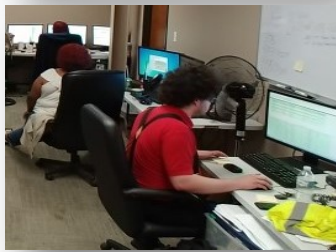


IndyGo Paratransit Operational Analysis Study

Final Report

June 2020



Prepared for IndyGo

IndyGoSM

by

KFH Group Inc.

Bethesda, MD | Austin, TX | Seattle, WA

in association with:

Palo Consulting Group and The McCormick Group

IndyGo Paratransit Operational Analysis

Final Report

Table of Contents

	Page
Introduction	1
Purpose of Study	1
Study Process	2
Open Door Improvements in 2020 After Study's Analysis Time Period	3
Study Background and Context	3
The Americans with Disabilities Act: What is Required?	3
<i>The Challenges of Operating ADA Paratransit</i>	3
IndyGo's Past and Current Paratransit Service	4
<i>Open Door</i>	4
<i>Taxi Vouchers</i>	5
The Larger Environment and Trends Impacting Paratransit Service	6
<i>The Built Environment</i>	6
<i>Changing Demographics</i>	6
<i>Labor Market</i>	7
<i>IndyGo's Fixed Route Improvements</i>	7
<i>Increasing Cost and Demand for ADA Paratransit</i>	8
<i>Technology</i>	9
Major Findings of the Study	10
Organizational Issues: IndyGo's ADA Paratransit Service	10
Open Door Service Performance	10
<i>ADA-Required Trips vs. Beyond-the-ADA Trips</i>	11
<i>Paratransit Technology</i>	12
<i>Call and Control Center Operations: Trip Reservations, Scheduling, and Dispatch</i>	12

Policies and Procedures 13

Taxi Vouchers 14

Eligibility Certification 14

Peer Assessment 15

Transit Industry Experience and Trends 15

Study Recommendations 16

(1) Short Term Improvements without Major Fiscal Impact 16

Role of IndyGo’s Board of Directors and Mobility Advisory Committee (MAC) for Paratransit Service 16

ADA Policies 17

Eligibility Certification Process 17

Strengthen Agency Commitment to Accessible Service 18

(2) Recommendations Related to Contractual Considerations 18

Performance Standards 18

Performance Incentives and Liquidated Damages 19

Technology Provided to the Contractor 19

Use of Technology: Scheduling Practices 20

Road Supervision 21

Payment to the Contractor 21

Operational Reporting 21

(3) Recommendations with Significant Change for Paratransit Service 21

Alternatives for ADA Paratransit—Open Door 22

Ridership and Operating Cost Estimates of Open Door Alternatives 22

Study Recommendation for Open Door 25

Options for Same-Day Service 25

Continuing Challenges for IndyGo’s ADA Paratransit Service 27

Efforts Towards Implementing Study Recommendations 28

List of Tables

Table 1: Open Door On-Time Performance, 2020.....	3
Table 2: Population Data and Projections for Marion County, 2010–2040.....	6
Table 3: Summary of ADA Paratransit Alternatives.....	23
Table 4: Alternatives for Open Door—Advantages and Challenges.....	24

List of Figures

Figure 1: Open Door On-Time Performance vs. Productivity, January 2016-April 2019.....	11
Figure 2: Peer Agency Data—Average Trip Length	15

Final Report of the IndyGo Paratransit Operational Analysis

(Tasks 7 & 8)

INTRODUCTION

This report serves as a summary of the Paratransit Operational Analysis conducted for IndyGo over an eleven-month period from 2019 to 2020 by the KFH Group, in association with Palo Consulting Group and The McCormick Group.

Following this Introduction, the report provides background and context for the study, including an explanation of the Americans with Disabilities Act (ADA) paratransit requirements as well as brief discussion of the larger environment and externalities that impact IndyGo's paratransit services. Major findings of the study are then summarized followed by the study's recommendations. Continuing challenges of operating ADA paratransit are noted, and the report concludes by outlining efforts towards implementing the study's recommendations.

Purpose of Study

The Indianapolis Public Transportation Corporation (IPTC) Board of Directors commissioned the study at the end of 2018 *to evaluate and assess its paratransit services, identify challenges and opportunities, and make recommendations to improve the service.* The study was also tasked *to assess the fiscal impacts of the opportunities for improvement, which are to include options that focus paratransit service within the mandated ADA area.*

In its request for the study, IPTC's Board of Directors provided the following background:

- *IndyGo's ADA paratransit service—Open Door—is uniformly available throughout Marion County, beyond the requirements of the federal law.*
- *Once a rider is determined eligible, that rider may book Open Door trips, participate in the lottery for taxi vouchers, and use fixed route at no cost.*
- *Open Door's ridership has increased dramatically in the past five years, which translates to additional revenue hours and operating costs.*
- *With increasing demand in the short term and long term demographic trends, costs are expected to continue to increase.*
- *Since March 2017, the timeliness of Open Door trips has declined, with continuing declines with the start of a new contractor in April 2018. In the first year with the new contractor, the timeliness of Open Door dropped to 65% (against a goal of 95%) in August of 2018. (The paratransit industry's standard practice to measure timeliness, referred to as "on-time performance," is calculated by the percent of trips that arrive within 30 minutes of the scheduled pick-up time given to the rider.)*

Study Process

The study involved the following components:

- **Outreach to stakeholders and ADA riders.** Outreach efforts, which are detailed in the Public Outreach Report submitted under separate cover, included:
 - In-person and telephone interviews with stakeholders, including several members of the IPTC Board of Directors.
 - A focus group and small group meetings with riders.
 - Meetings with the Mobility Advisory Committee (MAC).
 - An Open Door rider survey.
 - Observation of service through “rides-along” with paratransit drivers.
 - Two small group meetings with invited representatives of agencies serving Open Door riders to discuss the study-developed alternatives for Open Door.
- **Preliminary identification and assessment of major issues for the study.** The study’s initial effort was an identification and review of major issues to address. (Task 1)
- **Analyses of IndyGo's existing paratransit services.** This work included an evaluation of Open Door performance and comparisons of that performance to industry standards and peer transit agencies. Work also included a detailed review of use of technology and scheduling/dispatch practices. The taxi vouchers programs were also assessed. (Task 2)
- **Outline of preliminary recommendations.** Based on the preceding analyses, initial recommendations and options for change to consider were provided within the three categories requested by IndyGo: (Task 3)
 - (1) Short term improvements without major fiscal impact.
 - (2) Recommendations related to the contract with Open Door's private provider.
 - (3) Options with significant change for paratransit service requiring further analysis.
- **Development of options requiring further analysis.** Four options for Open Door were developed, including three that focus service within the area required by the ADA law as opposed to the current countywide service. Alternatives to the taxi programs were also developed. (Task 4)
- **Development of cost estimates for options with significant change to Open Door and the taxi voucher programs.** This included operating cost and ridership estimates for the four alternatives for Open Door for a five-year time period. Cost and ridership estimates were also provided for alternatives for the taxi voucher programs. (Task 5)
- **Study recommendations for changes to policies, procedures, and practices for IndyGo’s paratransit services.** Recommendations were detailed, including the recommendations for changes to Open Door. (Task 6)

Open Door Improvements in 2020 After Study's Analysis Time Period

The study analyzed operational data and policies and practices of Open Door and the taxi voucher programs for a defined time period—January 2016 through April 2019. The study was designed to analyze three years of data, beginning in January 2016. With the study's start date in late May 2019, the data set was extended through April 2019.

It is important to state that Open Door's performance has improved since the end of the study's analysis time period in April 2019. Significant improvements were implemented in early 2020 by new IndyGo leadership. These include, among others, acquisition of a newer version of the scheduling/dispatch software, Trapeze, and modifications to certain contract stipulations identified in the study as problematic. These changes have facilitated improved performance.

Of particular importance is Open Door's improved on-time performance (OTP). During 2020, OTP has consistently been over 90% (see Table 1). This is contrasted to the OTP of 81.3% averaged over the last 12 months of the study's analysis time period.

**Table 1:
Open Door On-Time
Performance, 2020**

January	94.2%
February	91.7%
March	90.5%
April	99.1%

STUDY BACKGROUND AND CONTEXT

The Americans with Disabilities Act: What is Required?

The ADA is federal civil rights legislation, providing a framework for ending discrimination against people with disabilities. Among other mandates, the ADA requires transit agencies with fixed route service to also provide complementary paratransit for individuals with disabilities who are prevented from using fixed route due to disability. It is important to recognize that the regulations specifically acknowledge that ADA paratransit was never intended to be a comprehensive system of transportation to serve all the travel needs of people with disabilities.

