

# HOW TO MAKE YOUR COMMUNITY TRANSIT READY



## Setting the Stage for Transit



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**Metra**



**pace**

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- ▶ Pace  
[www.pacebus.com](http://www.pacebus.com)

*Prepared for the Regional Transportation Authority by Teska Associates, Inc. and Fish Transportation Group.*

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# SETTING THE STAGE FOR TRANSIT

## GUIDEBOOK

### Content Overview

**Setting the Stage for Transit** is a guidebook to provide communities with information on best practices to encourage transit use. It also serves as a “how to” design manual for transit supportive development, highlighting case studies and resources for further learning.



#### intro

Focuses on the benefits of transit, how service decisions are made, and steps that can be taken to encourage transit.



#### transit

Identifies the different types of transit and the densities, facilities, parking and land use characteristics needed for each type of service.



#### scenarios

Looks to the future by focusing on three typical existing land use scenarios and how to introduce transit and apply transit-supportive design.



#### actions

Presents processes, strategies, and funding opportunities to help implement projects that welcome transit.



#### resources

Includes a list of publications, organizations and additional online resources.

Click buttons at right to jump to section. →



# PART 1

## INTRO



### The Benefits of Transit

Transit brings together people, jobs and services. Northeastern Illinois has the 3rd largest transit system in the nation offering a variety of transit choices, from regional fixed-routes to community-based services. Local leaders recognize the value that transit brings to their community through increased accessibility, convenience and choice. Serving as a primary mode of getting residents to jobs and employees to local businesses, transit is a critical component to the regional economy. Effective transit service can reduce congestion on our region's roadways and make trips to work, stores and services easier. **If you are interested in increasing ridership on your existing transit services or adding new or expanded transit service to your community, this guidebook serves as a resource for what you can do to help make it happen.**

### Transit Service is Responsive to Demand

The Chicago area is home to an assortment of communities, land use patterns, and local characteristics. The variety of transit choices offered allows for different communities and development styles to be accommodated. There must be sufficient number of potential riders created by nearby retail, housing, and civic destinations for transit services to function effectively. Transit options respond to the demand created by potential riders, fitting the best type of transit service to match local demand and usage.

The RTA and its service boards (CTA, Metra and Pace) evaluate a variety of factors when determining ridership demand and appropriate transit services. In the Chicago region, transit demand is primarily driven by population and employment densities, with certain groups such as senior citizens generating more transit trips per person.

Demand and ridership are critical to the operations of transit. Transit agencies are required by federal and state government to recover a percentage of their costs through fares. Due to the expense of transit infrastructure investments, service needs, and limited funds available, transit agencies plan years in advance for service expansions. **This guidebook helps you determine the best type of transit service for your community based on demand and how to make your community more transit-friendly.**



A CTA train passes over a Metra train. Source: Christopher & AmyCate/Flickr

### Proactive Community Efforts

Communities can be proactive in creating an environment conducive to transit by conducting transit supportive planning and considering local financial investments to transit service. To be more competitive for increased transit service, communities are encouraged to plan for transit by supporting development that has sufficient densities, mix of land uses, and available land for transit facilities. Remember to keep in mind the three “D’s” when it comes to transit:

- **Design** – Utilize design principles to make it easy for people to take transit and reduce cost of transit per rider.
- **Density** – By locating sufficient housing and jobs near transit, it is more feasible for people to use transit
- **Diversification** – A mix of housing, retail, and employment makes transit more accessible for all users

This guidebook presents steps communities can follow to make their community more supportive of transit service.

### Cost Considerations

Increasingly, communities need to be aware of and participate in raising funds for operating transit services for residents and/or employees. The cost of transit can be divided into capital expenses, such as stations, passenger amenities, and vehicles, and operational expenses, such as employees, fuel, insurance and other on-going expenses. Estimating costs is complex and includes a variety of factors specific to the location, type and quantity of service. *Setting the Stage* sets out ways to enhance cost effectiveness by building demand for transit service, and reduce costs through more efficient routes and potential shared capital expenses such as parking.

