# TRANSIT SUPPORTIVE LAND USE


# FOR THE LEHIGH VALLEY

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## Background and Purpose

In February 2010, the LANta Board of Directors adopted the *Moving LANta Forward* strategic plan which laid out a vision for the expansion of LANta's transit network throughout the Lehigh Valley. The plan had been prepared in response to various conditions including:

- The trend in which the level of transit service provided in the Lehigh Valley has not kept pace with population growth and land development;

- The adoption of the regional *Comprehensive Plan - Lehigh Valley 2030* which establishes a smart growth strategy for the region and identifies a greater use of transit as a strategy to meet the broader transportation and quality of life goals of the Plan including:

    - mitigating congestion and sprawl;
    - linking land use and transportation decisions;
    - directing urban development to identified areas;
    - preserving open space; and
    - revitalizing urban centers.

With these regional goals and strategies in place, the purpose of this document is to amplify on the *Comprehensive Plan – Lehigh Valley 2030* and further define how land development in the Lehigh Valley can be done in a way as to promote and facilitate the provision and use of transit in the region. While development in the downtowns of the three cities, in other traditional urban centers or along key corridors is preferred from the standpoint of transit provision, it should be noted that the Comprehensive Plan calls for urban development in currently un-developed or sparsely developed areas. It is critical that development which takes place in these areas be done in a way as not to preclude or discourage the use of transit in these areas. Accordingly, this document does direct significant focus to the type of development which will occur in the more suburban areas outside of the traditional urban core but that are still consistent with the regional Comprehensive Plan. The Lehigh Valley Planning Commission will use this document as part of the update to the regional Comprehensive Plan being done as part of the regional Sustainable Communities grant effort, of which LANta is a partner.

In support of the regional vision established in the *Comprehensive Plan – Lehigh Valley 2030*, the *Moving LANta Forward* plan outlines an ambitious vision for transit in the Lehigh Valley. However, the plan also includes a clear recognition that expansion of transit in the region is not feasible without transit supportive concepts being incorporated into the land use and development decisions made by the municipalities, counties, and other regional bodies. This document attempts to define those concepts.

Consistent with the regional Comprehensive Plan, many Lehigh Valley municipalities have stated through their municipal comprehensive plans the desire to promote and facilitate the use of transit in their communities. This document can be used as a guide to assist municipal staffs and Planning Commissions in their decision making processes regarding land use and development in their communities. This document can also guide county and regional bodies in their policy making decisions in areas such as economic development. Lastly, this document can act as a guide to developers in the region looking to facilitate the use of public transportation to their planned developments.

## What would Transit Supportive Land Use look like in the Lehigh Valley?

This document focuses on four key elements of what needs to be addressed for transit supportive land use conditions to exist. These include:

1. Service
2. Sidewalks
3. Site Planning; and
4. Centers

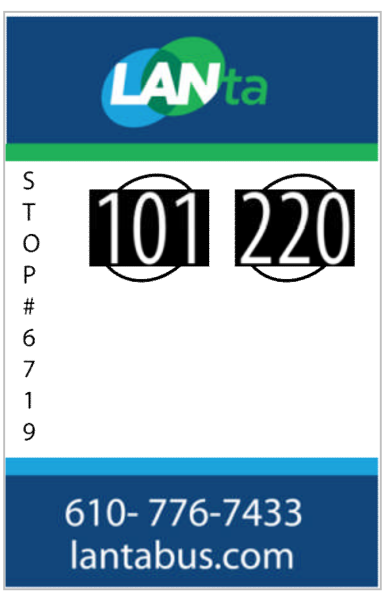
The remainder of this document describes how each of these elements contributes to an overall transit supportive environment and how they might apply specifically to the Lehigh Valley.

## 1. Service

The first component in any effort to promote transit supportive land use and development is support for the provision of the transit service itself.

Communities can support the provision of transit service by allowing LANta to operate on streets previously not served when utilizing that street will allow for service to a particular destination or when use of the street will help to improve the efficiency of the service provided through the community.

Communities can also promote and facilitate the use of transit in their jurisdiction by enforcing no parking regulations at marked bus stops; and by supporting the installation of bus stop waiting shelters and providing for an expedited process for the permits required for their installation.




Additionally, municipalities and regional bodies can help to promote the service which is already being provided by targeting development to sites or corridors which are already served by one of LANta's full service routes.

Lastly, municipalities can promote the use of transit in their communities by ensuring development that creates the overall conditions that make transit more feasible. LANta uses policy guidelines based on the population density and employment density of an area to ascertain the most appropriate level of transit service to provide in that environment.

The basis for this guideline is the service or route classification structure that LANta employs for its fixed route LANtaBus system. LANtaBus routes are organized into classifications by level and type of service provided. Each classification is designed to meet the transit needs of the varying parts of the two-county area. The individual routes within each classification are designated with a particular series of three-digit numbers (i.e., 100's, 200's, etc). The table below shows the various route classifications.

**LANtaBus Route Classification System**

| Classification | Route Series Designation | Target Areas |
|---|---|---|
| Trunk Routes | 100’s | Regional core corridors with highest levels of population and employment density. |
| Urban Routes | 200’s | Urban core corridors with secondary levels of population and employment density. |
| Commuter Routes | 300’s | Suburban communities with large numbers of workers commuting to a CBD or suburban employment centers with large numbers of workers commuting from central city areas. |
| Capacity Enhancing Specials | 400’s | Areas of high demand from high school and middle school students. |
| Flex Routes | 500’s | Suburban areas with isolated population or employment centers. |
| Special Market Routes | 600’s | Areas with market specific transportation needs. |
| Enhanced Bus | 1’s | Areas along trunk corridors exhibiting demand warranting additional service and capital improvements. |

Each route classification provides a different level of transit service. 100's routes (i.e., Routes 101, 102, 103, etc.) provide the highest level of service in terms of the frequency of the service as well the span of service, or the hours during which the service is available. Service frequencies and spans decrease on 200's routes and are lower still on 300's routes. 400's routes operate during weekday peak periods only and the level of service provided on 600's routes depends on the demand of the specialty market served. 500's routes are reservation based demand responsive services. There are currently no 1's, or Enhanced Bus routes, but these will be implemented along the 100's routes corridors which display the highest level of demand.

Decisions regarding the placement of service and the intensity of that service, or route type, are primarily based on the development character of the area to be served. Prime factors that predict the level of demand for transit service in an area are the density of population and employment. Accordingly, the matrix below shows the guideline used by LANta to guide decisions regarding where LANtaBus service should be provided and at what intensity. The appropriate route classification for each condition is listed in the matrix.

