

Service Standards



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QUALITIES FOR GROWING TRANSIT RIDERSHIP

A transit provider can grow its ridership and improve the efficiency and reliability of transit by investing in a frequent and connected network serving areas of:

DENSITY

More people going to and from areas around each stop increases ridership.



HIGH RIDERSHIP



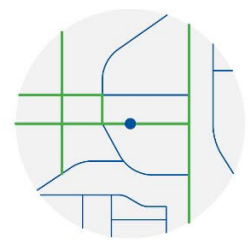
LOW RIDERSHIP

WALKABILITY

Ridership is higher in areas with better pedestrian facilities and a connected street grid.



HIGH RIDERSHIP



LOW RIDERSHIP

CONTINUITY

Transit that doesn't cross long low-density gaps increases ridership.



HIGH RIDERSHIP



LOW RIDERSHIP

LINEARITY

Transit that runs frequently and in straight lines attracts higher ridership.



HIGH RIDERSHIP



LOW RIDERSHIP

WHAT ARE SERVICE STANDARDS?

Transit agencies set goals for transit services provided, which are called Service Standards. These standards enable a transit agency and its partners to monitor how well the agency is performing in its delivery of service. IndyGo's Service Standards are organized within three overarching categories: Defining Features, Service Targets, and Outputs.

DEFINING FEATURES

Service features considered during designation of a route as either Rapid, Frequent, Basic, or Coverage.

FREQUENCY



How often a bus arrives at a stop

DAILY & WEEKLY SPAN



The hours of the day and days of the week that service operates

STOP SPACING



The average distance between bus stops

SERVICE TARGETS

Desired outcomes for service categories. These four targets often have a significant impact on whether or not someone chooses to ride transit.

TRAVEL SPEED



The average travel speed of buses along a route or route segment

RELIABILITY



The percentage of on-time bus arrivals

STOP AMENITIES



The type of amenities available at a bus stop, including shelters, seating, trash cans, etc.

PASSENGER LOAD



The maximum load of passengers on a bus, in proportion to the number of seats

OUTPUTS

Metrics that IndyGo uses to understand how a route is performing.

PRODUCTIVITY



The number of boardings per hour of revenue service; a measure of cost-efficiency

COVERAGE



Service that is provided without the expectation of a high level of ridership

SERVICE CATEGORIES

IndyGo's bus service consists of four Service Categories: Rapid, Frequent, Basic, and Coverage. Each Service Category has unique defining features, service targets, and productivity measures.

	DEFINING FEATURES	SERVICE TARGETS	OUTPUTS
RAPID			
	<p>Rapid service includes: Red Line, Purple Line, and the future Blue Line.</p>		
			<p>* weekday frequency ** 16 hours on Sundays</p>
FREQUENT			
	<p>Example Frequent services: Route 8, Route 10</p>		
			<p>* weekday frequency ** 16 hours on Sundays</p>
BASIC			
	<p>Example Basic services: Route 2, Route 37</p>		
			<p>* weekday frequency ** 16 hours on Sundays</p>
COVERAGE			
	<p>Example Coverage services: Route 24, Route 31</p>		
			<p>* weekday frequency</p>

FREQUENTLY ASKED QUESTIONS



Why can't a bus stop be located closer to my home or workplace?

Bus stops are located strategically along routes. More bus stops located along a route mean the bus has to stop more frequently. This slows the overall bus travel speed and makes bus trips longer for all passengers. IndyGo must balance bus stop access and passenger convenience with the desire to keep the bus in motion. *See page 8 for more information.*



Why can't my bus route be changed to be closer to my home or workplace?

For transit to be useful and efficient for the greatest number of people, bus routes need to be linear, with a straight direction of travel and limited turning movements. IndyGo is not able to make major bus route adjustments based on individual rider requests. Door-to-door local bus service is neither financially efficient nor operationally possible for IndyGo to provide. *See page 8 for more information.*



Why is my bus running late?

Traffic delays along a bus route, the number of times a bus needs to stop to pick up passengers, and the length of time a bus spends at each stop are the most common reasons why a bus may be running late. IndyGo has several options available to improve reliability, including traffic signal timing adjustments, dedicated bus lanes in congested areas, addressing bus stop spacing, adding more off-board fare collection options, and more. *See pages 11-12 for more information.*



Why is my bus full or over capacity?

High demand for bus service along a route can be a reason for a full bus. IndyGo monitors how full a bus is in order to make informed decisions on whether or not larger capacity buses are needed, or if additional buses need to be added along a route. *See page 14 for more information.*



Why does my bus stop not have a shelter or bench?

Shelters and benches require significant capital and operating expense. This means that IndyGo must be selective about where shelters or benches are placed. Stops with higher ridership are more likely to have amenities. Additionally, in many locations there is not enough space for shelters or benches within the public right-of-way (the street space owned by the City). IndyGo is constantly evaluating its existing bus stops in order to identify opportunities to add seating and shelters. *See page 13 for more information.*



Why don't buses run 24 hours per day, 7 days per week?

IndyGo is limited to its available resources, so 24/7 service is not an option at this time. However, IndyGo is increasing the hours of service for many routes on weekdays and weekends. Bus service also runs 7 days per week on all bus routes. If additional funding becomes available, or if ridership increases, individual routes will be evaluated for possible service improvements.

FREQUENTLY ASKED QUESTIONS



Why does my bus only arrive every hour?

IndyGo weighs a number of factors when determining how frequently a bus travels on a route. These factors include existing ridership, proximity to jobs, residential population, adjacent land use and development characteristics, and other factors. *See pages 4-6 for more information.*



Why is the bus so slow?

Buses are often affected by the same traffic conditions as all other vehicles, plus the added time needed to let riders on and off. IndyGo and the City of Indianapolis can collaborate to increase bus speeds by prioritizing buses using dedicated transit lanes or traffic signal controls. *See pages 11-12 for more information.*



Why is the bus empty?

IndyGo buses may have fewer passengers on them when they are just starting or completing a trip, or when they are heading to and from the garage.



Why are there only three Rapid transit lines?

As part of the Marion County Transit Plan, resources were identified for three rapid transit lines. Frequent transit routes also provide high-quality transit service and serve many areas of Marion County. Frequent routes will be individually evaluated to better understand if an upgrade to Rapid transit service is warranted. *See page 5 for more information.*



How does IndyGo evaluate its own performance?

IndyGo has access to many data points to understand and evaluate how each bus route is performing. However, the primary way is to calculate the number of boardings per service hour, also known as Productivity. If a route is performing well, then Productivity will meet the established standard for its service category. If not, IndyGo staff will review to better understand why it is not meeting the standard. *See pages 19-21 for more information.*



Why can't I ride the bus to Plainfield or other cities and towns outside of Marion County?

IndyGo only operates bus service in Marion County, with some limited exceptions. For IndyGo to run in other areas, those areas will need to either contract with IndyGo for service or identify a funding source to cover the capital and operating expenses required for new connecting transit service.

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Definitions

Bus Rapid Transit (BRT) - Bus Rapid Transit is a fixed route mass transit system designed to emulate the service features of light rail, but in a more cost-effective way. BRT provides regular service that is fast, frequent, reliable and comfortable using features including dedicated bus lanes, transit signal priority, elevated platforms, covered waiting areas, and real time arrival information.

