offers three Monarch programs, which are located in facilities in Naperville and Burr Ridge. These programs are tailored to the transition needs of young adults. The agency operates two community routes out of each of the Monarch facilities; sometimes, these routes are doubled up using the same vehicle. Similar to the day programs, each of these vehicles is also used for midday outings. In addition, the Ray Graham Association offers a Gateway special recreation association program that provides outings to local park district facilities.

A philosophy that pervades the Ray Graham Association's transportation efforts is to maximize an individual's ability to get to and from needed services and to maximize each individual's involvement in the community. Hence, the transportation services are both person-centric and community-centric.

G.2 Staffing

Key staff who manage/oversee the agency's transportation services and vehicles include the following:

- Day program supervisors at each site plan community routes and schedule outings.
- The CILA DSPs drive the CILA routes to day programs and drive for after-hours CILA outings.
- Medical appointment coordinators arrange for DSPs to drive for medical trips.
- Work trip coordinators arrange for drivers/DSPs to drive for work trips and coordinate use of Pace ADA Paratransit Services, Ride DuPage, and other transportation resources.

- Monarch program supervisors plan community routes and schedules outings.
- Gateway program coordinators arrange for Gateway outings.
- The transportation coordinator manages fleet maintenance and reporting.

The staff who drive the CILA vehicles are DSPs. The DSPs have other duties at the CILAs besides driving. Depending on their shift, some DSPs also have additional duties at the day programs. The community routes are driven by drivers (or in some cases by DSPs) using larger vehicles. The Gateway program has four program drivers. Note that the Pace vehicles must only be driven by Pace-certified drivers and DSPs. Pace certification has some stringent requirements for applicants, including a physical exam. All applicants who qualify must then take a Pace defensive driving course.

G.3 Day Program/CILA Relationships

Four sets of CILAs map into the agency's four day program facilities, as shown in Table G-1 and Figure G-2. Generally, the mapping is based on proximity to the day program location because of the maximum one-hour ride time requirement. That said, some CILA trips go to a day program that is not closest to the CILA because of programmatic or facility differences. For example, the Monarch Living CILA in Elmhurst travels to the Main Street day program facility in Lombard rather than the Elmhurst Community Center because the Lombard facility is better equipped to accommodate the higher levels of mobility challenges common to the Monarch Living CILA residents.

TABLE G-1: RAY GRAHAM ASSOCIATION DAY PROGRAMS AND ASSOCIATED CILAS

Main Street Day Program (Lombard)	
Abilene[1]	Bloomingdale
Ardmore	Villa Park
Circle	Bloomingdale
Elm	Villa Park
Grace	Lombard
Lincoln[3]	Addison
Monarch	Elmhurst
Princeton	Villa Park
View	Lombard
Vista	Addison
Wilson	Lombard

Elmhurst Community Center Day Program (Elmhurst)	
Abilene[1]	Bloomingdale
Bensenville	Bensenville
Crestwood	Bloomingdale
Hale	Addison
Ridge	Lombard

Mize Day Program (Burr Ridge)	
Briargate	Downers Grove
Devine	Downers Grove
Hinsdale	Hinsdale
Oxford[2]	Downers Grove
Williams[3]	Downers Grove
Winston[3]	Woodridge

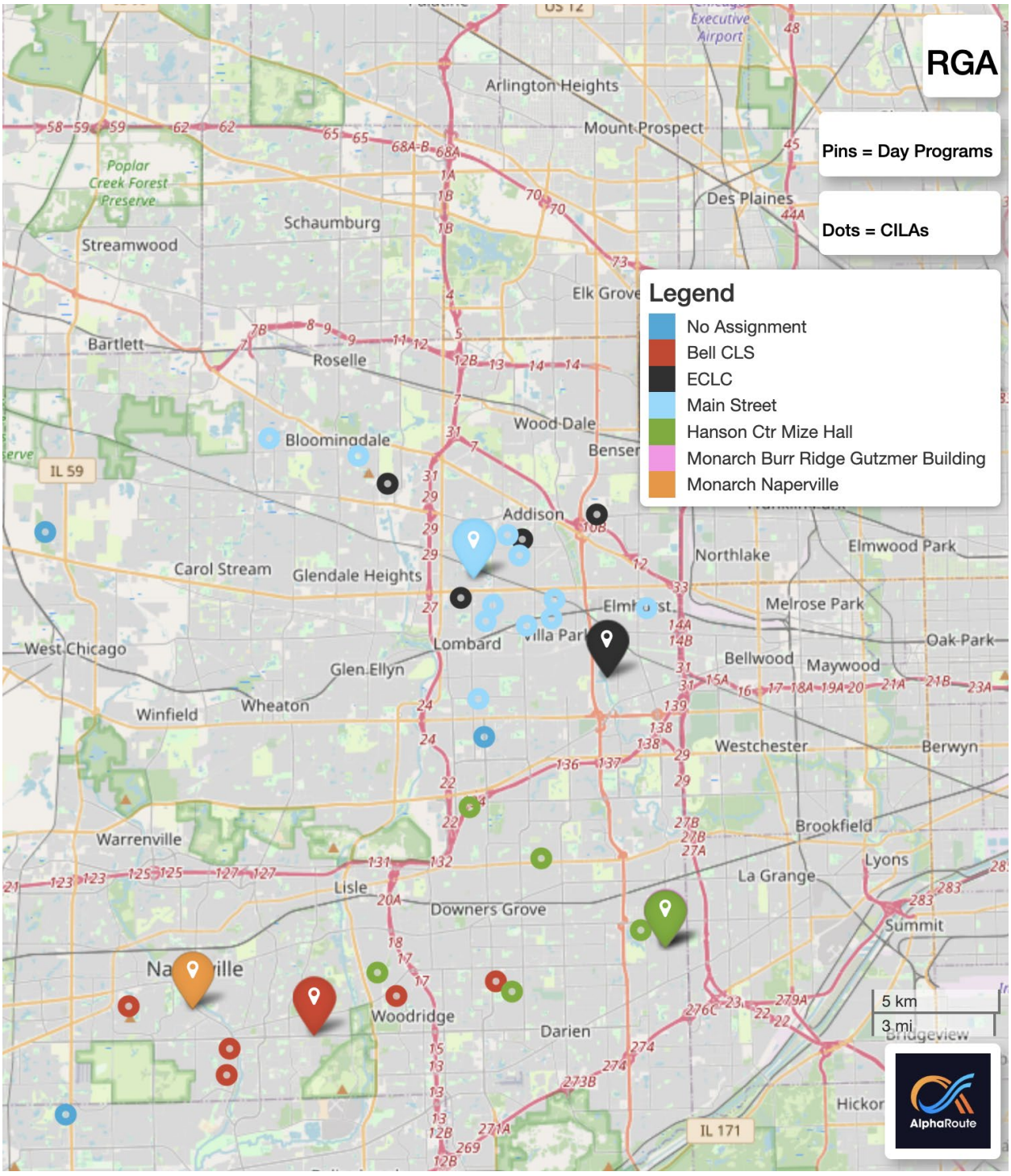
Belle Center Day Program (Naperville)	
Kincaid	Woodridge
Oakhurst	Naperville
Oxford[2]	Downers Grove
Starling	Naperville
Swift	Naperville