**Criteria for Service and Service Level**
**Measures at Census Block Group Level**

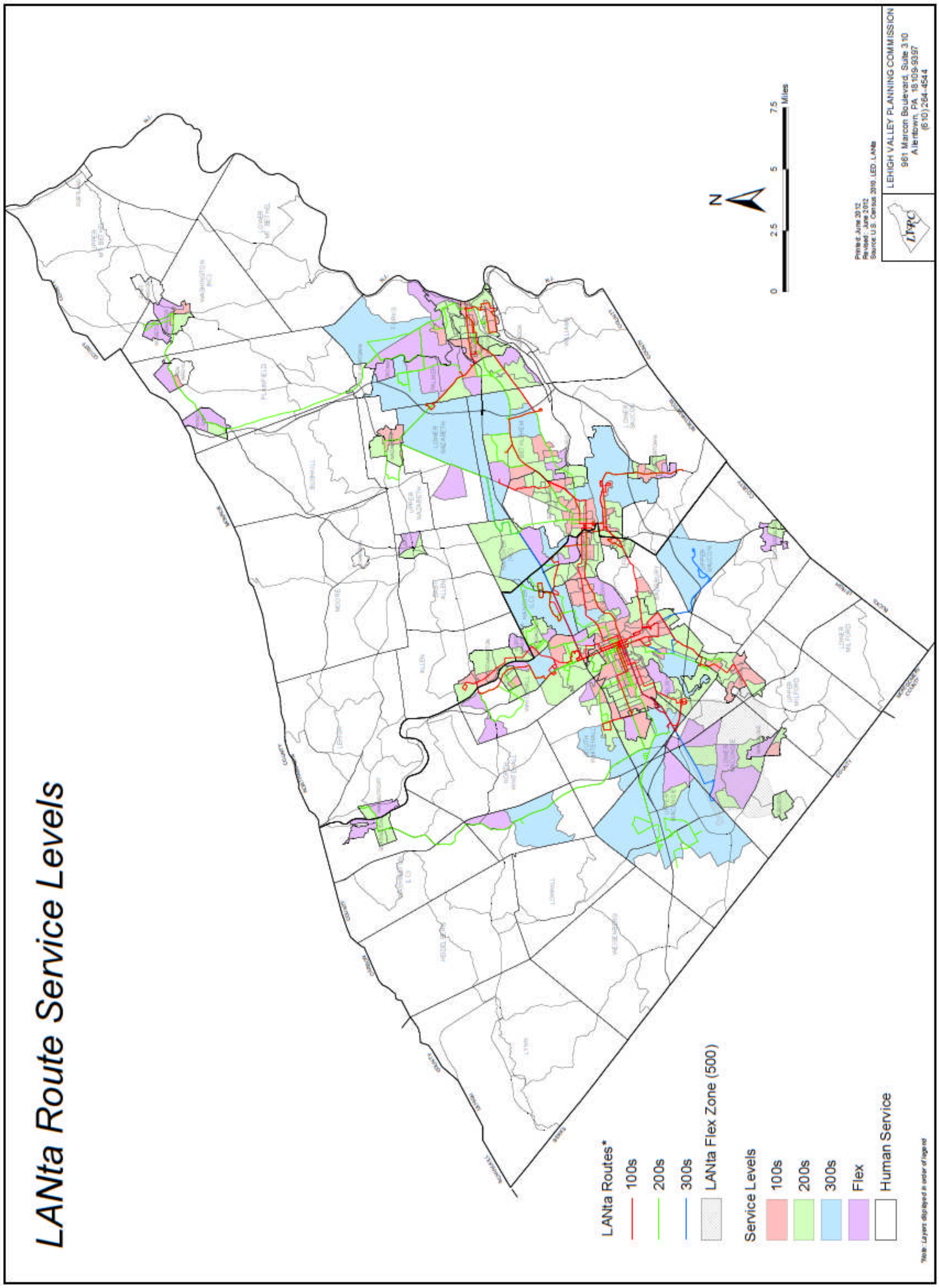
| Population Density (Persons/ Square Mile) | Employment Density (Employees/Square Mile) | | |
|---|---|---|---|
| | 0 – 499 | 500- 999 | 1,000 or more |
| 0 - 1,499 | Human Service Transportation | 300's | 300's |
| 1,500 - 2,999 | Flex | Flex | 200's |
| 3,000 - 5,999 | 200's | 200’s | 100's |
| > 6,000 | 200's | 200's | 100's |

As the matrix shows, areas with higher densities of both population and employment are candidates for service levels provided by 100’s routes. As densities of either population or employment decrease, a less intense level of service is needed. Areas with the lowest levels of population and employment densities should generally not be served by LANtaBus service but instead by eligibility-based human service transportation through LANtaVan. The map on the following page depicts the application of this policy guide throughout the LANta service area (i.e., Lehigh and Northampton Counties).

The guideline is applicable when there are multiple census block groups with similar conditions that are adjacent or nearly adjacent to one another. Special consideration is given to census block groups which are isolated from others with similar conditions. Use of lesser intense service models may be necessary to garner acceptable productivity levels in these isolated sections. Accordingly, municipalities should seek to create these transit supportive conditions over a continuous stretch of land such as along a designated corridor.

**LANtaBus Service Coverage and Service Level Guideline**

Shadings show the prescribed service level for the area according to the guideline



Since municipalities typically address population density in terms of dwelling units per acre , the table below translates the population density figures from the table on page 4 into dwelling units per acre based on the current average household size in Lehigh and Northampton Counties (i.e., 2.54 persons per household in 2010 according to U.S. Census data provided by the Lehigh Valley Planning Commission). In addition, the employment density figures have been converted into employees per acre.

**Criteria for Service and Service Level**
**Measures at Census Block Group Level**
**Shown in Dwelling Units and Employees per Acre**

| Dwelling Units per Acre | Employment Density (Employees/Acre) | | |
|---|---|---|---|
| | 0 – 0.79 | 0.8 - 1.59 | 1.6 or more |
| Less than 1 | Human Service Transportation | 300's | 300's |
| Greater than 1, less than 2 | Flex | Flex | 200's |
| Greater than 2, less than 4 | 200's | 200's | 100's |
| Greater than 4, less than 7 | 200's | 200's | 100's |
| Greater than 7 | 100's | 100's | 100's |

It should be noted that these figures are based on the average household size for all of Lehigh and Northampton Counties. Higher densities may be required if it is anticipated that the average household size in a proposed development will be lower than the average of 2.54 persons per household.

Also, some non-residential land uses are much more employment intensive than others. For example, every square foot of office space typically results in a higher number of employees than does warehousing. Accordingly, larger developments (i.e., more square footage) of lower employment intensive uses would be needed to create the employment densities listed in the guideline.

To provide some reference, the table below shows the typical employment intensity for different types of uses. These figures were developed by the Lehigh Valley Planning Commission (LVPC) for the 2040 Employment Build Out Analysis.

**Typical Employment Densities by Use**

| Use Category | Sq feet per 1 employee | Employees per Acre |
|---|---|---|
| Retail/Commercial | 350 | 13 |
| Office/Business | 300 | 12 |
| Industrial/Manufacturing | 425 | 11 |
| Institutional | -- | 7 |
| Warehousing | 1,300 | 4 |

LANta's vision for the development of the region's public transportation network also includes the introduction of higher frequency, limited stop bus routes potentially coupled with physical improvements which often characterize Bus Rapid Transit systems such as roadway modifications which provide preferential treatment to buses, traffic signal priority for buses, or improved amenities at transit stops, etc. LANta refers to this as Enhanced Bus service which will be employed along corridors of high transit demand and where conditions exist to support such investment.