Community Route – A transit route that is specifically identified and prioritized based on its role in serving communities that are highly dependent on public transit and may have historically experienced disparities in access to transportation. For these purposes, prioritization means priority when making decisions about service levels, investments, and adjustments, including but not limited to: restoring service, improvements, and mitigation during service disruptions.

Comprehensive Operational Analysis – Commonly referred to as the COA, this analysis examines existing conditions and routes future service plans. Typically updated every five years, although the scope of the analysis and magnitude of proposed changes can vary.

Coverage service – Transit service that has a purpose of providing geographic coverage of an area in order to provide transit access to as many people and jobs as possible.

Farebox recovery – Fare revenue from a service relative to the cost to operate a service; calculated by dividing fare revenue by the operating cost.

Frequency – The number of buses that operate per hour along a route for a period of time, or span, which is expressed by the number of minutes between bus arrivals.

Key Transfer Locations – Scheduled connections between routes to allow individuals to transfer from one route to another. These are key components of a grid-based system as the transfers allow the system to maintain frequency and riders to move easily from one part of town to another.

Major Trip Generator – A concentration of land uses with sufficient density and activity levels to produce or attract substantial daily passenger travel, thereby justifying the need for a direct transit connection. Major trip generators typically include regional employment centers, educational institutions, regional healthcare complexes, high-density residential, and regional retail and entertainment attractions. Land uses that typically do not increase transit use include low-density residential, industrial, manufacturing, and smaller retail developments.

Marion County Transit Plan (MCTP) – The Future Transit Network, as updated from time to time.

Minimum Productivity – The ideal level at which a route should perform at its defining (or peak) frequency, as determined by the Service Category of a route (or route segment).

Off-Peak – The time of lower demand for transportation. Off-peak occurs outside the peak periods, in the early morning, midday, night and evening hours.

Paratransit – Paratransit is federally-required door-to-door service for qualified individuals; in Indianapolis in accordance with the Americans with Disabilities Act (ADA) and IndyGo policy; the service is called Access and is operated by a contractor selected and managed by IndyGo.

Passenger Load – The number of passengers on a bus relative to the number of seats on a bus; presented as a percentage.

Peak – The times of greatest demand for transportation throughout the day. IndyGo recognizes two peak periods: morning and evening. Morning peak is from 6 a.m. to 9 a.m. and evening period is from 3p.m. to 6 p.m.

Predominant Frequency – The frequency of a route during the weekday peak times. For analytical purposes, IndyGo staff may use the standards of service for a different frequency if the weekend (Saturday/Sunday) peak frequencies are different than the weekday frequencies.

Productivity – Productivity measures the ridership of a service relative to the cost of providing that service. Typically, productivity is measured by dividing revenue hours into ridership.

Productivity Threshold - The Productivity Threshold is defined as two-thirds of the defined Minimum Productivity of a Service Category.

Reliability – A measurement of on-time performance, or how often a bus adheres to its scheduled time; calculated as a percentage of time points on a route when a vehicle arrived on time.

Revenue hour – One transit vehicle and its driver operating in revenue service for one hour.

Ridership service – Transit service with the purpose of attracting high ridership numbers.

Route – A specific and fixed path of travel of a transit vehicle.

Route segment – A portion of a transit route.

Service Area – The area served by public transit, typically a measure of a distance from a fixed route. In Indianapolis, the Service Area is the entirety of Marion County, with service to excluded cities.

Service category – A sub-type of transit service, based on the frequency of service; for IndyGo service categories include Rapid, Frequent, Basic, and Coverage.

Service span – The hours of the day and the days of the week that a transit service operates.

Service Standards – Measurable benchmarks for key areas of transit service performance.

Stop Amenity – An object located at a bus stop that improves the rider experience, including seating, shelters, boarding pads, lighting, waste receptacles, bike racks, real-time arrival information, wi-fi, and more.

Stop Spacing – The distance between bus stops.

Time Point – A specified location along a route assigned a time of arrival for vehicles.

Travel Speed – The average speed of a bus from the beginning of a route (or route segment) to the end of the route (or route segment).

Purpose

Service standards are intended to provide measurables for a transit system that can then be monitored. The standards serve as indicators when performance falls below or exceeds the benchmark. The indicators will trigger a service evaluation and action plan to resolve identified performance issues. In addition to transit service performance reviews, the Service Standards will also be used to support service evaluation as part of IndyGo's Title VI reporting process.

The Service Standards presented in this document are a direct result of significant public involvement as part of the 2015 *Comprehensive Operational Analysis* (COA) and the **Marion County Transit Plan**. IndyGo continues to update the standards to reflect the most current operational conditions of IndyGo's fixed route service.

The benchmarks expressed in the Service Standards are related to two kinds of goals:

- Ridership goals, which are met through transit being used by more people.
- Coverage goals, which are met through transit being available regardless of how much it is used.

[Marion County Transit Plan: Outlines significant service improvements to local routes and the construction of three rapid transit routes.](#)

As has been the case since the adoption of the Marion County Transit Plan, IndyGo seeks to spend 80 percent of its budget pursuing the highest possible ridership per unit of cost and 20 percent of its budget providing coverage service.

Principles Governing these Standards

There are several principles that are being used to govern the standards identified in this document. First, the performance of services is best measured against their intended purposes. Since not all transit services are designed to achieve the same goals, the service standards will differ for each service category based on the intended service goals.

Second, while service standards are conventionally applied to entire transit routes, there are instances where the application of some standards will be different along certain segments of a route. A route may comprise multiple segments that differ in purpose. Therefore, each route segment may be assigned a Service Category and may be evaluated based on the service standard assigned to that Service Category.

Third, while communication of these standards is important for transparency, staff discretion is an important part of any policy document. Therefore, as part of an evaluation, staff may recommend no changes because of factors outside the control of IndyGo that have an unforeseen and/or unavoidable impact on service performance, such as long-term road closures, detours, or traffic congestion.

Service Area

IndyGo's service area primarily covers the City of Indianapolis, which is approximately 368 square miles of the total 403 square miles of Marion County. By special arrangement, IndyGo provides service to portions of the approximately 35 square miles of excluded jurisdictions that do not contribute to its local funding through property taxes. However, all working Marion County residents contribute local funding through the 0.25% income tax that is funding transit expansion across the IndyGo service area.

Network Design Principles

The real benefits of transit present themselves at the systemwide level. This is especially true of high-frequency services, where the interdependence between routes is key to the system design.

Directness

IndyGo bus routes are designed for travel along paths that can be perceived as reasonably linear, providing efficient service to passengers while controlling operating costs.

Simplicity

IndyGo will design and maintain a network of routes that are simple to learn, navigate, and remember for new passengers. Simplicity must be emphasized and safeguarded by IndyGo, as many service requests fielded can introduce increased and unnecessary network complexity.

Density

IndyGo will prioritize service to areas where there are more people going to and coming from key destinations located near bus stops. Ensuring service is emphasized in areas with higher densities of population and jobs helps to expand IndyGo's potential ridership base.

Walkability

IndyGo bus routes are best suited in areas where riders have access to sidewalks, safe street crossings, and a connected street grid. Since all transit trips begin and end with a walk, access to safe pedestrian infrastructure is critical to make IndyGo's service safe and comfortable for riders.

Service Categories

IndyGo has four defined Service Categories for its fixed route bus network. As noted in Table 1, this includes categories for Rapid, Frequent, Basic, and Coverage. Each of these four Service Categories are primarily defined by their service frequency and purpose. The following subsections describe the unique characteristics of each Service Category.

