

# 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](http://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 1/4–1/2 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 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