As part of the Lehigh Valley Enhanced Bus/Bus Rapid Transit Study prepared for LANta, HDR Engineering, a subconsultant on the study team led by AECOM Technical Services, developed a guideline for development conditions that should exist to support the provision of Enhanced Bus service as shown below:

**Activity Density Index for Enhanced Bus Service**

| Activity Density (Population plus Employment per acre) | Development Density/Intensity* | Supportable Transit Service (Frequency) |
|---|---|---|
| 20-40 | 15-30 DU/A<br>0.25-1.00 FAR | Service every 10 minutes during peak periods |
| 10-20 | 7-15 DU/A<br>Less than 0.25 FAR | Service every 15 - 30 minutes during peak periods |

Source: HDR
*FARs or Floor Area Ratios are used as a measure of the intensity non-residential development. The ratio is generated by dividing the building area by the parcel area.

More information about where Enhanced Bus services are envisioned and the types of land use development which should exist along these corridors to support the service can be found at http://www.lantabus.com/planningstudies.html

## 2. Sidewalks

One of the most fundamental necessities for transit to be a feasible and convenient transportation choice is the existence of a comprehensive pedestrian network throughout the urbanized areas of our region.

A comprehensive pedestrian network requires:

- Sidewalks on both sides of all streets and throughout commercial developments;
- Marked crosswalks at intersections;
- Pedestrian islands, or "refuges" for crossing wide streets; and
- Pedestrian only phases in traffic signals where pedestrian traffic is heavy.


*This rendering of the south side of Hamilton Boulevard across from Dorney Park in South Whitehall Township shows how a comprehensive pedestrian network could significantly promote the use of transit, walking or biking along this heavily traveled thoroughfare.*

*This rendering depicts how clearly marked crosswalks and pedestrian refuges could improve the pedestrian environment along MacArthur Road in Whitehall Township*

## 3. Site Planning

The layout and character of developments has a significant impact on the feasibility of transit. For a development to be transit supportive it should be located and designed in a way that makes it convenient for people to travel to and from the development via transit. Additionally, the ideal design would allow for this access without the need for the bus to actually enter the site. That is, the development would be served by transit at bus stops on the main thoroughfare.

For this to be possible, the following design elements would need to be present:

- A comprehensive pedestrian network that allows for pedestrian movement into, out of, and throughout the entire site.
- Minimized walking distances from the street to the main destinations of the development. A one-minute walk from the street would be convenient for transit users and could be considered transit

supportive. Therefore, setback distances should take into account the typical pace of walking. According to the Transportation Research Record No. 1538, *Pedestrian and Bicycle Research - Field Studies in Pedestrian Walking Speed and Start Up Time*, the slowest walkers are females over 65 who walk at an average pace of 3.89 feet per second, or about 2.65 miles per hour. At that pace, a person will walk approximately 235 feet in one minute. Given that people's perceptions of distance change with the scale of a development, this figure of 235 feet may be appropriate for large scale developments, but building setbacks on smaller scale developments should be significantly less and set at 100 to 150 feet. It should also be noted that the width of the cartway of the road should also be taken into consideration when determining the walking distance since transit users will be walking either from or to the opposite side of the street for their travel in one direction (i.e., when either traveling to the development or from the development). Also, it should be emphasized that these setback distances represent suggested maximum distances and that that the shorter the setback distance, the more transit supportive the development can be considered.

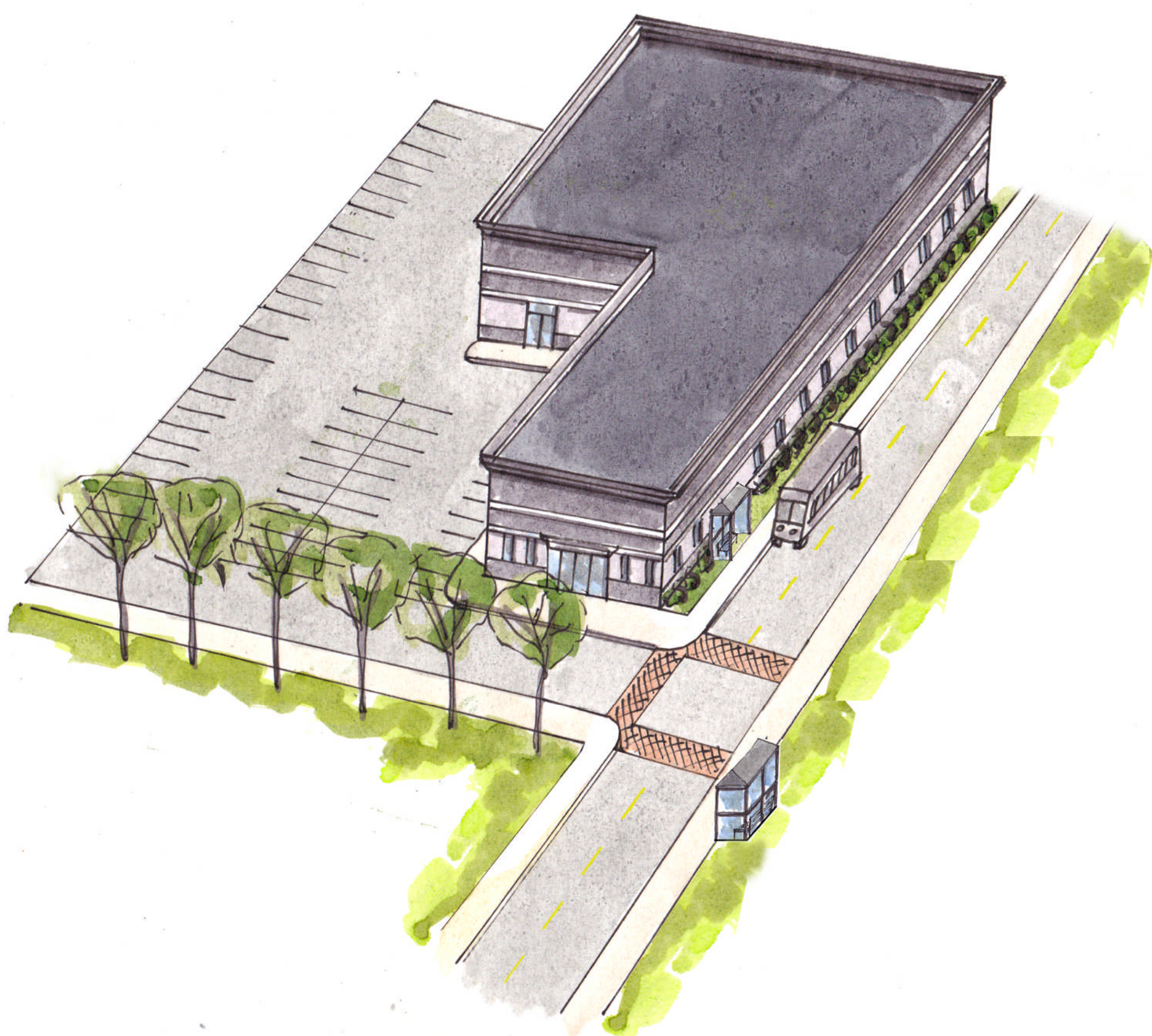
- Marked crosswalks, traffic control, and sidewalks on the opposite side of the street to allow transit users to cross the street to access transit service in both directions. At a minimum, crosswalks should be painted clearly, but methods to further pronounce crosswalks can provide added benefit.