Transit	Capital Expenses	Capital Expenses	Operating Expense Factors	Operating Expenses
<b>Pace Community Based Transit</b>	Few upfront expenses other than vehicles	Low	Cost per rider, contributions from community or employer to defray expenses	High
<b>Pace Fixed Route Bus</b>	Bus pads, shelters, sidewalks, and potentially turnout locations, vehicle costs	Medium	Service hour operating costs, cost per rider, contributions from community	Medium
<b>CTA Fixed Route Bus</b>	Pads, shelters, bus pads, and vehicles	Medium	Cost per rider, service hour operating costs and frequency of service	Medium
<b>Arterial Bus Rapid Transit</b>	Bus shelters, bus lanes/pullouts, vehicle costs, park-n-ride lots	Medium	Service hour operating costs, frequency of service, growth in ridership	Medium / Low
<b>CTA Rail</b>	Rail stations, rail cars, and necessary rail infrastructure	High	Cost per rider, service hour operating costs and frequency of service	Low
<b>Metra Rail</b>	Rail stations, rail cars, rail infrastructure and parking; Communities expected to pay for stations and improved amenities	High	Cost per rider, operating arrangements, and track availability	Low

# Getting Started

Increasing ridership and expanding transit is a commitment requiring long-term planning and budgeting and creating partnerships with the appropriate transit agencies. This guide will explain the following steps your community can take to determine what types of transit are most appropriate for your community.

## 1) Learn

**The first step involves understanding your community and the types of transit service that are currently or potentially available.**

- Transit demand;
- Pedestrian and bike systems support for transit;
- Variety of transit services offered by the transit agencies;
- How transit agencies make service decisions;
- That one size does not fit all and the most applicable transit service will depend on unique community characteristics;
- Understanding of markets served.

## 2) Vision

**The second step is to develop a vision of the type of community you want to be, and how transit fits into your community's vision.**

- The vision may be the result of a comprehensive planning process or visioning exercise;
- The vision should include how transit can help you meet your community's goals;
- The appropriate mode(s) of transit for your community will differ based on your vision.



Source: Teska Associates, Inc.

## 3) Community Goals

**Once a community vision is established, specific goals or principles should be developed that provide further explanation to implement the vision.**

- Goals help the community develop priorities;
- Goals cover a broad spectrum of inter-related topics, such as economic development, environment, transportation and housing;
- Goals should be specific enough to serve as indicators to measure progress toward meeting the long-term vision for the community.





#### 4) Plan

Once you understand transit services and how they fit into your community's goals, the next step is to lead a planning process identifying short- and long-term actions your community can take to meet the goals. Key steps include:

- Outline transit strategies and needs;
- Develop transit supportive land use plans incorporating alternative transit modes and develop revisions to local codes;
- Develop an implementation plan that clearly lays out specific actions: who is responsible, timeframe for implementation, and resources that may be needed;
- Identify potential funding sources.

#### 5) Implement

Once local planning is completed, the community can begin to implement changes that will help support existing and future transit. Implementation can include:

- Acting on recommendations of the transit supportive land use plans;
- Working with developers to pursue development projects and opportunities that are consistent with local plans and transit services;
- Consider local financial participation to support transit services, from station area improvements to support for community-based services.

## CASE STUDY

### Tinley Park Legacy Plan

*Designing and Applying Visionary Goals*

**About:** Adopted in April 2010, the Tinley Park Legacy Plan sets forth a clear vision and preferred urban design arrangements for the downtown. The plan implements a strategic 40-year vision for the downtown corridor of Oak Park Avenue between 167th and 183rd streets.

**Strategy:** The plan aims to spur economic growth by attracting higher density housing and retail shops to the heart of the downtown sector, between 172nd and 176th streets, within walking distance of the Oak Park Avenue Metra train station. The outlying areas would shift to residential districts and complement the inner core.

#### Downtown Redevelopment Goals

Goals & regulations were established during the planning process to set forth priorities and ensure the continued function of contemporary land uses, while creating standards and design criteria for infill and redevelopment projects. Examples include:

1. Regulate building form to create a street wall and create a pedestrian setting.
2. Prohibit the placement of off-street parking in front yards.
3. Prohibit drive-through facilities to encourage an environment where pedestrian comfort and safety come first and curb cuts are minimized.
4. Regulate streets and rights-of-way to encourage landscaped streetscapes and complete streets that accommodate multiple modes of travel.
5. Concentrate commercial development in a walkable downtown core.



Source: <http://www.tinleypark.org/>

# PART 2

## TRANSIT



### **Getting Started: Understanding Transit and the Types of Service that Fit your Community.**

A range of transit services provide mobility for various land use patterns – from dense, urban development within the City of Chicago and inner-ring suburbs, to walkable downtowns and neighborhoods of older, established suburban communities to low density, auto-oriented outer-ring suburbs. In order to support more transit, communities should understand the various types of service available and the characteristics, facilities, and access needs unique to each. Quick descriptions of each transit service are included here; detailed characteristics of each are outlined in the pages that follow.

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#### **Pace Community-Based Transit**

Provides origin-to-destination or short distance mobility within communities. Community-based services include demand-response services, vanpools, subscription services, fixed routes, and community circulators.