The Challenges of Operating ADA Paratransit

The federal regulations for ADA paratransit are highly prescriptive, with six service criteria requiring high levels of performance. The sixth criterion—operate **without capacity constraints**—has been the most challenging for transit agencies to meet. It means:

- Trips cannot be denied; virtually all trip requests from eligible riders must be served. This requirement limits transit agencies' ability to manage ridership demand.

The primary goal of the ADA for public transportation agencies is to make mainstream fixed-route bus and rail systems accessible to and useable by individuals with disabilities. ADA paratransit is a "safety net" for individuals with disabilities not able to use fixed route due to disability.

- Service must operate with high levels of on-time performance for trip pick-ups and, for time-sensitive trips (e.g., medical appointments, work), high levels of on-time performance for trip drop-offs. An on-time performance of 90% is a level accepted in the industry and generally by the FTA (assuming an on-time window of 30 minutes or less). IndyGo’s contract specified an on-time performance standard of 95%, which is considered high.
- Trip travel times on-board the vehicle cannot be “excessively long.”
- High levels of telephone availability to book trips and inquire about trip status must be provided; telephone “hold times” cannot be long.

The challenges of operating ADA paratransit multiply with the details of operating day-to-day **without capacity constraints**. As one example, Open Door is allowed to “negotiate” a rider’s trip request within one hour before and one hour after the rider’s requested pick-up time. If the rider is offered a pick-up time just outside the allowed “negotiation window” because schedules are full but she decides to book the trip anyway, that trip is to be reported as a denial—even though the rider is able to schedule the trip. Any accumulation of trip denials will be flagged by the FTA as problematic during a compliance review.

Other challenges result from ADA regulations that have evolved. For example, the regulations as published disallow “excessively long trips.” But what is excessively long? In ADA’s early years, transit agencies defined excessively long by a static number, such as a trip longer than 90 or 120 minutes. Now the FTA says that is not acceptable. Excessively long should be determined on a case-by-case basis: paratransit trip time should be compared to the time on a fixed route bus for a comparable bus trip, with time added to account for walking to/from the bus stop and making any necessary transfers. Comparing trips on a case-by-case basis can be time-consuming and is complicated when there is no “comparable” fixed route trip for comparison.

ADA’s 6 Required Service Criteria:

1. Operate in the **same service area** as the fixed route system, defined as a 3 /4-mile corridor on either side of bus routes and around rail stations.
2. Have a **comparable response time** as fixed route, defined as accommodating trip requests for a particular day during normal business hours on the previous day (i.e., next-day service).
3. Have **comparable fares** to fixed route, defined as fares that are no more than twice the base, non-discounted adult fare for fixed route service.
4. Meet requests for **any trip purpose**, that is, there can be no trip purpose restrictions or priorities.
5. Operate during the **same days and hours** as the fixed route service.
6. Operate **without capacity constraints**, meaning no waiting lists, trip caps, or patterns and practices of a substantial number of trip denials, untimely pick-ups or excessively long trips.

IndyGo's Past and Current Paratransit Service

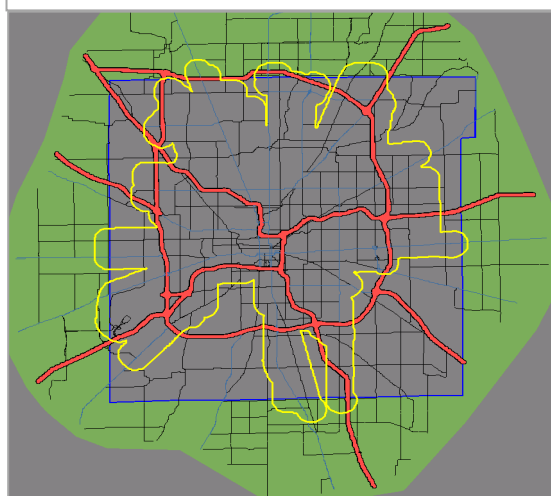
Open Door

IndyGo began providing shared-ride, advance reservation, door-to-door service throughout Marion County in the 1980s. After publication of ADA's implementing regulations in the early 1990s, IndyGo made some changes to Open Door to meet the regulations, such as introducing the required eligibility certification process to determine eligibility for the service. However, IndyGo continued to provide Open Door service throughout the county, which was not required by the ADA.

Initially, IndyGo operated Open Door in-house, using its own employees. Over time, the transit agency transitioned to private contracting. By 2004, this involved contracting for the call/control center functions of trip reservations, scheduling, and dispatch and for some of the day-to-day service on the street. The next step, by 2009, was to contract out all of Open Door service, which by then was the remaining service on the street.

Today, IndyGo uses a private contractor to manage the eligibility certification function. This involves administering the ADA application process, interviewing all applicants to review whether their disability meets the definition for ADA paratransit eligibility, making eligibility decisions, and managing the recertification function.

Open Door provides service countywide, exceeding the required ADA service area (outlined in yellow) by almost 50%.



The current contractor for Open Door began service in April 2018. IndyGo provides the vehicles and technology for the contractor's use, including the scheduling/dispatch software and the in-vehicle communication equipment including the mobile data terminals (MDTs).

Concerns with the performance of the current contractor prompted, in part, this Paratransit Operational Analysis, and the key findings of the study's evaluation of the contractor's performance are provided later in this report.

Taxi Vouchers

IndyGo has provided taxi vouchers for ADA riders since 2008. The first voucher program, which continues to this day, is a lottery-based program, providing a limited number of randomly selected riders with vouchers for taxi trips.

IndyGo also provides a taxi voucher program for dialysis trips, enabling dialysis patients to take taxi trips to and from their required three-times-per-week treatment. Dialysis trips are

difficult to provide with Open Door's advance reservation service since trip pick-up and drop-off times change frequently due to patients' medical conditions. On-demand taxi trips are seen as a more effective approach for dialysis trips than prescheduled ADA trips.

The Larger Environment and Trends Impacting Paratransit Service

IndyGo's Open Door service operates in an environment favoring automobiles over public transit and faces demographic trends forecasting an aging population. These and other factors must be recognized for their impact on IndyGo's paratransit service and options for improvement.

The Built Environment

The built environment and local transportation infrastructure in Indianapolis and Marion County, resulting from the area's history of population growth and development, have a significant impact on public transit—and paratransit—today.

The city and county grew significantly in the age of the automobile in the 1920s and 1930s and then witnessed a major transformation during the 1950s through the mid-1970s with development of the Interstate Highway System. Suburban style neighborhoods were built, with single family homes on large lots and wide roads; many neighborhood streets in this period were built without sidewalks. This resulted, in great part, in spread-out, low density development and a roadway system emphasizing vehicle travel over pedestrians.

This development pattern and transportation infrastructure adversely affect the provision of public transit, which needs a density of development and accessible pedestrian infrastructure to reach transit stops and stations. The outcomes also impact IndyGo's paratransit service. Providing shared rides on Open Door from spread-out neighborhoods to destinations throughout the low density environment often require long trips, causing long travel times for riders and sometimes late arrivals at destinations. The spread-out development coupled with the disconnected street network limit the ability for Open Door to group trips, which then requires more vehicles and service hours to meet the trip demand and that in turn increases operating costs.

Changing Demographics

Marion County's population is growing, including the 65 and older age cohort most likely to have disabilities requiring specialized transportation such as Open Door. This age cohort currently comprises an estimated 13% of the county's population with projections estimating it will grow to more than 16% by 2030 (Table 2).

Table 2: Population Data and Projections for Marion County, 2010 – 2040

Year	Population/ Projection	Percent Growth	Population Age 65+	Percent Age 65+
2010	903,393	--	96,102	10.6%
2020	963,732	7%	125,489	13.0%
2030	1,001,231	4%	162,045	16.2%
2040	1,033,719	3%	168,434	16.3%

Source: STATS Indiana: Indiana's Public Data Utility at <http://www.stats.indiana.edu>

Seniors are not considered eligible for Open Door solely because of age, but the incidence of disability increases significantly with age. National data suggest that 35.2% of people age 65 and older have a disability, with an ambulatory disability the most common type. Younger age groups have considerably lower rates of disability.

Applying the national disability rate for the 65 and older age cohort to Marion County's population projections suggests that there may be 57,040 seniors with disabilities in 2030 and 59,290 seniors with disabilities by 2040. These estimates do not translate to numbers of residents who will become eligible for Open Door. But they do point to the growing population and increasing numbers of seniors that will have an impact on the demand and resulting cost for ADA paratransit in Marion County.