**Transit Supportive Site Plan Pattern - Commercial Building**

*The rendering above depicts a commercial development which would meet the transit supportive site planning criteria listed above: shallow setbacks of buildings; a comprehensive pedestrian network throughout the development; sidewalks on both sides of the main thoroughfare; and marked crosswalks connecting the two sides of the street.*

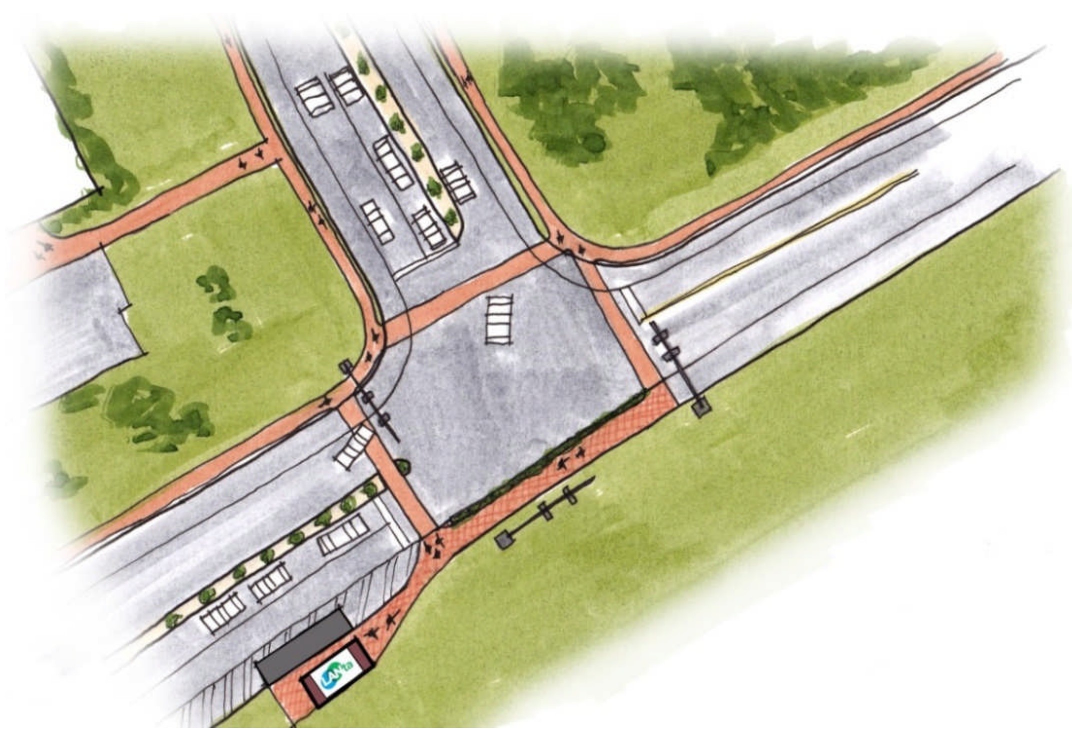
*The rendering below applies the same site design concepts to an industrial or office building. These site design concepts should be adhered to regardless of whether the building is located along a main thoroughfare or in a business/industrial park setting.*

**Transit Supportive Site Plan Pattern - Industrial/Office Building**



*While these two renderings show the transit supportive site design concepts applied to commercial and industrial/office developments, the same concepts should be applied to residential or mixed use developments. These concepts should be applied to all new developments and changes due to redevelopments or retrofits should be done in a way to further these desired conditions.*

*This rendering below of the intersection of Freemansburg Avenue and Hope Road in Bethlehem Township (shown in the photo) shows how a comprehensive pedestrian network at this intersection would allow for pedestrians to walk into and out of the Southmont Shopping Center and be able to access transit service on both sides of Freemansburg Avenue.*

*The rendering below shows how the entrance from Broadway into the Tilghman Square Shopping Center in South Whitehall (shown in the photo) could allow for convenient pedestrian circulation.*


*The photo above shows the entrance to the 25th Street Shopping Center in Palmer Township. As can be seen in the photo, sidewalks on 25th Street do not continue into the shopping center and there is no pedestrian network internally throughout the development. The rendering below shows how the shopping center could allow for convenient pedestrian access into, out of, and throughout the shopping center.*

*The photo above provides a ground level perspective of the 25th Street Shopping Center in Palmer Township. As noted, sidewalks do not continue into the shopping center and there are large expanses of parking that need to be crossed by a pedestrian to reach the retail stores. The rendering below shows how the extension of sidewalks and the incorporation of satellite buildings can significantly improve the pedestrian environment.*

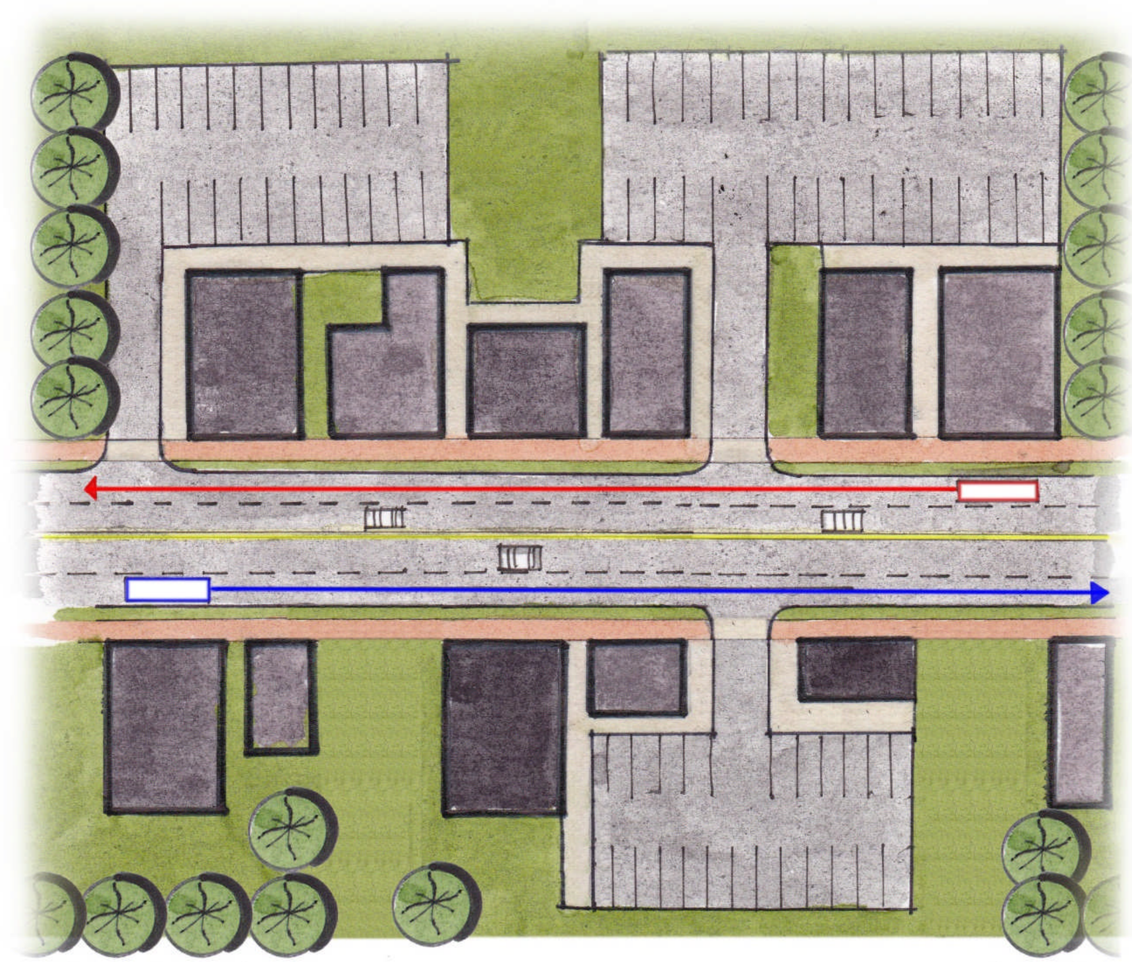
**Why are these Site Planning Elements Important?**