#### **Pace Fixed Route Bus**

Fixed route bus service is the most common mode of transit nationally. Typically traveling along collector and arterial roadways on an established schedule, fixed route buses make frequent stops and operate in mixed traffic. Fixed route service can also operate “express” and on area expressways to connect activity centers that may be far apart. Pace fixed routes frequently serve Metra or CTA rail stations.

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#### **CTA Fixed Route Bus**

CTA fixed route buses serve the City of Chicago and inner-ring suburbs. A number of express services are provided. Additionally, several routes also provide 24-hour service, known as “Owl Service.” CTA fixed routes typically follow the city’s grid street network, providing a network of cross-town routes supplementing the area’s rail system.

#### **Arterial Bus Rapid Transit**

Arterial Bus Rapid Transit provides enhanced bus service where there is sufficient demand for an increased level of investment. Increased speed, reduced travel times, and improved comfort levels are provided by strategies such as longer distances between stops, specialized vehicles, bus priority through intersections, exclusive bus lanes, rapid and convenient fare collection, and stops with high levels of customer amenities.

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#### **CTA Rail**


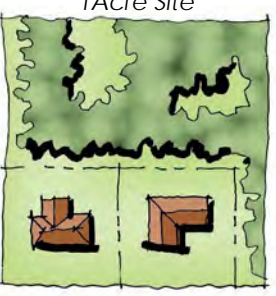
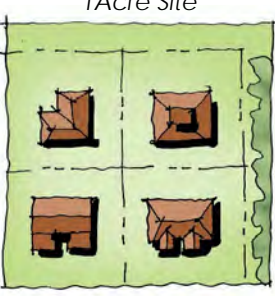
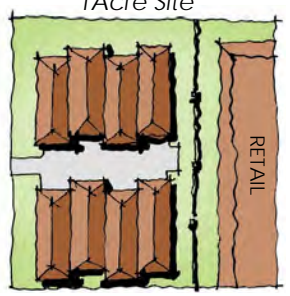
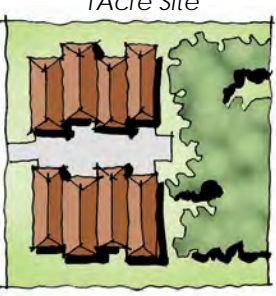

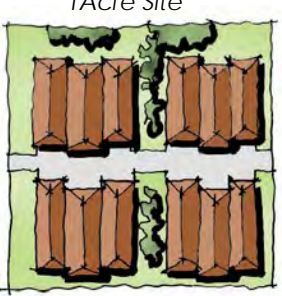
The CTA Rail system consists of train lines spanning the City of Chicago and neighboring communities and is known locally as the “L”. The “L” provides higher speeds and greater capacity than CTA’s fixed route bus service. Radiating out from downtown, it is the fastest mode of travel to the Loop for many transit-riders, while also providing mobility throughout the city and adjacent suburbs.

#### **Metra Commuter Rail**

Metra’s commuter rail system is comprised of 11 separate lines radiating out from Chicago’s Loop, and serving more than 100 communities at 241 rail stations. Metra commuter rail serves passengers through stations throughout the Chicago metropolitan area, providing travel towards (inbound) and away (outbound) from downtown Chicago.



# Service Comparisons

Pace Community Based Transit	Pace Fixed Route Bus	CTA Fixed Route Bus	Arterial Bus Rapid Transit	CTA Rail	Metra Commuter Rail
					
