



Access Living of Metropolitan Chicago

Transportation Delayed is Transportation Denied:

Report of On-time Performance in Pace's City of Chicago Paratransit Service

October 23, 2017

Prepared for Access Living

By Robert Zimmerman & Charles Petrof

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Acronyms

ADA	Americans with Disabilities Act
AL	Access Living
CDT	CDT Transportation
FTA	Federal Transit Administration
MV	MV Transportation
RDT	RDT Transportation

Executive Summary

Access Living of Metropolitan Chicago is a Center for Independent Living for people with disabilities established pursuant to the Rehabilitation Act, 29 U.S.C. § 796f. Access Living's statutorily mandated mission includes assisting individuals with disabilities in obtaining equal access to and participation in services, programs, activities, resources, and facilities, whether public or private. *See id.* § 796f-4(b)(1)(D). To carry out this mission, Access Living's office at 115 W. Chicago Avenue, Chicago, Illinois, is a frequent destination for both staff and consumers who use paratransit.

Paratransit is the public transportation system for people whose disabilities make it too difficult for them to ride conventional public transportation. To use the system, paratransit riders schedule pick-ups 24 hours in advance of a trip, and arrange a specific pick-up time with the paratransit carrier.

Staff and consumers frequently complain that their ability to conduct Access Living's business or participate in Access Living's programs is hindered by the unreliability of paratransit service. Access Living raised these concerns to Pace, the local public transportation agency that operates the paratransit service in Access Living's area, at a meeting on September 27, 2016. At that meeting, Pace officials shared on-time performance data that was significantly different from the experiences reported by our staff and consumers. When we raised our concerns about the significant difference between passenger experience and that data, Pace offered to share individual rider data in order to allow us to better understand the discrepancy.

In addition to pursuing Pace's data, from October 24, 2016 through November 18, 2016 Access Living conducted a survey (Access Living On-Site Survey) of the timeliness of the pick-ups for paratransit rides departing from Access Living. After that survey concluded, for comparison purposes, Access Living requested and received from Pace the individual rider data from the eleven participants in the Access Living On-Site Survey who had the highest number of pick-ups.

On March 10, 2017, we shared our results in an initial draft report with Pace and offered to meet to discuss our findings. This offer was now made on behalf of a coalition of organizations consisting of Access Living, the Advocacy Group at Friedman Place, Chicago ADAPT, Equip for Equality, and IMPRUE. The meeting occurred on April 25, 2017. Pace responded by suggesting that difficulty hiring drivers and a transition to a new scheduling system during the period of our survey resulted in a period of unusually poor performance, and

that operation had returned to previous performance levels. Pace also invited the coalition to a presentation of its operation system, which was eventually scheduled for June 23, 2017.

On May 3, 2017, Access Living began a subsequent survey (Pop-up Survey) to test Pace's claim that on-time performance had returned to previously published rates. This was conducted at four locations throughout the city where large numbers of paratransit users gathered for specific events.

On June 23, 2017, the paratransit coalition met with Pace leadership for the tour of Pace's operation system. During that tour, the coalition learned that the GPS devices in the vehicles providing paratransit service were not connected to the system the reported the vehicles arrival at a particular destination. Instead, Pace calculated on-time arrival rates based on driver manual entries in their in-vehicle computer system, and Pace only consulted the GPS data in response to a specific complaint or during an audit. Since Pace collected the GPS data on roughly 10 minute intervals, vehicles could only be roughly tracked even when Pace reviewed the data in response to a specific complaint or audit.

That information and the results of the Pop-up Survey suggested that on-time performance remained a problem. To increase the total number of trips observed, and because many riders use paratransit to travel to medical appointments, Access Living conducted a final survey at two medical facilities (Medical Facilities Survey).

Key Findings

- 1. Even using Pace's own definition of "on-time," of all 186 rides surveyed, actual on-time performance only averaged 62%.**
 - a. Breaking that total down, the survey conducted at Access Living found that only 59% of pick-ups were on time.**
 - b. The Pop-up Survey that followed found that only 69% of pick-ups were on time. That suggested that Pace did experience a decrease in performance during the time period of the Access Living study, but that even without that decrease, on-time rates remained low.**
 - c. The Medical Facilities Survey that occurred last found that only 64% of the pick-ups were on time. This rate was even lower than the rate found in the Pop-up Survey.**
- 2. This low on time performance rate is aggravated by the fact that when pick-ups were late, they were often very late.**
 - a. Of the pick-ups that were late, 41% were over 40 minutes late.**
 - b. 16% of the late pick-ups were over an hour late.**

3. **Actual on-time performance is significantly worse than the 87.5% rate reported by Pace and Pace's announced standard of 95%.**
4. **Pace's published on-time performance rates are not accurate.**
5. **Pace's system for assessing on-time performance is vulnerable to inaccuracies, with both the scheduled pick-up time and the actual pick-up time susceptible to falsification.**
 - a. **The data set Pace shared with Access Living did not indicate when a ride had been cancelled or rescheduled, making negotiated pick-up times unilaterally alterable without easy detection.**
 - b. **Although all vehicles are equipped with GPS systems, those systems are not interfaced with the system that reports vehicle destination arrival, leaving that report to the operator of the vehicle.**
6. **Nine percent of the pick-ups in the Pace Data Set that could be compared to the information in the Access Living On-Site Survey contained data inaccurate enough to change whether a pick-up was on-time or late.**
7. **Even if the information in the Pace Data Set was taken at face value, it could suggest that the location, time of day, and day of the week of the surveys in this report had some impact on the on-time performance discovered, but that this impact was not sufficient to throw into question this Report's conclusion that Pace's published on-time rate is not accurate.**

Key Recommendations

- 1) Pace should take steps to improve on-time pick-up performance in its paratransit service.
 - a) Performance improvement efforts should specifically address significant failures with downtown transportation, as many service providers operate in this area.
 - b) Pace should examine trip routing as a likely cause of late vehicle arrival.
- 2) Pace should replace manual driver input with a GPS linked system for recording actual on-time performance.
- 3) Pace should hire riders to provide independent, "secret shopper" type reporting on all aspect of the rider experience.
- 4) Pace should hire an independent auditor to:
 - a) Explain the discrepancy between Access Living's data and the Pace on-time performance reports.
 - b) Meet with stakeholders to obtain a complete picture of paratransit service and rider concerns.
 - c) Propose solutions for making on-time performance reports that reflect actual rider experiences.

- d) Examine the causes of late pick-ups and create a list of actions to achieve improved on-time performance.
- 5) Pace should enforce the penalty provisions in its contracts with vendors and consider making modifications to those contracts if further steps are necessary to improve on-time performance.
- 6) Pace should make regular public reports containing sufficient information to allow the community to monitor compliance with Pace's obligations.
- 7) Pace should provide a mechanism for Chicago citizens to have a proportional voice in the operation of the regional paratransit system.
- 8) Pace should offer text or voice notifications to alert consumers when riders arrive, including description identifying the arriving vehicle, for those consumers who request such an option.

1 Introduction

Access Living undertook this study to respond to continuous and consistent reports of poor paratransit performance from Access Living staff and consumers. Although complaints spanned the range of most aspects of the service, anecdotally the chief issue appeared to be the consistent failure to pick riders up at the scheduled time. Staff and consumers reported that their rides were late to pick them up almost half the time, and that the delays were so significant that they caused them to miss work, medical appointments, and other activities.

Staff who work with paratransit riders also reported significant interference with Access Living's activities because these riders were so frequently unable to join meetings and other activities at their scheduled times. Access Living's front entrance was frequently filled with paratransit riders awaiting delayed rides long after Access Living's business for the day was over.

On September 27, 2016, staff from Access Living and IMPRUE, an association of paratransit riders, met with Pace officials to discuss the observed problems in the paratransit service. Pace generously offered to share individual rider data to help illustrate the actual on-time performance situation. Pace also shared their on-time performance rates. At that time, Pace shared reports from January through April of 2016. Pace's on-time performance rate for that period was reportedly 87.5%. The discrepancy between rider experience and these reported rates convinced us to conduct our own surveys and compile this study.

1.1 Background

Between the rules governing the scheduling of rides and Pace's own definition of an "on-time" pick-up, paratransit providers operate under a generous definition of what qualifies as on-time. In the case of the service provided by Pace, a pick-up is only late if it occurs 20 or more minutes after the scheduled time. This report does not analyze the assumptions behind that system. Instead, it addresses whether Pace's performance meets its own standards.

A. Scheduling a Ride

The Americans with Disabilities Act has guidelines for scheduling trips. When a rider calls to schedule a ride the ADA allows a transit agency to negotiate pickup times for the eligible rider. However, the transit agency *cannot* require the rider to schedule a trip more than one hour before or after their desired departure time.ⁱ

- When there is a *latest arrival / appointment* time (i.e. a doctor's appointment) to ensure the rider gets to an appointment on-time the scheduling window should be

implemented on the early side, as in scheduled a maximum of one hour early.ⁱⁱ

- When there is an *earliest departure time* (i.e. when consumer gets off work) to ensure the rider does not get picked up before a certain time, the scheduling window should be implemented on the late side, as in scheduled from the stated time to a maximum of an hour after.
- When a rider indicates that their travel plans are not constrained by a latest arrival or earliest departure time (i.e. going to the park), then it is acceptable for the ride to be scheduled on either side of the scheduling window, as in a maximum of an hour before or after their desired departure time.

Table 1 – Paratransit Scheduling Pick-up Windows

Type of Pick-upⁱⁱⁱ	FTA appropriate “Window”
Latest Arrival (appointment to go to)	One hour before appointment
Earliest Departure (leaving work)	One hour after appointment
Not time constraint (no appointment)	One hour before AND one hour after

In ADA compliance reviews the FTA has found repeatedly that a rider’s needed arrival or appointment must be taken into account by transit agencies in scheduling the ride. If there is a change to the pickup window the transit agency *must* notify the rider.^{iv} Once an agreed-upon-time is scheduled it will appear on the driver’s manifest. The manifest should also display any specific rider parameters such as “can’t get picked up any later than” (because they are going to an appointment) or “don’t come any earlier than” (because the rider is still working).

B. On-time Pick-ups and the Pick-up Window

It is current practice in the Paratransit industry to view an on-time pick-up as a vehicle arrival within an on-time window established by the transit agency. Large transit agencies frequently use twenty to thirty minutes as their on-time pick-up window but in no event should it be more than thirty minutes.^v Pace set its on-time window to run from the scheduled pick-up time to just under 20 minutes after that scheduled time. A pick up occurring more than 20 minutes after the scheduled time is late.^{vi}

“The pick-up must occur during the window, not earlier or later, to be considered on-time.”^{vii} This means, the window opens at the time of the scheduled pick-up, not before.^{viii} This rule is important in relation to the frequent paratransit complaint that vehicles arrive well before the announced pick-up window, and, if passengers are not ready at that earlier time, the driver

assigns the passenger a “no-show” and leaves without them. This practice is not consistent with the ADA.^{ix}

C. Five-Minute Wait Time

Pace has also adopted rules requiring paratransit providers to wait for five minutes once they arrive at the pick-up location.^x However, the FTA has determined that the five minutes may not begin until the pickup window starts.^{xi} Therefore, drivers will wait for five minutes after arriving or 5 minutes after the pick-up time, whichever is later. However, before leaving, Pace requires carriers to attempt to contact the customer. If the driver leaves after the appropriate five minute waiting period, the customer will be recorded as a no-show.^{xii}

D. ADA Performance Standard

Like many transportation authorities, Pace does not provide paratransit service itself. Instead Pace contracts with private companies whose drivers Pace contract with these companies usually include a minimum on-time performance standard (for example, 92 percent) or an acceptable range (for example, 92 to 95 percent). Below 92 percent there may be penalties, and above 95 percent there may be incentives.^{xiii}

E. Pace Performance Standard and Reported On-time Rates

“Pace has a goal of 100 percent on-time performance and standards of 95 percent for on-time pick-ups and 90 percent for on-time appointment time drop-offs.”^{xiv} Pace monitors compliance with these standards for each ride. When the Paratransit driver arrives to pick-up a passenger, the driver hits a button to record the time. Hitting this button is also supposed to signify that the vehicle arrived at the pick-up location, but no automated system checks that claim for accuracy.^{xv} Pace officials report that this driver supplied data is compiled into performance reports nine times a day. In addition to generating data, these reports have an economic consequence for Pace’s subcontractors. A sample contract provision affords Pace the right to collect liquidated damages from the carriers at the stipulated rate of 40 percent of the value of the trip for a late pick-up.

Table 2 – On-time Performance Reported by Pace

<u>Pick-ups –Chicago</u>			
Year	Standard	Pace Performance	Variation
2016 (January - April)	95 %	87.5%	- 7.5 %
2015 (whole year)	95 %	87.41 %	- 7.59 %

1.2 Objectives

The objectives of this Report are:

- To collect independent Pace paratransit pick-up on-time performance data
- To determine if there are discrepancies between this data sample and Pace’s reported data
- To propose recommendations to improve on-time performance for paratransit users.

2 Methodology

2.1 Research questions

The research questions to be answered by this survey are:

1. What is the percentage of surveyed rides that were within Pace's on-time pick-up window?
2. Does the data collected vary drastically from month to month?
3. Does the data collected vary drastically based on the day of the week?
4. When a ride is late, how late is it: 20 – 39 minutes? 40 to 59 minutes? 60 minutes plus?
5. Was the data collected in October and November of 2016 unrepresentative of general on-time rates?
6. Does the data collected vary drastically based on the location of the pick-up?
7. Does the individual rider data Pace shared with Access Living suggest a flaw in the survey data?

2.2 Research design

This report will use quantitative and comparative methods to answer the research questions. The Access Living On-Site Survey lasted from October 24 to November 18. The Pop-up Survey lasted from May 3, 2017 to June 3, 2017, taking place on four separate days in that period. The Medical Facilities Survey lasted from August 3, 2017 to August 30, 2017. The survey occurred on three separate days in that period at two separate facilities. The following table summarises the methods used to answer each question:

2.3 Instruments and data collection

The instrument used for this survey was a form filled out by volunteers. For the part of the study conducted at Access Living, volunteers filled out the forms in the lobby where staff and consumers wait for their Pace paratransit ride to pick them up. At the other survey locations, volunteers waited alongside paratransit riders wherever they congregated to wait for pick-up. All information about scheduled pick-up times was collected face-to-face and actual pick-up times were observed by the volunteers. Access Living's Civil Rights Department staff and a volunteer created the survey instrument. (See Appendix 1 for the Survey).

2.4 Sample

The sample was organized based on the actual ride experience of Paratransit riders waiting for pick-ups. At Access Living, fifty-three Pace paratransit riders participated in the survey. 118 individual rides were recorded. (See Appendix 2 for the Release Form). The Pop-

up Survey and the Medical Facilities Survey recorded a combined 74 individual rides. No Release was requested from these riders because there was no intention to share their individual information with Pace.

2.5 Data analysis

Staff entered the survey data into Microsoft Excel. Staff compiled the data in various sheets under one workbook: an overall master of all 116 rides, a master for the month of October, each individual day in October, a master for the month of November, each individual day in November, and a table of all the late rides. Data was then analyzed and recorded into charts and graphs. Those include charts for: late rides by time brackets based on the lateness of a ride, on-time performance by date, the on-time performance of all 118 rides, month of November on-time performance, and month of October on-time performance. Many of these charts and graphs are represented in this report. Staff entered the data from the Pop-up Survey and Medical Facilities Survey in similar but separate Excel workbooks.

2.6 Limitations

The majority of the rides reported are from one location, Access Living. This may have affected the results because Access Living is located in a higher traffic area close to Chicago's downtown. The results may also be limited by the fact that the survey at Access Living only recorded pick-ups between 3:00 PM and 6:00 PM, and only on weekdays. The Pop-up Survey and the Medical Facilities Survey recorded data from other locations and at other times of day, but still did not record information about weekend pick-ups.

The entire sample is also weighted towards locations with high levels of paratransit activity. As such, drivers should be very familiar with most of the surveyed pick-up locations. Additionally, Access Living also has staff in its lobby who connect riders to drivers making the possibility of a miscommunication unlikely.

Finally, as these surveys were conducted without funding to support the work, the volunteers' available time for performing the surveys limited the total number of pick-ups that were recorded in total. The 186 pick-ups recorded should provide a reliable approximation of the level of service, but a greater number of surveyed rides could increase the accuracy of the results.

3 Results of Access Living On-Site Survey

3.1 Only 59% of the rides in the Access Living On-Site Survey were on-time.

Volunteers conducted our first survey of paratransit pick-up times on weekdays from October 24 to November 18, 2016, between the hours of 3:00 and 6:00 PM. Since paratransit riders at Access Living typically wait in the building's lobby, volunteers conducted this survey by asking those waiting if they wanted to participate. For those riders who did wish to participate, the volunteer recorded certain information. Primarily, the volunteer recorded each rider's scheduled pick-up time, as reported by the rider, and then wrote down the time when that rider was picked up by a paratransit vehicle. For this survey, volunteers also collected a release so that this information could be shared with Pace.