Service Category	Map Representation	Predominant Frequency*	Purpose
Rapid	Color reflecting name of route (e.g. red for Red Line)	15 minutes or better	Ridership
Frequent	Orange	15 minutes or better	Ridership
Basic	Blue	30 minutes	Mix of ridership and coverage
Coverage	Green	60-120 minutes	Coverage

Table 1: Service Categories and their associated map colors, predominant frequencies and purposes. * The "predominant frequency" is the frequency that is sustained throughout the weekday peak period.

Rapid (BRT)

Rapid services (typically 10- to 15-minute frequency) must be ridership-justified. The concentration of resources on these corridors is essential for achieving the higher ridership and productivity expected of these corridors. In IndyGo's current service, the Rapid category applies only to bus rapid transit (BRT) lines.

While IndyGo's Rapid services almost always operate frequently (i.e. 15-minute service frequency or better), Rapid service differs from Frequent service due to its speed and amenities. The higher speeds of Rapid transit are achieved through wider stop spacing, dedicated lanes, transit signal priority (TSP), and level boarding. Rapid service is generally perceived by transit riders as being more useful than other service categories because of the overall faster average vehicle speed.

Frequent

Frequent services (~15-minute frequency) must also be ridership-justified. Generally, Frequent service has high ridership, but not high enough to warrant the resources and unique amenities committed to Rapid transit. Top performers in this category will be reviewed for potential upgrade to Rapid service as soon as a full analysis can be completed and as resources become available.

Basic

Basic Services (typically 30-minute frequency) can be categorized as either ridership or coverage. Basic services that are considered ridership-justified are high performance routes (or route segments) which may be upgraded to frequent service if/when resources permit. Basic services that are coverage-justified generally have high enough ridership to justify frequency greater than one trip

every hour; however, because conditions for very high ridership are not present (e.g. the route passes through low-density land uses, there are limited adjacent jobs/employment, and/or there is a lack of pedestrian amenities, etc.), coverage-justified Basic routes are unlikely to be upgraded into the Frequent service category.

Coverage

Coverage services (typically 60- to 120-minute frequency) are intended to provide transit in places that are harder to serve due to lower population density or other characteristics which make transit less productive. However, in some of these harder to serve places, community characteristics (including income and vehicle ownership, among others) require additional considerations for the need for some level of service. Coverage services achieve low levels of ridership relative to service cost, but that is accepted as ridership is not the purpose of providing service.

Paratransit

The fixed route services described above are complemented with paratransit service, called IndyGo Access (formerly Open Door), throughout the service area. When running fixed route, complementary paratransit is required by the Americans with Disabilities Act (ADA) and is operated in accordance with federal statutes and regulations. IndyGo is required to provide door-to-door services for individuals who qualify within $\frac{3}{4}$ miles of fixed route service. IndyGo currently serves all of Marion County with IndyGo Access service. The ADA Area adheres to the mandatory ADA requirements. The area within Marion County but outside the ADA Area, which can change based on routing adjustments to the fixed route bus network, is the Premium Service Area, which is where IndyGo provides paratransit service above and beyond ADA requirements. The service levels for the different service areas and/or services are outlined in other IndyGo planning and policy documents. For the Premium Service Area, those policies are outlined in the board-adopted Beyond the ADA Policy, which can be found on IndyGo's website.

Elements for Service Categories

Defining Features

These describe features that must be present for the service to be in the given category. If a service does not have these features, it should not be in this category. These features include:

- Frequency
- Daily and Weekly Span
- Stop Spacing

The following section describes each Defining Feature, with the characterization required for a route to be considered in a service category.

Frequency

Frequency is the number of buses that operate per hour along a route for a majority of the day, which is expressed by the number of minutes between bus arrivals. Service during the periods in the early morning and late evening are often less frequent than peak hour service due to reduced demand.

Service Category	Peak Frequency	Off Peak Frequency
Rapid	15 min. or better	20 min. or better
Frequent	15 min. or better	30 min. or better
Basic	30 min. or better	45 min. or better
Coverage	60 min. or better	90 min. or better

Table 2. Frequency by Service Category

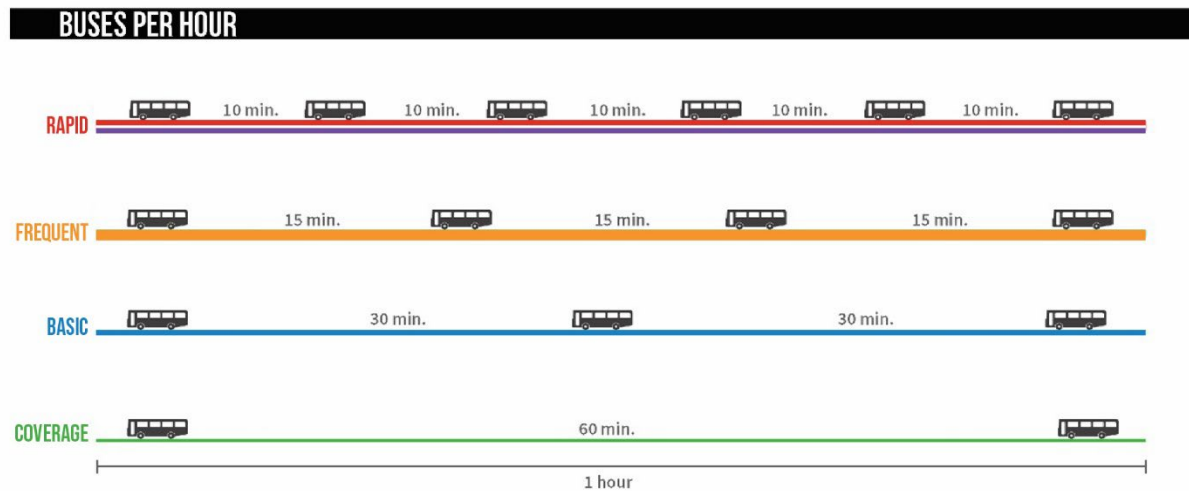


Figure 1: Graphic representing the frequency presented by the different Service Categories.

Daily and Weekly Span

Span refers to the hours of day and the days in the week that a service operates, and the hours that it runs at its defining, or peak, frequency. Routes meant to drive ridership should have longer spans of service because the service is more useful, providing trips for work and entertainment.

Service Category	Weekdays			Saturdays		Sundays & Holidays	
	Total Hours	Service hours at defining frequency	Service hours at lower frequency	Service hours at defining frequency	Service hours at lower frequency	Service hours at defining frequency	Service hours at lower frequency
Rapid	20	14	6	14	6	0	16
Frequent	20	14	6	14	6	0	16
Basic	18	16	2	16	2	0	16
Coverage	16	16	0	16	0	0	16

Table 3. Service span by service category.

Stop Spacing

Stop Spacing is the distance between bus stops. Stop spacing is a key contributor to the operational efficiency and productivity of a transit route.