Labor Market

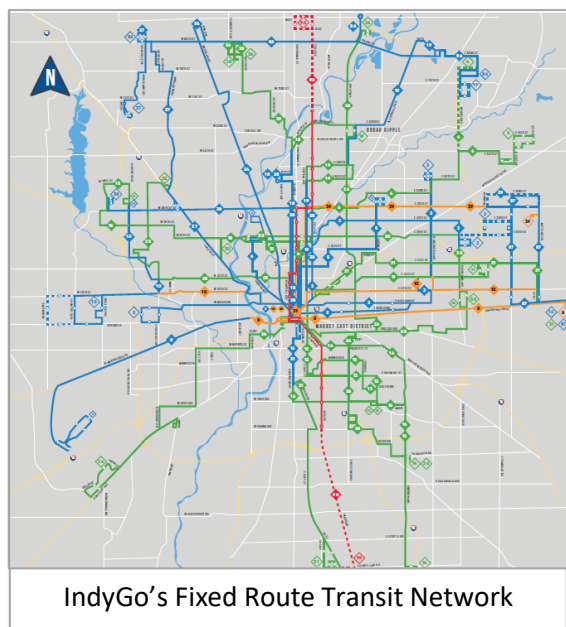
The transportation industry across the country was facing driver shortages by 2015, which was due in large part to a growing economy and low unemployment rate. This affected public transportation until recently with onset of the coronavirus pandemic in the early months of 2020.

During the tight labor market, transportation agencies and contractors, including Open Door's contractor, had difficulty staying fully staffed, particularly with vehicle drivers. While not an issue now, staffing issues appeared to be a contributing factor to Open Door's performance problems that were assessed during the study.

IndyGo's Fixed Route Improvements

IndyGo is improving its fixed route service with new funding for public transportation from the voter-approved referendum in 2016 and the blueprint provided by the Marion County Transit Plan. The plan proposed three new bus rapid transit (BRT) lines, with the first already operating, and significant improvements to the local bus network.

Improvements to the transit network may benefit those ADA riders who are able to use fixed route for some of their trips, however the Marion County Transit Plan did not specifically address ADA paratransit or other specialized services for people with disabilities.¹



¹ The Central Indiana Transit Plan, June 2016, Chapter 3: The Marion County Transit Plan at http://www.indygo.net/wp-content/uploads/2014/12/Central-Indiana-Transit-Plan_2016-06-16.pdf

With progress underway towards improving and expanding fixed route service, study options for Open Door that might limit or restrict the countywide ADA service may be viewed unfavorably.

An additional challenge is wording in the Indiana statute and the public question that enabled the transit improvements proposed through the referendum. The statute required that the proposed projects provide for “improving or providing public transportation service in the county.” Since the Marion County Transit Plan focused on generating ridership and not providing coverage, the IndyGo Board of Directors considered the existing countywide paratransit service as sufficient to satisfy the spirit of the statute and the language of the public question.

Yet does “countywide paratransit service” require that Open Door service remain as now operated? May options be considered that recognize that the current service goes beyond what the federal ADA law requires? What about reconfigured paratransit service in the areas beyond what the federal law requires to ensure that there is *paratransit* service countywide?

Paratransit and ADA paratransit are two different things. “Paratransit,” a term that originated in the 1960s, is defined as service that is “in-between conventional fixed route service and the private automobile.” This includes many types of transportation service, such as dial-a-ride for the general public, shared-ride taxi service, jitneys, etc. ADA paratransit is the specific service required by the ADA law.

Increasing Cost and Demand for ADA Paratransit

Concerns in the transit industry about the increasing cost and demand for ADA paratransit began in the early 2000s as many transit agencies saw demand grow by 5% or more year after year. Research in 2016 found that paratransit services represented more than 12% of total transit costs but carried only about 2% of all transit trips.² For some individual transit agencies, the cost for ADA paratransit required 20% or more of the agency’s budget while carrying less than 5% of the agency’s trips.

For IndyGo, the demand and cost for Open Door will increase, driven by expected ridership demand in coming years due in great part from the aging of the population as well as normal cost increases from operating transit services. Data show that IndyGo’s ADA paratransit ridership—Open Door and the taxi voucher programs—increased 13.3% from 2013 to 2018. Cost increases have been more significant.

² TCRP Report 163, Strategy Guide to Enable and Promote the Use of Fixed-Route Transit by People with Disabilities, prepared by TranSystems Corp., The Collaborative, KFH Group, Inc., and DREDF, Transportation Research Board, Washington, D.C., 2013.

The total actual costs for services from 2015 to 2019 that are directly attributable to service for ADA riders—the Open Door contractor, the eligibility certification contractor as well as the taxi vouchers—reached \$11.413 M in 2019. This is an increase of \$3.8 M from the cost of \$7.575 M in 2015—an increase of 50.7% over the five-year period.

Important to recognize is the fact that the increases in demand and cost experienced by IndyGo for its ADA paratransit service have resulted in part from Open Door service that is not required by the ADA given that service operates countywide.

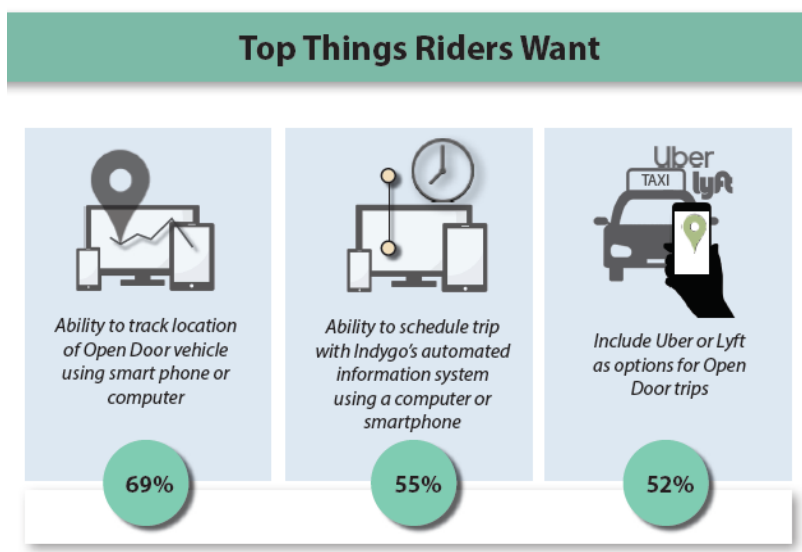
Technology

Technology advances are rapidly changing the transportation landscape and improving the experience for riders. Private mobility providers such as Uber and Lyft have introduced new features popular with those who have smartphones, such as the ability to request a trip via smartphone and then "see" the assigned vehicle's location on the phone. Technology companies that provide paratransit scheduling/dispatch systems are experimenting with such features and will make them available as they are developed.

The emerging private mobility providers are also beginning to partner with transit agencies to supplement transit services, including ADA paratransit. Referred to as transportation network companies or TNCs, these mobility companies have agreements—typically designed as pilots—with transit agencies to provide subsidized same-day, on-demand trips for ADA riders. The objective of these pilots is to offer a less costly alternative to ADA paratransit and a more responsive service for riders.

IndyGo is exploring possible use of TNCs to supplement Open Door in an effort separate from this study. Open Door riders appear supportive of adding TNC service, according to the study's on-board survey of riders.

In response to the question *What service enhancements to Open Door would you like in the future?* 52% of respondents chose the inclusion of Uber or Lyft as options for trips. This was the third ranked enhancement.



Open Door Rider Survey, July-August 2019, 198 Respondents.

MAJOR FINDINGS OF THE STUDY

Organizational Issues: IndyGo's ADA Paratransit Service

IndyGo's commitment to ADA paratransit and specifically the provision of Open Door service throughout Marion County—beyond what the ADA requires—was acknowledged by stakeholders as a strength of the transit agency. Stakeholder comments also spoke to IndyGo's willingness to listen to issues and concerns of the disability community and to the agency's dedicated paratransit staff.

The study finds that IndyGo uses a number of good practices with its Open Door contractor, including, as examples, the provision of vehicles for the contractor's use and contract provisions to address the changing price of fuel.

Other findings point to issues that merit attention:

- Interviews with IndyGo board members suggested they would prefer more and timelier reports about Open Door performance. The interviews also revealed they lack background information and understanding of certain paratransit issues, which may not be surprising given the complexity of ADA paratransit and evolving regulations.
- Interviews with the MAC suggest that IndyGo does not always notify the committee about the transit agency's plans, in particular, plans for fixed route service.
- A review of contract provisions related to the Open Door contractor's performance found that the required performance standards and use of incentives and penalties need review. The current structure is overbalanced towards penalties.