No weekend or morning pick-ups were recorded in this survey because Access Living's building is usually closed on the weekend, and few consumers schedule pick-ups in the morning.

The survey recorded 118 pick-ups during the period covered. Six of those pick-ups had missing information, leaving 112 total pick-ups that could be assessed to determine on-time performance.

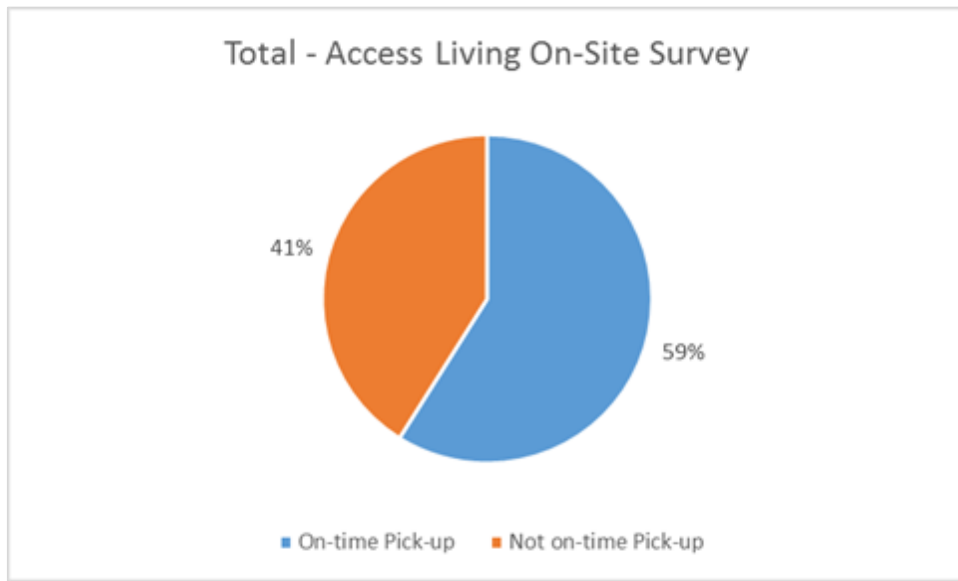
Of those 112 pick-ups, only 59% were on time under Pace's definition, which considers a pick-up on-time if it is within twenty minutes of the scheduled pick-up time.

We also examined the survey data to determine if there was a substantial difference in pick-up time performance based on the month or the day of the week it occurred. These variables did not significantly change the results. Of importance, of the rides that were late, 41% were 40 or more minutes late.

Table 3 – On-time Performance: Access Living On-Site Survey

	On-time Pick-up	Not on-time Pick-up	Total Reported
Total	66	46	112

Figure 1 – On-time Performance: Access Living On-Site Survey



3.2 The on-time rate did not significantly change from October to November.

The Access Living On-Site Survey collected data from October 24 – 31 and November 1 – 18. The on-time performance rate differs slightly by month. In October, the survey recorded 28 pick-ups. 57% of those pick-ups were on-time. In November, the survey recorded 84 pick-ups. 60% of those pick-ups were on-time.

Table 4– On-time Performance: October

Date	On-time Pick-up	Not on-time Pick-up
Oct. 24	2	0
Oct. 25	4	2
Oct. 26	0	0
Oct. 27	2	4
Oct. 28	3	3
Oct. 31	5	3
Total	16	12

Figure 2 – On-time Performance: October

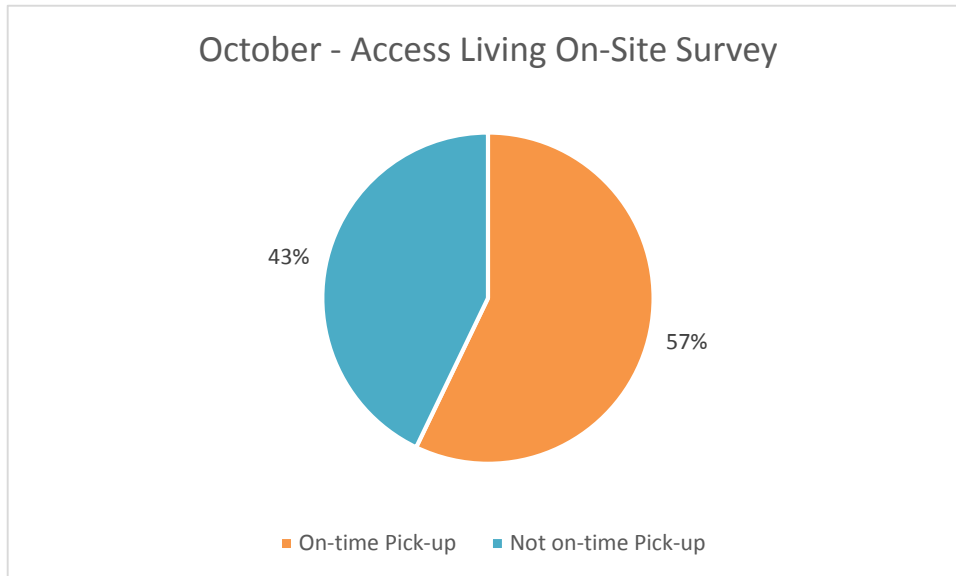
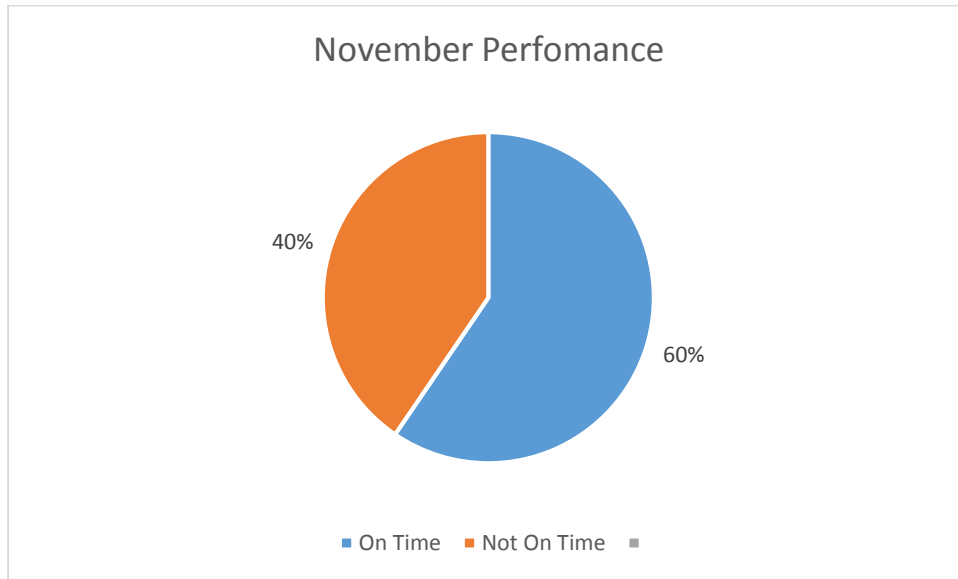


Table 5 – On-time Performance: November

Date	On-time Pick-up	Not on-time Pick-up
Nov. 1	4	5
Nov. 2	1	3
Nov. 3	0	4
Nov. 4	2	1
Nov. 7	4	1
Nov. 8	3	2
Nov. 9	5	0
Nov. 10	2	6
Nov. 14	4	2
Nov. 15	15	2
Nov. 16	3	3
Nov. 17	4	3
Nov. 18	3	2
Total	50	34

Figure 3 – On-time Performance: November



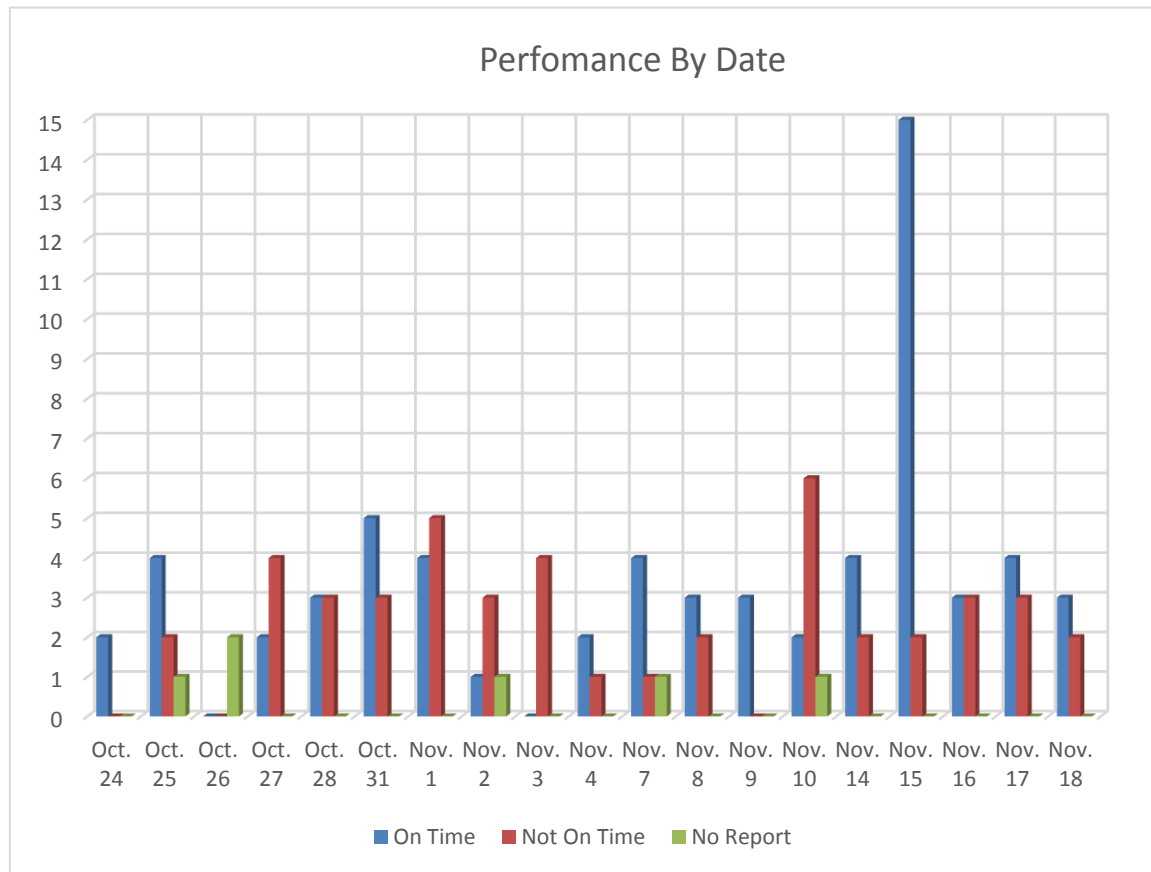
3.3 The on-time rate remained reasonably consistent day to day.

With the exception of November 15th, the data did not vary drastically based on the day of the week the trip occurred. On November 15th, there was an unusually high volume of paratransit pick-ups at Access Living, and an unusually high percentage of on-time pick-ups. 88% were on-time.

Table 6 – On-time Performance: Day to Day

Date	On-time Pick-up	Not on-time Pick-up
Oct. 24	2	0
Oct. 25	4	2
Oct. 26	0	0
Oct. 27	2	4
Oct. 28	3	3
Oct. 31	5	3
Nov. 1	4	5
Nov. 2	1	3
Nov. 3	0	4
Nov. 4	2	1
Nov. 7	4	1
Nov. 8	3	2
Nov. 9	5	0
Nov. 10	2	6
Nov. 14	4	2
Nov. 15	15	2
Nov. 16	3	3
Nov. 17	4	3
Nov. 18	3	2
Total	66	46

Figure 4 – On-time Performance: Day to Day



3.4 41% of late rides were 40 or more minutes late.

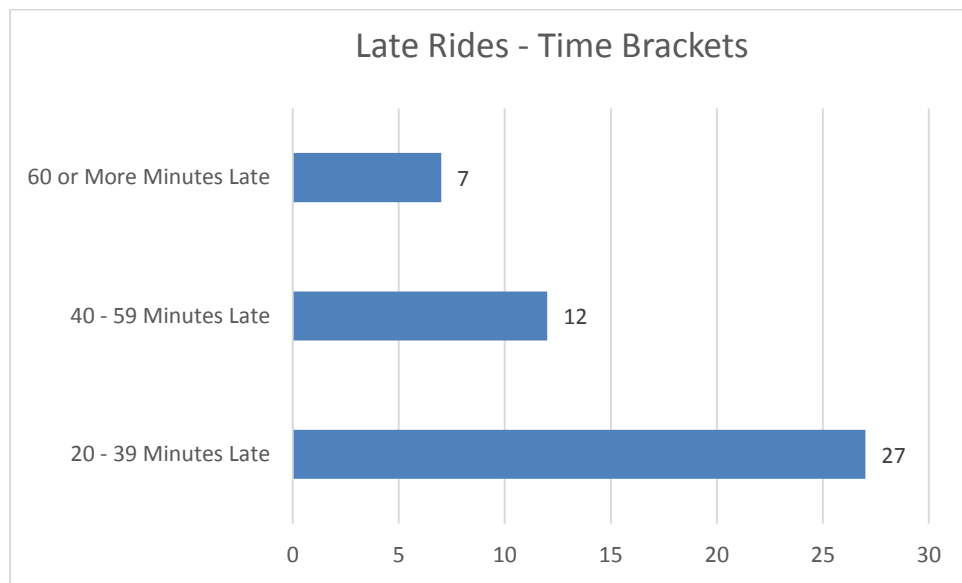
The survey also allowed analysis of the amount of time riders waited when their pickups were late. Since Pace defines an on-time ride on a twenty-minute interval the survey data was broken down similarly to show how many rides were 20 – 39 minutes, 40 – 59 minutes and over 60 minutes late.

Of late rides, 59% were between 20 and 39 minutes late, 26% were between 40 and 59 minutes late, and 15% were over 60 minutes late.

Table 7 – On-time Performance: Late Rides by Time Brackets

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	27	12	7

Figure 5 – Late Rides: 20 minute intervals



4 Pop-Up Survey

4.1 Research questions

At the April 25, 2017 meeting when the paratransit coalition presented our draft findings to Pace, Pace suggested that its contractors had experienced unusual difficulty hiring qualified drivers during the period of the Access Living On-Site Survey. Pace further suggested that this problem had been resolved, and our findings were only of historical interest.

To test that claim, we conducted an additional survey during the time that Pace claimed on-time performance had returned to former rates. Access Living conducted this second survey from May 3rd to June 3rd of 2017.

4.2 Instruments and data collection

The instrument used for this survey was the same as the instrument used for the Access Living On-Site Survey. (See Appendix 1 for Survey). However, since there was no further expectation of sharing individual rider data with Pace, Access Living did not ask volunteers to collect releases from survey participants.

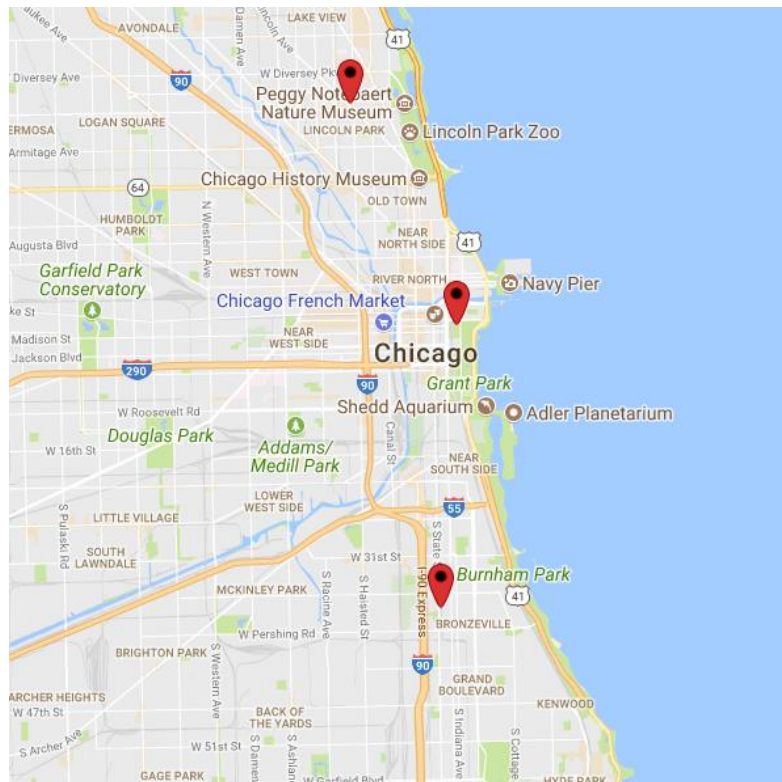
At the time of this survey, paratransit contractors frequently positioned supervisors on the sidewalk outside Access Living's building. These supervisors appeared to monitor all pick-ups occurring at the building. That level of attention on this specific site raised the concern that further data collected at Access Living's building would not be representative of general patterns.