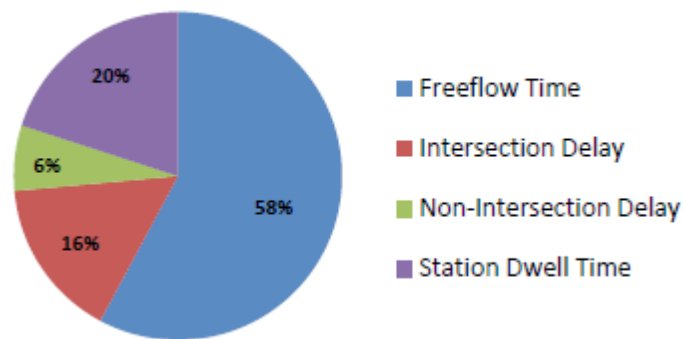


Figure 2. How buses on Route 8, on Washington Street, spend their time.

Serving passengers at a stop takes time, regardless of the number of people boarding or alighting. The more stops a bus makes, the slower its average operating speed is, the less useful it is to passengers, and the costlier it is to operate. To achieve higher travel speeds and ridership, IndyGo regularly evaluates bus stop spacing to consolidate boardings and alightings. Although fewer stops can be inconvenient, the increased frequency and speed of routes is intended to mitigate it.

Stop spacing standards are mostly motivated by the need to reduce delay, as delay can discourage ridership and make service more expensive to operate. However, wider stop spacing has other advantages:

- **Safer pedestrian environment.** Wider stop spacing increases the likelihood that every stop can be located at a place where it is safe to cross the street. Any round trip will require using stops on both sides of the street, but stops are less useful if crossing the street is difficult, dangerous, or impossible for most riders. Because of this, IndyGo prioritizes placing and improving bus stops at locations where safe pedestrian crossings are possible.
- **Better stop amenities.** Wider stop spacing increases the percentage of riders who will have access to higher quality bus stop amenities at their typical bus stop locations. These amenities may include benches, shelters, real-time bus arrival information, off-board fare collection, and other amenities. The fewer stops there are, the greater the proportion of stops that will have these amenities.

Stop spacing for Rapid and Frequent routes must be managed carefully to ensure that stops are not too close, resulting in the bus stopping too frequently. The Marion County Transit Plan (MCTP) recommended Rapid service stopping, on average, twice per mile (approximate distance of a half-mile between stops). The expectation during planning of the MCTP was that Rapid service would be fast and frequent enough that riders will be willing to walk further to access it. The industry standard for Frequent service is to space stops approximately four times per mile (approximate distance of a quarter-mile between stops). Basic and Coverage route stop spacing varies based on the physical context of an area and whether the pedestrian infrastructure provides a safe walking environment. Often times, additional stops need to be provided due to unsafe or non-existent pedestrian infrastructure or a disconnected street network.

Factors staff consider when evaluating stop spacing include:

- Land use and development pattern
- Presence and condition of pedestrian infrastructure
- Geographic and right of way considerations
- Connecting routes
- Ridership of the stop

Service Category	Stops per mile	Ideal distance between stops
Rapid	2 stops	½ mile
Frequent	4 stops	¼ mile
Basic	4 to 6 stops	Varies based on context
Coverage	4 to 6 stops	Varies based on context

Table 4 Stop spacing by service category

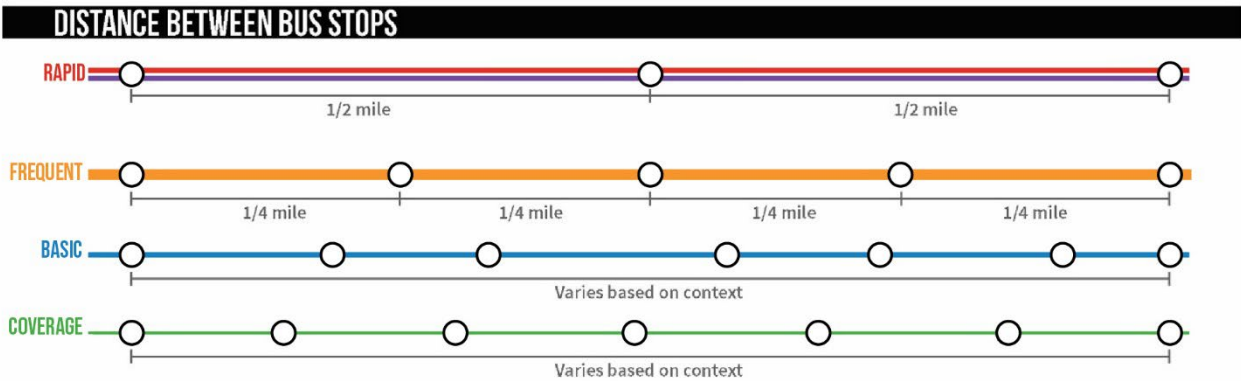


Figure 3. Stop spacing by service category.

The service standards in the table refer to averages, with an understanding that actual stop spacing will reflect local context, challenges, and needs. The average for each category should be within the stop spacing range for that category.

Flexibility in bus stop spacing is required for low-ridership Coverage services. Coverage routes may change over time and riders' access to bus stops may vary across different urban forms, posing unique safety and accessibility challenges. However, stop spacing that is too frequent may also result in issues associated with travel speed and reliability. Access and service reliability must both be taken into consideration, which requires greater flexibility in determining stop spacing for Coverage services.

Service Quality Targets

The following Service Quality Targets describe outcomes that result from other features, but they also can greatly influence peoples' decisions to use transit. These include:

- Travel Speed
- Reliability
- Stop Amenities
- Passenger Load
- Vehicle Assignment

The following subsections describe each Service Quality Target and the target anticipated for each route in any given service category.

Travel speed

The travel speed of a bus route has a direct impact on its usefulness and its operating cost: slower service requires more buses to deliver a given frequency and also results in longer travel time for riders. Maximizing ridership requires services that maintain high average operating speeds relative to alternative transportation options.

Service Category	Scheduled Speed Standard
Rapid	19 to 22 mph
Frequent	13 to 17 mph
Basic	13 to 17 mph
Coverage	14 to 18 mph

Table 5. Scheduled speed by Service Category

Travel speed standards determine scheduled speed, which is in turn used to build route schedules. When actual speeds do not adhere to scheduled speeds, schedule adherence (as measured through on-time performance) will suffer.

Routes often have varying service categories along different segments of the route. Because of this, scheduled speed may be evaluated for each unique route segment.

Operating speeds are affected by:

- **Ridership-related delays.** These types of delays result from increased ridership and therefore slower boarding and alighting times. A transit agency has tools to improve travel speeds despite high ridership, including reducing the number of stops per mile. Other tools available to improve travel speed include all-door boarding, off-board fare collection, or upgrading to digital fare payment systems (which process payments more quickly than cash payment methods).
- **Traffic congestion and signals.** Transit agencies often collaborate with City engineering departments on methods to reduce the amount of time buses spend at red lights. These methods can include transit signal priority systems and/or physical roadway infrastructure that allows transit vehicles to either bypass or “queue jump” other vehicles at congested intersections. Transit-only lanes can also be incorporated along longer sections of congested roadways.

On-Time Performance

On-time performance measures how often the bus adheres to its scheduled time. The better the on-time performance, the more reliable a system will be for riders. This reliability provides confidence and comfort to transit riders that the bus will arrive on time and take them to their destination as intended.

IndyGo’s current standard for on-time performance is as follows: if a bus is less than one minute early or less than five minutes late at a time point, it is considered on-time. The table below outlines the Reliability standard, which is expressed as the percentage of buses that arrive on-time.

