

Different Types of Transit Service and Vehicles

Which option is right for DeKalb County?

There are so many transit options. Most communities find that a single option isn't enough and have to have a mix of transit options to meet residents' needs. You'll also find more Transit Service options on our website at www.DeKalbTransitMasterPlan.com.



Heavy Rail Transit (HRT)

- Operates on tracks separated from traffic.
- Carries more people and travels at faster speeds than light rail trains, but are more expensive to build.
- Typically powered electrically from a third rail.
- Operates at ground level, on an elevated structure, or below ground.

Passengers

- Pay to enter stations (not the train itself) which speeds the boarding process.
- Board from platforms that are level with the train's floor which helps people of all abilities to board more easily.

Stations

- Spaced at least a mile apart, but may be closer together in dense urban areas.
- Urban areas offer access for pedestrians, bicyclists and drop-off passengers.
- Suburban areas typically offer all of those access options plus parking areas.
- May offer amenities like ticket vending machines, customer service kiosks, directional signs, real-time train arrival information, etc.



Frequency

Typically 15 min or less



Operating Cost (per veh/per hr)

Approx. \$250–\$300



Capital (per mile)

Approx. \$250M

Light Rail (LRT)

- May operate in their own lane separated from traffic.
- Carries fewer people and travels at slower speeds than heavy rail trains, but are less expensive to build.
- Typically powered electrically from an overhead wire.
- Often operated at ground level, but can operate below ground.
- Streetcars are a type of light rail that operate in mixed traffic.

Passengers

- Pay to enter stations (not the train itself) which speeds the boarding process.
- Board from platforms that are level with the train's floor which helps people of all abilities to board more easily.

Stations

- Spaced at least a mile apart, but can be closer in urban areas.
- Streetcar stations are usually $\frac{1}{4}$ – $\frac{1}{2}$ mile apart.
- May offer amenities like ticket vending machines, directional signs, real-time train arrival information, etc.



Frequency

Typically 15 min or less



Operating Cost (per veh/per hr)

Approx. \$250–\$350



Capital (per mile)

Approx. \$120M (streetcar \$75M)

Bus Rapid Transit (BRT)

- A bus that is operated like a train and operates in its own lane so that they are not affected by automobile congestion.
- Carries fewer people, travels at slower speeds than trains, but are much less expensive to build.
- Often articulated and more stylized than local buses.
- Often operated at ground level, but can operate below ground.

Passengers

- Pay to enter stations (not the bus itself) which speeds the boarding process.
- Board from platforms that are level with the bus's floor which helps people of all abilities to board more easily.

Stations

- Spaced about $\frac{1}{3}$ mile apart, but can be closer in highly developed urban areas.
- Offer amenities like ticket vending machines, directional signs, and real-time bus arrival information.



Frequency

Typically 15 min or less



Operating Cost (per veh/per hr)

Approx. \$100–\$150



Capital (per mile)

Approx. \$25M



Arterial Rapid Transit (ART)

- A bus that operates on regular streets so that vehicles are affected by congestion, but short bus-only lanes adjacent to major intersections are used to reduce delays.
- Carries the same number of people as BRT vehicles, but they tend to travel at slower speeds due to being in normal traffic lanes.
- Less expensive to build because a dedicated travel lane is not needed.
- Buses are often articulated.
- May also employ technology to reduce delay caused by traffic signals.

Passengers

- May use stations or stops to access bus.

Stations/Stops

- Typically spaced about 1/3 mile apart.
- May offer amenities like ticket vending machines, real-time bus arrival information, etc.



Frequency

Typically 15 min or less



Operating Cost (per veh/per hr)

Approx. \$100-\$150



Capital (per mile)

Approx. \$2.5M

Express/High Capacity Bus Service

- Picks up commuters near their residences and takes them directly to an employment district with very few stops along the way.
- Operates on regular streets and are affected by automobile congestion.
- Carries fewer people than BRT/ART vehicles.
- Designed for greater comfort than local buses as passengers ride longer distances on them and they often use interstates for travel.

Passengers

- Pay upon entering the bus which slows the boarding process.
- Buses have lifts to assist passengers with limited mobility.

Stations/Stops

- Service often originates in a park-and-ride lot and drops passengers off at standard bus stops.



Frequency

Concentrated during peak morning and evening commute periods and one or two trips during the middle of the day



Operating Cost (per veh/per hr)

Approx. \$150-\$250



Capital (per vehicle)

Approx. \$600-\$800K

Local Bus

- Designed to make frequent stops along a fixed route and schedule.
- Operates on regular streets and are affected by automobile congestion.
- Carries approximately 40 seated passengers, but can have standing passengers as well.
- Capital costs are limited to vehicles and stop infrastructure.
- Fueled by gasoline, diesel, compressed natural gas, electricity, or a hybrid of fuel sources.

Passengers

- Pay upon entering the bus which slows the boarding process.
- Ramps assist passengers with limited mobility.

Stops

- This service uses traditional bus stops that vary between a stop with only a bus stop sign to a stop with a sheltered seating area.



Frequency

Varies substantially from 10 min on high demand routes in peak periods to 60 min during evenings and weekends



Operating Cost (per veh/per hr)

Approx. \$100-\$150



Capital (per vehicle)

Approx. \$600-\$800K