4.3 Sample

In response to concerns about further use of Access Living as a representative site for data collection, we conducted this survey off site. Locations were selected simply by identifying activities likely to attract large numbers of paratransit riders that matched volunteer availability. That resulted in the survey occurring at three locations with one location surveyed on two separate occasions. Volunteers waited with paratransit riders at those locations and otherwise recorded their experiences in the same manner employed in the Access Living On-Site Survey. Volunteers recorded 49 individual pick-ups.

Location and time differed by sight. Some locations and times were in high traffic areas and during busy times of day (Millennium Park) other were in areas and at times where traffic was light (Victory Gardens, Bee Library).

Figure 6 – Map of Pop-Up Survey Locations



4.4 Limitations

This survey was limited by the fact that appropriate sites were also locations where scheduled pick-up times were clustered together. Unlike the Access Living On-Site Survey and the Medical Facilities Survey, volunteers could not view individual rider pick-ups that were spread over the course of a longer period of time.

This survey was also limited in the comparatively smaller number of pick-ups observed. Less than half as many pick-ups were observed compared with the Access Living On-Site Survey.

5 Results of Pop-Up Survey

5.1 Only 69% of all the rides in the AL Pop-up Survey were on-time.

Viewing all the rides from the four locations of the Pop-up Survey, 69% of the rides met the Pace definition of on-time. Since this survey occurred during a period when Pace indicated that its performance had returned to the published rate of nearly 90% on-time, it suggests that Pace may in fact have had a decrease in its on-time rate in October and November of 2016, but that a return to normal operations still failed to produce a performance rate near the level that was reflected in Pace's reports.

Notable in this survey, when rides were late, they were very late. 47% of the late rides were more than 40 minutes late. 18% were over an hour late.

Table 8 – On-time Performance: Entire Pop-Up Survey

	On-time Pick-up	Not on-time Pick-up	Total Reported
Total	34	15	49

Figure 7 – On-time Performance: Entire Pop-Up Survey

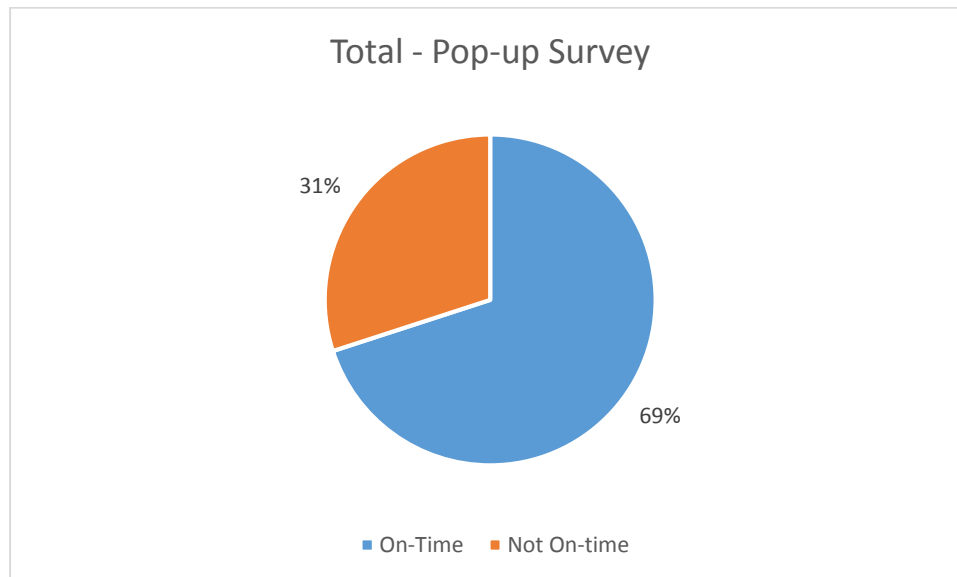
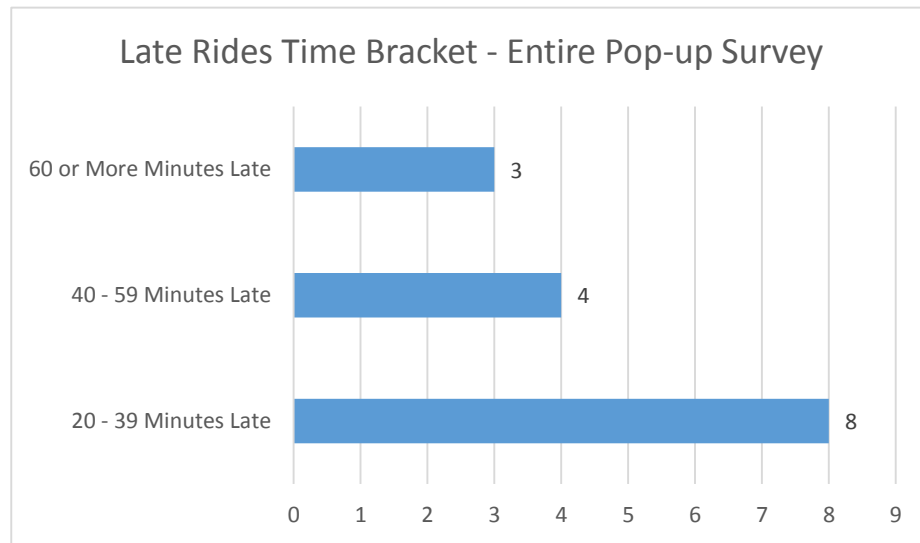


Table 9 – Time Brackets: Entire - Pop-Up Survey

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	8	4	3

Figure 8 – Time Brackets: - Pop-Up Survey



5.2 The on-time rate for May 3, 2017 between 9:00 and 9:40 PM was 71%

The Pop-up Survey first location was Victory Gardens Theater: 2433 N. Lincoln Ave. Chicago, IL 60614. On May 3, 2017, there was a film screening attended by a comparatively large number of paratransit users. Access Living staff and volunteers conducted the survey of the on-time rate for pick-ups from Victory Gardens that evening. 71% (5) rides were on-time. Of the two late rides one was over 40 minutes late.^{xvi}

Table 10 – On-time Performance: Victory Garden - Pop-Up Survey

	On-time Pick-up	Not on-time Pick-up	Total Reported
Total	5	2	7

Figure 9 – On-time Performance: Victory Garden - Pop-Up Survey

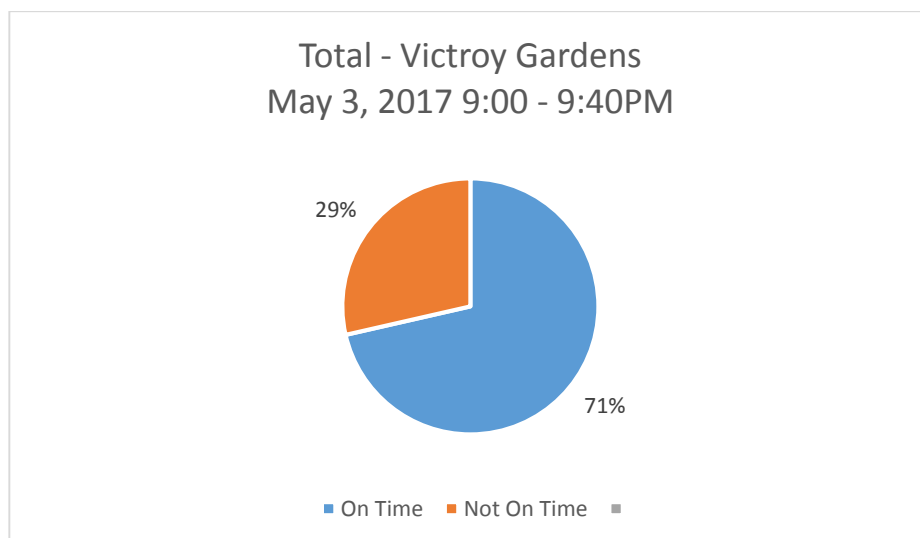
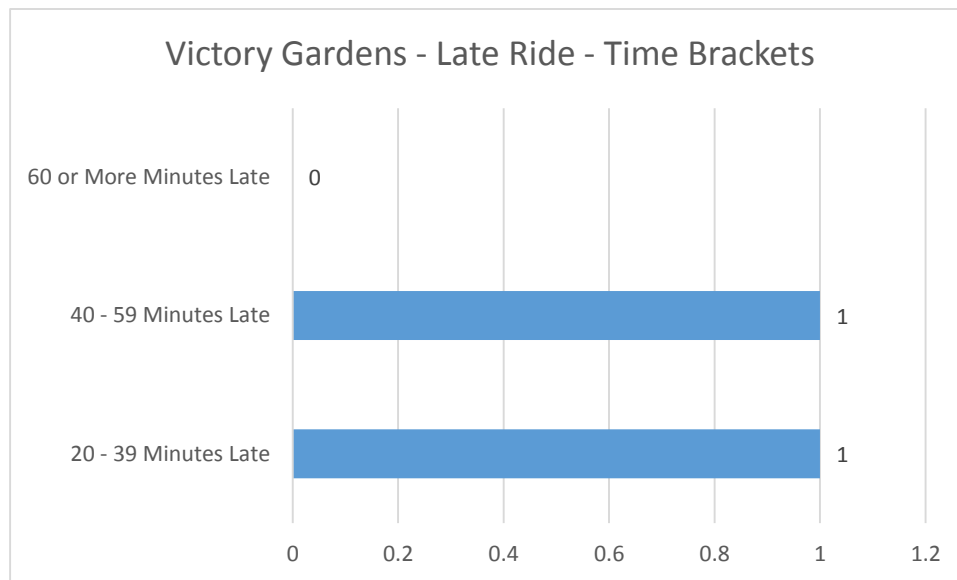


Table 11 – Time Brackets: Victory Garden - Pop-Up Survey

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	1	1	0

Figure 10 – Time Brackets: Victory Garden - Pop-Up Survey



5.3 The on-time rate for May 20, 2017 was 60% and 25% of late rides were over an hour late.

The Pop-up Survey's second location was at an IMPRUE Rider-Driver Alliance Meeting at Bee Library: 3647 S. State St. Chicago, IL 60609. On May 20, 2017, a Rider-Driver Alliance meeting at this library brought together a reasonably large group of paratransit riders. 60% (6) of the pick-ups from this event were on-time. Of the late pick-ups, 25% were over an hour late.

Table 12 – On-time Performance: Bee Library, May 20 - Pop-Up Survey

	On-time Pick-up	Not on-time Pick-up	Total Reported
Total	6	4	10

Figure 11 – On-time Performance: Bee Library, May 20 - Pop-Up Survey

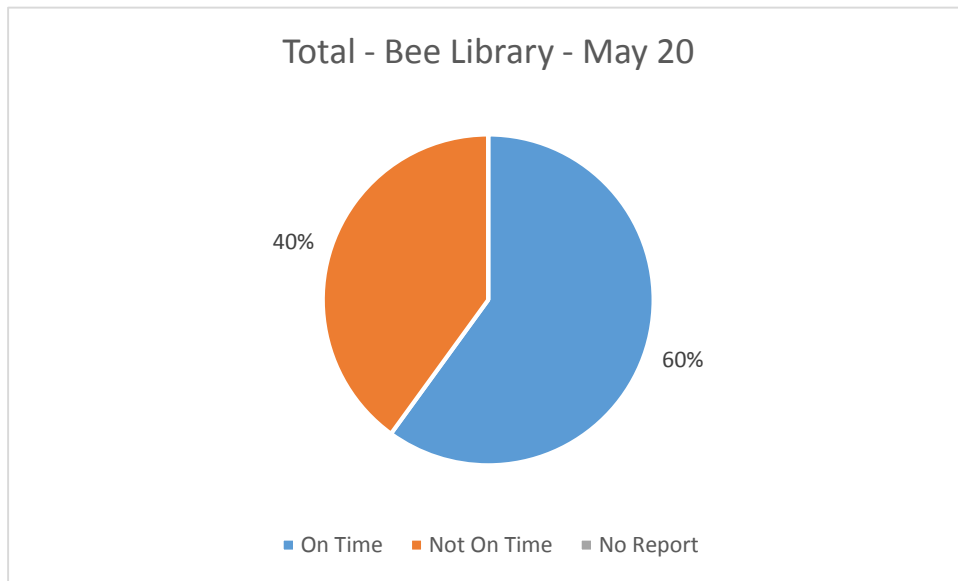
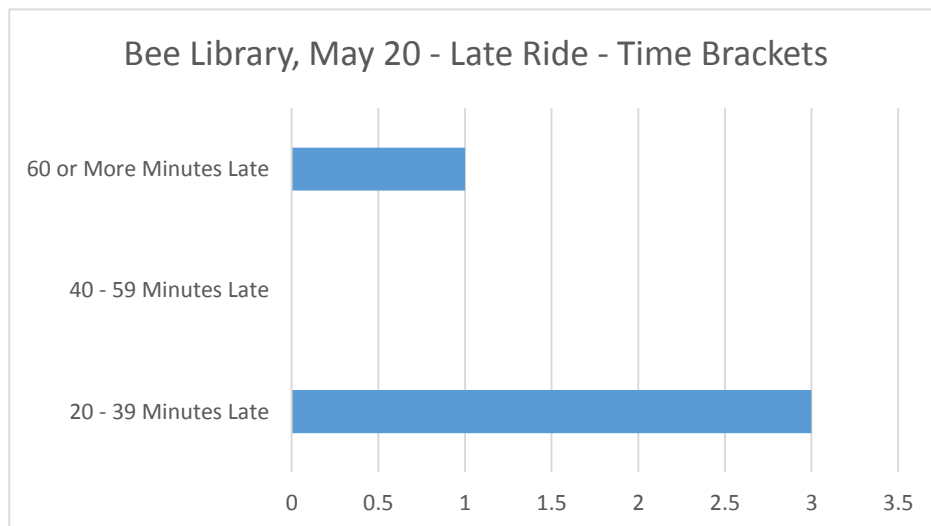


Table 13 – Time Brackets: Bee Library, May 20 - Pop-Up Survey

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	3	0	1

Figure 12 – Time Brackets: Bee Library, May 20 - Pop-Up Survey



5.4 The on-time rate for May 31, 2017 was 56% and 50% of late rides were over 40 minutes late.

The Pop-up Study's third location was at Millennium Park: 201 E. Randolph St. Chicago, IL 60602. On May 31, 2017, there was Rider Driver Alliance rally attended by a large number of paratransit users. Access Living volunteers conducted the survey and found an on-time performance rate of 56%. Over 40% of late riders were over 40 minutes late.