[1]Abilene CILA van goes to Main Street (first stop) and then Elmhurst Community Center (second stop).

[2]Oakhurst CILA van goes to Belle Center three times per week and Mize two times per week.

[3]CILA vehicles are wheelchair accessible.

FIGURE G-1: MAP OF THE RAY GRAHAM ASSOCIATION DAY PROGRAMS AND CILAS



G.4 CILA Routes

The CILA routes take residents from the CILAs to the day programs. Generally, each CILA maps to one of the four day programs, as indicated in Table G-1. Two exceptions exist, however. The Abilene CILA van transports CILA residents to the Main Street day program (first stop) and then the Elmhurst Community Center (second stop). The Oakhurst CILA van transports CILA residents to/from the Belle Center three times per week and to/from Mize twice a week.

The DSPs that drive these CILA routes have different duties depending on their shifts. The Ray Graham Association offers two- and three-shift DSP coverage options. The three-shift coverage option includes the following shifts: (1) 7:00 a.m. to 3:00 p.m., (2) 3:00 p.m. to 11:00 p.m., and (3) 11:00 p.m. to 7:00 am. The two-shift coverage option includes the following shifts: (1) 2:30 p.m. to 11:00 p.m. and (2) 11:00 p.m. to 9:30 a.m.

Under the three-shift coverage option, the DSPs who are on the first (day) shift are responsible for driving the residents to/from the CILA in the morning and afternoon and performing other duties at the day program facility, which may include driving and attending day program outings. Thus, the vehicle that is used for these CILA routes generally stays at the day program facility location and is available for outings. On the weekends, the first-shift DSPs drive the residents (as a group) on any local outings for shopping, recreation, meals in the community, etc. The second shift DSPs are also available to drive the group of residents for local outings. Most of the Ray Graham Association's CILAs only have one DSP at a time on duty. During these local outings, every member of the CILA staff must therefore attend these outings. The DSPs on the third (overnight) shift do not typically have any driving duties but do make sure the residents are ready to go to the day programs in the morning.

Under the two-shift coverage option, the DSPs who work the evening shift (2:30 p.m. to 11:00 p.m.) and the overnight shift (11:00 p.m.to 9:30 a.m.) tag team with respect to their driving duties. For example, the overnight-shift DSPs who are on duty throughout the night at the CILA makes sure that the residents are up in the morning, are bathed, take their medications, have breakfast (often the DSP cooks breakfast), and are packed up for the trip to the day programs. They then drive the residents to the day program facilities. After driving the residents to the day programs, the DSPs then return the CILA vehicle to the CILA, where their shift ends and where (in most cases) they have left their private vehicle. The DSPs working the evening shift pick up the CILA vehicle at the CILA, drive to the day program to pick up the CILA residents, and drive them back to the CILA. This DSPs may also drive the group of residents to after-hours outings emanating from the CILA.

The vehicles used for the CILA routes are generally smaller (typically carrying four to six residents) and only a few are wheelchair accessible. One WAV is available at the Lincoln CILA and Winston CILA, and two WAVs are available at the Williams CILA. The Highland CILA also has a WAV, but its residents do not attend a day program.

The CILA vehicles generally return to the CILA after the five-hour day programs are complete. If a CILA resident is late getting back to the day program facility from a doctor's appointment, the CILA van might wait for the returning resident, or it might go home at 2:30 p.m. with the individual being driven directly home to the CILA after the appointment is over. To accommodate this flexibility, the DSPs arrive at the day programs beginning at 8:00 or 8:30 a.m. to accept early arrivals and remain through 4:30 p.m. for CILA residents whose afternoon run is delayed for such circumstances.