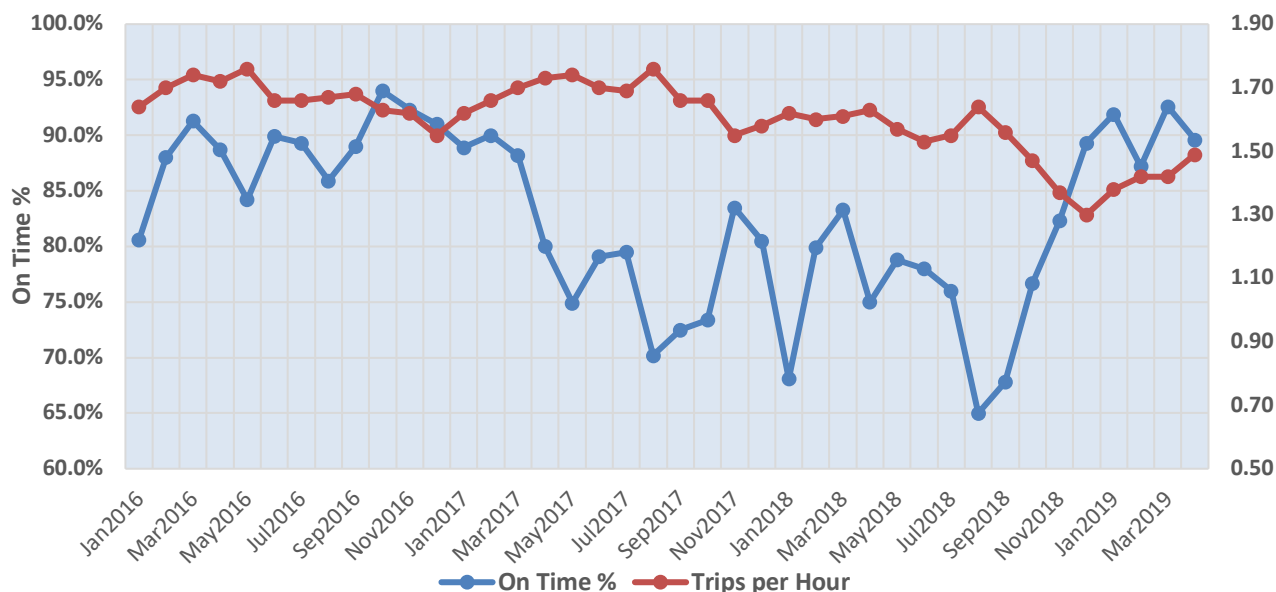
Open Door Service Performance

From the riders' perspective, the most important measure of performance is whether Open Door is on time (OTP). From a transit agency's cost perspective, the key measure is productivity, which measures the number of passenger trips carried each revenue hour of service. Balancing the relationship between the two is a primary objective for a paratransit provider: an emphasis on OTP can adversely impact productivity while an emphasis on productivity can adversely impact OTP.

Calibrating this balance must recognize that achieving high levels of OTP is an ADA requirement, while productivity is not. This means that transit agencies tend to focus on OTP, with the result that typical productivity figures for larger urban transit agencies are rarely above 2.0 and, depending on the size of the service area, are more typically between 1.0 and 1.5.

Figure 1 shows the relationship between the two measures for Open Door from January 2016 through April 2019. OTP shows improvement by December 2018, yet stakeholders and Open Door riders provided numerous comments about late trips to work and medical appointments (time-sensitive trips), as well as long trips, suggesting some performance is below the high levels required by the ADA

Figure 1: Open Door On-Time Performance vs. Productivity, January 2016-April 2019



Open Door's ability to reach ADA performance levels is impacted by the countywide service area. The FTA refers to the practice of providing ADA paratransit beyond ADA requirements as **premium service**, recognizing that doing so is a local transit agency decision.

The FTA cautions that providing *premium service* should not lead to lower service quality for riders using the required ADA paratransit service.

ADA-Required Trips vs. Beyond-the-ADA Trips

To review the impact of Open Door's countywide service area, performance for trips within the ADA required area versus trips not required by the ADA—those with one or both ends outside the required area—was assessed for the three months of January through March 2019. This analysis found:

- 17% of total trips during those three months had an origin or destination or both outside the required area.
- 200 of the 1,751 individual riders traveling during the time period had a home/origin address outside the required area.
- Trips with an origin or destination or both outside the required area are, on average, more than two miles longer than those within the ADA area and have longer ride times.
- A higher proportion of 90-minute and longer trips are those with one end outside the ADA area, particularly trips going from inside the service area to outside.

The analysis reviewed timeliness of time-sensitive trips, which are trips booked to arrive by a specific time (e.g., work, medical appointment), and found differences in the trips relative to the ADA service area:

- Trips with an origin outside the ADA area and going to a destination inside had the highest proportion of trips booked to specific appointment times at 23%.
- These same trips— with an origin outside the ADA area going to a destination inside—had the lowest on-time performance at 79%.

Paratransit Technology

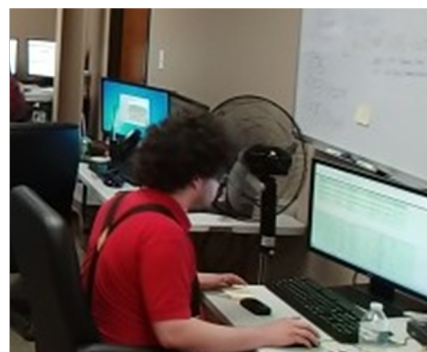
At the time of study analyses during 2019, the consultants found that the most significant technology challenge for Open Door's contractor was use of older versions of the IndyGo-provided scheduling/dispatch software Trapeze and the TransitMaster ITS system for real-time communications (the MDTs). However, in early 2020, IndyGo installed the newer Trapeze version 18, which helped address study findings resulting from the contractor's use of the older version of Trapeze.

However, it appears that a decision regarding replacement of the older MDT system is outstanding. The MDTs are needed for effective dispatching, a function considered critical for balancing service quality (on-time performance) and productivity on day-of-service.

Call and Control Center Operations: Trip Reservations, Scheduling, and Dispatch

The study found issues with contractor staff training on the technology, use of standard operating procedures, and effective use of Trapeze, as well as questions about the scheduling

Contractor's Dispatcher Using Trapeze.

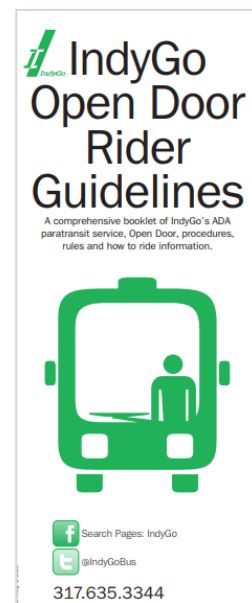


parameters used with Trapeze. Suggestions were provided to address specific issues. Also assessed was vehicle pull-out performance and the related measure of timeliness at first scheduled pick-up. Pull-out performance for the three years assessed was found to be relatively low, ranging on average from 53% to 60% on-time. This metric needs to be closely monitored because scheduling assumptions for the day depend on vehicles leaving the yard on time. Data for timeliness at first pick-up show that, on average, trips were late by 11 to 14 minutes in 2017, about 20 minutes late in 2018, and with improvements in 2019 that came with the contractor's focused attention on improving OTP.

Policies and Procedures

Open Door's performance relative to the ADA's six required service criteria was assessed. Issues were found with adherence to the sixth and most challenging criterion—the prohibition of capacity constraints, specifically regarding trip scheduling with ADA's negotiation window, on-time performance for time-sensitive trips, and on-board travel times.

- Adherence to ADA Regulations on Trip Negotiation and Reporting of Denials:** Stakeholder and rider input raised concerns about riders being offered trips outside of the ADA-allowed negotiation window for scheduling. As noted earlier, such trips need to be reported as denials, even if riders accept the trips. The study found that Open Door's monthly reports showed virtually no denials, but the consultants' observations of call/control center operations witnessed instances where riders were offered trips outside the negotiation window.
- OTP at the Destination for Time-Sensitive Trips:** The study found issues with OTP at the drop-off end for time-sensitive trips, particularly for trips that begin outside the required ADA area and travel to destinations inside the ADA area. The contract goal, similar to the goal for on-time pick-ups, is 95%. (This means that 95% of all time-sensitive trips are to arrive within 30 minutes before the agreed-upon arrival time.) According to sampled data, OTP for those trips at the drop-off end was only 78.7%. This means that more than 20% of riders were late for their time-sensitive trips.
- Long On-Board Travel Time:** According to the ADA, travel times for ADA paratransit trips are to be compared against comparable fixed route trips. But for Open Door, many paratransit trips have no comparable fixed route since Open Door serves parts of the county without fixed route service.