Table 14 – On-time Performance: Millennium Park - Pop-Up Survey

	On-time Pick-up	Not on-time Pick-up	Total Reported
Total	9	7	16

Figure 13 - On-time Performance: Millennium Park - Pop-Up Survey

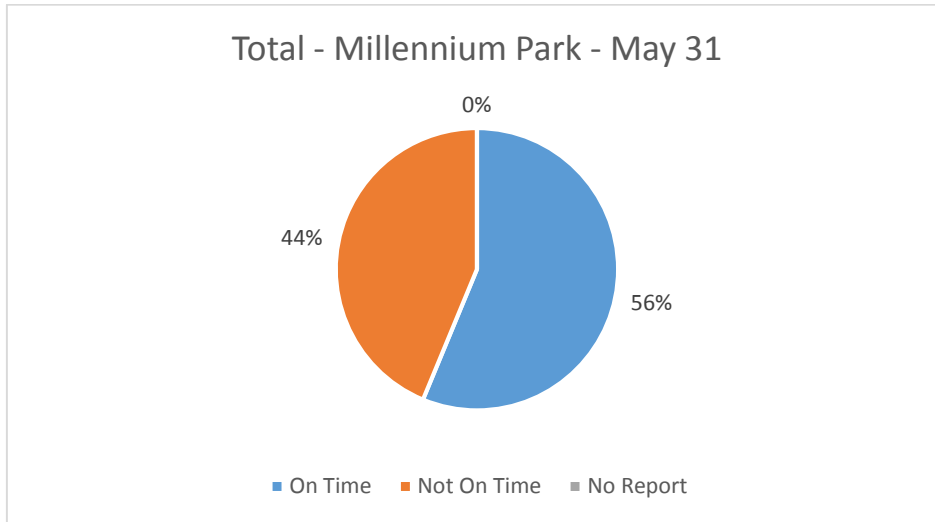
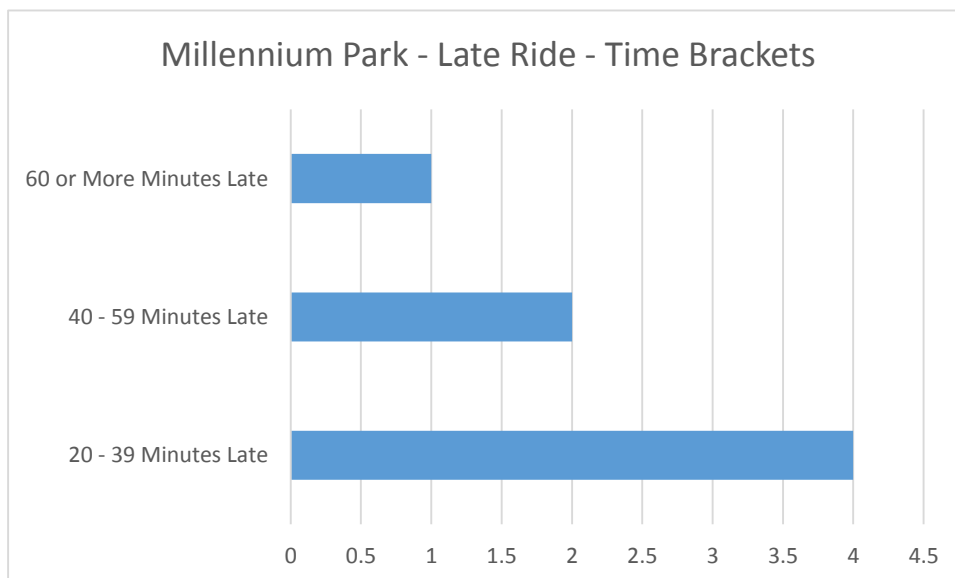


Table 15 – Time Brackets: Millennium Park - Pop-Up Survey

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	4	2	1

Figure 14 – Time Brackets: Millennium Park - Pop-Up Survey



5.5 The on-time rate for June 3, 2017 was 87%, but, when rides were late they were very late.

The Pop-up Survey's final location was again an IMPRUE Meeting at the Bee Library at 3647 S. State St. Chicago, IL 60609. This meeting occurred on Saturday, June 3, 2017. After the meeting, 88% (14) of the pick-ups were on-time. 100% of the late rides were over 40 minutes late, and one vehicle never arrived, requiring the rider to use a flash cab to return home.

Table 16 – On-time Performance: Bee Library, June 3 - Pop-Up Survey

	On-time Pick-up	Not on-time Pick-up	Total Reported
Total	14	2	16

Figure 15 – On-time Performance: Bee Library, June 3 - Pop-Up Survey

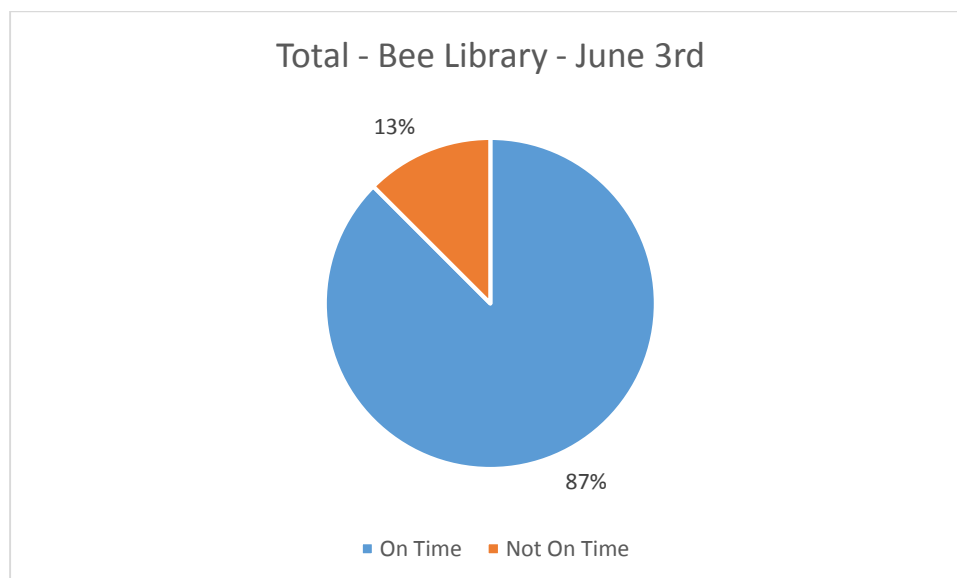
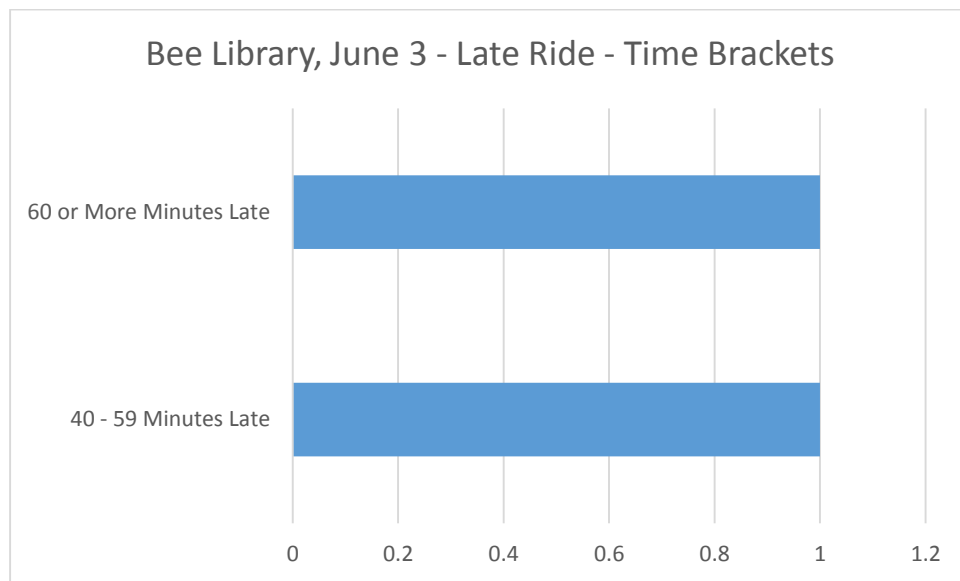


Table 17 – Time Brackets: Bee Library, June 3 - Pop-Up Survey

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	0	1	1

Figure 16 – Time Brackets: Bee Library, June 3 - Pop-Up Survey



6 Medical Facilities Survey

6.1 Research questions

At this point, paratransit riders began to voice a new concern to Access Living staff. Riders indicated that they had begun to see some improvement in the on-time rate for pick-ups, but that vehicle routing had become much worse, sometimes trapping riders in their vehicles for hours at a time.

The paratransit coalition decided that the rider concerns over routing could not easily be addressed in the confines of the present study, but that additional pick-ups should be surveyed during the period of normal operations to confirm the results of the Pop-up Survey. Because many riders expressed concern about their ability to travel to and from medical appointments, we decided to move our focus to medical facilities.

6.2 Instruments and data collection

The instrument used for this survey was the same as the one used in the previous surveys. However, to respect the confidentiality of the individuals at the medical facilities, not only were no releases requested, volunteers identified individual riders on the survey instrument in such a manner that the rider's identity would be protected from any third party observer. (See Appendix 1 for Survey.) As in the other two surveys, the negotiated pick-up time was obtained from a face to face interview with the rider, and the actual pick-up time was observed by the volunteer.

6.3 Sample

The Medical Facilities Survey was conducted on three individual days: August 3, 2017, August 17, 2017 and August 30, 2017. The first day was conducted at Schwab Rehabilitation Hospital, and the second two days the survey were conducted at the Shirley Ryan Ability Lab. The survey recorded twenty-five individual pick-ups.

7 Results of AL Medical Facilities Survey

7.1 Only 64 % of all the pick-ups in the Medical Facilities Survey were on-time, and 33% of the late rides were over 40 minutes late.

The on-time performance rate found at medical facilities was even lower than the rate found during the Pop-Up Survey. It was 64%. In light of the other surveyed pick-ups, this new data confirmed that the on-time rate published by Pace was not correct, regardless of whether or not Pace's contractors experienced difficulty in hiring qualified drivers. It also confirmed that Pace's on-time performance was at a level that was unsatisfactory.

Additionally, as with the other surveys, the Medical Facilities Survey found that when rides were late, they were substantially late. 33% of the pick-ups surveyed were over 40 minutes late.

Table 18 – On-time Performance: Entire Medical Facilities Survey

	On-time Pick-up	Not on-time Pick-up	Total Reported
Total	16	9	25

Figure 17 – On-time Performance: Entire Medical Facilities Survey

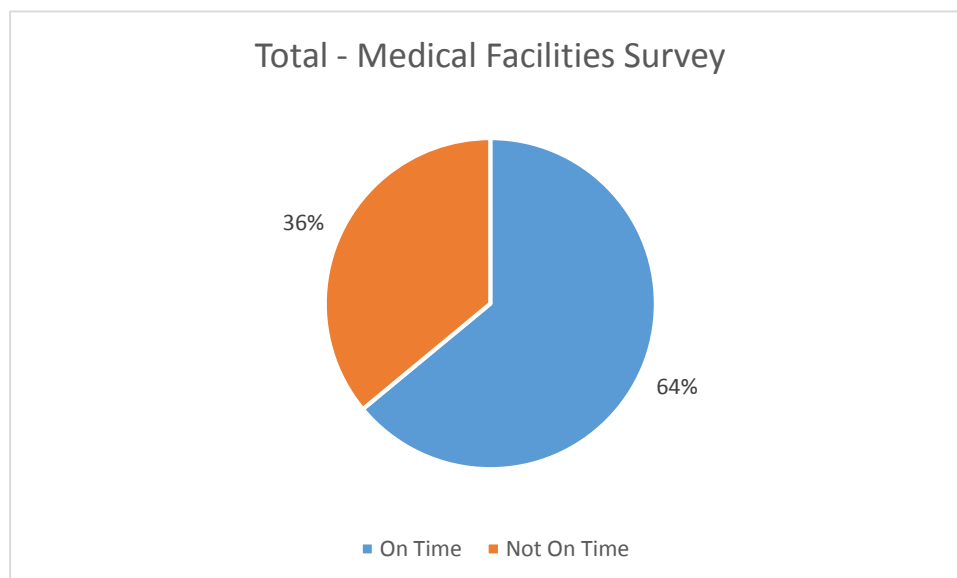
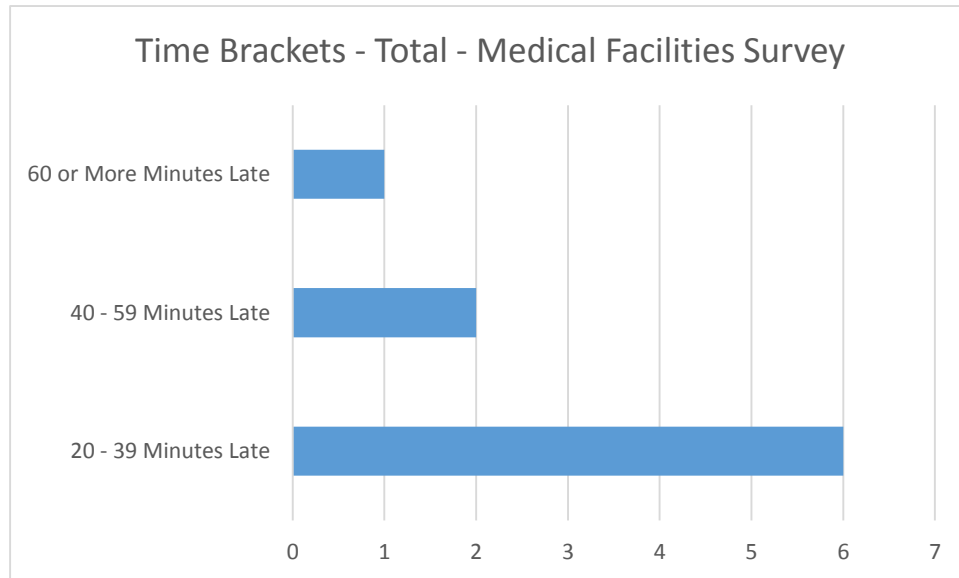


Table 19 – Time Brackets: Entire - Medical Facilities Survey

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	6	2	1

Figure 18 – Time Brackets: - Medical Facilities Survey



7.2 Only 60% of the pick-ups were on-time from Schwab Rehabilitation Hospital.

The Medical Facilities Survey first location was Schwab Rehabilitation Hospital at 1414 S. Fairfield Ave. Chicago, IL 60608. On Thursday August 3, 2017, an Access Living volunteer conducted the survey of the on-time rates for pick-ups from Schwab that afternoon. Five pick-ups were recorded. 60 % (3) of the pick-ups were on-time. Of the two late rides one was over 40 minutes late.

Table 20 – On-time Performance: Medical Facilities Survey - Schwab

	On-time Pick-up	Not on-time Pick-up	Total Reported
Total	3	2	5

Figure 19 – On-time Performance: Medical Facilities Survey - Schwab

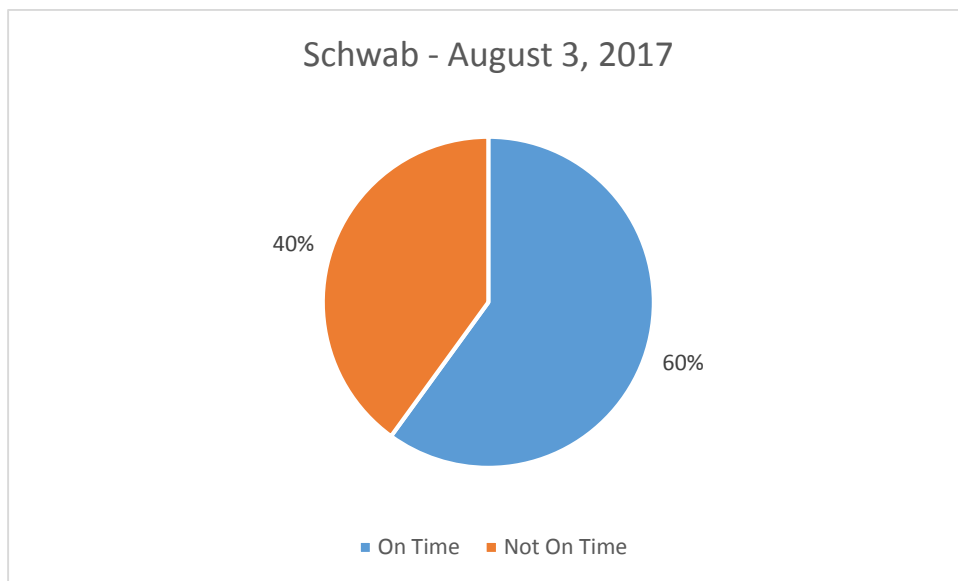
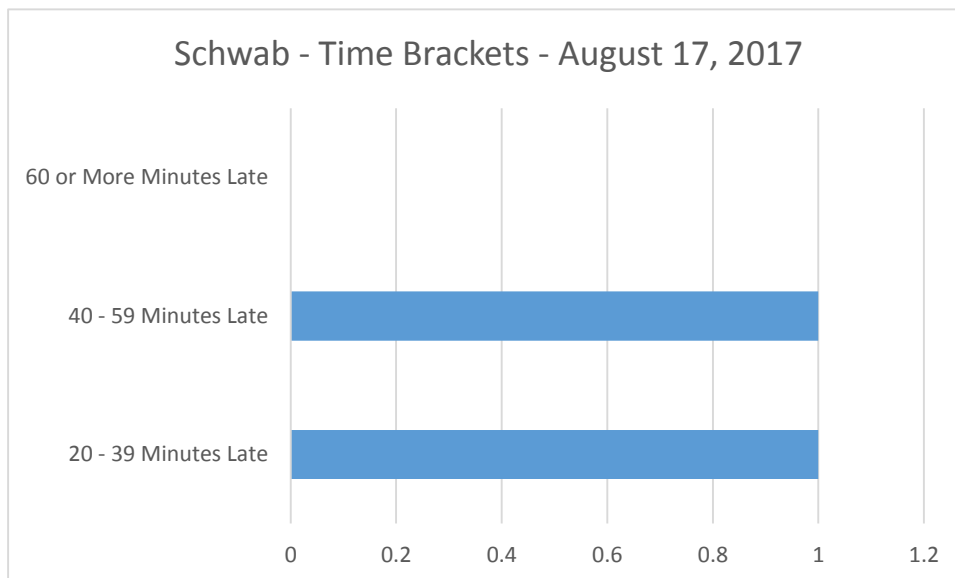


Table 21 – Time Brackets: Medical Facilities Survey - Schwab

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	1	1	

Figure 20 – Time Brackets: - Medical Facilities Survey - Schwab



7.3 69% of pick-ups were on-time from the Shirley Ryan AbilityLab on the first day surveyed.