CHARACTERISTICS					
<ul style="list-style-type: none"> <li>• Curb-to-curb service</li> <li>• Flexible routing</li> <li>• Short trips</li> <li>• Scheduled or “on demand”</li> </ul>	<ul style="list-style-type: none"> <li>• Operate on set schedules</li> <li>• Frequencies tailored to demand</li> <li>• Variety of bus sizes</li> <li>• Frequent stops</li> <li>• Operates primarily in suburbs</li> </ul>	<ul style="list-style-type: none"> <li>• Frequent service</li> <li>• High capacity buses</li> <li>• Frequent stops</li> <li>• Operates primarily in City of Chicago</li> </ul>	<ul style="list-style-type: none"> <li>• Frequent service</li> <li>• Enhanced stop and vehicle comfort</li> <li>• Transit priority treatments on streets and intersections.</li> </ul>	<ul style="list-style-type: none"> <li>• Frequent service all day</li> <li>• High capacity and speed</li> <li>• Dedicated right-of-way</li> <li>• High fixed and operating cost</li> </ul>	<ul style="list-style-type: none"> <li>• Commuter oriented</li> <li>• Long trip distances</li> <li>• High capacity and speed</li> <li>• Wide station spacing</li> </ul>
OPTIMUM DENSITY NEEDED					
<p><b>2 - 6 DU PER ACRE</b> - and/or - <i>Employment Density Varies</i></p>	<p><b>4 - 10 DU PER ACRE</b> - and/or - <b>30 Employees Per Acre</b></p>	<p><b>8-14 DU PER ACRE</b> - and/or - <b>75 Employees Per Acre</b></p>	<p><b>10-16 DU PER ACRE</b> - and/or - <b>75 Employees Per Acre</b></p>	<p><b>14+ DU PER ACRE</b> - and/or - <b>125+ Employees Per Acre</b></p>	<p><b>10+ DU PER ACRE</b> - and/or - <i>Employment Density Varies</i></p>
<p>1Acre Site</p>  <p>2 DU* Per Acre</p>	<p>1Acre Site</p>  <p>4 DU* Per Acre</p>	<p>1Acre Site</p>  <p>8 DU* Per Acre + Retail</p>	<p>1Acre Site</p>  <p>8 DU* Per Acre</p>	<p>1Acre Site</p>  <p>15 DU* Per Acre + Retail</p>	<p>1Acre Site</p>  <p>12 DU* Per Acre</p>
EXAMPLES					
<p>Lake-Cook Shuttle Bug; Joliet Call-n-Ride; Vanpools</p>	<p>Niles, Harlem Ave; Cermak Rd; Metra Connecting Services</p>	<p>Lawrence Ave, Chicago</p>	<p>Jeffery Blvd. Corridor, Chicago; several others planned</p>	<p>Downtown Skokie/Oakton Street Station</p>	<p>143rd Street Metra Station, Orland Park; Tinley Park; Arlington Heights</p>

\* DU = Dwelling Units

# Pace Community-Based Transit

Community-based services originate from location centers and provide short-distance mobility, allowing passengers to travel directly to their destinations. Services come in many forms, including Demand-Response, Vanpools, Flexible Bus Routes, and Circulators that provide connections to bus routes and CTA/Metra rail services. Communications technology is utilized to ensure connections with other services and respond to real-time customer service requests.



Source: <http://abilitychicagoinfo.blogspot.com>

## SERVICE MEASURES

### WHERE CAN I ACCESS THIS SERVICE?



**Service Coverage**  
Communities, townships, small areas

### WHERE IS THE SERVICE FOCUSED?



**Configuration**  
Flexible services within communities or small geographical areas

### HOW FREQUENTLY DOES IT COME?



**Service Frequency**  
Flexible schedules; typically weekday only

### HOW MANY PASSENGERS PER HOUR?



**Passenger Capacity**  
6-12 for passengers per hour for Demand Response; 25-150 for flexible service; and 50-200 for circulators

### HOW FAR BETWEEN STOPS?



**Stop Spacing**  
No set stops; curb-to-curb service based on user address and destination

## WHAT DO YOU NEED TO SUPPORT COMMUNITY-BASED TRANSIT?

Below are four factors to keep in mind if your community would like to develop community-based transit.

### 1. Density to Support Ridership

- Flexible services require 2-4 dwelling units per acre;
- Circulators require 2-6 dwelling units per acre;
- Employment density per acre varies.

### 2. Land Uses that Support Ridership

- Since community-based transit is geared towards short-distance trips, the layout of land uses is less of a concern than the road network within the community.

### 3. Transit and Access Facilities

- No facilities are typically needed, rather there are transport vehicles that originate from transportation centers located at major activity centers.
- Priority employee parking for car/vanpools.

### 4. Costs

- Pace regularly evaluates costs for existing and future community-based transit based on productivity, recovery ratio, subsidy per rider, passenger miles, cost per vehicle, cost per mile, and cost per hour.
- Communities and employer contributions are often needed to provide services.