Service Category	Reliability Standard
Rapid	87%
Frequent	85%
Basic	85%
Coverage	85%

Table 6. Reliability by Service Category. Reliability is measured as percentage of buses that arrive on-time.

Under normal conditions, Rapid and Frequent services are likely to experience the greatest delays (because of their high ridership and more congested operating environments), and it can be tempting to set lower standards for them. However, Rapid and Frequent services also carry the most people and are meant to maximize the number of riders they attract, so their delay has a greater influence on the overall percentage of IndyGo’s riders who experience delays.

Because routes often have varying service categories along different segments of the route, reliability may be evaluated for each unique route segment as opposed to being evaluated as full routes.

It is impossible to achieve and maintain 100 percent on-time performance due to variable traffic and weather conditions, road construction, detours, collisions, and other unforeseen service interruptions. Nevertheless, every effort should be made to identify ways to improve on-time performance, while also ensuring that any improvements are implemented without compromising the safety of operators or riders.

Stop Amenities

IndyGo considers multiple factors when determining what amenities to place at bus stops. These factors, many of which are outside of IndyGo’s control, often limit what types of amenities can be included at a bus stop. The factors IndyGo considers during stop amenity improvement decisions include:

- Existing ridership numbers (boardings and alightings)
- Availability of public right-of-way (ROW)
- Land use activities and development patterns of adjacent and nearby properties
- Access to popular destinations
- Proximity to stops with existing amenities
- Pedestrian infrastructure (connecting sidewalks, curb-ramps, crosswalks, etc.)
- ADA accessibility
- Proximity to key transfer locations and where routes connect

Not all amenities listed in the following table will be present at every stop type.

	Amenities	Typical Ridership Threshold
Basic Bus Stop	Bus Stop Sign Boarding Pad (if possible)	Default
Bus Stop with Bench	Basic Bus Stop Amenities and: Seating (Bench or Simme-Seat)	10-20 Boardings Per Day
Sheltered Bus Stop	Basic Bus Stop Amenities and: Shelter Lighting Waste Receptacle Seating Bike Racks	20+ Boardings Daily
Super Stop	Sheltered Bus Stop Amenities and: Larger Shelter Near-Level Boarding Real-Time Information Display Security Cameras	Based on Route Service Category
Rapid Transit Station (BRT)	All Super Stop Amenities and: Station Signage Level Boarding Fully Covered Platform	Determined by Planning Effort
Transit Center / Mobility Hub	All Rapid Transit Station Amenities and may include: Indoor Seating Public Restrooms On-Site Security Staffed Information Desk	Determined by Planning Effort

Table 7. Stop Amenities by Boardings.

Passenger Load

In managing bus crowding, there is a balance between maximizing the number of passengers on a bus and providing a comfortable passenger experience. The intent of passenger load standards, then, is to identify a quantifiable balance between passenger comfort (and safety) and operating efficiency. These standards define maximum passenger loads to ensure acceptable levels of rider comfort and safety while promoting efficiency.

Passenger load is defined as the percentage above seated capacity of a vehicle. Passenger load is measured by evaluating average ridership per trip against vehicle capacity. A passenger load of 120 percent (which means there are 20 percent more passengers than the number of seats on the bus)

generally reflects a comfortable standing load and is recommended as a balance point between maximizing passenger comfort and productivity. However, for Rapid service, a passenger load of 150 percent is set, as it is expected that riders will be more accepting of increased passenger loads due to increased service speed, shorter trip times, and overall service efficiency.

Service Category	Peak Passenger Load	Off Peak Passenger Load
Rapid	150%	150%
Frequent	120%	120%
Basic	120%	120%
Coverage	120%	120%

Table 8. Passenger load by Service Category.

If the load standard is exceeded, IndyGo should evaluate whether improved service frequency is warranted.

Vehicle Assignment

IndyGo policy is to distribute vehicles equitably amongst its routes based on the age of the vehicle. High ridership routes are more likely to be assigned vehicles with higher capacity. Rapid routes are only assigned 60-ft. articulated vehicles. Vehicles may also be assigned to routes based on additional factors beyond vehicle age; an example of this is vehicle height, as certain routes must navigate low clearance bridges or other obstacles that limit which vehicles can be used to provide service.

Outputs

Outputs measure achievement towards the highest-level goals of the IndyGo network, productivity (ridership per unit of cost) and coverage (provision of service to socially important places and people).

Output: Productivity

Productivity measures the ridership on a service relative to the cost of providing that service. Productivity is measured as boardings per service revenue hour. A *revenue hour* represents one transit vehicle and its driver operating in service for one hour.

IndyGo has two productivity standards that are used to evaluate routes and determine if a route is underperforming or overperforming its Service Category. Minimum Productivity is the ideal level at which a route should perform at its defining (or peak) frequency, as determined by the Service Category of a route (or route segment). The Minimum Productivity is typically set after a COA and is based on the average of productivity in that category for several years.

The Productivity Threshold is defined as two-thirds of the defined Minimum Productivity of a Service Category. Productivity Threshold is the target used to determine when a route (or route segment)

should be evaluated to understand why the route or segment is underperforming and what actions IndyGo could take in response. This occurs when a route consistently fails to meet the Productivity Threshold standard. The Productivity Threshold for a route is also determined based on the route’s Service Category.

Productivity will be measured as an annual average that includes a complete cycle of seasons and school years. Because routes often have varying service categories along different segments of the route, productivity should be evaluated for each segment of a route based on its service category; these are called major segments.

In evaluating a route’s productivity outputs, IndyGo may consider the Minimum Productivity to represent the expected productivity for the Service Category at its defining (or peak) frequency. However, when evaluating a route during a non-peak period, a Minimum Productivity standard that is appropriate to the level of service provided should be used. For example, the Frequent route minimum productivity may be used when a Frequent route is operating at its defining frequency, such as during the weekday. But for weekend service analysis, even by segment, IndyGo may use the lower productivity standards to reflect the lower frequency.

Service Category	Minimum Productivity	Productivity Threshold
Rapid	> 25*	16
Frequent	20	14
Basic	15	10
Coverage	10	7
System-wide	19	12

Table 9. Productivity by Service Category.

While some transit agencies also track farebox recovery (fare revenue / operating cost) as an output in their Service Standards, IndyGo has historically not included farebox recovery as a Service Standard output. Generally, productivity tracks in line with farebox recovery, eliminating the need to track both metrics. Farebox revenue is based on productivity, but also on average fare per boarding.

Output: Coverage

The goal of a coverage service is to provide transit access to as many people and jobs as possible, acknowledging that the purpose of the route is to provide geographic coverage. While IndyGo has set a long-term goal of 20 percent of its operating budget to go towards coverage services, that percentage will be higher in the short-term until the full implementation of the MCTP is completed.

IndyGo will work towards achieving 80 percent ridership and 20 percent coverage levels by implementing additional ridership-based service, not necessarily by cutting coverage service.

Service Category	Minimum Coverage
Rapid	None
Frequent	None
Basic	None
Coverage	Maximize residents and jobs near coverage services

Table 10. Coverage by Service Category.

One measure of the outcome of both decisions - to dedicate up to 20 percent of the transit budget to providing coverage and to run those coverage services as close to as many people and jobs as possible - is the percentage of Marion County residents and jobs that are within a half-mile of service.

Service Plans and Review Processes

The following table (Table 11) provides an overview of different IndyGo service review processes, including the frequency and purposed of each process. The Productivity Review is described in additional detail further in the *Using the Service Standards* section of this document.