Site plans that do not conform with the transit supportive attributes listed earlier can have a deleterious effect on the convenience, reliability and cost of local transit service. This is due to the amount of time that is required to leave the main thoroughfare and directly serve individual developments.

The graphic below shows a simple bus route which does not deviate off of the main street it is serving. In the graphic, the red arrow shows service in one direction, for example westbound service, and the blue shows the same bus route operating in the opposite direction (in this example, eastbound service).

In the graphic, the westbound trip takes 25 minutes and the eastbound trip takes 25 minutes for a total of 50 minutes for the cycle, or round trip. In transit schedules, time is built in at the end of round trips to allow for "recovery". That is, if the bus begins to run late on one trip, they can "recover" at the end of the trip and begin the next trip on time. This allows for greater on-time performance and reliability of the service. In addition, time at the end of the line also allows the driver a short break to use the restrooms, etc.

**Example Transit Corridor**

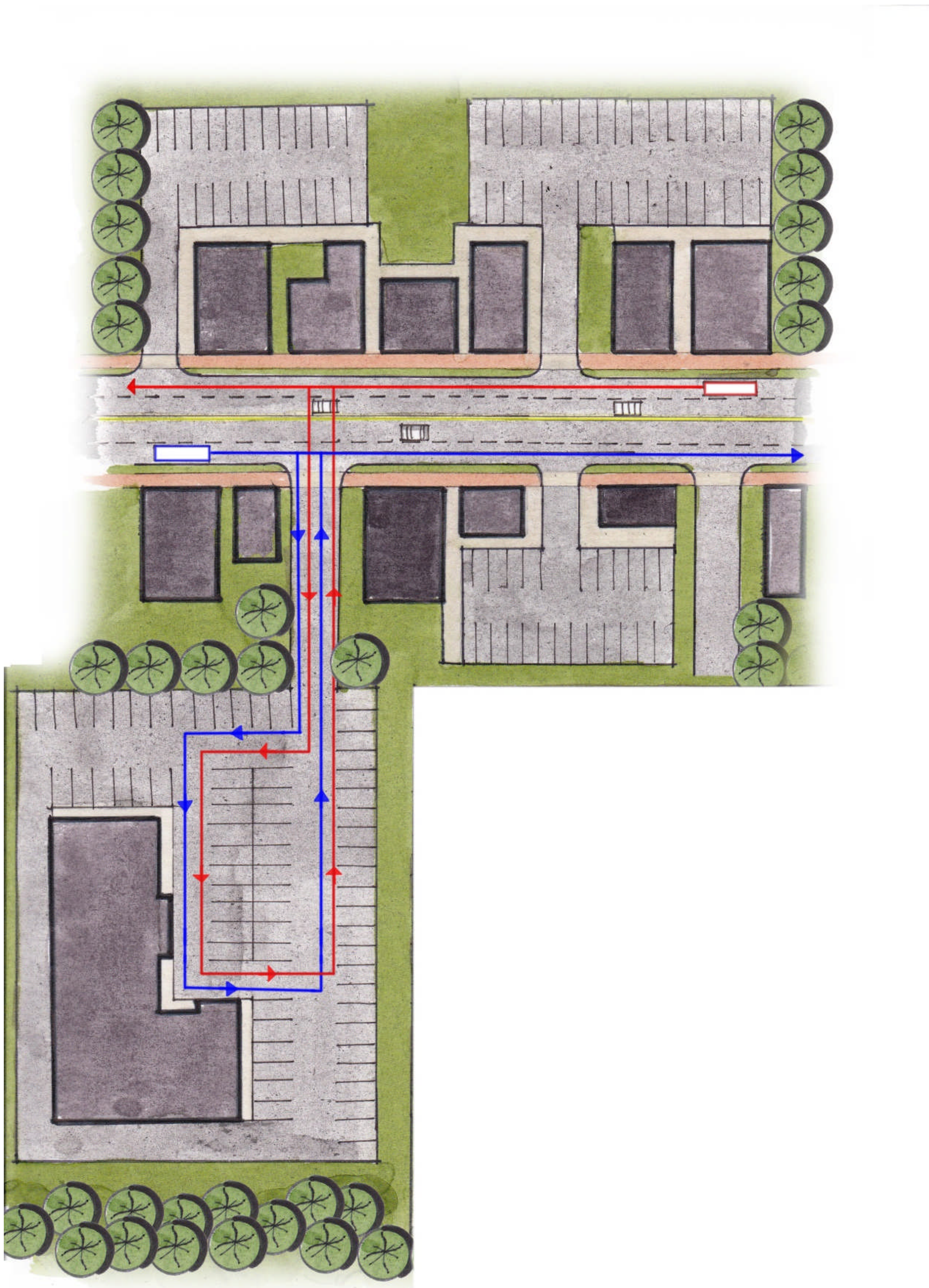


This schedule, as summarized below, is an ideal schedule in that it ensures reliability of service throughout the day by allowing for sufficient recovery time. With the added recovery time, the full scheduled cycle is 60 minutes. This would allow the transit provider to operate service along this corridor every 30 minutes using two buses.

| Measure | Requirements |
|---|---|
| Round Trip Running Time | 0:50 |
| Recovery Time | 0:10 |
| Total Cycle Time | 0:60 |
| Frequency of Service | Every 30 mins |
| Buses needed to maintain frequency | 2 |

However, as development occurs it can often change the nature of a corridor. In the graphic on the following page, a new commercial development has been built along the corridor shown above. In this example, there is no pedestrian network linking the development to the main thoroughfare and no safe and convenient way to cross the main thoroughfare. Therefore, to provide convenient service to this new development for transit riders, the bus route must now deviate off of the main road to serve the new development in both the eastbound and westbound directions (people need to get there and later make a return trip).