The study looked in detail at travel times for a subset of the sampled trips from the first quarter of 2019, which included trips within the ADA service area as well as trips with one or both ends outside. The analysis first determined if there was a

comparable fixed route trip, based on the paratransit trip origin and destination and, where there was a match, compared the two travel times. For trips within the ADA area, virtually all paratransit trips had a comparable fixed route trip. About half of those trips were shorter than comparable fixed routes trips; about 20% were 30 minutes or less longer than fixed route, which would be considered reasonably comparable according to the FTA’s suggested analysis; but about 30% were more than 30 minutes longer than comparable fixed route trips and would thus be deemed “excessively long.”

For Open Door trips with one or both ends outside the required ADA service area, the analysis showed that very few Open Door trips had a comparable fixed route trip.

Taxi Vouchers

The taxi vouchers, which allow same-day on-demand trips, are popular with the riders, according to study outreach with stakeholders and ADA riders.

ADA’s equivalency requirements establish that taxi subsidy programs must include accessible vehicles to serve riders who use wheelchairs.



Each taxi voucher costs \$3.50, the same price for an Open Door trip. Since the taxi trips are considered *premium* service by the FTA because same-day service is not required by the ADA, it may be appropriate to charge more than the Open Door fare. It may also be appropriate to set the cost to riders in relation to the length of the trip and the meter fare.

Attention is needed for the dialysis voucher program. The study found that voucher program, as currently implemented, does not meet ADA's equivalency

requirements since the one taxi company that participates—Triple A—does not have any accessible vehicles.

The program also does not meet FTA’s drug and alcohol testing requirements. With only one participating taxi company, the FTA considers the company to “stand in the shoes” of the transit agency. Where two or more taxi companies participate in a taxi subsidy program so the riders have a choice of companies, the drug and alcohol testing requirements do not apply.

Eligibility Certification

The study found the ADA eligibility certification process for Open Door effective, particularly with the inclusion of an in-person assessment for all applicants. However, IndyGo’s current policies do not address the age at when a child can travel alone. Having such a policy for fixed route and ADA paratransit would mean that young children, below the policy-defined age, are

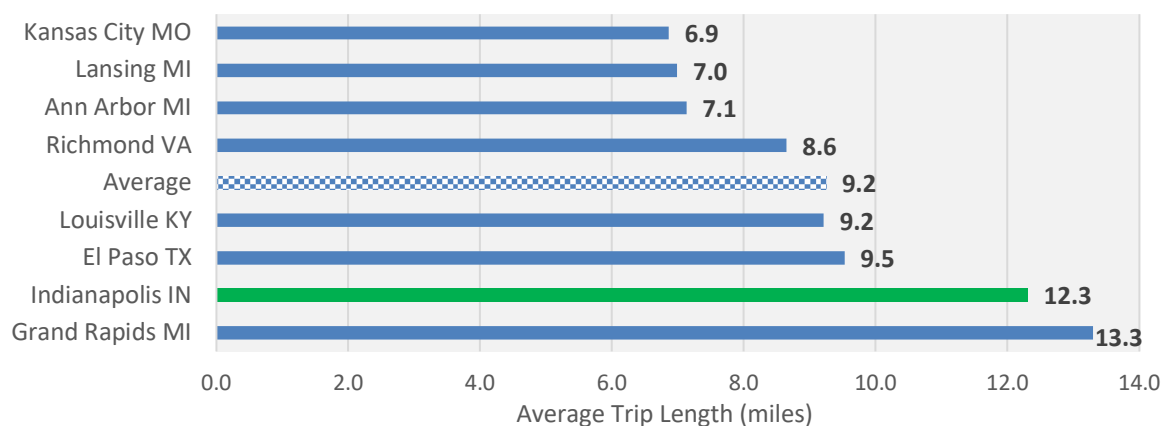
evaluated for ADA paratransit along with the adult they travel with. Without such a policy, a child of any age can be certified for ADA paratransit.

Peer Assessment

Open Door's performance was compared to the paratransit service of seven transit agencies using the most recently available national data (FY 2017). Open Door's performance on cost per revenue hour compared favorably with the selected peers. However, Open Door's productivity—passenger trips per revenue hour—was the second lowest of the peers, resulting in part from the large service area and average trip length.

IndyGo's average trip length is the second highest of the peers—at more than 12 miles—and more than three miles longer than the average trip length of the agencies, which is 9.2 miles (Figure 2). The long trips adversely impact productivity and also lead to longer travel times for riders.

Figure 2: Peer Agency Data—Average Trip Length



Transit Industry Experience and Trends

Transit agencies in urban areas across the country have been grappling with increasing demand and costs for their ADA paratransit services since the early 2000s. Many of those agencies that initially implemented their ADA paratransit service more broadly than the law required have had to pull service back.

Approaches to the pull-back have varied. Some have realigned the service to only what the ADA requires. Others have implemented that same realignment but provided limited taxi service for trips outside the required area.

There are also some transit agencies that implemented a grandfathering arrangement when they reduced their service area to ADA requirements. This allowed riders eligible for ADA

paratransit at the time of service area reduction, but living outside the ADA area, to continue using the service.

A growing trend in the transit industry is use of TNCs for service in the beyond-the-ADA-area (the non-ADA area). TNCs' same-day on-demand service provides more responsive transportation for riders. And if designed with adequate controls, the service can be a cost-effective approach to help address increasing demand and cost for ADA paratransit.

The study's peer review found that several of the transit agencies used by IndyGo as Open Door peers are piloting the use of TNCs to supplement ADA paratransit service. Two of these agencies have defined a geographic area beyond that required by the ADA and allow ADA eligible riders to take trips in that area, however for a fare higher than that for the required ADA service.

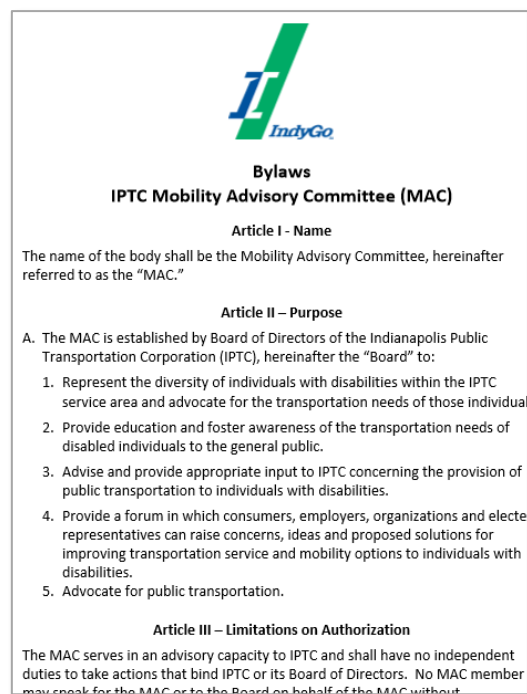
STUDY RECOMMENDATIONS

Recommendations are provided within the three categories requested by IndyGo in the study's RFP.

(1) Short Term Improvements without Major Fiscal Impact

Role of IndyGo's Board of Directors and Mobility Advisory Committee (MAC) for Paratransit Service

- Ensure the Board of Directors is provided with timely and comprehensive information regarding paratransit performance and plans for change and improvement. ADA paratransit is complicated and challenging given the regulatory requirements, particularly requirements prohibiting capacity constraints.
- Ensure that the MAC is included early in planning discussions that affect public transit services, including fixed route.
- Encourage IndyGo's board members to attend a MAC meeting on a periodic basis to better understand the perspective of riders with disabilities. Input from stakeholders and riders suggested that board members might also be encouraged to take a trip on Open Door to better understand ADA paratransit service.



ADA Policies

- Provide free fare on fixed route for ADA eligible riders determined *conditionally eligible* to encourage use of fixed route and divert trips from more costly paratransit.
- Establish an age policy for children traveling alone on both fixed route and paratransit. Such a policy strengthens the ADA paratransit eligibility certification process so that young children with disabilities, who are below the policy-defined age, are evaluated for ADA paratransit along with the adult they travel with.