G.5 Community Routes

Community routes transport individuals who live in the community (but not at agency-affiliated CILAs) to the day programs. The Ray Graham Association operates 13 community routes—5 run out of Main Street, 3 run out of Elmhurst, 2 run out of Belle Center, and 3 run out of Mize. The vehicles used for the community routes tend to be larger to accommodate larger groups and are all wheelchair-accessible.

The agency has 14 dedicated vehicles for community routes. These vehicles are also used for midday outings, medical trips, and work trips emanating from their respective day programs. Altogether, including the CILA residents and others living in the community, the Ray Graham Association currently transports about 140 individuals to and from the day programs each weekday.

Generally, the community routes run on time, arriving at or before 9:30 a.m. (between 9:00 and 9:15 a.m.) and departing between 2:30 and 3:00 p.m. Some flexibility in these schedules exists, however.

G.6 Midday Outings

Transportation plays a key role in the day program outings. For example, the Ray Graham Association puts great stock in volunteerism as a way to integrate individuals into the community. Several individuals volunteer to help with Meals on Wheels programs; individuals are transported to hubs where their efforts include packing meals. Similarly, individuals volunteer to help out at food pantries and with litter pickup and other cleaning activities at parks. Other types of programmatic outings focus on recreational activities to the YMCA/YWCA (for a workout), bowling, museums, television shows, and sporting events. These outings are arranged by the day program staff and often involve sign-up sheets.

Generally, these outings take place in midday during program hours, with transportation emanating from the day program facilities. Drivers and DSPs are used to drive the vehicles. The larger vehicles, used for the day program community routes, are often used for outings because of the large group size. After-hours/evening activities (e.g., going to the movies, going out to dinner) are arranged as well. In these cases, drivers typically pick up and drop off individuals at their residences.

G.7 Medical Trips

The Ray Graham Association has a medical appointment coordinator who works with the day program leads and CILA staff to arrange for medical appointments and for staff to drive individuals to/from the medical appointments from the day program facilities and to stay with the individuals during the appointments. The medical appointment coordinator also utilizes Monarch program staff and vehicles for Monarch participants going to medical appointments. Generally, the medical appointments are made such the individuals can get back to the day program facility in time for the return trip home from the day program facility. In cases where an appointment runs late into the afternoon, staff will drive the individual back to their residence after the appointment. On average, transportation is provided for approximately 31 medical appointments per week, equating to over 3,224 one-way passenger trips per year to over 135 different community-based medical providers located throughout DuPage, Will, and Cook Counties.

G.8 Work Trips

The Ray Graham Association's work trip coordinator utilizes the agency's vehicles based at the day programs. For individuals who are more independent and have a job, the work trip coordinator helps individuals arrange for work trips using Pace ADA Paratransit Services and Ride DuPage.

G.9 Monarch Program Community Routes

The Monarch Academy, Monarch II, and Life Coaching, located in Naperville and Burr Ridge, offer programs for young adults with IDDs that focus on relationship building, volunteerism, skill-building, and environmental and visual supports. Monarch provides transportation to/from these programs, as needed, by operating two routes at each site, with vehicles making a double run.

G.10 Gateway Program Outings

The Gateway program involves recreational outings to a partnering park district. The midday outings are scheduled on Tuesdays; some additional outings occur after-hours and on weekends. The midday trips emanate from the day program facilities; the after-hours/weekend outings emanate from the CILAs and homes in the community. Two drivers dedicated to the Gateway program provide transportation for the outings utilizing four dedicated vehicles. The fleet manager's spare vehicles are used as backup if needed.

G.11 Transportation Services Schematic

Figure G-2 presents a schematic of the Ray Graham Association's primary transportation services.

G.12 Transportation Data Collection

The Ray Graham Association tracks vehicle trip data using Geotab fleet tracking devices provided to each driver (or DSP who has driving duties). For each vehicle trip, Geotab tracks the following information:

- Device name, group (vehicle), and user ID (driver or DSP).
- Driver group.
- Trip start and stop times (and stop duration).
- Trip distance and duration.
- Latitude and longitude at each stop.
- Maximum speed.
- Trip distance and time.