**Example Transit Corridor**
**with New Commercial Development**



Due to the multitude of factors that result in a very slow pace of traffic in commercial developments (e.g., double parked vehicles, delivery trucks, heavy pedestrian activity, etc), a bus would take a minimum of three minutes, on average, to traverse a commercial development and return to the main road.

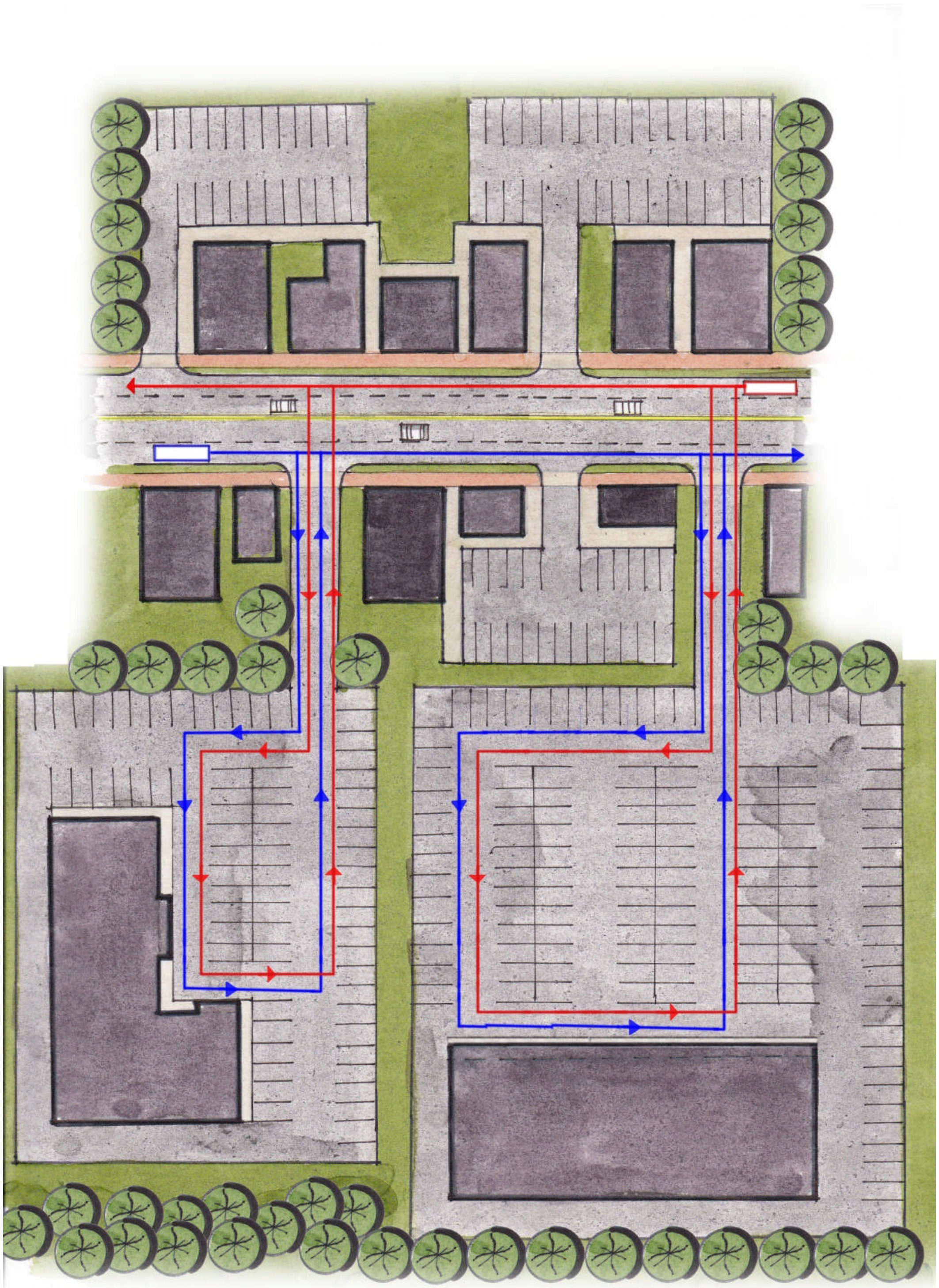
With the new routing shown in the graphic on the previous page, the westbound trip now takes 28 minutes and the eastbound trip takes 28 minutes. Applying this to the cycle time calculations renders the following results:

| Measure | Requirements |
|---|---|
| Round Trip Running Time | 0:56 |
| Recovery Time | 0:04 |
| Total Cycle Time | 0:60 |
| Frequency of Service | Every 30 mins |
| Buses needed to maintain frequency | 2 |

The bus route can still be operated at a frequency of every 30 minutes, however, the amount of recovery time has now been reduced to 4 minutes. This provides less of a chance to recover if a trip is delayed for some reason. This limited amount of recovery time could affect the overall reliability of the service in that multiple trips could end up operating late if the bus falls behind schedule.

The scheduling of a bus route becomes more complicated as development continues along a corridor. In the graphic on the following page, a second large commercial development is built along the corridor. Like the previous commercial development, there is no pedestrian network linking the development to the main thoroughfare and no safe and convenient way to cross the main thoroughfare. In addition, the developments are not connected to one another. Therefore, to provide convenient bus service to this newer development for transit riders, the bus route must now deviate off of the main road to also serve the newer development in both the eastbound and westbound directions.

**Example Transit Corridor**
**with Multiple New Commercial Developments**



Again, given that each deviation will require at least three minutes to serve the development and return to the main road, another six minutes is now added to the round trip running time of the route. The table below shows the effect of this on the schedule for the bus route:

| Measure | Requirements |
|---|---|
| Round Trip Running Time | 0:62 |
| Recovery Time | 0:00 |
| Total Cycle Time | 0:62 |
| Frequency of Service | ? |
| Buses needed to maintain frequency | ? |

With these deviations, the total cycle time is now over 60 minutes requiring a decision about the bus route. One option is to reduce service from every 30 minutes to perhaps every 40 minutes which makes the service much less convenient. The second option would be to add a third bus to the cycle to maintain the 30 minute frequency, but using a third bus to cover the route will increase the cost significantly.

What this example shows is that developments that are not in line with the transit supportive site planning criteria put forth in this report can have material effects on the quality and cost of local transit service. Making transit less convenient and more costly runs counter to the goal of promoting transit and other alternative forms of transportation in a community.