Eligibility Certification Process

- Enhance reporting of eligibility certification outcomes, with outcome data differentiated by new applicants and recertifying applicants. Data on new applicants is particularly important for monitoring increasing demand for paratransit.
- Give applicants the responsibility for obtaining the required healthcare professional verification form to expedite the process. The current process indicates that either the applicant or the healthcare professional can return the form.
- Include the opportunity for one-on-one travel training for new applicants to ensure applicants who seem able to use accessible fixed route are given assistance and encouragement for such use.
- Consider feasibility of centralizing tasks of the eligibility certification process into one office.
- Re-brand the in-person interview required for applicants a *transportation assessment* or *mobility interview*, focusing on applicants' abilities rather than disabilities and include the opportunity to educate applicants about accessible fixed route as well as ADA paratransit.
- Focus greater attention on conditional eligibility during the certification process, identifying those riders who may be able to use fixed route and for which of their trips. Provide one-on-one assistance to help those riders use fixed route to encourage and facilitate their use of accessible fixed route.



Strengthen Agency Commitment to Accessible Service

The primary goal of the ADA for public transportation agencies is to make mainstream fixed-route bus and rail systems accessible to and useable by individuals with disabilities. ADA paratransit is a “safety net” for individuals with disabilities not able to use fixed route due to disability.

- Consider creation of an accessibility manager position to oversee day-to-day accessible services—fixed route and ADA paratransit—with a focus on operations. Linking accessible fixed route and paratransit gives more visibility and prominence to IndyGo’s overall system accessibility, aligning with the primary goal of the ADA. ADA’s focus is accessible fixed route, with ADA paratransit functioning as a “safety net” for people with disabilities unable to use accessible fixed route because of disability.
- Elevate information about accessibility on IndyGo’s website, including a focus on accessible fixed route

(2) Recommendations Related to Contractual Considerations

The second category of recommendations relates to the contract with Open Door’s private provider. Several of the issues raised in our study have been addressed through amendments to the contract that became effective on February 1, 2020 (during the course of the study) and are noted below.

Performance Standards

- IndyGo should revise the on-time performance standard for Open Door. The contract has required an on-time performance (OTP) of 95%, with liquidated damages assessed when OTP is below 90%. We suggest that 95% is too high a standard, particularly given the current large countywide service area. A standard less than 95% but at least 90% should be considered by IndyGo. This study finding has been addressed: IndyGo amended the contract effective February 2020 to require an OTP of 93%, with an incentive if OTP is 94% or above. The penalty for an OTP lower than 90% remains.
- IndyGo should also consider revising the productivity standard. The contract lists two different productivity standards: 2.0 passenger trips per revenue hour and 1.7 passenger trips per revenue hour. The contract also specifies that Personal Care Attendants (PCAs) should not be included in the calculation of productivity.

During the time period assessed for the study (January 2016 through April 2019), the 2.0 productivity standard was never reached, and the 1.7 level was last achieved only for several months in 2017 but was coupled with very poor on-time performance. The standard should be revised to a level that is achievable, particularly considering the

large countywide service level. Importantly, setting the level for productivity needs to recognize that it is inversely related to on-time performance.

IndyGo staff has recently indicated that there is consideration for a contract change to require productivity at a level somewhat less than 1.7.

The contract language should also be revised to state that PCAs are included in the calculation of productivity, as defined in the reporting requirements for the National Transit Database (NTD).



Performance Incentives and Liquidated Damages

- IndyGo should consider revising the set of incentives and liquidated damages for a better balance. An over-balance of penalties assessed to an incumbent contractor is something that other private contractors consider when bidding a new paratransit procurement. When contractors bid on a paratransit contract and find that the transit agency has applied various penalties to the incumbent for failing to reach standards that may seem unrealistic, they assume they too will be penalized and budget accordingly, adding costs to their budget to account for expected financial penalties. The result is higher costs for the transit agency.

Technology Provided to the Contractor

- The study found a range of issues hampering day-to-day operations that were related to the older version of Trapeze software provided to the contractor. In early 2020, IndyGo installed the newer Trapeze version 18, which helped address study findings resulting from the contractor's use of old technology.

Trapeze version 18 gives the contractor access to a number of tools and techniques that facilitate improved trip negotiation and scheduling. Additionally, the contractor's corporate IT department has been given greater autonomy within the Trapeze environment at IndyGo, and this has significantly helped the contractor's local staff deal with technology support issues and has also allowed the local contractor management team to standardize roles and user permissions in the environment.

- Timely maintenance by IndyGo of the in-vehicle technology—the mobile data terminals (MDTs)—appeared resolved during the course of the study. During our analysis of the call/control room functions early in the study, we found that a significant number of the vehicles' MDTs, which are critical for effective dispatching, were not working on any given day and impacting performance. We also note that while timely MDT maintenance has improved, a decision regarding replacement of the current MDT system, which uses older technology, has not been made.



Use of Technology: Scheduling Practices

- IndyGo should ensure the contractor is effectively using Trapeze in concert with ADA regulations. Among the issues detailed in our Tasks 2 and 3 Report were the contractor's scheduling practices. One of the more significant showed that the schedulers were not taking full advantage of the trip negotiation framework allowed by the ADA, which can help address peak period demand and improve OTP. We also found instances when the schedulers booked trips outside of the ADA-allowed one-hour negotiation window—trips that should be marked as denials, even if the rider accepts the trip. These issues and others related to the call/control center functions and practices detailed in the Tasks 2 and 3 Report can be resolved with staff training and minor adjustments to existing protocols coupled with the availability of the newer version of Trapeze.
- Attention should be given to updating the ADA service area polygon in Trapeze to reflect the current fixed route network. Our review of the data in developing the four alternatives for Open Door finds the polygon may not have been updated for several years. Any enforcement of the ADA service boundaries in the future requires that the correct polygon boundaries be established and maintained.
- Because Open Door has a very large subscription trip base (approximately 60%), there are opportunities for improving scheduling efficiency that are not as readily available to transit agencies with a high “casual” trip demand. Subscription trip negotiation and “templating” / “anchoring” trips on daily runs are key factors to improving scheduling efficiency. Trapeze has tools to assist with identifying negotiation opportunities specifically for subscription trips which should be explored further.
- Similarly, the alignment of vehicle hours to trip demand can have a significant impact on operating costs. Identifying when there is slack during the day and then reducing the number of vehicles on the street in those periods translates to fewer revenue hours. If available, a realignment of driver schedules to include split-shifts may be another option.

Road Supervision

- IndyGo has been providing road supervision for the contractor's service. Our study found that one of the IndyGo supervisors was accessing Trapeze and rescheduling trips, sometimes without consultation with the contractor's control center.

Our study recommended that the contractor should have its own road supervision, in addition to any on-the-road oversight that IndyGo may wish to provide. This study finding has been addressed: IndyGo amended the contract effective February 2020 with approval for the contractor to add four road supervisor positions along with the provision of two road supervisor vehicles. The amendment also approves funding for insuring and maintaining the two vehicles.

Payment to the Contractor

- IndyGo should allow payment for varying numbers of monthly revenue hours, but within the framework of the allocated annual number of revenue hours agreed to in the contract. Our study found that, starting in March 2019, IndyGo's monthly payment for the contractor's services provided for a set 16,500 revenue hours per month, regardless of the number of revenue hours provided. That number represented the 12-month average of the 198,000 annual revenue hours set in the contract cost forms.

Operational Reporting

- IndyGo should require the monthly reporting of on-time performance for trips booked to appointment times. Input from stakeholders and riders through the study outreach efforts found concerns about late trips for time-sensitive trips.

(3) Recommendations with Significant Change for Paratransit Service

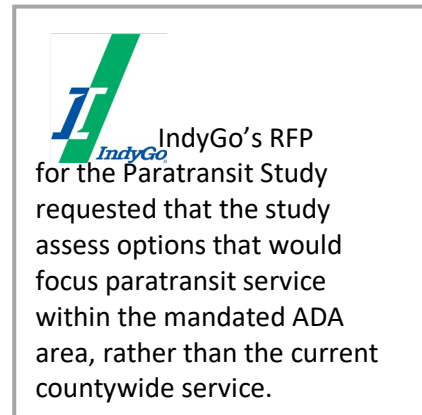
The study developed options for IndyGo's paratransit service, with four alternatives for next-day ADA paratransit service provided by Open Door. Also developed were considerations for revisions to the taxi voucher programs, including a possible increase in the cost of vouchers to recognize that the same-day taxi trips are premium service not required by the ADA.

Use of transportation network companies (TNCs) was also identified as one option to provide same-day service for ADA riders, an option that IndyGo is pursuing on a track separate from this study.