Review Process	Process Frequency	General Process Purpose
Comprehensive Operational Analysis (COA)	Every four to five years.	A comprehensive review of existing operations and suggestions for service changes.
Corridor Planning	As Needed	Typically prompted by a COA, corridor planning evaluates transit demand for a particular corridor, analyzing demand and providing recommendations for service or infrastructure enhancements.
Transit Operational Performance Report (TOPR)	Annually	Review of existing transportation performance.

Productivity Review	As Needed	Review of Service Standards for the existing network and modification recommendations for any underperforming or overperforming routes.
Staff Discretion	Ongoing	Staff continually reviews service data and rider and employee feedback. Staff may decide to make minor changes to a route based on their information-gathering.

Table 11 Service review processes

Updating the Service Standards

These standards should be evaluated, refined, and modified only after a Comprehensive Operational Analysis or other significant, comprehensive transit planning effort has been completed. While corridor plans may affect a single or multiple routes, they will not provide a comprehensive picture of standards for all service categories, and thus should not trigger an update to the agency’s Service Standards.

Service Standards Review Process

The following table (Table 12) identifies the review process for a service standard and when staff may recommend modifications based on the review; these are all subject to the professional discretion of IndyGo staff.

	Standard	Review Process	Modifications Recommended
DESIGN FEATURE	Frequency	<ul style="list-style-type: none"> Corridor Planning COA 	Plan recommendations*
	Daily and Weekly Span	<ul style="list-style-type: none"> Corridor Planning COA 	Plan recommendations
	Stop Spacing	<ul style="list-style-type: none"> Corridor Planning COA Productivity Review 	Plan recommendations**
SERVICE QUALITY	Travel Speed	<ul style="list-style-type: none"> Productivity Review COA 	Below standard
	Reliability	<ul style="list-style-type: none"> Productivity Review 	Below standard

		<ul style="list-style-type: none"> COA 	
	Stop Amenities	<ul style="list-style-type: none"> Staff discretion 	Increase in boardings, or street redesign process
	Passenger Load	<ul style="list-style-type: none"> Productivity Review COA Staff discretion 	Exceeding maximum load for a Service Category
OUTPUTS	Productivity	<ul style="list-style-type: none"> Productivity Review 	< 2/3 of Service Category Productivity
	Coverage	<ul style="list-style-type: none"> COA Staff discretion ** 	(Consult Appendix B of this document) ***

Table 12. Standard timing and change table.

*Frequency changes should be done only during a rigorous and comprehensive transit planning process. The process for evaluating frequency is identified in the Appendix.

**Stop spacing may change as a result of the annual review of network and route productivity.

***New service requests are likely to be for Coverage routes. There are steps outlined in these Service Standards to evaluate whether additional Coverage is justified.

Frequency, span, and stop spacing are all outcomes of service planning activities. They can be measured and checked against the standards at the time any plan (corridor or short-range network plan) is proposed and adopted. The Service Quality Targets (Travel speed, reliability, stop amenities, passenger load) may be evaluated on a more regular basis, as part of the Productivity Review.

Using the Service Standards

Service standards provide measurable benchmarks from which performance can be monitored and evaluated. The standards indicate when an aspect of performance is not what the agency or its partners intended. Such indication should trigger an evaluation of the problem and a plan of action for resolving it.

Transit Operations Performance Report

IndyGo evaluates its network and route performance according to these Service Standards on an annual basis. This occurs through IndyGo's annual Transit Operations Performance Report (TOPR) which reviews key facets of service delivery, including boardings per revenue hour (productivity) and on-time performance.

Frequency Change Due to High Productivity

The TOPR evaluation may reveal a route which is overperforming the average performance of its Service Category or performing at the level of another Service Category. These overperforming routes should be considered for a frequency upgrade in the next COA.

Productivity Review

It is best practice for transit agencies to evaluate their network and route performance according to the agency’s Service Standards on at least an annual basis. This process is defined as the “Productivity Review.” In IndyGo’s case, the TOPR serves as the analysis process through which IndyGo completes its annual review of service productivity. This review encompasses evaluation at the route (and potentially segment) level of productivity of the network. Any new service or network element should be allowed to run an entire year before judgements are made about its productivity.

The application of productivity standards to existing routes, as is done through a Productivity Review, should be viewed as a flexible and collaborative process. The purpose of the standards is to help identify routes that are underperforming (or overperforming), which is then followed by analyzing any underlying service quality issues and identifying recommendations for potential service modifications that may help to resolve the issues. The Productivity Review process is outlined as follows:

1. Review services relative to associated service standards
2. Identify underperforming services
3. Evaluate deficiencies causing performance issues
4. Recommend modifications
5. Obtain approval from appropriate decision-makers
6. Implement the modifications
7. Monitor route performance

Review Services (relative to associated service standards)

Ideally, the productivity of each major segment in each route will be determined. Staff have the discretion to determine how major segments are defined, but typically the points where a route’s Service Category changes is used for the beginning (or end) of a major segment. As Figure 4 conveys, a route may have several major segments.

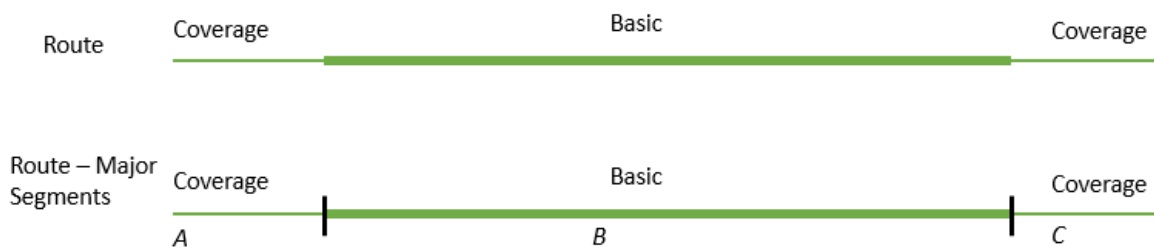


Figure 4. Example of Major Segment determination process.

Identify Underperforming Services

Productivity outcomes are the result of an entire network layer of a given frequency. Thus, the productivity standards presented in Table 9 are for the *average across the entire category*. A deficiency

occurs when a single major segment for a route drops below Productivity Threshold standard outlined in Table 9. This recognizes the interdependence found in a public transit network. The entire route is then analyzed, with particular focus paid to the major segment considered deficient. Community routes should be identified, as per the methodology in the appendix.

Evaluate Deficiencies Causing Performance Issues

Once a deficiency is identified, the Service Quality Targets (speed, reliability, and passenger load), as well as stop spacing and other underlying metrics, should be evaluated. On-time performance data is available to IndyGo daily, though the most advanced transit information systems allow for it to be monitored in real time. Automatic Vehicle Location data should also be queried to diagnose potential speed and reliability problems. Through a detailed analysis it may be possible to determine whether a delay problem correlates with a particular route segment or a particular time of day, or other factors.

All Service Quality Targets should be investigated equally throughout this evaluation process.

Recommend Modifications

Following the evaluation of service, modifications to service (that align with the issues identified) should be identified, considered, and recommended. This can include potential modifications such as restructuring to eliminate lower-productivity segments or branches, adjusting service frequency to better reflect the demand for service, or providing additional promotion of low ridership routes. Elimination of routes is only intended as a last resort, when it has been determined that no cost-effective actions are able to improve the productivity of the route.