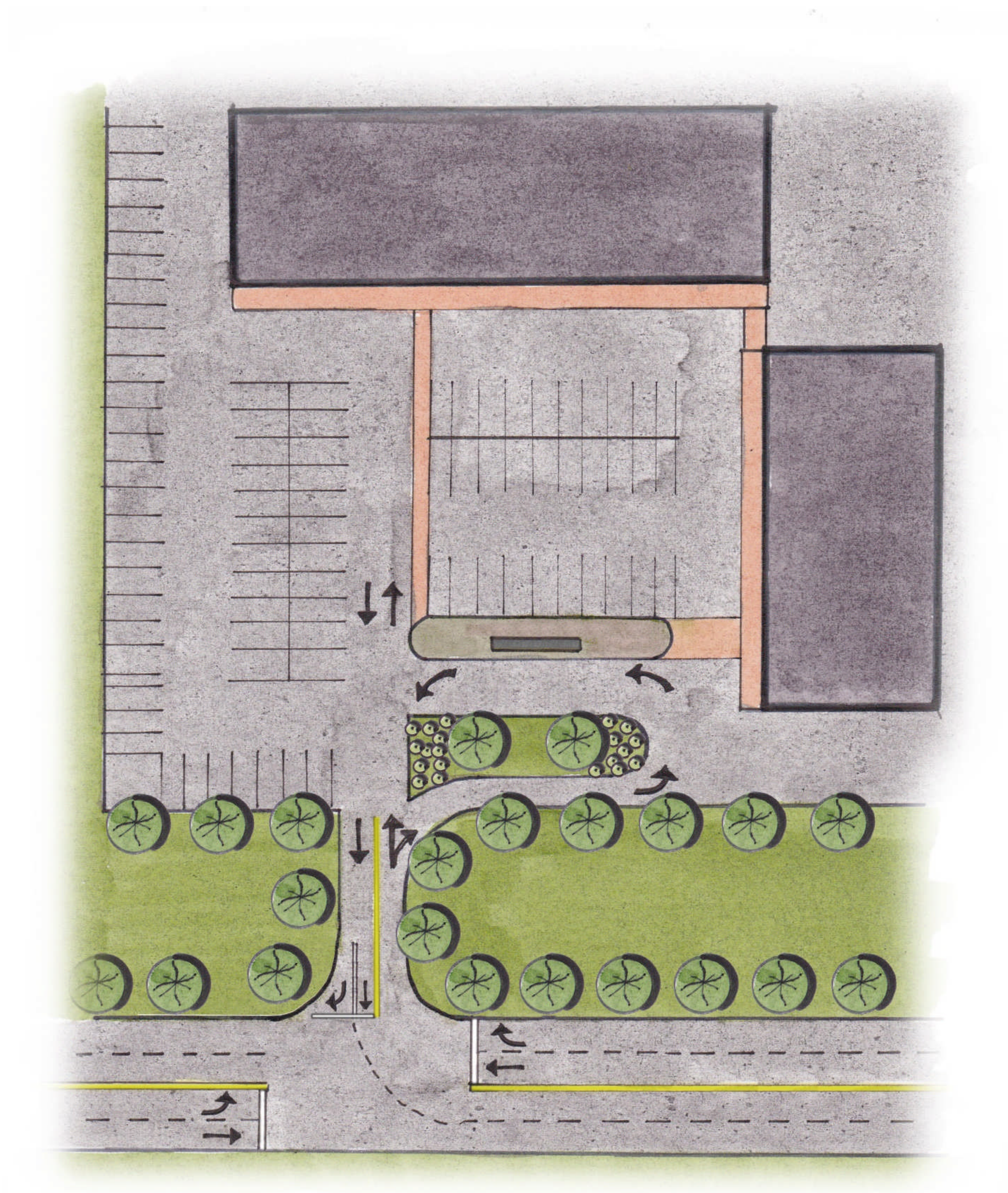
**When these conditions cannot be met....**

There may be conditions that require buildings to be set further back than 235' from the road and/or there is no possibility to allow for pedestrian access to the site. When this is the case, it is often necessary for transit buses to leave the main road and traverse a development to provide convenient transit access to the development. Under these conditions, there are certain design elements that can improve the efficiency and effectiveness of transit service to the site. These include:

- **Minimize the need for internal circulation** - If a bus route has to enter a development to provide service, the site plan should provide for a circulation pattern for buses that minimizes the amount of time the bus must spend within the development. This could be done by providing a transit stop at a location immediately within the development that allows transit riders direct access to a pedestrian network that connects to all areas of the development. The transit stop should also be situated in a way to allow buses to then quickly and feasibly exit from the development.

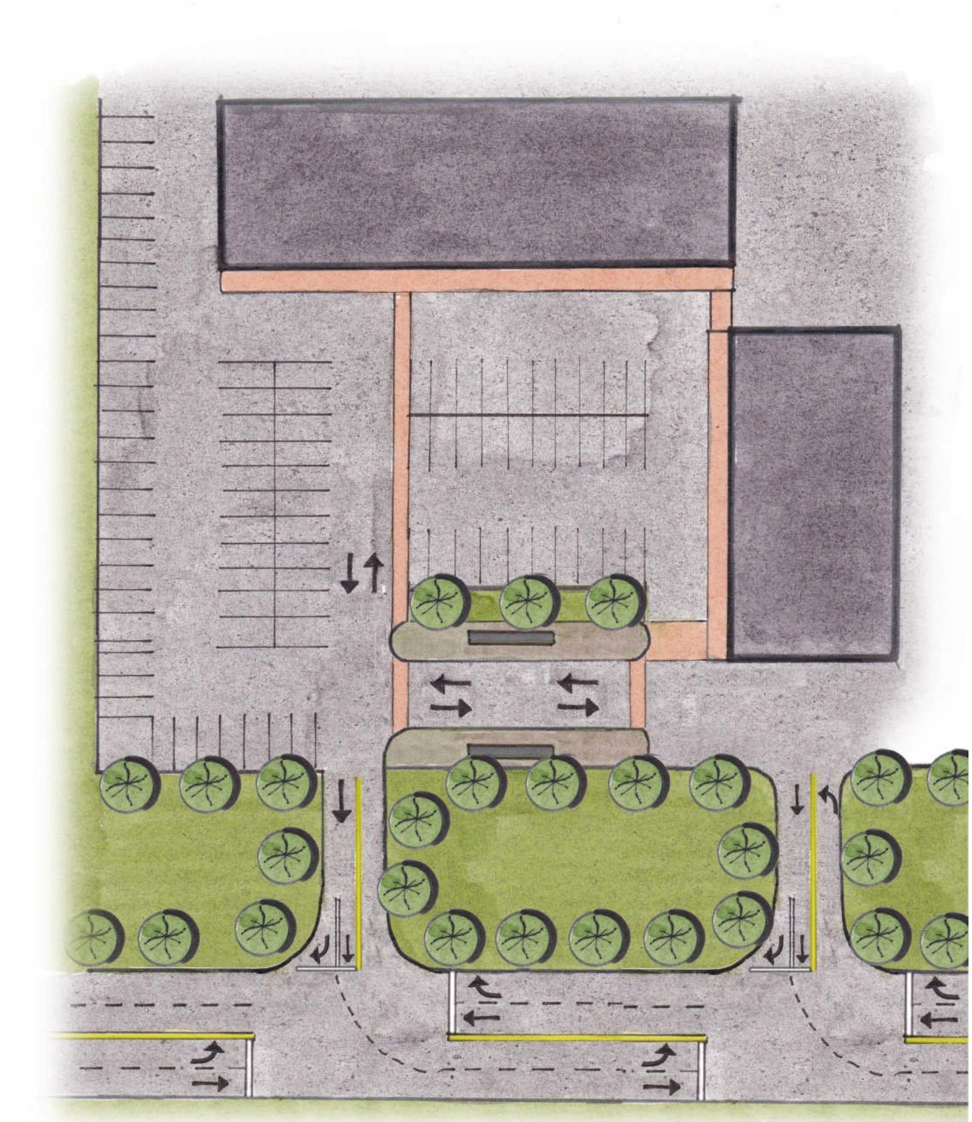
  *The graphic on the following page shows how a transit plaza could be incorporated into a site plan to provide a location immediately within a development that would act as the location of the transit stop for the development. Buses could serve the stop then return to the main road without the need to traverse the entire development.*