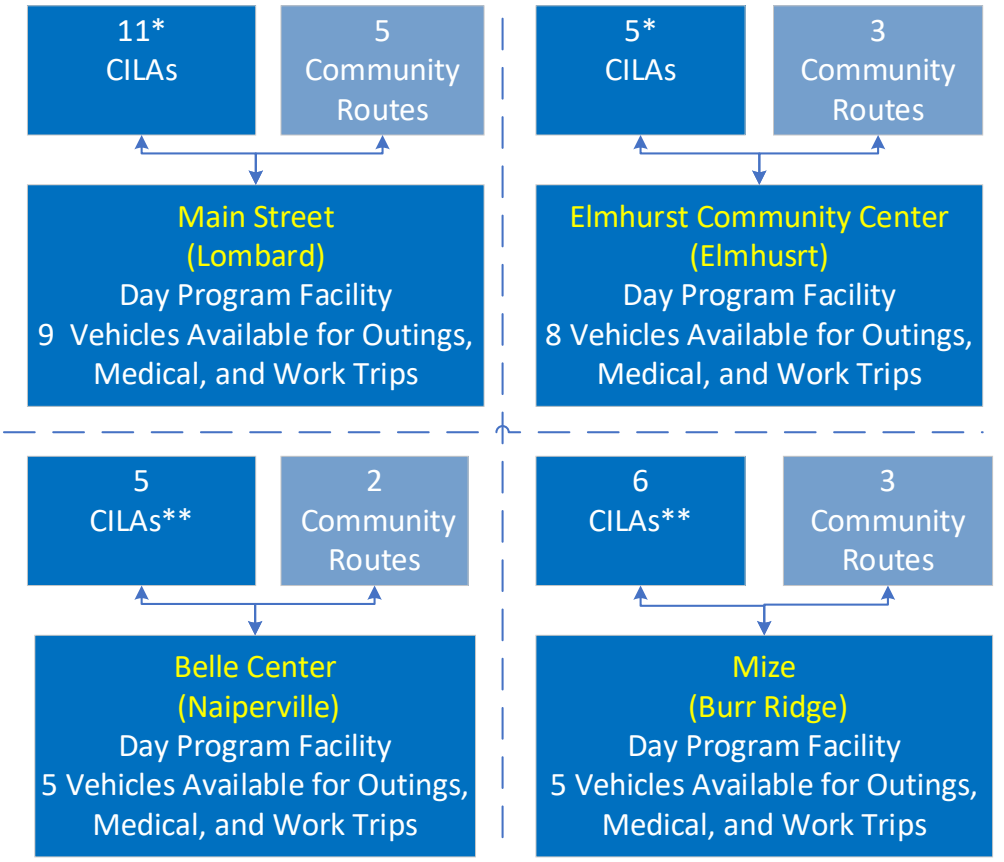
G.13 Ridership

Table G-2 details the Ray Graham Association's annual number of passenger trips in 2022 by trip purpose.

TABLE G-2: RAY GRAHAM ASSOCIATION RIDERSHIP

Annual Passenger Trips-2022	
Transportation to day programs	
CILA routes	77,598
Community routes	10,441
Trips from day programs	
Outing	17,568
Medical	4,877
Work	10,400
Trips from CILAs	
Outing	41,691
Total	162,575

FIGURE G-2: RAY GRAHAM ASSOCIATION TRANSPORTATION SERVICES



* Abilene CILA Van goes to Main St (first stop) and Elmhurst (second stop)
** Oakhurst CILA Van goes to Belle Center 3 times per week and Mize 2 times per week (approximate)

Note: An additional 2 CILAs (Jerue and Highland) each have a vehicle but do not go to day programs.

Total number of CILA's = 27 (25 go to day programs)
Total CILA Vehicles = 25 plus 4 spares
Total Day Program Vehicles = 27 (excluding Monarch)
Total Number of Community Routes: 13

Monarch #1 (Naiperville) 2 vehicles for Community Routes and Mid-day Trips

Monarch #2 (Burr Ridge) 2 vehicles for Community Routes and Mid-day Trips

Monarch #3 (Burr Ridge) 2 vehicles for Community Routes and Mid-day Trips

G.14 Fleet and Fleet Maintenance

Table G-3 details the Ray Graham Association's fleet. Not including the 2 vehicles dedicated to the Gateway program, the agency's fleet totals 72 vehicles used for the transportation of individuals served by the agency. The fleet is split evenly between non-WAVs (37) and WAVs (37). The agency obtained 26 WAVs (36 percent of the fleet) from IDOT, 18 vehicles (25 percent) through the Pace Advantage Program, and 18 leased vehicles (25 percent) from Enterprise Rent-A-Car. The remaining 10 vehicles are owned by the Ray Graham Association. The agency also maintains four additional vehicles as spares.

TABLE G-3: RAY GRAHAM ASSOCIATION FLEET

Vehicle Source	Non-WAVs by Seating Capacity							
	2	5	7	8	10	12	14	Total
Enterprise			5	3		5	5	18
Pace			6		2		8	16
Agency	1	1				1		3
Agency/IDOT								
Total	1	1	11	3	2	6	13	37

Vehicle Source	Non-WAVs	WAVs	Total
Enterprise	18		18
Pace	16	2	18
Agency	3	7	10
Agency/IDOT		26	26
Total	37	35	72

Vehicle Source	WAVs by Seating Capacity/Wheelchair Spaces									
	5/2	6/1	6/2	7/1	7/2	11/3	12/4	14/4	14/5	Total
Enterprise										
Pace					2					2
Agency	1		1	1				1	3	7
Agency/IDOT	1	2				1	11	1	10	26
Total	2	2	1	1	2	1	11	2	13	35

Pace-sourced vehicles are maintained by contractors in Pace's network of maintenance providers, while leased vehicles from Enterprise Rent-A-Car are maintained by Enterprise. All other vehicles are maintained by local service stations or dealerships. Fleet maintenance and all related reporting is coordinated by the agency's transportation coordinator.

G.15 Costs

The Ray Graham Association reported operational costs in 2022 of $866,394.87. This annual cost equates to a per trip cost of $5.33 (based on 162,575 trips during the year).

APPENDIX H: PROFILE OF SERTOMA CENTRE

H.1 Agency Background and Programs

Sertoma Centre is a social service organization located in Alsip, Illinois, that provides community mental health and counseling services, programming for persons with IDDs, and janitorial contract services. Sertoma Centre offers day programs at their Alsip location (123rd Street) for individuals from the community or from CILAs in the agency's network. From the 123rd Street facility, individuals take trips on planned outings into the community. Currently, Sertoma Centre has around 140 total day program participants; 100 of these individuals are coming from the community, while the remaining 40 are coming from CILAs.