# Pace Community-Based Transit

## DEMAND - RESPONSE

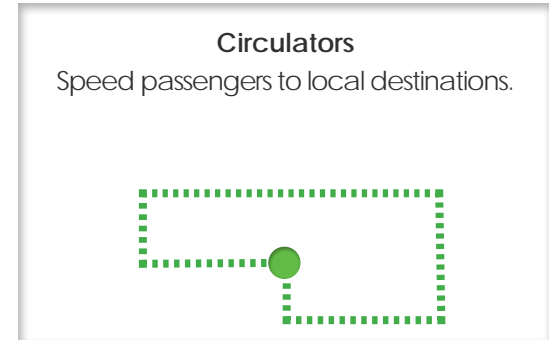
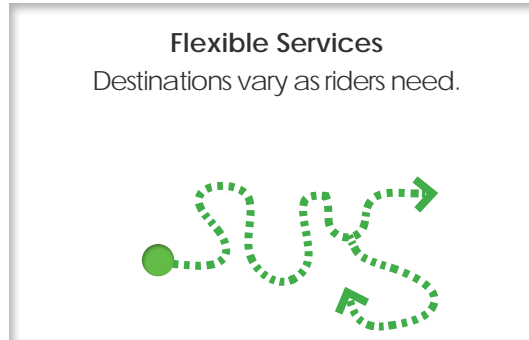
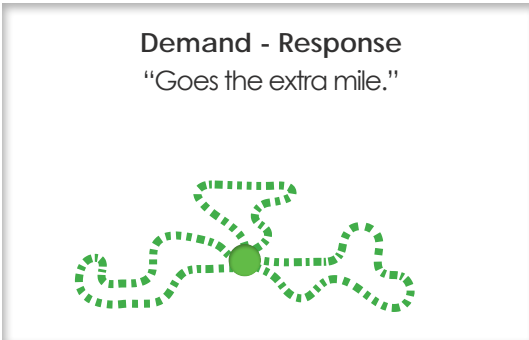
- **Dial-a-ride**  
Offers transit trips to residents who travel within a designated geographic service area, typically seniors and people with disabilities. Dial-a-ride is set up via a joint partnership between Pace and a township or municipality and service is generally reservation-based.
- **Call-n-ride**  
Reservation-based, curb-to-curb service that picks up riders and takes them anywhere within a designated geographic service area. Service is open to the general public. Similar to Dial-A-Ride this service offers curb-to-curb service and in many instances consumers can reserve service for the same day. Flat rates are set by Pace.
- **ADA Paratransit Service**  
ADA (Americans with Disabilities Act) Paratransit Service is provided within 3/4 mile of fixed route service and mirrors fixed route hours and days. Pace operates this service across the entire six-county region, including Chicago, but passengers call different phone numbers to reserve rides depending on where they live.

## FLEXIBLE SERVICES

- **Traditional Vanpool - Employer Shuttle Program**  
The traditional vanpool/employer shuttle program offers employees that live and work near one another and share similar schedules the opportunity to form a group that conveniently gets them between home and work. The vanpool is designed to transport 5-13 people to work in a Pace van. Employers lease a Pace van at a cost for \$750 per month for work-related passenger trips. Each rider pays a low monthly fare based on distance and the number of participants. This covers the costs of the vanpool including fuel, maintenance, insurance, tolls, roadside assistance, and van washes. The primary driver does not pay a fare.
- **Pace Vanpool - Metra Connector**  
Allows Pace vans to be parked at a Metra station near worksites, so employees can take the train and then use the van to complete their commute to work. Each rider pays a monthly fare and at least half of users must purchase a monthly Metra pass or 10-ride ticket.

## CIRCULATORS

- **Local Community Circulators**  
Local community circulator service is a local bus service that provides trips within a community. These services, typically using smaller vehicles, serve community demands and destinations, and can also provide connections to other transit services. The service type varies based on the area to be served. For example, some circulators are fixed routes, while other services are more demand responsive or flexible services such as route deviations.
- **Community Vehicle Program**  
A community runs a fixed route service within defined geographic boundaries. This service is best utilized for trips that have a large number of passengers. Municipalities lease Pace vehicles or fund their own vehicles to offer public transportation service. The municipality is responsible for the operation and maintenance costs. Traditionally mini-buses are used to provide service.



# Pace Fixed Route Bus

Fixed route bus service provides the backbone of the Pace bus network. These routes provide frequent service, connect major regional activity centers, and provide transit mobility to population centers. Fixed route transit travels along collector and arterial roadways making frequent stops, operating in mixed traffic, and offering flexibility not found with rail service. Routing and schedules can be adjusted to better serve travel markets and high ridership producing routes can evolve to bus rapid transit or rail service. Pace fixed route buses operate along the most direct and efficient routes between activity centers.


**Park-n-ride facilities** are parking lots with connections to public transport, allowing commuters to leave their vehicles and transfer to a bus, rail, or carpool. There are four general types of Pace park-n-ride lots (see chart); the optimum size is defined as 1 space per 100 population within the two-mile express bus market area.

PACE PARK-N-RIDE LOT CLASSIFICATIONS

Lot Type	Size	Location/Characteristics
<b>Regional</b>	550+ Spaces	Adjacent to highways/major arterials; could be part of a transportation center or mixed use development.
<b>Subregional</b>	76–100 Spaces	5-minute drive time to highway or major/minor arterial; could be part of a transportation center or mixed use development.
<b>Local</b>	25–75 Spaces	15-minute drive time to highway or major/minor arterial; usually leased by Pace; locations include shopping centers, churches, and forest preserve parking areas.
<b>Vanpool</b>	< 25 Spaces	Within 10-minute drive time of vanpool participants' residences; no more than 60 minutes from destination; usually leased by Pace; locations include shopping centers, churches, and forest preserve parking areas.