A more comprehensive list of potential solutions to resolve performance issues includes, but is not limited to:

- Alter bus stop spacing or adjust bus stop placement (farside or nearside of intersection)
- Install transit signal priority
- Implement off-board fare collection and/or all door boarding
- Add dedicated transit lanes or intersection queue jumps
- Create public campaigns about helpful passenger practices for fast operation
- Adjust bus schedule
- Add additional buses to improve frequency
- Improve bus stop amenities
- Simplify bus routing

Obtain Approval from Appropriate Decision Makers

Present recommendations to IndyGo leadership and refine and adjust the recommendations, as needed. If required, the changes should then be presented to any appropriate stakeholders (such as the City of Indianapolis Department of Public Works), IndyGo subcommittee(s), and/or the Board of Directors for approval.

Implement Modifications

Modifications may be implemented once the appropriate internal (staff) decision maker and/or decision-making body (such as the IndyGo Board of Directors) has approved the recommended action(s), dependent on the required budget and/or resources being available. If budget and/or resources are unavailable, any non-resource dependent modifications, as determined by staff, should be prioritized. For any resource-dependent modifications, staff should work to identify the necessary budget and resources to advance future implementation.

Monitor Route Performance

Modified routes should be monitored closely, but do not need to be fully analyzed until a year after modifications or changes occur. The same approach should be taken for COA, Corridor Planning, and any other comprehensive transit planning implementation. Any route performance monitoring should follow the Productivity Review process, as approved by the Board of Directors, or any other review process deemed appropriate by staff.

Title VI Service Monitoring Report

IndyGo is also required to evaluate its service using these Service Standards to determine if the service delivered has a disparate impact and/or disproportionate burden on minority and/or low-income individuals in its service area. The Service Monitoring Report is required as part of a Title VI Program Update that is completed every three years by IndyGo. IndyGo's analysis of its Service Standards as part of the Service Monitoring Report must include categorizing routes into minority/non-minority and low-income/non-low-income categories. This effort is defined in the Service Monitoring Report.

Analysis of IndyGo's service for the purpose of the Title VI Program Update will not consider the following parts of these defined Service Standards:

- **Route segments.** Routes will be analyzed at the route level, not the segment level as outlined in these standards.
- **Outputs.** These standards and policies are designed to document the planning process required for the network. The standards define Output metrics: Productivity and Coverage. These outputs are relevant only to the network planning and not to the Title VI analysis.

Responding to Service Requests

IndyGo routinely receives requests to operate new or modified service. The cost of implementing and operating any of these service requests would typically be paid for out of the agency's existing operating budget. The majority of these requests will be for expanding or modifying service to reach currently unserved areas, which likely have lower ridership potential. If IndyGo were to implement these types of requests regularly, it would almost certainly result in a reduction of the overall productivity of the transit network.

In light of this, IndyGo must continually balance the need to serve every resident within its service area against the public's support (as determined by the 2016 transit referendum) for a highly productive, efficient, and useful transit service, all within a constrained budget. Service requests should be evaluated with this balance in mind. Details on how IndyGo staff will respond to service requests can be found in Appendix B.

APPENDIX A: Additional Considerations for the Productivity Review

Frequency Changes Due to Low Productivity

Productivity standards are segment-based, so they will require segment-level assessment of boardings and revenue hours. Once a route is divided into meaningful segments, automated queries of Automated Passenger Count (APC) data can be developed for ease of reporting.

Rapid and frequent routes are strongly interdependent (because their higher frequencies increase the number of available transfer opportunities). Any low-performing frequent route should be analyzed as follows before considering reducing its frequency:

- Does the route have an inner segment that connects with other frequent routes, and outer segments that do not? If so, look at the productivity of these outer segments in isolation to see if they have markedly lower productivity than the inner segment. If they do, the segmentation of the route can be revised; the outer segment can be considered for demotion to the basic or coverage service categories.
- Does the route show evidence of high transfer volumes at key network intersections? If so, assume that any service reduction will cause ridership drops not just on the route in question but also on the intersecting route(s).

Community Routes

Before modifying a route - whether through modification to frequency, span, or other service characteristic - as a result of a below the threshold productivity score, IndyGo should first review whether the route (or a segment of the route) is considered transit dependent. Community Routes, those with communities depending on transit, may also be used by IndyGo staff in other service standard applications, such as transit amenities.

Community Route – Blended Methodology

Variables from the On-Board Survey (OBS) and Transit Critical Populations (TCP) are used to create a two-part score. The OBS reflects riders who use the routes while the household data reflects the data from those living along a route (TCP).

ACS Household Survey

- If less than 1/3 of the route's vehicle revenue miles (VRM) are in an area identified as minority (as defined by Title VI Program Update), then the score is 0 for the metrics; otherwise, the score is the actual percentage recorded.
- Metrics
 - o Low-income household (income less than \$35,000);
 - Not normalized by household member;
 - o Minority population

- Zero-vehicle household

On-Board Survey

- System-wide average for each statistic used should be calculated. Any route with an average below the system-wide average would score a 0; others would score the actual percentage.
- Metrics considered:
 - Zero-vehicle household;
 - Low-income household (income less than \$35,000);
 - Not normalized by household member;
 - Minority population

Final Score Aggregations

For final ranking, the range of scores across all routes should be ordered from least to greatest and assigned a rank; 1 represents the highest rank. The scores should be distributed into equal sized tiers (e.g. three) ; the top tier would be a transit dependent route.

This methodology can be modified by staff, as needed. The methodology should be explicitly contained in any completed analysis.

APPENDIX B: Responding to Service Requests

Step 1. Will the requested service increase productivity in the near term?

Does meeting this request achieve ridership comparable to that of the ridership network? This can be assessed by asking if the request improves or worsens the following features of the high-ridership network:

- **Density.** The network's stops are surrounded by a high density of residents, jobs, or other trip-generating land uses.
- **Walkability.** The network is focused on areas where it is easy and safe to walk between bus stops and the surrounding development.
- **Linearity.** The network's routes are as straight as possible, so that they are perceived as a reasonably direct path between any two points on the route.
- **Continuity.** Service does not need to cross areas with long spans of undeveloped or underdeveloped land.
- **Uniqueness.** Parallel routes are far enough apart that they do not compete for the same riders.

If a service request would not be a clear net improvement in the feature of the ridership network, then it is a coverage request. Meeting a coverage request will predictably lead to lower ridership (shifting resources away from higher productivity routes), so coverage requests must be met out of the portion of the budget assigned to coverage.

Step 2. Will the requested service increase productivity in the long term?

Sometimes, developers or advocates ask transit agencies to fund a service because they believe it will help a community develop in a certain way, leading to a long-term ridership outcome. Transit agencies must view these arguments with caution because it puts the transit agency in the position of gambling on the land use outcome using its operating budget. There is almost always a way to invest service toward a shorter-term ridership outcome, one that depends on fewer uncertain factors, so investing in these possible futures comes at a cost to potential riders in the present.

The actual policy toward a developing area must reflect the degree of likelihood that the development will occur as planned. Development under construction should be treated as existing land use, but development in earlier planning stages requires the cautions outlined above.

Step 3. Will the requested service increase the number of people or jobs near service?