Prior to the COVID-19 pandemic, Sertoma Centre used to run community routes and CILA routes to pick up individuals living in the community and transport them to and from the day programs at 123rd Street. These routes were operated by drivers rather than DSPs. Sertoma Centre stopped running these routes in March 2020 and no longer has non-DSP drivers on staff. Individuals living in the community now travel to the 123rd Street facility using their own means of transportation (e.g., rides provided by a family member/guardian, Pace ADA Paratransit Services, etc.). The maintenance shop and mechanic position at Sertoma Centre are still in place from this previous transportation route system and are now used to support the remaining transportation services.

When they were in operation, the community routes were very successful, transporting around 150 individuals using 25–28 drivers. Sertoma Centre began collaborating with the CSP in 2010 and providing transportation services in 2012–2014. Partner social service agencies in the CSP (including Sertoma Centre) that had vehicles that were not used during the day started offering trips to day programs, medical appointments, and job locations. The agencies were able to provide additional trips for individuals and benefit from extra revenue. To schedule a ride, an individual would request the trip and one of the agencies would subsequently confirm the ride and provide transportation during the day; the confirming agency was responsible for picking up and dropping off that individual. This small pilot within the CSP allowed the drivers who did the morning routes to then provide transportation for other appointments (around a few rides per day). The individuals on these trips were from all over the community, often from residential homes with guardians and nursing homes. This service was supported through a grant from the United Way and Chicago Community Trust. However, the service was determined to be too expensive (about $55.65 an hour) and ceased to have continued funding support.

Also prior to the COVID-19 pandemic, Sertoma Centre had contracts with three third-party vendors to connect individuals to the mental health programming at the Community Mental Health Center. The contracts were flow-through funding agreements (paid by medical insurance providers) with MTM, Inc.; LogistiCare; and First Transit. Between all programs, Sertoma Centre previously served around 325 individuals. This service halted in March 2020 and is now being handled directly by the third-party vendors rather than through Sertoma Centre.

Sertoma Centre faced several issues when the agency was previously contracted with third-party vendors to provide medical transportation to individuals. These issues included the following:

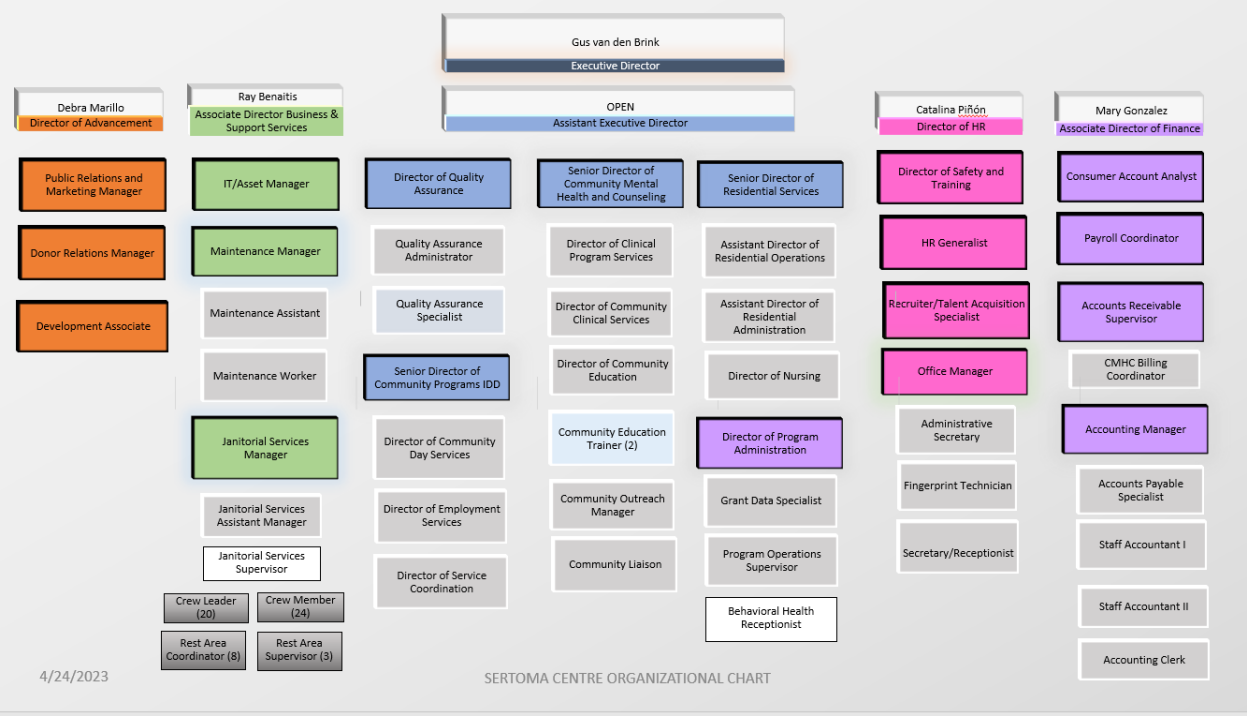
- Drivers had to be certified for driver safety training, CPR, wheeled-trailer training, and first aid; providing this training to all drivers was costly.

- Drivers had difficulty meeting recertification training dates before their certifications expired. If expired, the driver could not continue to provide trips. If Sertoma Centre did not catch this lapse in time, the agency would not get reimbursed for these trips.
- Sertoma Centre had difficulties getting reimbursed for trip tickets because the tickets were required to be filled out perfectly—with no missing or incorrect numbers—to get approved.