The Medical Facilities Survey's second location was the Shirley Ryan AbilityLab: 355 E. Erie St. Chicago, IL 60610. On Thursday August 17, 2017, an Access Living volunteer conducted the survey of the on-time rates for pick-ups from Shirley Ryan. 69% (9) of rides were on-time.

Table 22 – On-time Performance: Medical Facilities Survey – Shirley Ryan I

	On-time Pick-up	Not on-time Pick-up	Total Reported
Total	9	4	13

Figure 21 – On-time Performance: Medical Facilities Survey – Shirley Ryan I

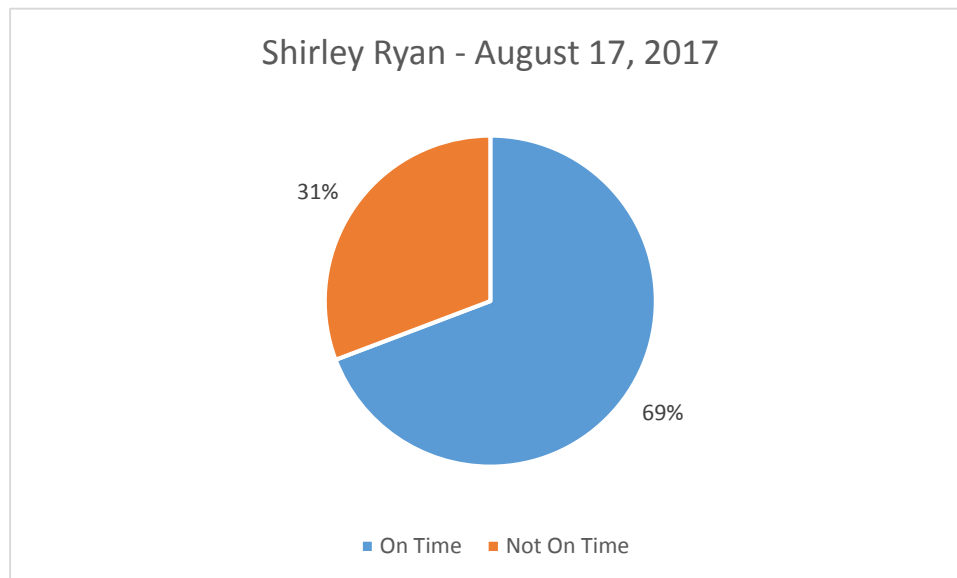
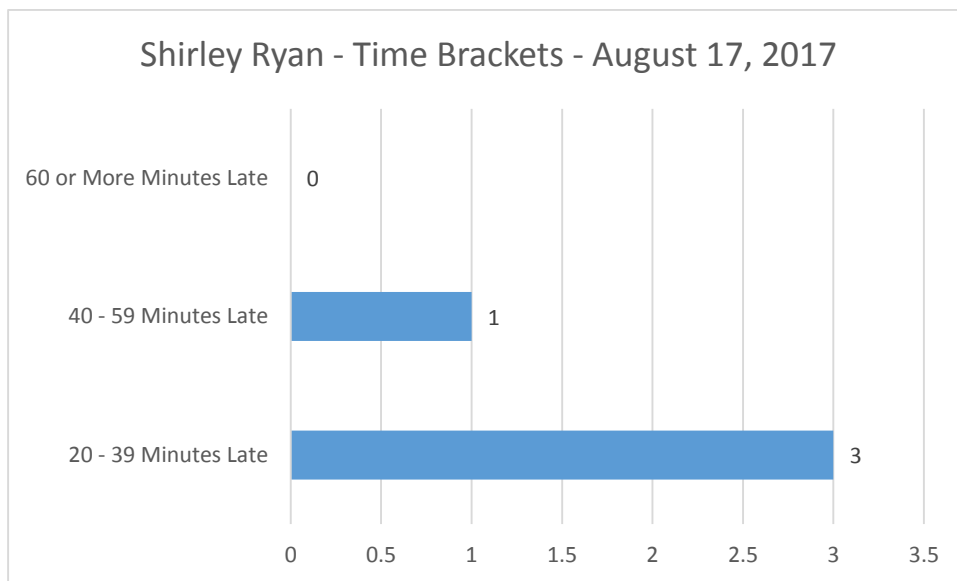


Table 23 – Time Brackets: Medical Facilities Survey – Shirley Ryan I

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	3	1	0

Figure 22 – Time Brackets: Medical Facilities Survey – Shirley Ryan I



7.4 57% of pick-ups were on-time from the Shirley Ryan AbilityLab on the second day surveyed.

The Medical Facilities Survey surveyed the Shirley Ryan AbilityLab a second time on Wednesday, August 30, 2017. The volunteer observed seven pick-ups, 57% (4) of them were on-time. Additionally, one rider was never picked up, despite the rider waiting in the appropriate area. That rider’s follow up phone call to Pace discovered that Pace charged the rider for a “no show” even though it was the paratransit vehicle that never arrived.

Table 24 – On-time Performance: Medical Facilities Survey – Shirley Ryan I

	On-time Pick-up	Not on-time Pick-up	Total Reported
Total	4	3	7

Figure 23 – On-time Performance: Medical Facilities Survey – Shirley Ryan I

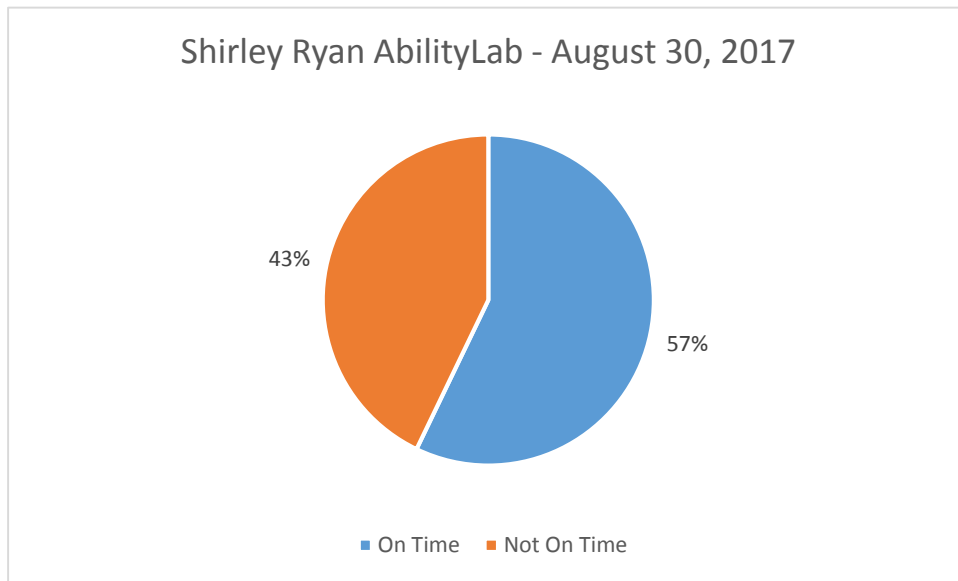
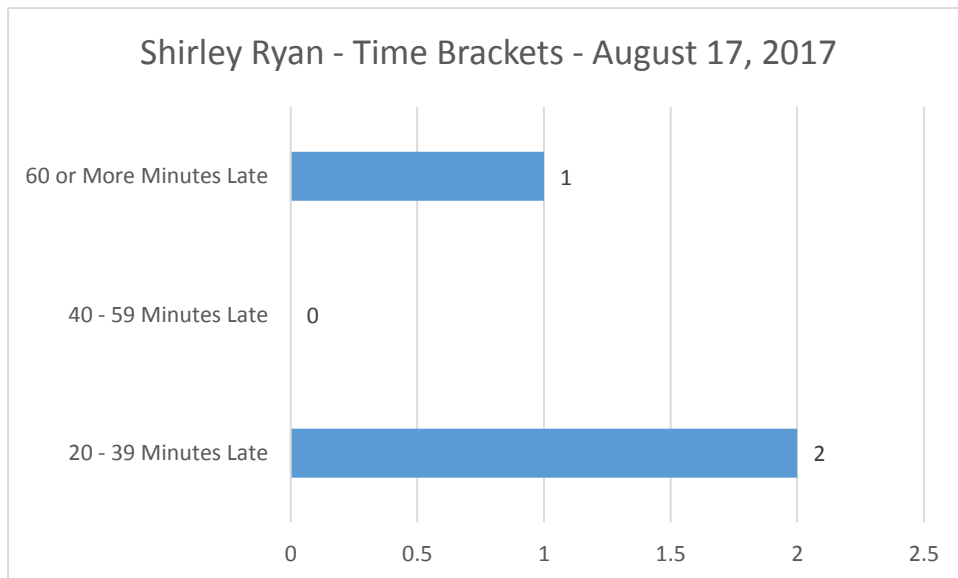


Table 25 – Time Brackets: Entire - Medical Facilities Survey – Shirley Ryan I

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	2	0	1

Figure 24 – Time Brackets: - Medical Facilities Survey – Shirley Ryan I



8 Comparative Analysis with Pace Data

When we first conceived the idea of the first survey in this report, the Access Living On-Time Performance Survey, we thought it would be useful to compare our information to Pace's own data. We believed that the comparison might make it possible assess the degree to which our survey data reflected the on-time performance not just at our site but throughout the City. We also wanted to comb the data to see if it led to any suggestions for why consumer experience appeared so different than the experience reported by Pace.

8.1 Research question

The research questions to be answered by comparing Pace's data to our survey results are:

1. Is there a difference between the pick-up information collected in the Access Living On-Time Performance Survey and data in Pace's system for those same trips?
2. If there is a difference in the data, how does it impact the resulting on-time performance rate?
3. If there is a discrepancy in the results, can it be explained by different performance rates between Chicago's downtown and its neighborhoods?? ^{xvii}
4. If there is a discrepancy in the results, can it be explained by a difference in performance rates between weekday and weekend trips?
5. Does the on-time pick-up performance for all pick-ups in the data provided by Pace match either the on-time rate in the Access Living On-Time Performance Survey or the rate published by Pace?

8.2 Instruments and data collected

Access Living identified the eleven participants in the Access Living On-Time Performance Survey with the highest number of recorded pick-ups and asked Pace to share Pace's data regarding their trips during the period of the survey, October 24, 2016 to November 18, 2016. Pace shared their data for all the rides these eleven participants completed during this period. In total, Pace shared data for 291 rides. Of those 291 rides, 56 were also recorded in the Access Living On-Site Survey. Pace's data included: Provider^{xviii}, Rider's Name, Requested Time, Negotiated Time, Scheduled Time, Actual Arrival, Actual Departure, Location Ride is From, Destination and, Distance of Ride. This data set lacked any information concerning trip cancelations, rescheduled trips, or "no shows."

9 Pace Data Set Raises Concerns About Accuracy of Pace’s Performance Reports

Nine percent (5 of 56) of the pick-ups recorded in both the Access Living On-Time Performance Survey and Pace’s Data Set had information sufficiently different to change whether or not a pick-up was on-time. In three of those five instances the difference resulted in a pick-up that was recorded as late in Access Living’s survey to show as on-time in the Pace Data Set.

Regardless of this difference, the on-time performance rate for the 56 pick-ups in both data sets was very low. Pace’s data produced an on-time performance rate of 54% whereas the Access Living On-Time Performance Survey data for these rides found a rate of 52%. The difference caused by the 9% of entries that did not match was significant enough to change the result, but it was not enough to explain why the Access Living On-Time Performance Survey found a result that was so much worse than the on-time performance reported by Pace, even assuming a temporary shortage of drivers.

Nonetheless, the Pace Data Set did suggest that the limitations in the Access Living On-Time Performance Survey had some impact on the resulting performance rate. There did appear to be a distinction in the on-time rate depending on whether the pick-up was in a neighborhood or a downtown location, and whether the pick-up was on a weekday or weekend. Those differences, while relevant in terms of estimating the overall on-time performance rate, were not significant enough to explain the discrepancy between the rate found in the Access Living On-Time Survey and the rate published by Pace.

9.1 The two data sets show a significant difference in on-time performance, but not a sufficient difference to explain Pace’s published performance rate.

This report compared the rides recorded in both the Access Living On-Time Performance Survey and the Pace Data Set. There were 56 individual pick-ups at Access Living reported in both data sets. There are two separate performance rates for those same rides. Access Living found an on-time performance rate of 52%. Pace’s data resulted in an on-time rate of 54%.

Table 26 – On-time Performance: Rides Recorded in Access Living Survey between October 24 and November 18, 2016

	On-time Pick-up	Not on-time Pick-up	Total Reported
Total	29	27	56
Percent	51.79 %	48.21 %	

Table 27 – Pace Data Set: Rides Recorded in Pace Data for Pick-ups from Access Living between October 24 and November 18 2016

	On-time Pick-up	Not on-time Pick-up	Total Report
Total	30	26	56
Percent	53.57%	46.43%	

9.2 Nine percent of the pick-ups in both surveys had data differences sufficient to change whether the pick-up was on-time.

Of the 56 pick-ups recorded by both Access Living’s survey and Pace’s data, only three rides had a reporting discrepancy that resulted in a ride being deemed as on-time by Pace but not on-time by Access Living. That amounts to 5% of the data. Two rides are recorded in the Pace Data as late even though it shows in the Access Living Survey as on-time.

Based on Pace’s explanation of their system for determining on-time performance demonstrated at our June 23, 2017 meeting, it appears likely that the two rides that shows as on-time in our survey but late in Pace’s data set were caused by simple human error. The driver likely forgot to hit the button indicating that the vehicle had arrived to pick up the rider at Access Living until after the rider had boarded the vehicle and the driver had driven off. That conclusion was suggested by Pace at our June 23, 2017 meeting, and is supported by the fact that the Pace data for one of these pick-ups indicates that the driver arrived at Access Living, boarded a rider, and departed within 0.04 seconds.

In fact, 10 of the 291 rides record a difference of less than 30 seconds between arrival at the pick-up location and departure with a boarded passenger. Considering the population and driver protocols, pick-ups cannot happen in such a short amount of time.

The fact that Pace’s system did not detect the error in the recorded arrival time suggests that it could also not detect if the three rides that show as on-time in Pace’s data but late in Access Living’s survey were caused by drivers hitting the button to claim arrival at the pick-up location before the vehicle had even arrived at Access Living.

Understanding that drivers can falsely claim arrival for a pick-up lead to the additional speculation about whether such behavior could explain the difference in on-time performance rates. The 5% change found in this instance is not enough to make up for the much larger difference between the on-time performance rates we found and the rate reported by Pace. Accordingly, if it is a reason for the difference, it does not appear to be a complete answer.

Still, the behavior of the paratransit contractors after learning of the Access Living survey suggests that the total rate of incorrectly reported on-time pick-ups might be larger than the 5% we found for pick-ups at Access Living. Access Living’s office is a high traffic location for

paratransit travel. As such, there should be a higher likelihood that false claims of on-time arrival could be detected at our location. After all, the paratransit contractors were able to station supervisors on the sidewalk in front of our door to monitor, in person, the performance of their drivers.

That kind of monitoring is nearly impossible in most of the neighborhood locations where most riders live. If drivers were incorrectly indicating that they had arrived for a pick-up while still en route to a destination, the pick-ups in the neighborhoods would seem to be a place where such activity would be much harder to detect.

Table 28 – Rides where Pace’s Internal Data and Access Living’s Survey Significantly Differed

	Date	Which Carrier?	Scheduled up Time	Pick-	Actual Time	Pick-up	On-time? (Less than 20 min late?)
Access Living Survey	11/17/2016	CDT	4:30 PM		4:50 PM		No
Pace’s Data	11/17/2016	CDT	4:29 PM		4:57 PM		No

	Date	Which Carrier?	Scheduled up Time	Pick-	Actual Time	Pick-up	On-time? (Less than 20 min late?)
Access Living Survey	11/15/2016	CDT	3:15 PM		3:30 PM		Yes
Pace’s Data	11/15/2016	CDT	3:15 PM		3:43:17 PM		No

	Date	Which Carrier?	Scheduled up Time	Pick-	Actual Time	Pick-up	On-time? (Less than 20 min late?)
Access Living Survey	11/4/2016		5:15 PM		5:40 PM		No
Pace’s Data	11/4/2016	CDT	5:15 PM		5:21:52 PM		Yes

	Date	Which Carrier?	Scheduled up Time	Pick-	Actual Time	Pick-up	On-time? (Less than 20 min late?)
Access Living Survey	10/28/2016		3:00 PM		3:25 PM		No
Pace’s Data	10/28/2016	CDT	3:03 PM		3:18:15 PM		Yes

	Date	Which Carrier?	Scheduled up Time	Pick-	Actual Time	Pick-up	On-time? (Less than 20 min late?)
Access Living Survey	10/27/2016		5:00 PM		5:30 PM		No
Pace’s Data	10/27/2016	CDT	5:13:15 PM		5:20:35 PM		Yes

10 Comparison of Survey with Pace Data Suggests that Neighborhood Service Warrants Further Investigation.

Because Access Living’s office is on the edge of downtown, and because the Access Living On-Site Survey was conducted in the afternoon and on weekdays, this report looked at the Pace Data Set to answer the question whether those elements materially affected the results. The analysis suggests that the condition of the Access Living On-Site Survey had some impact on the results, but not enough to alter the overall conclusion that paratransit on-time performance is significantly worse than Pace reports. It also raised questions about the on-time performance rate reported for neighborhood trips.