Alternatives for ADA Paratransit—Open Door

Four alternatives for Open Door, IndyGo’s next-day ADA paratransit service, are provided:

- #1: Continue ADA paratransit service countywide (including small portions of neighboring counties)— **Status Quo**.
- #2: Provide ADA paratransit service only in the required ADA paratransit service area—**Required ADA Service Only**.
- #3: Provide required ADA paratransit service in the required area, but continue to serve all currently ADA eligible riders who live outside the required area, providing their trips to destinations both inside and outside the required area through a “grandfathering” arrangement—**Required ADA and Grandfathered Service**.
- #4: Continue to provide paratransit service countywide but separate the county into two areas—the required ADA service area and the rest of the county. In the latter non-ADA area, different service policies can be adopted, such as a fare higher than in the ADA area, since service beyond the ADA required area is a premium service and does not have to meet ADA requirements—**Required ADA and Non-ADA Service**.



Ridership and Operating Cost Estimates of Open Door Alternatives

Estimates of ridership (trips) and operating costs for the four alternatives are shown in Table 3 for the five-year period 2021 to 2025, with advantages and challenges summarized in Table 4.

Alternative #1, the Status Quo, shows the highest ridership estimates, with Alternative #2, Required ADA Service Only, showing the lowest ridership estimates since riders can travel only within the required service area. Alternative #2 also has the lowest estimates of operating costs compared to the other three options.

Alternative #3, with the Grandfathered Service, and #4, with the ADA and Non-ADA Service areas, show ridership estimates between those of Alternatives #1 and #2. Notably, the study estimates that operating costs for Alternatives #3 and #4 are not significant different or lower from Alternative #1 over the five-year period analyzed for several reasons. For Alternative #3, the study estimates a very conservative decline in the number of grandfathered riders over the five years, so operating costs do not decline significantly during that time.

Table 3: Summary of ADA Paratransit Alternatives

		2021	2022	2023	2024	2025
Alternative #1 Status Quo	Estimated Trips	317,209	325,456	333,918	342,600	351,507
	Estimated Operating Cost	\$11,095,000	\$11,623,000	\$12,164,000	\$12,730,000	\$13,322,000
Alternative #2 Required ADA Only	Estimated Trips	266,229	273,151	280,253	287,539	295,015
	Estimated Operating Cost	\$9,085,000	\$9,517,000	\$9,960,000	\$10,424,000	\$10,908,000
Alternative #3 ADA and Grandfathered Service	Estimated Trips	303,048	309,413	315,974	322,735	329,701
	Estimated Operating Cost	\$11,100,000	\$11,538,000	\$11,986,000	\$12,475,000	\$12,986,000
Alternative #4 ADA and Non ADA Service Areas	Estimated Trips	299,420	307,205	315,192	323,387	331,795
	Estimated Operating Cost	\$11,171,000	\$11,703,000	\$12,247,000	\$12,817,000	\$13,413,000

For Alternative #4, while the study estimates fewer trips in the non-ADA area given an assumed higher fare, this results in a decreased demand density which lowers productivity and increases the operating costs of trips. (For purposes of analysis, the study assumed a fare twice the Open Door fare or \$7.00.) Moreover, unlike Alternative #3 which restricts use of ADA paratransit outside the required area to currently eligible riders who live outside the ADA area, Alternative #4 does not include this restriction. This means that additional people who live outside the ADA area or who move there and qualify for ADA paratransit based on their disability can become certified as eligible.

Significantly, Alternatives #3 and #4 give IndyGo policy options and latitude to address operating costs since service outside the ADA area is not required. IndyGo might provide Alternative #3's grandfathered service only for a set number of years, rather than indefinitely. IndyGo can set the fare and operating hours for Alternative #4's non-ADA area at varying levels to address increases in operating costs. While the study assumes a doubling of the Open Door fare for trips to and from the non-ADA area, a higher fare can be set, for example at \$10, since it is premium service. The operating hours for the non-ADA area can be reduced from those of the required area. For example, instead of operating until 1:05 a.m. on weekdays, which is required for the ADA area as Open Door hours must match fixed route hours, service in the non-ADA area might end at, say, 9:00 or 10:00 p.m.

Table 4: Alternatives for Open Door—Advantages and Challenges

	Advantages	Challenges
Alt. #1: Status Quo	No change needed to current service.	Commits IndyGo to continuing increases in demand and cost resulting from service beyond what the ADA requires.
		IndyGo forgoes the opportunity given with this study to realign Open Door to an alternative that helps address increasing demand and cost.
Alt. #2: Required ADA Service Only	IndyGo provides ADA paratransit at the level required by the law. Limits ongoing demand and cost increases to the ADA paratransit service that is required.	ADA riders with trip origins and/or destinations outside the required ADA area would no longer have Open Door service.
	Allows contractor to focus on achieving ADA's high-performance levels in the required area.	Expanding fixed route transit service with new BRT lines at the same time as reducing paratransit service may be perceived as inequitable.
Alt. #3: Required ADA Service and Grandfathered Service	Currently eligible ADA riders living outside required ADA service continue to receive Open Door service as long as they stay at their current home address.	Service outside the required ADA area is limited to currently eligible ADA riders.
	Eventually results in Alternative #2, Required ADA Only, as number of grandfathered riders decreases over time.	Demand and cost will not decrease significantly in short term.
Alt. #4: Required ADA and Non-ADA Service	Currently eligible ADA riders continue to have access to Open Door	ADA riders with trips outside the ADA face a higher fare for their trips.
	Formally recognizes that IndyGo provides premium service by setting a higher fare for trips with origins and destinations outside the required area.	ADA riders may face other policy differences in future years for service in the non-ADA area, e.g., reduced service hours, trip priorities.
	Gives IndyGo policy levers to adjust or limit non-ADA service over time with revisions to fares, operating hours and/or trip priorities.	Demand and costs continue to increase from ADA paratransit service that is not required.
	Individuals with disabilities moving to Marion County in future can apply for ADA paratransit eligibility and, if certified, can use Open Door.	

These are the types of modifications that IndyGo can consider should the transit agency adopt Alternative #3 or #4. IndyGo might also blend these two alternatives, as has been suggested. In this way, the transit agency would follow Alternative #4—delineating the required ADA and non-ADA service areas—but allow currently eligible ADA riders to use Open Door as they do now through the grandfathered arrangement for a limited number of years. After this limited time period, those grandfathered riders would follow all policies set for the non-ADA area, including a higher fare and other changes that IndyGo might establish.

Study Recommendation for Open Door

While the study has included the status quo as one alternative for Open Door, we recommend that IndyGo consider adoption of one of the other three alternatives. This recommendation is based on the study analyses and findings and is supported by our experience in the transit industry.

A continuation of the currently configured Open Door service will see increasing demand and cost, resulting from population growth and particularly the aging of the population with its higher proportion of disability. But part of that increasing demand and cost will result from service that is not an ADA requirement. Alternatives #2, #3, and #4 provide options that specifically recognize this reality with three different choices. Alternative #2 would be the most comprehensive change from the status quo—pulling back Open Door to the ADA minimum. Alternatives #3 and #4 are less comprehensive but offer the transit agency options that provide guardrails to the expected increases in ADA paratransit cost and demand.

Any decision that supports consideration of Alternatives #2, #3, or #4 would require continued outreach and discussion with Marion County’s disability community before any plans for implementation.

Options for Same-Day Service

Same-day service is not required by the ADA. However, IndyGo has provided same-day service through taxi vouchers since 2008, and same-day service is available through IndyGo’s fixed route service for those ADA riders able to use accessible fixed route. Same-day service through Open Door on a space-available basis is another option to consider.

Dialysis Voucher Program

Two revisions to the current dialysis voucher program are currently needed to ensure the program meets ADA and FTA requirements:

- (1) To meet ADA’s equivalency requirements, the program should ensure that dialysis riders using wheelchairs are able to use the program.
- (2) To ensure compliance with FTA’s requirements for drug and alcohol testing, the program must either require the current taxi company providing the dialysis voucher

trips to comply with drug and alcohol testing or include a second taxi company as a provider. When riders have two or more taxi companies to choose from, the FTA has determined that the drug and alcohol testing requirements do not apply.

Policy revisions can also be considered. The study suggests a number of changes, with estimates of costs and ridership for the revised program detailed in the study's Tasks 4 and 5 Report. These changes include, among others, an increase in the cost of a vouchers for riders to recognize the service is a premium one and a payment structure to the taxi companies that is more reflective of trip length, instead of a flat payment for all voucher trips.

Revised Lottery Voucher Program

The current lottery program is based on chance—with a set supply of taxi vouchers provided to randomly selected ADA riders. A more equitable program might give all ADA riders the opportunity to purchase a limited number of taxi vouchers each year. The study provides cost estimates, detailed in the Tasks 4 and 5 Report, for two versions of this revised program.