H.2 Organizational Chart and Staffing

Figure H-1 shows Sertoma Centre's organizational chart.

FIGURE H-1: SERTOMA CENTRE ORGANIZATIONAL CHART



All Sertoma Centre's staff who drive and work with individuals are DSPs. The DSPs are responsible for planning the monthly outing and reaching consensus among individuals regarding activities. The DSPs spend some time each month learning about the kinds of activities that are available and individual interests. The outings are usually planned during the previous week. Individuals and DSPs go through the available options to plan and create a calendar. Then, the DSPs give the calendar to their program supervisor for approval.

Most DSPs at the CILAs work 8-hours shifts, although some DSPs work 10-hour shifts. Typical duties for each DSP shift include the following:

- **First shift:** For home-based trips every morning, the DSPs go directly from their home to the CILAs, load the individuals in the vehicle, then transport them to the day program. The DSPs on the first shift will stay with the individuals during the day and likely help with the morning activities and outings. At the end of the day the DSPs load the individuals into the vehicle and drive them back to the CILAs before ending their shift.

- **Second shift:** The DSPs on the second shift should already be at the CILAs when the first-shift DSPs arrive back with individuals from the day program. Once all individuals are in the house, the first-shift DSPs go home and the second-shift DSPs remain there until they are relieved by other DSPs starting a new shift.

Some of the DSPs in the residential program are also considered service facilitators. Prior to the COVID-19 pandemic, service facilitators were—on occasion—required to bring individuals into the facility from their assigned house or CILA. The requirement for service facilitators to drive has since been dropped. Unless an emergency situation exists, service facilitators are not required to transport individuals.

H.3 CILAs, ICILAs, and Pace ADA Paratransit Services

Sertoma Centre has 10 CILAs and 2 ICLAs (Ridgeway is also an ICILA). Table H-1 details the locations and number of residents for each of these facilities. Sertoma Centre assigns one non-Pace vehicle to each CILA for transportation to and from the day programs and for after-hours and weekend outings. Residents of the ICILAs—who are more independent—arrange for their own transportation, either through family or friends or through Pace ADA Paratransit Services. For the latter option, Sertoma Centre provides these individuals with Pace single-ride tickets or monthly passes. Travel for ICILA residents is coordinated with their social worker or case manager.

TABLE H-1: SERTOMA CENTRE CILAS AND ICILAS

CILA	Address	Residents
Alsip-426	11817 S. Komensky Ave., Alsip, IL 60803	8
Brookwood-427	642 Brookwood Dr., Olympia Fields, IL 60461	7
Cambridge-428	1811 Cambridge Ave., Flossmoor, IL 60422	8
Hillside-433	15232 Hillside Ave., Oak Forest, IL 60452	6
Lawler-431	12006 Lawler Ln., Alsip, IL 60803	7
Millard-429	11832 S. Millard Ave., Garden Homes, IL 60803	7
Ridge Road-430	1451 Ridge Rd., Homewood, IL 60430	7
Ridgeway-425/455[1]	14410 Ridgeway Ave., Midlothian, IL 60445	3
Riegel-432	2 Riegel Oaks Ln., Homewood, IL 60430	6
Greenwood-434	20861 Greenwood Dr., Olympia Field, IL 60461	6
ICILA	**Address**	**Residents**
Community-460		
Family-450		

[1]Ridgeway is also an ICILA.

At the start of the first shift, the DSPs drive to the CILAs, load the individuals, and then drive to the 123rd Street facility for the day programs. The vehicles stay at the facility during the day and are sometimes used for different outings. The DSPs drive the individuals back to the CILAs at the end of the day, concluding the first shift. The CILA residents need to return to the CILA no later than 4:00 p.m.

Miscellaneous trips that originate from the CILAs include recreational trips or evening/weekend trips. Agency vehicles at the CILAs are used for these types of trips.

H.4 Community Routes

Unlike the other agencies in *The Collaborative*, Sertoma Centre does not operate any community routes.

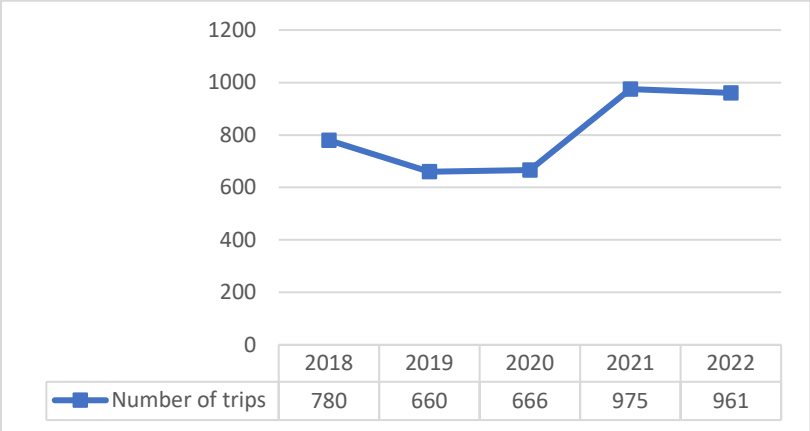
H.5 Midday Outings

Midday outings are arranged based on informal communications between staff and day program supervisors. Outing trips generally depart around 10:00 a.m. and return tie no later than 1:30 p.m. The DSPs are assigned to drive for outings by the day program supervisors. If an outing trip goes long, the DSPs will drive the individuals directly back to the CILAs. In some instances, additional staff persons other than the DSPs will ride along in the vehicles. Several individuals require one-on-one supervision, which requires another staff member to be with that individual in the vehicle.