## SERVICE MEASURES

### WHERE CAN I ACCESS THIS SERVICE?




**Service Coverage**  
The average transit user will typically walk no further than 1/2 mile to the nearest bus stop

### WHERE IS THE SERVICE FOCUSED?



**Configuration**  
Suburban service on arterial streets

### HOW FREQUENTLY DOES IT COME?




**Service Frequency**  
30 min: peak;  
60 min: offpeak;  
weekday, evening,  
and weekend service

### HOW MANY PASSENGERS PER HOUR?



**Passenger Capacity**  
150-1,200 passengers per hour

### HOW FAR BETWEEN STOPS?



**Stop Spacing**  
Every 1-2 blocks (1/8 - 1/4 mile); major activity centers

## WHAT DO YOU NEED TO SUPPORT PACE FIXED ROUTE BUS?

Below are four factors to keep in mind if your community would like to develop Pace Fixed Route Bus.

### 1. Density

- 4-6 dwelling units per acre (60 min frequency);
- 6-10 dwelling units per acre (30 min frequency) and/or 30 employees per acre.

### 2. Land Uses

- Clustered retail/shopping centers;
- Diversity of housing types and densities;
- Higher density within 1/4-1/2 mile of transit;
- Mixed-use (retail, services, residential, office);
- Public places, civic space, parks, and plazas.

### 3. Transit and Access Facilities

- Facilities range from a sign and waiting pad to a shelter with lighting, electronic passenger information and bicycle storage;
- Sidewalks and pedestrian accommodations;
- Park-n-ride lots can be provided.

### 4. Costs

- ~ \$500,000 per bus;
- Costs are determined by length and frequency of route;
- Sufficient number of riders are needed to ensure route viability;
- Community contributions are encouraged and may be needed to help fund service and provide amenities, including bus pads and sidewalks to access stations.