If the request substantially improves the system's performance on the coverage output target, and does so at a modest cost, it should be identified as a possible coverage improvement. Possible coverage improvements should be prioritized for allocation from the portion of the operating budget that is dedicated to the coverage goal. Coverage improvements on this list can be implemented if and when:

- The budget grows to the point that more total funding can be devoted to coverage.

- The Board elects to shift the policy split of the budget between ridership and coverage purposes.
- Other coverage services are discontinued, possibly including those that provide coverage less efficiently.

Step 4. If the answer to the above questions is “no”

IndyGo should be very reluctant to introduce services that do not satisfy one of the above tests. If there is a strong desire on the part of the Board to add the service for other reasons, options can include:

- Seeking external funding for the service, ideally from the parties most likely to benefit from it.
- As a last resort, creating a third slice of the budget, distinct from the ridership and cover slices, called “discretionary.” This slice could be devoted to any services the Board desires, regardless of objective policy justification.

Short-term operational solutions when proposed new services do not satisfy the previously mentioned tests include alternative forms of mobility, such as ride-matching, vanpools, and subsidized taxis.

The preferred long-term solution when proposed new services do not satisfy the previously mentioned tests include coordinating with businesses, the City of Indianapolis Department of Metropolitan Development, and others to encourage people, businesses, institutions, and future developments to locate along corridors with existing transit service.

APPENDIX C: Updating Route Purposes

Individual routes are assigned a category based on the route's purpose; either to maximize ridership or provide transit access to as many jobs and residents as possible. IndyGo may wish to revise the purpose of each route; this process of this determination is outlined below:

Route Purpose

Rapid and frequent services are all ridership-justified. Coverage services are all, by definition, coverage-justified. **The primary challenge is the basic category.**

In certain cases:

- If there are clear reasons to expect ridership to dramatically improve soon (for example, as a result of an imminent development or redevelopment of a property to become a major trip generator), IndyGo may provisionally assign the route to the ridership purpose. Any such imminent improvement should be an improvement in one or more of the necessary features for ridership that arise from the built form: density, walkability, linearity, and continuity.
- If the built environment is mostly unfavorable to transit (in terms of generally low density, walkability, linearity, and continuity) and shows little signs of changing in character to become more transit-supportive, assign the route to the coverage purpose.
- In a small number of cases, a route may be running at 30-minute frequency and its purpose is ideally just coverage or just ridership, yet some constraint prevents it from running at higher or lower frequency.

Segment Purpose

One challenge of using frequency-based or purpose-based standards is that part of a route may be in one category and part in another.

Many routes in the recommended networks have an inner frequent segment which is clearly ridership-seeking and less frequency tails or branches which are meant to provide coverage.

In these cases, we recommend that:

- If the low-frequency portion of a route is less than 10 percent of the total revenue hours, the entire route can be analyzed in the higher-frequency category.
- Otherwise, the frequent and infrequent segments should be separated and assigned to separate categories.
- If a low frequency segment is part of a short mid-route split or minor variation in route, the route should be identified in the higher-frequency category.

Measuring Productivity of Outer Segments

Separately analyzing the productivity of inner and outer route segments (where the inner segment has higher frequency) requires an extra step. One analytical method is as follows:

- Ridership: Using APC data, identify the total inbound boardings and outbound alightings that occur on the *outer* segment. Add these two numbers together to get the total ridership that makes some use of the outer segment (This method counts each trip once and does not double-count trips that are entirely within the outer segment. If there are difficulties with counting alightings, simply count the total inbound boardings and double, presuming most trips are round trips, to capture the trips alighting in the segment.)
- Subtract that number from the total route ridership to get boardings assignable entirely to the inner segment.
- Cost (revenue hours): Using a costing tool to estimate the revenue hours required to operate the frequent inner segment, as if the outer segment did not exist. Assign those revenue hours to the inner segment.
- Assign the difference between the inner segment's revenue hours and the route's full cost to the outer segment.
- Calculate productivity of the outer segment by dividing its boardings by its revenue hours.

When evaluating the purpose of a Basic service's segments, consider the following:

- If the segment's productivity is in the range of rapid or frequent services, then it is probably a ridership segment.
- If the segment's productivity is within the range of the other coverage routes or segments, then it is probably a coverage segment.
- If ridership is clearly very different on one part of a segment than another, divide it into smaller pieces and think about them separately. (Sometimes this process inspires the redesign of a route, so that high-ridership segments can be served by a more frequent route.)

When a 30-minute segment is assigned to a ridership or coverage purpose, it should be reviewed in the following terms:

- Half-hourly segments categorized as ridership may be in route for promotion to the Frequent network as resources permit.
- There may be cases—such as segments driven by a strongly day-time-only or peak demand – where a 30-minute base frequency may yield very high productivity, and productivity would fall if they were promoted.
- There may be extenuating circumstances that argue against increasing or decreasing the frequency of a basic route. For example, reducing the frequency might save no money, due to the route's cycle time; or the frequency may be created by hourly branches at the end of the segment whose frequency should not be reduced to bi-hourly.

APPENDIX D: Assessing Compliance with the Ridership/Coverage Split

The frequency of routes is a key ingredient for public transportation. IndyGo should routinely evaluate the percentage split between service that could be considered frequent and that considered infrequent.

For the service under review, each route is to be identified as frequent if it provides service every 30 minutes or better during the weekday. Any route providing service 31 minutes or greater is to be considered an infrequent or coverage route. Demand response service may be handled at the discretion of IndyGo staff at the time of determination. Vehicle revenue hours should be the datapoint measured.

APPENDIX E: MODIFICATIONS TO THESE STANDARDS

This is a summary of modifications to these standards.

Version	Modifications
October 2018 Version	Board approved.
October 2019 Version (Draft)	<ul style="list-style-type: none"> • Minor grammatical changes • Added “Vehicle Assignment” section • Added section on the “Title VI Service Monitoring Report” • Retroactive to February 1, 2018
October 2019 Version (Final)	Board approved.
February 2026 (Draft)	<ul style="list-style-type: none"> - Added “peak” and “non-peak” to the following standards: - Added Federal Requirements Checklist - Edited the Standards for Productivity - Identified Rapid as a separate, distinct mode – bus rapid transit. - Modified the Productivity Review and Replaced it with the TOPR. - Added key definitions.

APPENDIX E: Federal Requirements Checklist

This checklist outlines the federal requirements for Service Standards. The area that fulfills the requirement is identified in the table below.

From FTA Circular C4702.1B (2012)

Requirement	Additional Information	Document Reference
Vehicle Load for Each Mode.	Vehicle load can be expressed as the ratio of passengers to the total number of seats on a vehicle. Generally expressed in peak and off-peak times.	Passenger Load.
Vehicle headway for Each Mode.	The amount of time between two vehicles traveling in the same direction. Generally expressed for peak and off-peak, per mode.	Frequency.
On-time Performance for Each Mode.	Measure of runs completed as scheduled.	On-Time Performance.
Service Availability for Each Mode.	Measure of distribution of routes within a provider's service area. Could also be a maximum distance between stops or stations.	Stop Spacing.
Distribution of Transit Amenities by Mode.	Items of comfort, convenience, and safety available to the general riding public. Amenities include, but are not limited to: seating, shelters, information, escalators, elevators, and waste receptacles.	Stop Spacing.

Vehicle Assignment by Mode

Process by which transit vehicles are placed into service in depots and on routes. May be based on age, type of vehicle, and/or type of service.

Vehicle Assignment.