H.6 Medical Trips

Medical trips can start from a day program facility, a CILA, or a home location. The vehicles from the CILAs are used for these medical trips. Logistically, each house manager is responsible for contacting the other house managers to request a CILA vehicle for a medical trip. In total, only a handful of midday medical trips are provided per month across all CILAs. Figure H-2 shows the numbers of medical trips provided from 2018 to 2022.

FIGURE H-2: SERTOMA CENTRE MEDICAL TRIPS



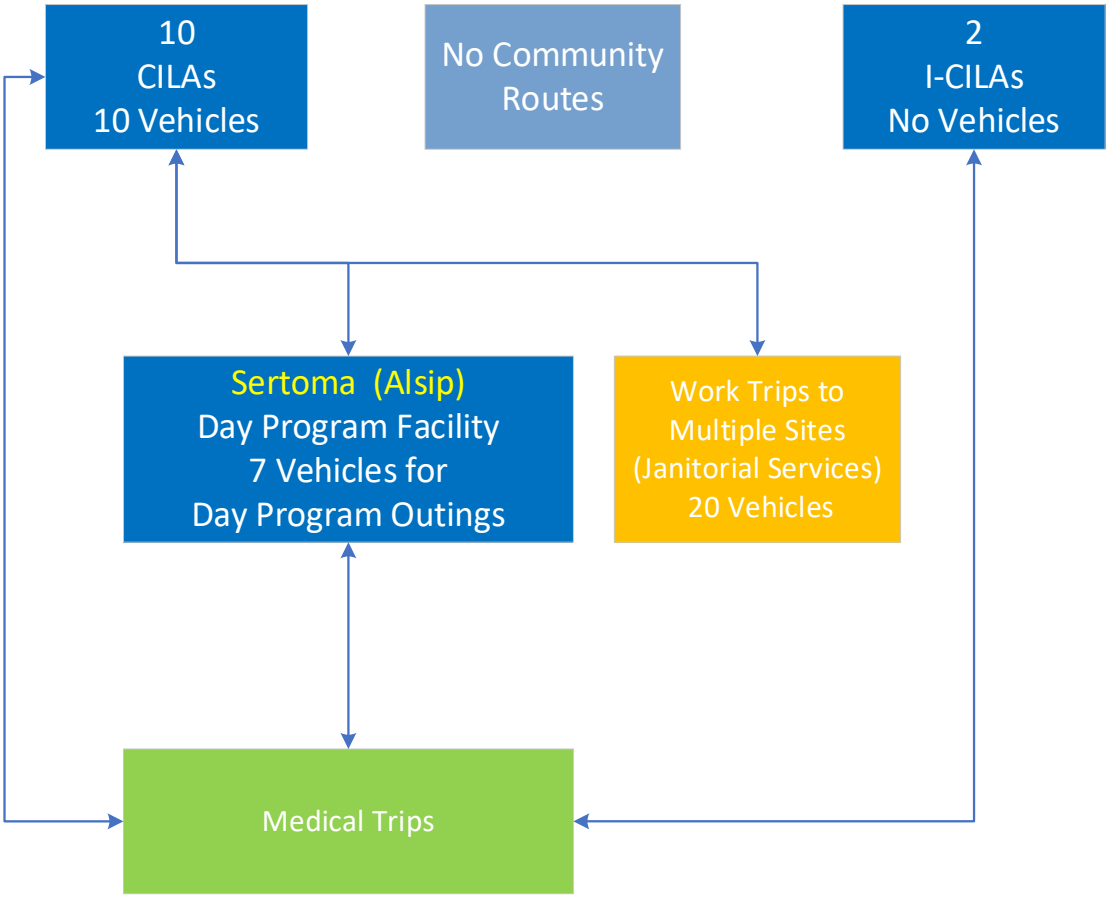
H.7 Janitorial Work Trips

Sertoma Centre has dedicated 20 vehicles to transport individuals to/from janitorial contract services. These vehicles are used for business purposes only; the riders in the vehicles are designated as staff rather than individuals. Of these 20 vehicles, 15 start from the 123rd Street facility and travel to/from service locations and the remaining 5 are staged at rest stops in the community and picked up by staff during service runs. These service contracts are not considered in the remainder of the agency service profile.

H.8 Transportation Services Schematic

Figure H-3 shows a schematic of Sertoma Centre's transportation services.

FIGURE H-3: SERTOMA CENTRE TRANSPORTATION SERVICES



H.9 Transportation Data Collection

For each of the agency's vehicles, a daily log is used to support the monthly reporting requirements, which includes each vehicle's starting mileage and ending mileage. Reports available from Sertoma Centre include the following:

- The Pace monthly report informs ADA ridership by documenting the number of passengers transported per day.
- The Federal monthly report provides auditable information about each vehicle's use throughout the month.
- The daily vehicle trip inspection report is used for both Sertoma Centre and Pace vehicles to document the numbers of individuals picked up, the dates and times of each individual pickup, the results of visual pre-and post-trip checks of the vehicle, and the beginning and ending vehicle mileages for the day.

H.10 Ridership

Table H-2 details the estimated annual number of passenger trips in 2022 by trip type for Sertoma Centre. Data are estimated based on information provided by the agency. Janitorial service trips are not included because they transport staff rather than individuals.