Another option would use policy objectives to provide a defined subset of ADA riders with taxi vouchers. Criteria that could be considered to define the subset might be those with low incomes; elderly riders over a defined age; or those with ongoing medical needs or with specific chronic diseases needing continuing medical trips. The study provides cost and ridership estimates for this revision, also detailed in the Tasks 4 and 5 Report.

Transportation Network Companies

Use of transportation network companies (TNCs) is an option to provide same-day service for ADA riders. Use of TNCs would need assurances that the service provided meets ADA and Title VI requirements for riders who need accessible vehicles and for those who are unbanked and/or do not have a smartphone. In particular, use of TNCs typically requires that riders have a smartphone. The Open Door rider survey found that more than two-fifths of riders (42%) do not have one.

Possible TNC involvement is being explored by IndyGo on a track separate from this study.

Same-Day Service through Open Door on Space-Available Basis

Another possible option for same-day service is to allow ADA riders to request same-day trips on Open Door on a space-available basis. Should IndyGo consider this option, it will be important to first ensure the next-day service meets the high performance levels required by the ADA on a sustained basis.

CONTINUING CHALLENGES FOR INDYGO'S ADA PARATRANSIT SERVICE

IndyGo will face continuing challenges with ADA paratransit service—even with implementation of improvements. But it's first important to recognize that the ADA law and its mandates for public transit and ADA paratransit have improved transportation and mobility for individuals with disabilities in Marion County. Fixed route vehicles are accessible, and efforts are underway or planned to improve the accessibility of bus stops and the pedestrian infrastructure, benefiting those with disabilities who can use the service. For those who cannot use the service, ADA paratransit provides next-day, shared ride trips for any trip purpose.

A major challenge for IndyGo relates to the cost for ADA paratransit: ADA paratransit is a costly service to provide. This is a reality faced by virtually every urban transit agency in the country that provides ADA paratransit service. With few passenger trips carried each revenue hour, the cost per trip is significantly higher than for fixed route. According to 2018 data for IndyGo, the operating cost per passenger trip for an ADA paratransit trip was \$37.56 compared to a fixed route trip at \$8.36. The disparity relates, in great part, to the differences in passenger loads. ADA paratransit averaged 1.5 passenger trips per revenue hour while fixed route averaged 15.8.³

There are other challenges and issues:

- Demand for ADA paratransit will continue to increase, given population growth particularly in the senior age category (age 65 and older) with its higher incidence of disability compared to younger age groups. While not every senior with a disability will qualify or apply for ADA paratransit, demographic trends will impact demand for Open Door.
- The ADA's primary goal is accessible fixed route, and this study emphasizes the need to encourage riders with disabilities to use IndyGo's accessible fixed route services. Yet this is a challenge given the built environment in Marion County, particularly the lack of sidewalks with safe access to bus stops, and the locations of Open Door destinations beyond the fixed route network. Without significant changes, the transportation needs of those with disabilities will continue and grow with increasing demand for ADA paratransit. And it is likely that community pressures on IndyGo to meet those needs will also continue to grow.
- Costs for the service can be mitigated with increases in productivity—the number of passenger trips carried each revenue hour. But an emphasis on productivity may decrease OTP since the two measures are inversely related. OTP performance is

³ National Transit Database, Report Year 2018 for IndyGo at https://cms7.fta.dot.gov/sites/fta.dot.gov/files/transit_agency_profile_doc/2018/50050.pdf

important for riders and is a measure scrutinized by the FTA. While productivity is important to IndyGo, it is not a concern to riders or the FTA.

- Without additional investment of constrained public transportation resources or improvements to ADA paratransit service, a realigned ADA service area that recognizes what the federal law requires, in light of efforts to improve fixed route, may be perceived as unequal treatment between those who can use fixed route and those who cannot because of disability.
- Exploration of using the new private mobility providers must face the limitations of their service. Use of TNCs typically requires riders to have a smartphone as well as a credit or debit card; not all ADA riders have these. TNCs generally do not have accessible vehicles needed to serve riders using wheelchairs; accessible vehicles must be included to meet ADA's equivalency requirements.
- Providing the paratransit technology (e.g., Trapeze, MDTs) for the Open Door contractor's use is considered a good practice, but efforts are needed and financial resources provided to ensure timely provision of software updates and replacement of older in-vehicle equipment so the contractor has the right tools for effective and efficient operation.



EFFORTS TOWARDS IMPLEMENTING STUDY RECOMMENDATIONS

IndyGo has already addressed a number of issues raised in the study and implemented several improvements and revisions, which have improved Open Door's performance. These include contract amendments that revise the OTP standard from 95% to 93%, which is a level still ensuring a high level of performance. The amendments also approved the contractor to add four road supervisors as well as two road supervisor vehicles with funding for insuring and maintaining the two vehicles. Importantly, IndyGo provided an updated version of the Trapeze software for the contractor's use, providing access to new tools and techniques that facilitate improved operations.

Other efforts towards implementing the study's recommendations will depend on decisions made by IndyGo's Board of Directors in order to move forward. Again, depending on those decisions, implementation steps to consider are outlined below:

- **Stakeholder Engagement**
 - Engage and discuss with the MAC and the broader disability community in Marion County the possible policy and major procedural changes for ADA

paratransit service. These efforts began with the study and should continue as revisions are considered and decisions made about implementation.

- **Transit Agency Administration of ADA Paratransit**

- Create and fill an accessibility manager position to oversee day-to-day accessible service—fixed route and paratransit. This would allow an integrated focus on service for people with disabilities and better alignment of transit services with the goals of the ADA law.
- Update the ADA service area polygon in Trapeze to reflect the current fixed route network.

- **Eligibility Certification**

- Centralize activities of the eligibility certification function in one office to streamline administration.
- Introduce and operationalize conditional eligibility, identifying applicants who can use fixed route and the specific conditions and/or trips that can be made on fixed route.
- Ensure the eligibility certification function has the resources to provide one-on-one travel training.
- Re-brand the in-person interview as a *transportation assessment* to focus on abilities rather than disabilities and include provision of information on accessible fixed route.

- **Management of Open Door Contractor**

- Continue to review and revise, as determined appropriate, the contractor's performance standards, recognizing the service area size and trendline performance.
- Review and consider revising the mix of penalties and incentives, which currently are over-balanced to penalties.
- Ensure timely updates and replacement of IndyGo-provided technology for the contractor's use to support effective day-to-day operations.
- Require the contractor to report OTP for trips that are booked to a specific drop-off time (time-sensitive trips).
- Review the contractor's reporting of trip denials to ensure compliance with ADA regulations.
- Review contractor's management of subscription trips to ensure use of best practices and Trapeze tools for more efficient operations and to help improve productivity.
- Review with the contractor opportunities to reduce revenue hours through a better correspondence of scheduled hours to ridership demand.

- **Realignment of Open Door Service Area**

- Realign the Open Door service area to formally recognize, define and operationalize what the ADA requires. This can be done with either the study-developed Alternative #2, Alternative #3, or Alternative #4, or a hybrid of Alternatives #3 and #4.
- Depending upon which alternative is chosen, decisions are needed for:
 - Whether the grandfather arrangement continues indefinitely or has a sunset clause.
 - The higher fare for trips outside the ADA area. (The study assumed a higher fare for analysis purposes, but fare setting is the purview of IndyGo.)
 - Whether operating hours for trips outside the ADA area should be less than in the ADA area and, if so, a determination of the hours.

- **ADA Paratransit Policies**

- Provide free fare on fixed route for ADA riders determined conditionally eligible. Ensure ADA riders with unconditional eligibility (e.g., fully eligible for paratransit) ride for half-fare should they use fixed route.
- Adopt a policy stating the age at which a child can travel alone on both fixed route and paratransit.

- **Same-Day Programs**

Same-day service is not required by the ADA, so IndyGo has considerable latitude to make changes. However, changes that affect riders use of the programs, such as a fare change, should be discussed with the MAC. Same-day service can be provided through:

- **Taxi voucher programs**—Implementation steps for changes to the two taxi voucher programs depend on decisions by IndyGo regarding the cost of vouchers for riders and structural changes that can make the programs more effective and reflective of trip length.
- **TNCs**—IndyGo is considering possible use of TNCs (e.g., Uber, Lyft) to supplement ADA paratransit service. Ensure any use of TNCs provides wheelchair service and enables use by riders without a smartphone or bank account.
- **Same-day trips on Open Door**—On a space-available basis, Open Door could provide same-day trips. Set the fare for same-day trips above the Open Door fare, recognizing the premium service, and ensure required levels of OTP and capacity for next-day trips are met on a consistent basis before offering same-day trips.