10.1 There is a significant difference in on-time performance between downtown and neighborhood pick-ups in Pace data.

All 291 rides in the Pace Data Set were reviewed to compare the on-time rate for downtown pick-ups versus neighborhood pick-ups. Rides from “downtown”^{xix} were 65 % on-time. When the rides were late 68% were between 20 and 39 minutes late, 26% of late rides were between 40 and 59 minutes late, and 6% of late rides were over 60 minutes late.

In comparison, the Access Living On-Site Survey found that 59% of the pick-ups were on time. The difference in that result, and the 65% on-time rate for downtown rides in Pace’s data set could largely be explained by the rate of driver misreporting found earlier in this Report. However, even assuming that such an analysis is correct, it fails to answer the larger question of why Pace claims an 87.5% on-time rate and consumers experience a much lower rate.

Table 29 – Pace Data Set: Rides that were Pick-ups from “Downtown”

	On-time Pick-up	Not on-time Pick-up	No Report	Total Reported
Total	63	34	0	97
Percent	64.94 %	35.05 %	0 %	

Figure 25 – Pace Data Set: Rides which were Pick-ups from “Downtown”

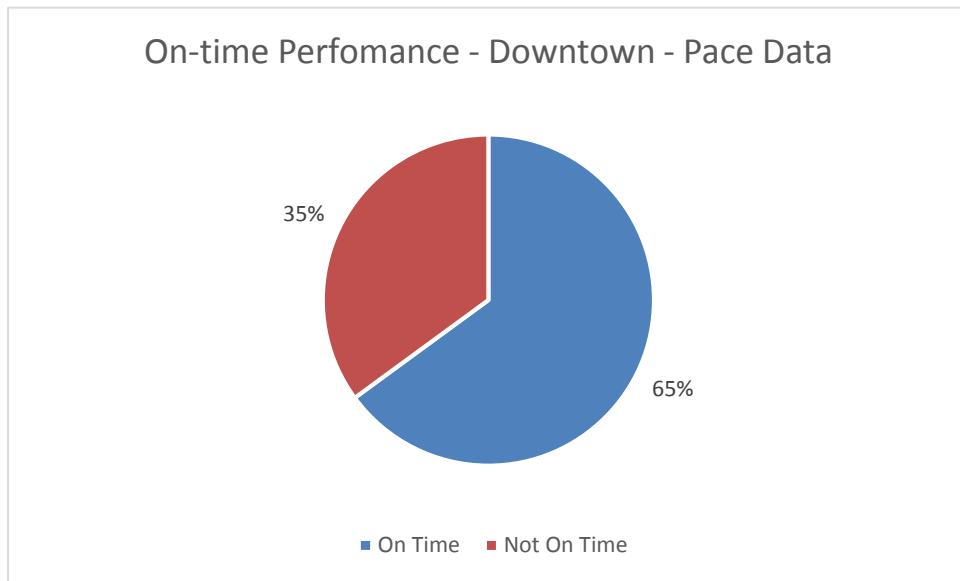
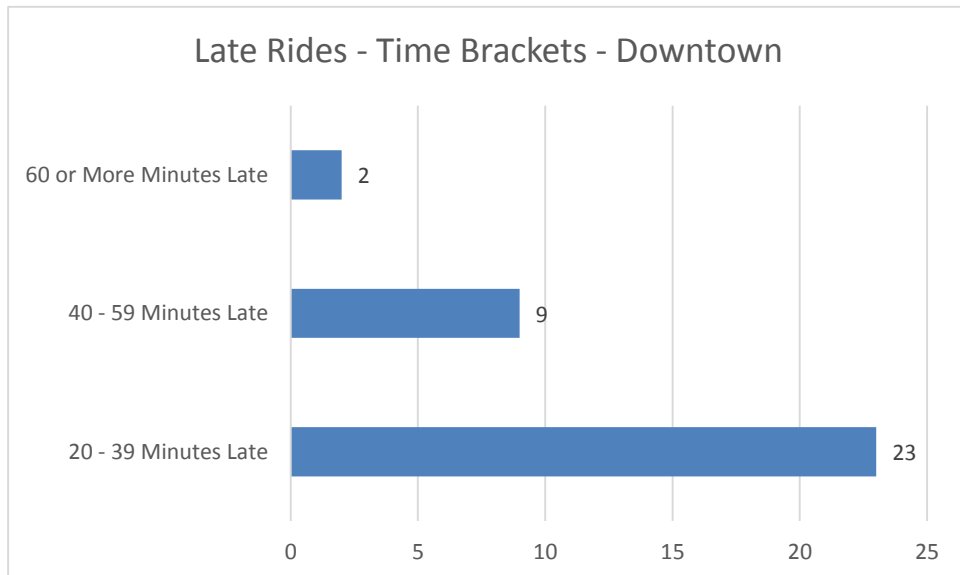


Table 30 –Pace Data Set: Late rides by Time Bracket – “Downtown”

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	23	9	2

Figure 26 –Pace Data Set: Late Rides by Time Bracket – “Downtown”



This Report also calculate the on-time pick-up rate of neighbourhood rides in the Pace Data Set. These rides were 84% on-time. When the rides were late 79% were between 20 and 39 minutes late, 15% were between 40 and 59 minutes late, and 6% were over 60 minutes late. Even if one assumes that 84% of the neighbourhood riders were on time, this would still fall below Pace’s published 87.5% rate before the much lower downtown rate is taken into consideration.

Table 31 – Pace Data Set: Rides which were Pick-ups from a “Neighborhood”

	On-time Pick-up	Not on-time Pick-up	No Report	Total Reported
Total	161	33	0	194
Percent	83.53 %	17.01 %	0 %	

Figure 27 –Pace Data Set: Rides which were Pick-ups from a “Neighborhood”

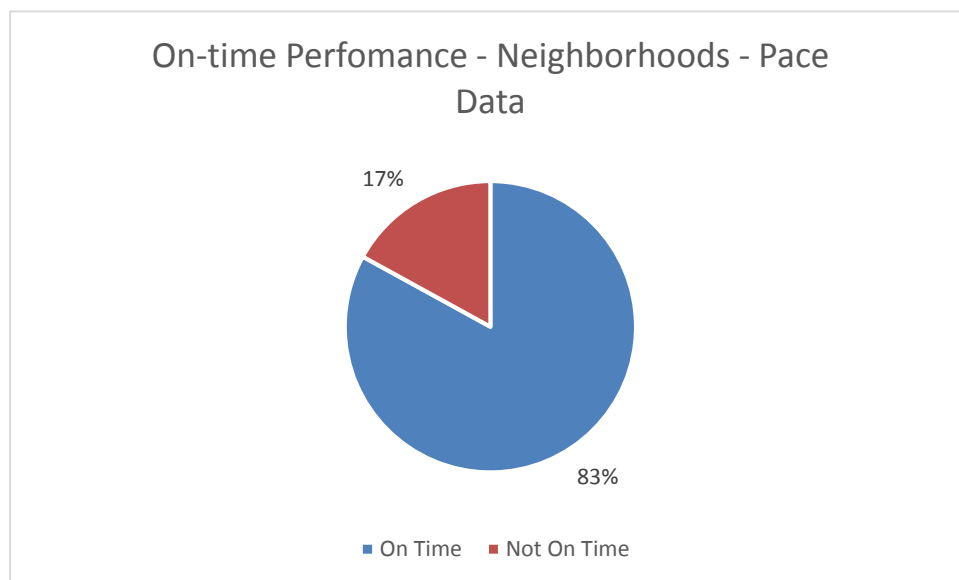
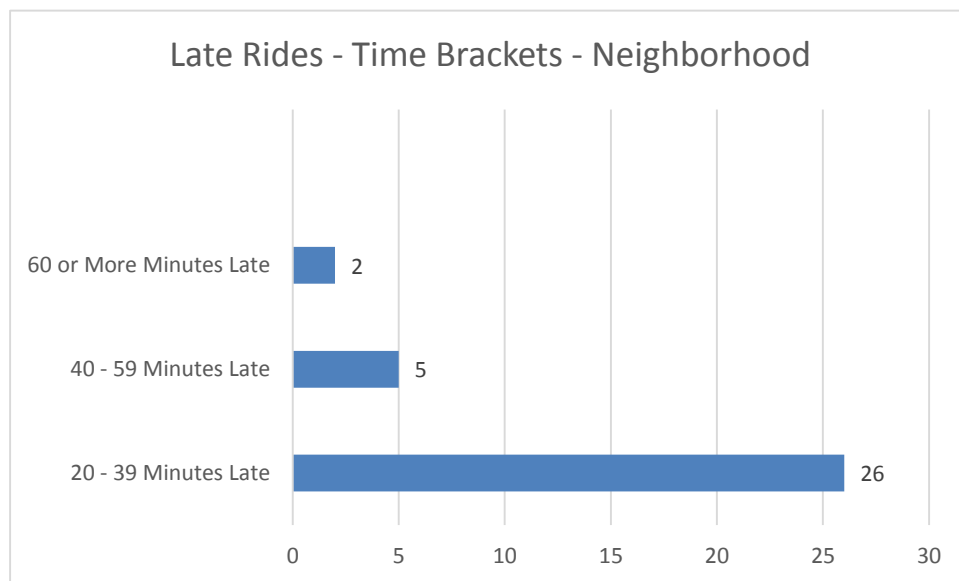


Table 32 –Pace Data Set: Late rides by Time Bracket – “Neighborhood”

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	26	5	2

Figures 28 –Pace Data Set: Late Rides by Time Bracket – “Neighborhood”



The neighborhood on-time performance rate is remarkable in that it is so much higher than almost all other performance rates found in this Report. Weekend on-time performance is next closest, but it only represents 8% of the total rides in the Pace Data Set. Looking at all the pick-ups in the Pace Data Set, there is still only a 77% on-time rate.

It is also remarkable because a late pick-up downtown for one passenger should have a high likelihood of causing the vehicle to be late for the next passenger being picked up. That should be the case unless the scheduling software accommodates for late pick-ups downtown. This report cannot rule out that possibility, but finds it unlikely that the software can accommodate for late pick-ups, but does not do a better job of planning routes to avoid late pick-ups in the first place.

Instead, the unusually high on-time rate suggests another characteristic may be causing the unusually high performance in neighborhoods. It is important that driver ability to manipulate the reporting of arrival for a pick-up when the vehicle is not yet on site be examined to determine the extent to which that feature impacts this rate. As this Report noted previously, due to the deconcentration of paratransit riders in most neighborhoods, it would appear to be unlikely that a false report of arrival at a pick-up site could be easily discovered.

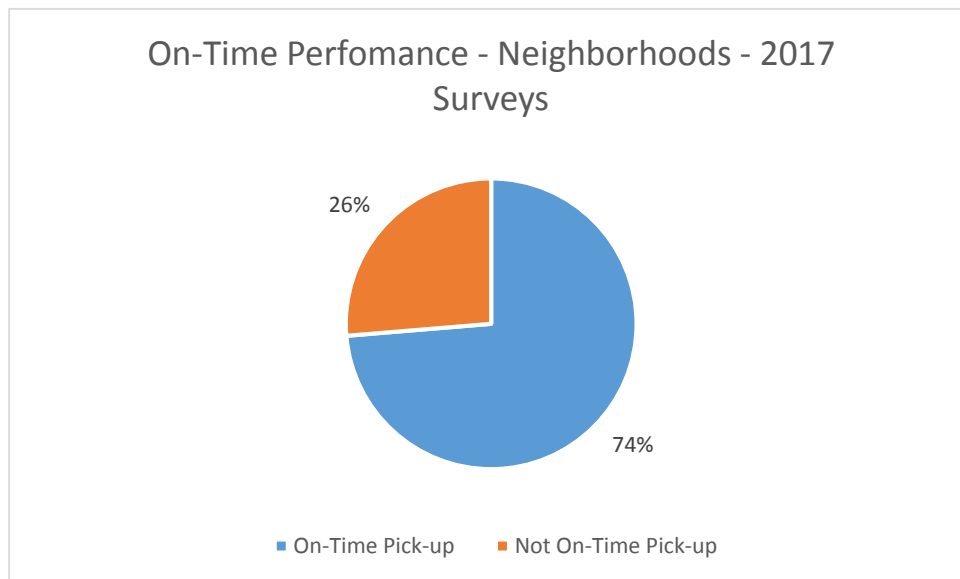
To consider that possibility, we isolated the neighborhood rides recorded in the Pop-up Survey and Medical Facilities Surveys. 74% of neighborhood pick-ups in these surveys were on-time. That is better than the 66% average recorded in these surveys, but not near the 84% from the Pace Data Set. This suggests that Pace might fruitfully investigate solutions for the lower on-time rates it experiences in downtown settings as a route to improving overall

performance, but that driver reporting of neighborhood pick-ups should still be investigated for potential misreporting.

Table 33 – Time Brackets: Rides from 2017 which were pick-ups from a “Neighborhood”

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	5	3	2

Figure 29 – On-time Performance: Rides from 2017 which were pick-ups from a “Neighborhood”



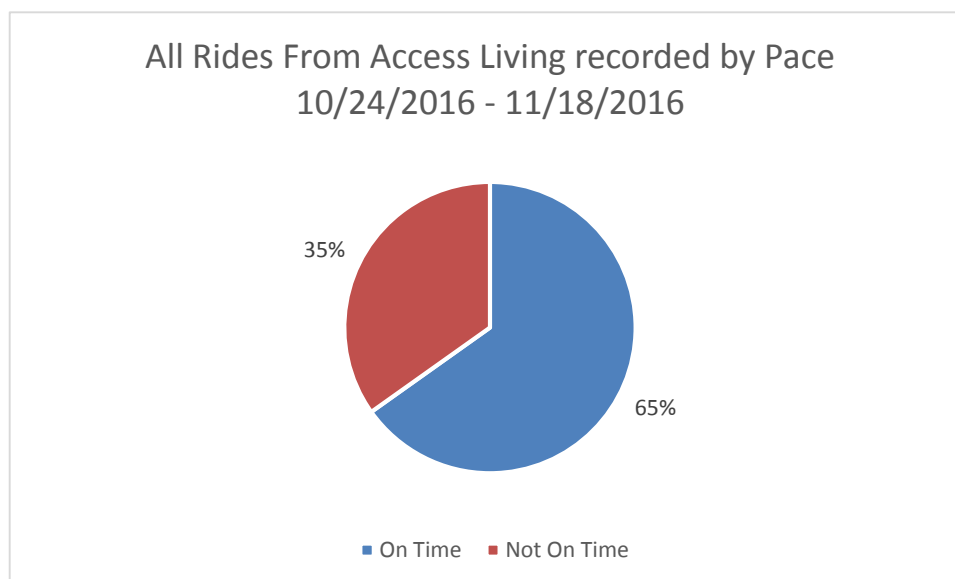
10.2 Evening rush hour had lower on-time rates than the daily average, but not enough lower to explain Paces published on-time rate.

The Access Living On-Site Survey collected information about pick-ups at Access Living’s facility between the hours of 3:00 pm and 6:00 pm. The Pace Data Set has pick-up information from around the clock. Looking at the around the clock information in the Pace Data Set, 77% of pick-ups are recorded as being on-time. Looking only at that part of the data set that recorded pick-ups scheduled between 3:00 pm and 6:00 pm, 65% were on time. This suggests that paratransit service is particularly bad in the afternoon, but that even taking that into account, it does not have a significant enough impact to explain why the Access Living On-Site Survey found an on-time rate so much lower than the rate reported by Pace.

Table 34 – Pace Data Set: All rides at Access Living between October 24 and November 18 2016

	On-time Pick-up	Not on-time Pick-up	No Report	Total Reported
Total	58	31	0	70
Percent	65.17 %	34.83 %	0 %	

Figure 30 – Pace Data Set: All pick-ups at Access Living between October 24 and November 18 2016



The Pace Data Set shows better on-time performance on the weekends than during the week.