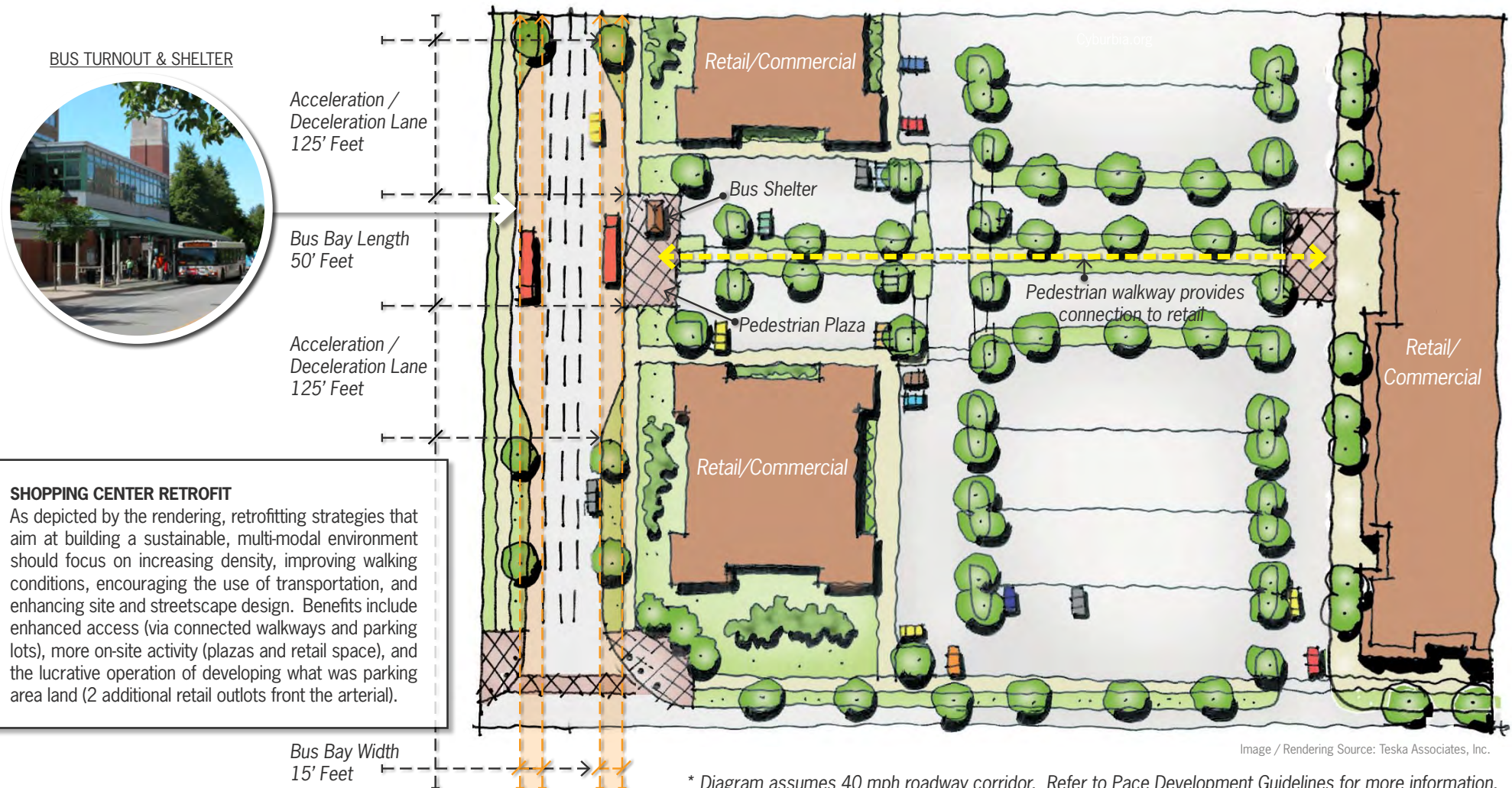


# Suburban Multi-Modal Planning & Design

How to plan for bus access while creating safe, walkable environments

## BUS TURNOUTS

Bus turnouts (highlighted in orange below) are stop areas that are recessed from the thoroughfare. Bus turnouts are needed in areas where passenger volumes are high and the flow of traffic could be significantly impeded by stopped transit vehicles. According to Pace Development Guidelines, turnouts should only be located at mid-block bus stop locations, allowing buses to re-enter traffic more easily during gaps in the traffic flow. When planning for bus turnouts, the speed of the roadway should be considered along with pedestrian access from stop locations. Bus routes should not be diverted into shopping centers or other destinations that are set back from arterial roads. The diversion causes increased time to the routes and cost to the service; additionally, internal parking lots may not be designed or constructed to handle regular bus service.



# CTA Fixed Route Bus

Chicago Transit Authority's (CTA) bus routes serve Chicago and surrounding suburbs, moving people across town and providing a number of express services. Most routes run daily through late evening and several provide 24-hour service, known as "Owl Service". The CTA has a structured process for evaluating services and proposed changes that is tied to the annual budget, yet is responsive to small market changes throughout the year. The CTA Service Standards (July 2001) presents this framework and identifies five measures (service coverage, span of service, frequency of service, passenger flow, and minimum productivity) to be considered for new and existing service design, expansion, and reductions.



Source: gridchicago.com

## SERVICE MEASURES

### WHERE CAN I ACCESS THIS SERVICE?



#### Service Coverage

The average transit user will typically walk no further than 1/2 mile to the nearest route

### WHERE IS THE SERVICE FOCUSED?



#### Configuration

Local and express service on arterial streets

### HOW FREQUENTLY DOES IT COME?



#### Service Frequency

5-15 min: peak;  
15-30 min: offpeak;  
weekday/end,  
evening and rush hour  
service; some overnight

### HOW MANY PASSENGERS PER HOUR?



#### Passenger Capacity

400-2,000 passengers  
per hour

### HOW FAR BETWEEN STOPS?



#### Stop Spacing

Approximately 1/8 mile

## WHAT DO YOU NEED TO SUPPORT CTA FIXED ROUTE BUS?

Below are four factors to keep in mind if your community would like to develop CTA Fixed Route Bus.

### 1. Density to Support Transit

- At least 8-12 dwelling units per acre (30 min frequency);
- At least 12-14 dwelling units per acre (10-20 min frequency) and/or 75 employees per acre.

### 2. Land Uses to Support Ridership

- Attract development that can take advantage of frequent transit and pedestrian friendly site design;
- Clustered retail/shopping centers ;
- Diversity of housing types and densities;
- Higher density within 1/4-1/2 mile of transit;
- Mixed-use (retail, services, residential, office);
- Public places, civic space, parks, and plazas.

### 3. Transit and Access Facilities

- Facilities range from a sign and waiting pad to a shelter with lighting, electronic passenger information, and bike storage;
- Sidewalks and pedestrian accommodations.

### 4. Costs

- \$500,000-\$800,000 per bus;
- Costs are determined by length and frequency of route;
- Sufficient number of riders are needed to ensure route viability;
- Community contributions are encouraged and may be needed to help fund service and provide amenities.