**Commercial Development with Transit Plaza**



- **Provide for a circulation pattern that allows for continuous forward motion** - Site plans should also provide for a circulation pattern that would allow buses to maintain continuous forward motion along a route rather than the need to "double back". The graphic below is a modification of the graphic on page 22. The site plan below incorporates a transit plaza with bus stops in both directions, which both connect to the pedestrian network. This layout allows buses to enter and exit the shopping center while maintaining forward motion in both directions of travel.

**Commercial Development with Transit Plaza**
**Accommodating Bi-Directional Movement**



In all instances, transit stops within developments must meet Americans with Disabilities Act (ADA) requirements. The length of the transit stop must have curbing and ADA accessible ramps connecting to the pedestrian circulation network. At the transit stop, there should be no vegetated strip between the sidewalk/passenger waiting area and the curb.

## 4. Centers

Municipalities should encourage the development or redevelopment of village centers or mixed higher density nodes of development at various junctures along corridors. Ideally, these nodes should have a mix of uses (i.e., residential and commercial) at higher densities than the immediately surrounding areas. They should also include pedestrian infrastructure and site designs complying with the concepts outlined in the above sections.

This is consistent with the goals of many community Comprehensive Plans which call for the redevelopment of traditional village centers, or the creation of activity centers through zoning that allows for mixed use development and higher densities.


*This rendering shows how the intersection of Broadway and 39th Street in Cetronia, South Whitehall Township could incorporate slightly higher densities and mixed uses to create a node of activity along a current bus route.*

The existence of higher density, mixed use nodes along a transit corridor can help to improve the productivity of transit service, that is, the number of people carried per trip. The nodes provide added destinations along a route and the mix of uses allows the route to serve different trip purposes.

The graphics below show two hypothetical corridors. Corridor A shows a corridor running between a low density suburban residential and highway commercial area connecting to a central business district (CBD). Corridor B shows the same corridor with two higher density mixed use development nodes along the corridor.

**Corridor A**


**Corridor B**


Demand for transit service along Corridor A will follow a pattern of people boarding at various stops along the route in the morning peak and deboarding the bus in the CBD. Very few passengers will get off at stops along the corridor prior to the CBD. Also, trips emanating from the CBD in the morning and heading out to the end of the corridor will receive very limited demand since low density residential areas are not prime attractors of incoming trips during the morning peak.

During the afternoon along Corridor A, the opposite pattern will be observed with most riders boarding the bus in the CBD and deboarding at various stops along the route. Very few riders will board the bus outside of the CBD. Also, transit trips traveling from the end of the corridor into the CBD will receive very little demand.

During the midday, the route will receive little demand in either direction because demand to and from a CBD is highly peaked in the traditional morning and afternoon peak commute times. The corridor has few other destinations to attract any other demand outside of those times.

Given the nodes of mixed use, higher density development along Corridor B, demand for transit service along the corridor will now follow a different pattern. First, overall demand will increase due to the added density and transit supportive development. Also, during the morning peak, the primary trip pattern will still be from the residential areas to the CBD, however, more passengers will also be deboarding the bus in the nodes to access the new destinations. Also, transit trips in the opposite direction during the morning will attract more demand with riders boarding in the CBD and the inner parts of the corridor traveling out to destinations in the nodes. Similar diversification of demand will be observed during the afternoon peak.

In addition, the mix of uses in the nodes will result in increased demand for midday service along the corridor with riders traveling from various origins to destinations within the nodes.

**The most important benefit of the addition of these nodes is that demand for transit service along this corridor has been enhanced without the need for costly additions of new routes or the extension of an existing route.**

**Summary**

To assist municipalities in determining whether their community in general or specific development plans can be considered transit supportive, the table below provides a checklist of the points covered in this document.

| Community Wide |
|---|
| Does the community have sufficient densities of employment and population along key thoroughfares to support desired transit levels in accordance with LANta's guidelines? |
| Does the community have a comprehensive sidewalk network including:<br>Sidewalks on both sides of all streets and throughout commercial developments;<br>Marked crosswalks at intersections;<br>Pedestrian islands for crossing wide streets; and<br>Pedestrian only phases in traffic signals where pedestrian traffic is heavy? |
| Does the community have mixed use nodes with enhanced densities and pedestrian infrastructure along major thoroughfares? |
| Specific Development Plans |
| Is the development located along a LANta route and does that route **currently** provide sufficient service to meet the nature of the demand anticipated? |
| Can pedestrians use accessible sidewalks and marked crosswalks to walk into and out of this development from both sides of the street on which the development is located? |
| Can pedestrians use accessible sidewalks and marked crosswalks to walk throughout the development? |
| Are the primary buildings situated within a walk of 235 feet for developments of over 50,000 square feet and within a walk of 150 feet for developments under 50,000 square feet? |
| If the above conditions are not met, does the plan include a designated transit stop that:<br>Allows for minimal circulation by LANta buses within the site;<br>Allows LANta buses to maintain continuous forward motion; and<br>Is connected to a comprehensive pedestrian network throughout the site? |

In addition, many employers express interest in adopting transit supportive policies. Some simple steps employers can take to make their workplaces more transit supportive include:

- When choosing locations for your business, locate along a corridor which already receives the level of transit service you anticipate will be needed by your employees (e.g., if your business has night shift workers, make sure there is transit service in the evening hours when assessing locations);
- Choose to locate in buildings which meet the transit supportive development guidelines described in this document; and
- Provide financial incentives to your employees to use transit to commute to work (i.e., discounts on transit passes).

Municipalities, developers and employers all share goals with LANta in promoting transit and transit use in the Lehigh Valley. Following the precepts outlined in this document is important in meeting that goal, but it should also be stressed that it is important to bring LANta into discussions regarding new developments or redevelopments early in any process so that LANta planners can make suggestions on how to best accommodate transit and transit riders on the site.

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