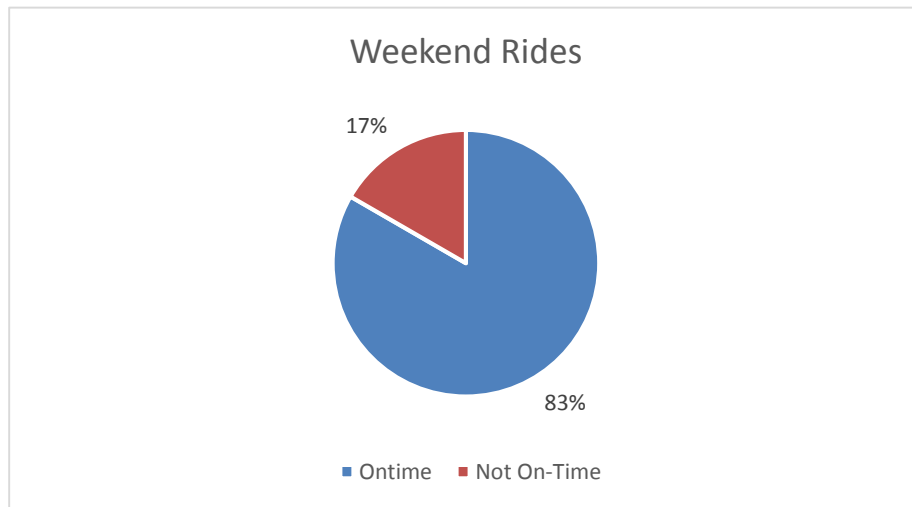
Of the 291 rides recorded in the Pace Data Set, only 24 were on the weekend. That represents just 8% of the rides in the Pace Data Set. This low volume suggests that the AL Pick-Up Time Survey was not significantly impacted by its failure to collect data on the weekends.

Rides on the weekend were 83% on-time. As was found with neighborhood rides, this 83% rate still fell below Pace’s reported on-time performance rate of 87.5%, even without considering the weekday pick-ups.

Table 35 –Pace Data Set: Pick-ups on Weekends

	On-time Pick-up	Not on-time Pick-up	Total Reported
Total	20	4	24
Percent	83.33 %	16.67 %	

Figure 31 –Pace Data Set: Pick-ups on Weekends



10.3 Only 77% of the ride in the complete Pace Data Set were on-time.

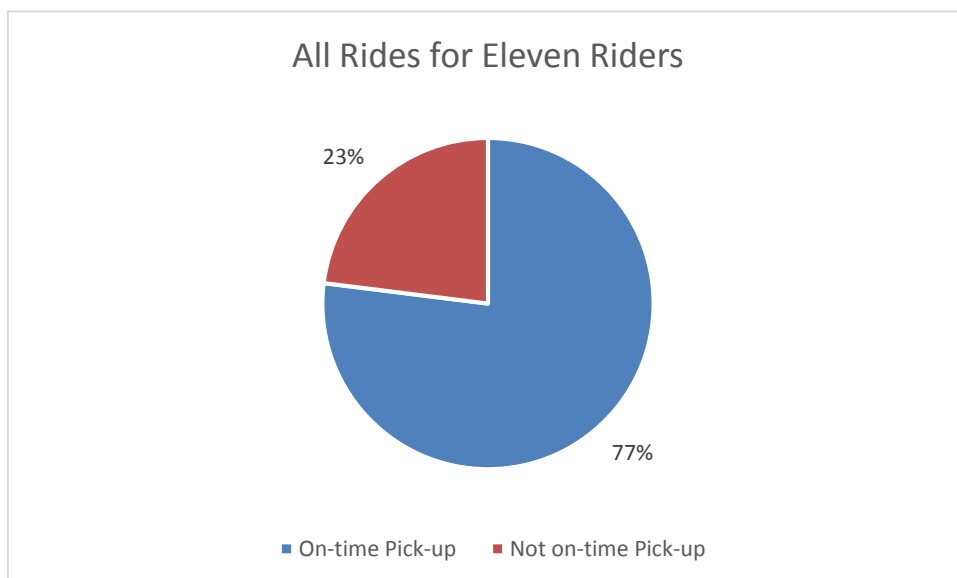
The Pace data for all pick-ups for the eleven consumer whose specific trip records were requested were on-time 77%. This falls 18% below Pace’s on-time pick-up standard of 95%.

Pace data records a 18% better on-time rate than the data generated by the Access Living On-Site Survey.

Table 36 – Pace Data Set: Survey of All Pace Pick-ups provided by Pace for Eleven Riders

	On-time Pick-up	Not on-time Pick-up	No Report	Total Reported
Total	224	67	0	291
Percent	76.98 %	23.02 %	0 %	

Figure 32 – Pace Data Set: Survey of All Pace Pick-ups provided by Pace for Eleven Riders



11 Combined Survey Results and Combined Results from 2017

11.1 62% of all pick-ups recorded in the surveys were on-time.

Looking at all three surveys together, 62% of the pick-ups met Pace definition of on-time. Additionally, when pick-ups were late, 41% of the late pick-ups were more than 40 minutes late. 15% were over an hour late.

Table 37 – On-time Performance: All Three Surveys

	On-time Pick-up	Not on-time Pick-up	Total Reported
Total	116	70	186

Figure 33 – On-time Performance: All Three Surveys

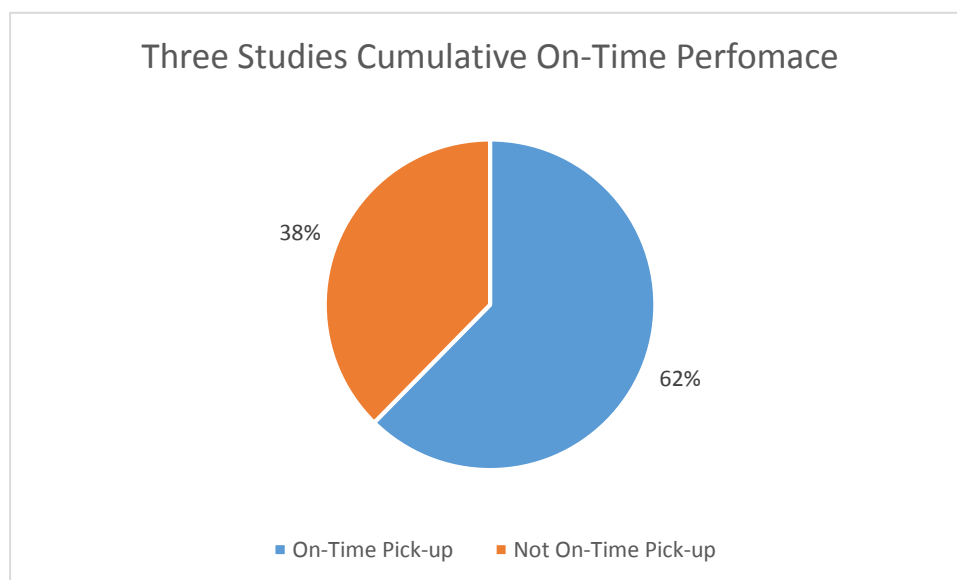
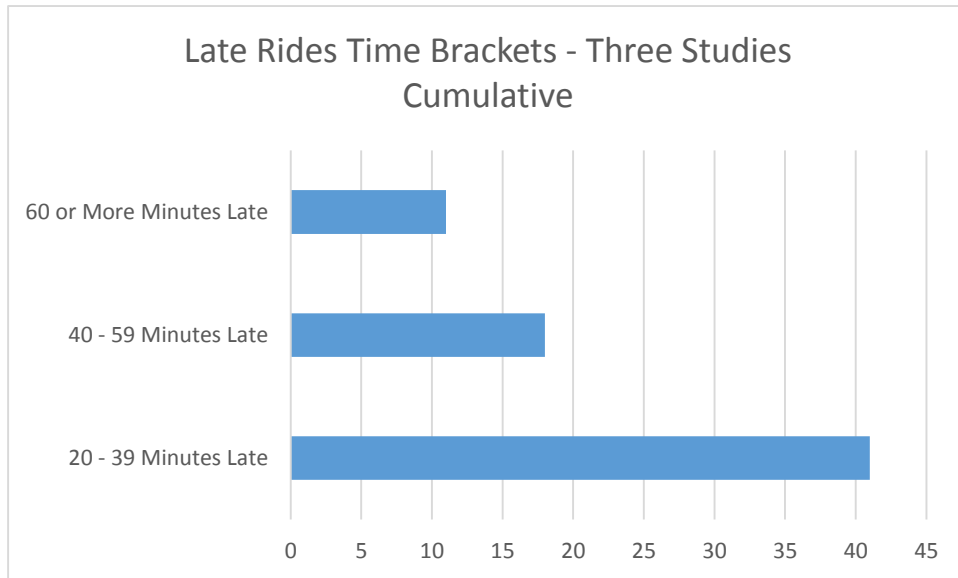


Table 38 – Time Brackets: Entire – All Three Surveys

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	41	18	11

Figure 34 – Time Brackets: - All Three Surveys



11.2 Only 68% of pick-ups surveyed in 2017 were on-time.

Access Living conducted the Pop-Up Survey and the Medical Facilities Survey to assess Pace’s contention that service had temporarily worsened during the period of the Access Living On-Site Survey. The combined results of the Pop-Up and Medical Facilities Surveys found that 68% of the pick-ups were on time. Moreover, when rides were late, 41% were more than 40 minutes late. 15% were over an hour late.

This leads some credence to Pace’s claim of a performance reduction during the period of Access Living’s On-Site Survey. However, even after those conditions had resolved, Pace still failed to provide on-time performance even close to the claimed rate of 87.5%. The performance rate improved, but not enough to satisfy Pace’s performance obligations.

Table 39 – On-time Performance: All Three Surveys

	On-time Pick-up	Not on-time Pick-up	Total Reported
Total	50	24	74

Figure 35 – On-time Performance: All Three Surveys

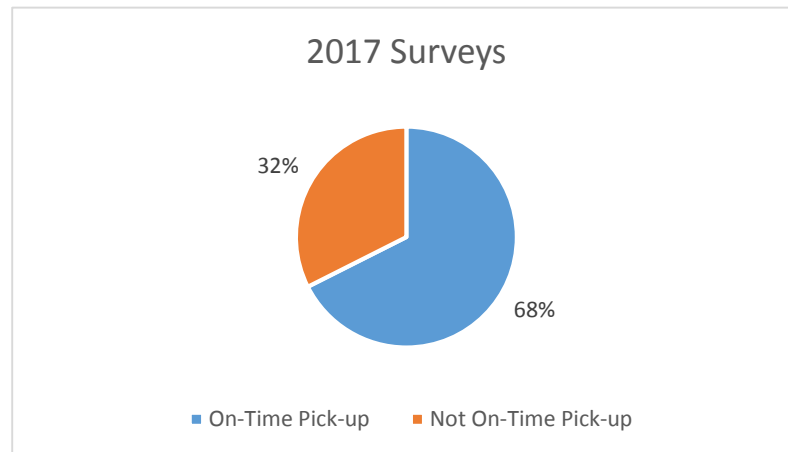
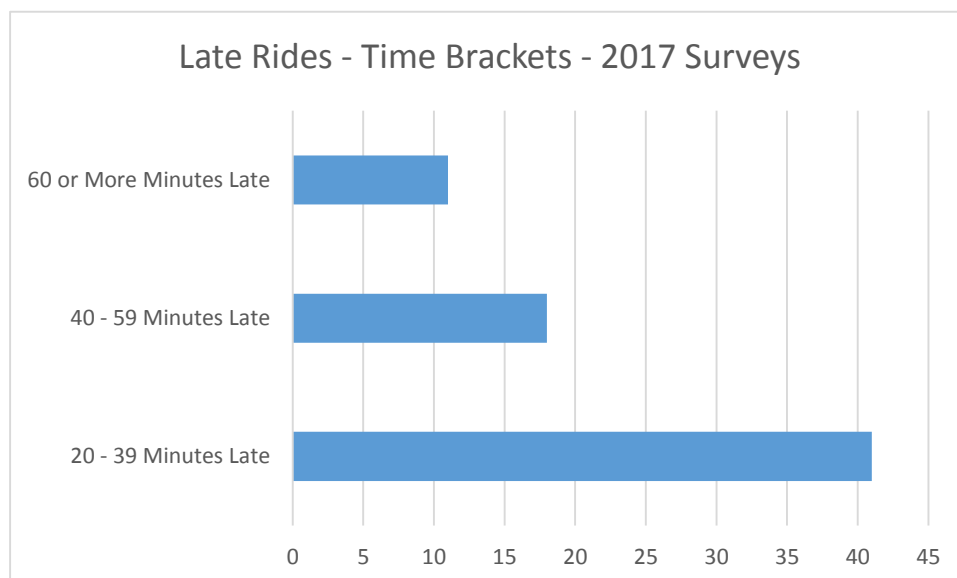


Table 40 – Time Brackets: Entire – All Three Surveys

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	41	18	11

Figure 36 – Time Brackets: - All Three Surveys



11.3 Differences in Downtown and Neighborhood Performance

The two surveys conducted in 2017 contained pick-up information for both neighborhood and downtown locations. Splitting the data into those two categories provides the following results.

Rides from downtown were 61 % on-time. When the rides were late 64% were between 20 and 39 minutes late, 21% of late rides were between 40 and 59 minutes late, and 14% of late rides were over 60 minutes late.

Rides from neighborhoods were 73% on-time. When the rides were late 50% were between 20 and 39 minutes late, 30% were between 40 and 59 minutes late, and 20% were over 60 minutes late.

These results support a conclusion that Pace has a lower performance rate in downtown than in neighborhood settings. This distinction is not just academic, as Chicago's downtown provides a concentration of certain opportunities, such as access to work and services. The greater the difference access these opportunities, the less paratransit users can take advantage of them.

Table 41 – On-time Performance: Rides from 2017 which were pick-ups from “Downtown”

	On-time Pick-up	Not on-time Pick-up	Total Reported
Total	22	14	36

Figure 37 – On-time Performance: Rides from 2017 which were pick-ups from “Downtown”

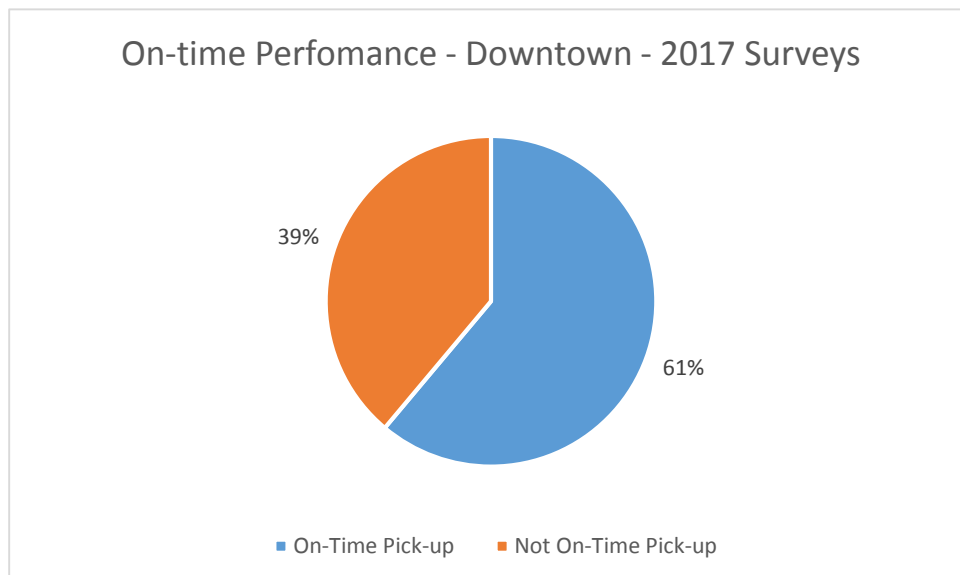


Table 42 – Time Brackets: Rides from 2017 which were pick-ups from “Downtown”

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	9	3	2

Figure 38 – Time Brackets: Rides from 2017 which were pick-ups from “Downtown”