TABLE H-2: SERTOMA CENTRE RIDERSHIP

Annual Passenger Trips-2022	
Transportation to day programs	
CILA routes	33,800
Trips from day programs	
Outing	22,800
Medical	360
Work	0
Trips from CILAs	
Outing	1,968
Total	58,928

H.11 Fleet and Fleet Maintenance

Table H-3 lists the Sertoma Centre fleet vehicles used to transport individuals served by the agency. This list does not include janitorial services vehicles (vehicles that age out of individual transportation use are then typically designated to janitorial services for business purposes). The fleet inventory does not appear to include vehicles designated for the Hillside, Ridgeway, or Riegel CILAs. Also, the CILA location for the vehicle identified as 126 was not specified.

TABLE H-3: SERTOMA CENTRE FLEET SIZE AND CHARACTERISTICS

Source	Year	Vehicle ID	Location	Make/Model	Passenger Seating	
					With Wheelchair	Total
Pace	2018	50083	123rd Street	Ford Transit	No wheelchair	14
Pace	2017	0398	123rd Street	Dodge Caravan	3+1 wheelchair	7
Pace	2017	0401	123rd Street	Dodge Caravan	3+1 wheelchair	7
Pace	2017	0487	123rd Street	Dodge Caravan	3+1 wheelchair	7
Pace	2017	0536	123rd Street	Dodge Caravan	3+1 wheelchair	7
Pace	2017	0552	123rd Street	Dodge Caravan	3+1 wheelchair	7
Pace	2020	50135	123rd Street	Ford Transit	No wheelchair	14
IDOT	2018	116	Cambridge CILA	E350-Starcraft	8+1 wheelchair	12
IDOT	2014	96	Ridge Road CILA	E350-Starcraft	8+1 wheelchair	12
IDOT	2017	113	Greenwood CILA	E350-Starcraft	8+1 wheelchair	12
IDOT	2014	95	Brookwood CILA	E350-Starcraft	8+1 wheelchair	12
IDOT	2015	99	Millard CILA	E350-Starcraft	8+1 wheelchair	12
IDOT	2017	114	Lawler CILA	E350-Starcraft	8+1 wheelchair	12
Sertoma	2017	105	Alsip CILA	Ford Transit Wagon T-350	No wheelchair	10
Sertoma	2021	126	NA	Ford Transit Wagon T-350	No wheelchair	9

Most vehicles in the agency's fleet are now wheelchair accessible with available seating. Sertoma Centre has had to use wheelchair accessible vans for smaller routes based on need. Prior to the COVID-19 pandemic, Sertoma Centre had 30 vehicles and was one of the largest paratransit providers in the Chicagoland area. For maintenance of agency-owned vehicles, Sertoma Centre has a preventive maintenance program (in-house maintenance) and an E-ticket system (through CSP) for repairs that need to be done. Sertoma Centre completes state inspections every six months for all CILA and janitorial vehicles. Originally part of the now defunct community routes program, Sertoma Centre has a maintenance garage with one vehicle bay and a mechanic. Maintenance for agency-owned vehicles typically has a quick turnaround—about 24 hours in most cases. All Pace vehicles are regularly in use without any spares in the fleet. If a Pace vehicle breaks down, Sertoma Centre can quickly get a loaner vehicle from Pace. The DSPs prefer the residential vans in the fleet for outings over the Pace vehicles because the residential van are smaller and equipped with cameras.

Sertoma Centre also has four vehicles and two buses stationed at the 123rd Street facility that are available for DSPs or other staff to utilize. The vehicle keys are kept in the reception area, and the vehicle can be checked out through a virtual appointment calendar accessible to any eligible staff. Any staff using a vehicle but must complete the vehicle trip inspection report and return the key to the reception area. At the Community Mental Health Center, Sertoma Centre has one minivan, two buses, and one Pace vehicle that can be checked out in a similar fashion if needed.

All vehicles are equipped with GPS tracking technology, and all DSPs have agency-issued phones. The GPS tracking can be used to monitor vehicle locations and pull reports from the IT system.

H.12 Costs

Sertoma Centre individual attendance is reported through the HSMS with the CSP. The maintenance, IT, marketing, and finance departments at Sertoma Centre all use the HSMS. Sertoma Centre uses two types of billing hours, including programming time and community transportation time.

Programming time is technically 9:00 a.m. to 2:30 p.m., and staff shifts are 8 a.m. to 4 p.m. The staff start earlier and later than the programming time to provide transportation services from the CILAs during the 8:00–9:00 a.m. window and to the CILAs during the 2:30–3:30 p.m. window. The state does not reimburse agencies for staff lunch times. As such, the maximum transportation billing time is five hours (transportation billing time used to be seven hours or a maximum of 1100 hours for the year). Recently, the state divided the billing rates for CILAs (19 hours) and transportation (5 hours a day).

Sertoma Centre's transportation billing is based on 31C funding from the state, which allows a higher rate for activities in the community than onsite. Any community activities outside the day program facility are eligible for 31C funding. The higher rate for the 31C funding helps incentivize more community access and activities. Pressure to increase community access, however, challenges staff retention because some DSPs do not like driving as part of their duties.

Through the Pace Advantage program, Pace vehicles cost Sertoma Centre $250 a month per vehicle for all costs including insurance. Non-Pace vehicles are procured irregularly based on need.

Transportation administration consumes about 80 percent of staff time for transportation-related non-DSP staff. The DSPs time can be attributed 100 percent toward transportation.