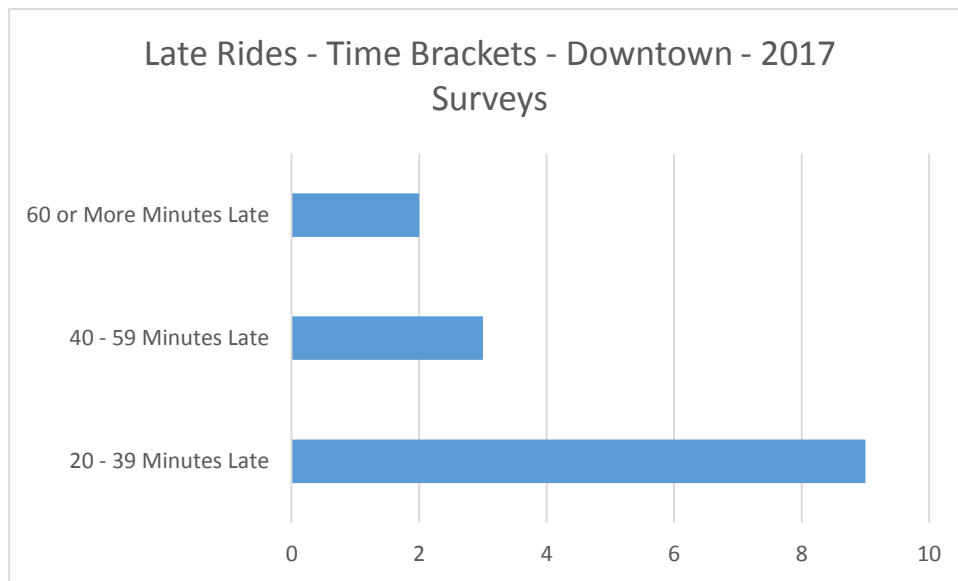


Table 43 – On-time Performance: Rides from 2017 which were pick-ups from a “Neighborhood”

	On-time Pick-up	Not on-time Pick-up	Total Reported
Total	28	10	38

Figure 39 – On-time Performance: Rides from 2017 which were pick-ups from a “Neighborhood”

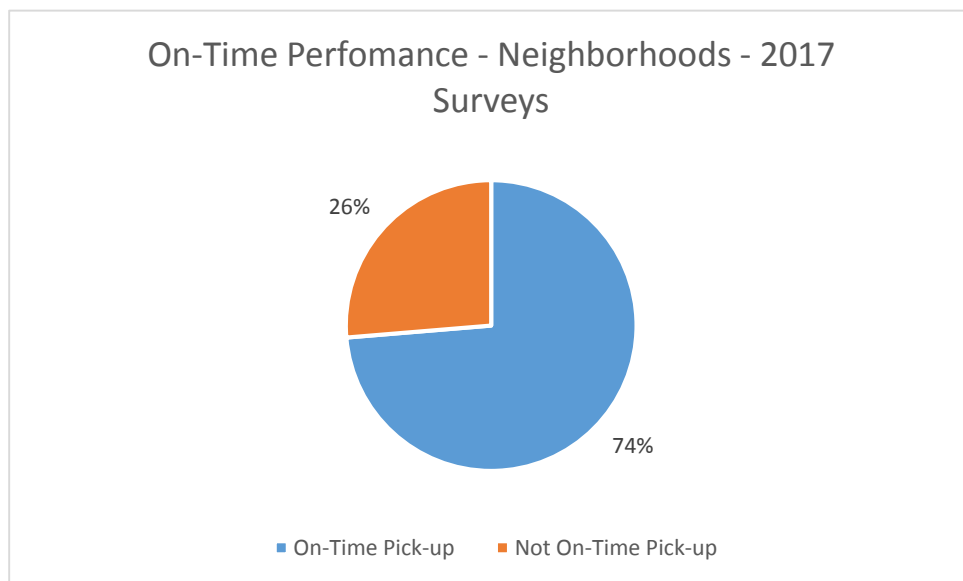
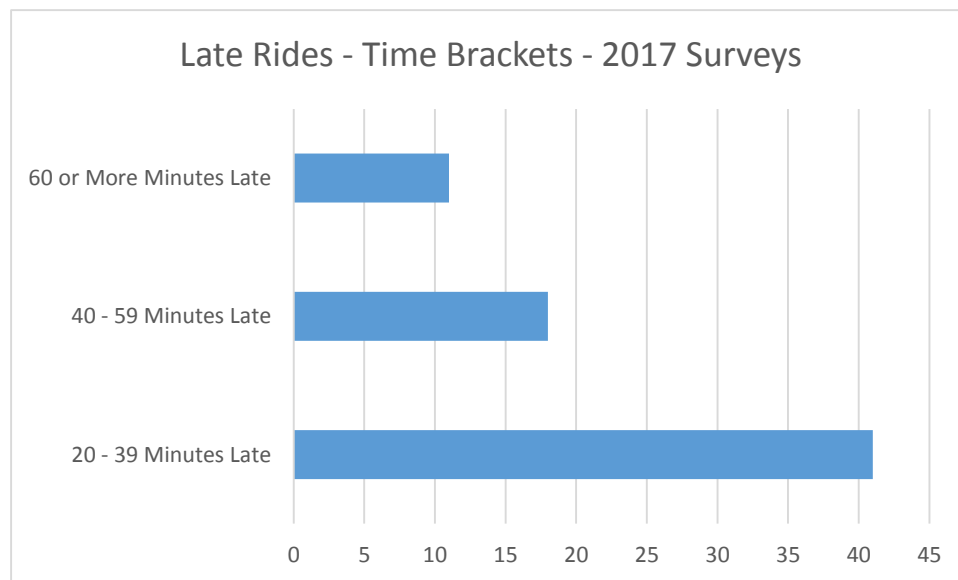


Table 44 – Time Brackets: Rides from 2017 which were pick-ups from a “Neighborhood”

	20 – 39 Minutes Late	40 – 59 Minutes Late	60 or More Minutes Late
Total	5	3	2

Figure 40 – Time Brackets: Rides from 2017 which were pick-ups from a “Neighborhood”



12 Discussion / Recommendation

Transportation is an essential right. It is a requirement for accessing the basic opportunities of our community. When transportation is not available, individuals suffer not just physical isolation, but denial of access to the basic building blocks of an individual life. Transportation is an essential link to work, food, education, medical care, political action, public services, entertainment, religious observance, and social interaction. For people whose disabilities prohibit them from using main line public transportation, paratransit is their predominate link to these essential activities.

This Report recognizes that paratransit is not required to provide the level of service available through main line transportation. Paratransit requires riders to plan at least a day in advance, requiring a minimum of 24-hour advanced reservation for rides, and subjecting riders to pick-up times as much as an hour before or after their intended departure time. Paratransit rules also subject riders to long wait times simply by defining as on-time any pick-up within 20 minutes of the scheduled arrival time. However, this Report also recognizes that those permitted inefficiencies should not be compounded by operational inefficiencies.

Even accepting advanced reservations and negotiated pick-up times, the remaining aspects of Chicago's paratransit system function substantially worse than its public bus system. Anyone with a smart phone can learn when the next bus will arrive at any bus stop in the City. The rate at which Chicago buses experience big gap intervals, indicating a longer than scheduled wait for transportation, is just over 2%.^{xx} These aspects of Chicago's bus system completely distinguish it from the 62% on-time rate and total lack of information about vehicle arrival times in paratransit.

Further, new software designed for a changing transportation system should offer a stepping stone for improvements in paratransit systems. Private transportation companies have developed software that allows them to dynamically schedule bus routes to match real time rider demand. With their software, riders could schedule a ride in advance, like paratransit, but could also request transportation at the moment when they wanted to travel, like hailing a taxi or an Uber. There is also new innovation coming out of other public transit authorities. For example, the municipal transportation authority in Kansas City, Ride KC, is currently experimenting with its own system to provide a combination of on demand and advanced reservation paratransit service.

In this context, it is no longer acceptable to operate Chicago's paratransit system at a 62% on-time performance rate. It is also no longer acceptable to make operation decisions on

anything less than accurate trip data. To remedy those concerns, Pace should take the following steps:

- 1) Pace should take steps to improve on-time pick-up performance in its paratransit service.
 - a) Performance improvement efforts should specifically address significant failures with downtown transportation, as many service providers operate in this area.
 - b) Pace should examine trip routing as a likely cause of late vehicle arrival.
- 2) Pace should replace manual driver input with a GPS linked system for recording actual on-time performance.
- 3) Pace should hire riders to provide independent, “secret shopper” type reporting on all aspect of the rider experience.
- 4) Pace should hire an independent auditor to:
 - a) Explain the discrepancy between Access Living’s data and the Pace on-time performance reports.
 - b) Meet with stakeholders to obtain a complete picture of paratransit service and rider concerns.
 - c) Propose solutions for making on-time performance reports that reflect actual rider experiences.
 - d) Examine the causes of late pick-ups and create a list of actions to achieve improved on-time performance.
- 5) Pace should enforce the penalty provisions in its contracts with vendors and consider making modifications to those contacts if further steps are necessary to improve on-time performance.
- 6) Pace should make regular public reports containing sufficient information to allow the community to monitor compliance with Pace’s obligations.
- 7) Pace should provide a mechanism for Chicago citizens to have a proportional voice in the operation of the regional paratransit system.
- 8) Pace should offer text or voice notifications to alert consumers when riders arrive, including description identifying the arriving vehicle, for those consumers who request such an option.

This list reflects the fact that our surveys strongly support the conclusions that Pace’s on-time performance is unacceptably poor and that Pace’s system for monitoring on-time performance is not accurate. Our surveys could not clearly indicate the most appropriate solution for fixing the poor on-time performance. But, any appropriate solution will have to be built on real data. That belief leads to the conclusion that the first order of business for Pace is to link the GPS already in its vehicles to its system for monitoring on-time pick-ups.

Since we do not have the data that such a change will create, we can only urge a process for using that data to improve performance. The urging of an independent auditor comes from the experience of talking to Pace after sharing the initial draft report on the Access Living On-Site Survey. While Pace leadership deserves praise for the operation of Pace's existing system, assistance in looking beyond that current system and a fresh perspective are warranted. Improvement of the existing system requires an independent auditor to coordinate the knowledge and ability of Pace's leadership, the riders, and the drivers.

13 Appendix

13.1 Survey Form

CDT = 2000 / SCR = 3000 / MV = 4000 / FT = 6000

Paratransit

Date: _____

Consumer's Name	Which Carrier?	Scheduled Pick Up Time	Actual Pick Up Time	On time? (Less than 20 min late?)	Any ride canceled connected to this trip?	Inappropriate Vehicle Arrived? Full?
1)				Yes	Yes	Yes
				No	No	No
2)				Yes	Yes	Yes
				No	No	No
3)				Yes	Yes	Yes
				No	No	No
4)				Yes	Yes	Yes
				No	No	No
5)				Yes	Yes	Yes
				No	No	No
6)				Yes	Yes	Yes
				No	No	No
7)				Yes	Yes	Yes
				No	No	No
8)				Yes	Yes	Yes
				No	No	No
9)				Yes	Yes	Yes
				No	No	No

13.2 Release

AUTHORIZATION TO RELEASE MY TRAVEL INFORMATION

PURPOSE: To assist in collecting data on Pace Paratransit service.

WHAT: The extent or nature of information to be disclosed includes anything that Pace maintains identifying me as a Paratransit rider, my scheduling, traveling, and communicating with Pace and its contractors about my Paratransit service, and any other information relevant to understanding the service I receive from Pace.

EXPIRES WHEN: This authorization shall expire six (6) months from the date of signing, or until I revoke in writing, if earlier.

REVOCABLE: This consent is subject to revocation by me at any time except to the extent that action has been taken in reliance hereon. I understand that if I revoke this authorization, I must do so in writing and present my written revocation to my representative at Access Living and that Access Living will convey that revocation to Pace.

VOLUNTARY: I understand that I do not have to consent to this disclosure in order to receive services from Access Living. I understand that any disclosure of information carries with it the potential for an unauthorized redisclosure by the authorized recipient(s). Moreover, I understand that the authorized recipient(s) may not be subject to federal confidentiality rules. I understand that I have the right to inspect and copy any information disclosed.

SIGN:

SIGNATURE OF CLIENT

DATE

PRINTED NAME

DATE

WITNESS

DATE

PACE PARATRANSIT NUMBER

ⁱ Federal Transit Administration ADA Compliance Review of Rochester-Genesee Regional

Transportation Authority (R-GRTA), Rochester, New York, *Assessment of ADA Complementary Paratransit Service Capacity Constraints*, conducted November 18 — 21, 2002, Final Report dated October 27, 2003, p. 46, available at www.fta.dot.gov/civilrights/ada/civil_rights_3899.html.

ⁱⁱ Finding that “Requiring that ‘going’ trips be scheduled based on a requested pick-up time and not allowing riders the option to schedule trips based on desired arrival times is a practice that can make it extremely difficult for customers to schedule trips that reliably meet appointments. This practice could discourage riders from using the service.” *Id.*

ⁱⁱⁱ “Pace ADA Paratransit Service: City of Chicago Consumer Guide” at page 5, available at: http://Pacebus.com/pdf/Paratransit/City_ADA_Service_Guide_July2016.pdf

^{iv} “Unbeknownst to passengers, schedulers may reschedule pick-up times. Although schedulers are supposed to attempt to notify passengers if a pick-up time is shifted more than 15 minutes, often they do not, so passengers are unaware of the change in pick-up time. This practice can lead to confusion and misunderstandings.” *FTA ADA Compliance Review of Sun Mentro LIFT, El Paso, Texas, assessment of ADA Complementary Paratransit Service Capacity Constraints*, conducted January 22- 25, 2001, final report dated May 24, 2001, p. 22, available at www.fta.dot.gov/civilrights/ada/civil_rights_3899.html

^v Pace ADA Paratransit Service, *Paratransit Service City of Chicago Customer Guide*, January 1, 2010, p. 9, available at www.pacebus.com/sub/paratransit/sd_ada_chicago.asp.

^{vi} “Pace ADA Paratransit Service: City of Chicago Consumer Guide” at page 6, available at: http://Pacebus.com/pdf/Paratransit/City_ADA_Service_Guide_July2016.pdf

^{vii} “Topic Guides on ADA Transportation, On-Time Performance in ADA Paratransit” on page 11, available at: https://dredf.org/ADAtg/OTP.shtml#_ednref11

^{viii} See “Topic Guides on ADA Transportation, On-Time Performance in ADA Paratransit” on page 11, available at: https://dredf.org/ADAtg/OTP.shtml#_ednref11 (I am interpreting the Chicago ADA Paratransit Service window to start at the scheduled time as it is not specified otherwise (0/+20). For example, see Miami-Dade Transit’s 30 minute pick up variation. Vehicles can arrive 10 minutes before or 20 minutes after (-10/+20) (Federal Transit Administration ADA Compliance Review of Metro-Dade Transit Agency, Special Transport Services, Miami, Florida, *op. cit.*, p. 24.)

^{ix} “Topic Guides on ADA Transportation, On-Time Performance in ADA Paratransit” on page 12, available at: https://dredf.org/ADAtg/OTP.shtml#_ednref11

^x “Pace ADA Paratransit Service: City of Chicago Consumer Guide” at page 6, available at: http://Pacebus.com/pdf/Paratransit/City_ADA_Service_Guide_July2016.pdf

^{xi} Michael A. Winter, then Director, Federal Transit Administration Office of Civil Rights, letter to Rochester-Genesee Regional Transportation Authority (RGRTA), October 27, 2003, as discussed in Transit Access Report, *Option Urged for ADA Riders to State Desired Arrival Time*, Pace Publications, November 25, 2003, p. 5.

^{xii} “Pace ADA Paratransit Service: City of Chicago Consumer Guide” at page 6, available at: http://Pacebus.com/pdf/Paratransit/City_ADA_Service_Guide_July2016.pdf (see also page 14: “In order for a passenger no show to be recorded, all of the following conditions must be met: (1) the rider must have a scheduled ADA Paratransit trip. (2) The driver must arrive at the scheduled pick-up point not later than 15 minutes after the scheduled pick-up time. (3) The driver must wait at least 5 full minutes beyond the scheduled pick-up time or 5 full minutes beyond the time the vehicle arrives, whichever is later, and the rider fails to approach the vehicle.”)

^{xiii} “Topic Guides on ADA Transportation, On-Time Performance in ADA Paratransit” on page 21, available at: https://dredf.org/ADAtg/OTP.shtml#_ednref11

^{xiv} U.S. Department of Transportation Federal Transit Administration Region V, “2014 Triennial Review of the Suburban Bus Division of the Regional Transportation Authority (Pace)” at page 13.

^{xv} *Id.* at page 14 (Stating also: “To prevent drivers hitting the button prematurely, Pace performs periodic random checks to ensure that drivers are on site.”).

^{xvi} This specific late ride resulted in the rider waiting in the lobby of the theater well the staff vacuumed around him, locked the doors and turned off the lights. Fortunately, they were kind enough to let him wait in the lobby rather than outside in the cold spring night.

^{xvii} “Downtown” is defined loosely as areas which are located near to the city center of Chicago. Alternatively, neighborhoods are defined as areas outside the downtown. Downtown includes all rides, not just rides to Access Living. There were only 8 rides in the Pace data qualified as downtown rides that were not pick-ups at Access Living.

^{xviii} Provider refers to the carrier contracted to perform each ride (CDT, MV, RDT).

^{xix} *Id.* at endnote xv.

^{xx} See Chicago Transit Authority’s April 2017 Performance Metrics, at http://www.transitchicago.com/assets/1/performance_metrics/Performance_Metrics_-_April_2017.pdf, last viewed October 17, 2017.