CASE STUDY

## Lawrence Avenue Bus Corridor

### A Pedestrian-Oriented Transit Environment

**About:** The Lawrence Avenue Bus Corridor, served by CTA Bus #81, runs through the City of Chicago's Northwest Side and serves culturally diverse communities, unique mixed-use neighborhoods, commercial centers, and business districts. Just as prominent is the corridor's excellent accessibility to various transit facilities, including the Jefferson Park CTA Blue Line Station, Kimball CTA Brown Line, Lawrence CTA Red Line Station, Ravenswood Metra Station, and various CTA bus lines.

**Strategy:** While the Lawrence Avenue bus corridor has evolved to become a highly transit-accessible corridor, it has also created a more pedestrian-friendly environment by integrating streetscape improvements and adhering to "Complete Streets" fundamentals. Streetscape improvements, which include gateway signs, pedestrian-scale lighting, and buildings up to the street, are progressively being completed along the corridor, and they typically enhance the pedestrian environment and foster a sense of place for residents and visitors.

#### TRANSIT-FRIENDLY STRATEGIES

**Greater access** to multiple transit facilities rather than a single facility can enhance a corridor's appeal to businesses, employers, residents, and visitors.

**A pedestrian-friendly environment** can influence people's use of transit, boosting ridership and support for greater investment in transit-related improvements, such as enhanced bus stops and increased service.

**Investing in streetscape improvements** to reinforce economic development efforts and use of TIF funds to support redevelopment.

**Complete Streets** fundamentals can be integrated into almost any corridor, even if it is already well-established.

#### WHAT ARE "COMPLETE STREETS"?

Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities are able to safely move along and across a complete street. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations.



CDOT RENDERING OF LAWRENCE AVENUE STREETScape

Source: CDOT

# Arterial Bus Rapid Transit


Arterial Bus Rapid Transit comes in many different varieties from express bus to separated lanes with distinctive stations in roadway medians. Arterial Bus Rapid Transit combines technology with design and operating practices to allow buses to increase speed and reduce travel times, providing faster, more dependable service. Other benefits include high ridership, regional connectivity, and the creation of new travel markets that spark economic investment. Typical elements include combinations of Transit Signal Priority (TSP), roadway improvements including queue jump lanes (or bypass lanes), and/or real time transit information along arterial routes. Stations should be prominent and similarly branded. Locally referred to as Bus Rapid Transit (BRT) by CTA and Arterial Rapid Transit (ART) by Pace, both provide expedited bus service. They differ in that BRT may include dedicated bus lane while ART operates in mixed traffic. Six ART corridors have been selected by Pace to be implemented within a 10-year time frame, including Milwaukee, Dempster, Harlem, Cermak, 95th Street, and Halsted Street. The Jeffery Blvd. Corridor is the first BRT project from CTA and CDOT, future BRT plans include a Central Loop route that connects Union Station and Navy Pier, a route along the Western/Ashland Avenue Corridor, and others.



Source: KC-Photos.com

## SERVICE MEASURES

### WHERE CAN I ACCESS THIS SERVICE?




**Service Coverage**  
Urban/suburban areas with access via connecting rail and bus service, park-and-ride lots at major stations, and bike/ped access

### WHERE IS THE SERVICE FOCUSED?



**Configuration**  
Line service in exclusive lanes and/or with priority treatment

### HOW FREQUENTLY DOES IT COME?




**Service Frequency**  
5-15 min: peak;  
15-30 min: offpeak;  
evening and weekend service

### HOW MANY PASSENGERS PER HOUR?



**Passenger Capacity**  
1,000-3,000 passengers per hour

### HOW FAR BETWEEN STOPS?



**Stop Spacing**  
Stations every 1/2-2 miles

## WHAT DO YOU NEED TO SUPPORT BRT/ART?

Below are four factors to keep in mind if your community would like to develop BRT or ART.

### 1. Density to Support Transit

- At least 10-16 dwelling units per acre and/or 75 employees per acre.

### 2. Land Uses to Support Ridership

- Clustered retail/shopping centers;
- Diversity of housing types and densities;
- Higher density within 1/4-1/2 mile of transit;
- Mixed-use (retail, services, residential, office);
- Public places, civic space, parks, and plazas.

### 3. Transit and Access Facilities

- BRT/ART bus stops, transit centers;
- Dedicated bus lanes;
- Stations (branded and designed for ART/BRT);
- Shelters include electricity (heating, lighting);
- Transit Signal Priority (TSP) and real time information relating when the next bus will arrive;
- Sidewalks and pedestrian accommodations;
- Queue jump lanes where applicable;
- Park-n-ride lots can be provided if appropriate.

### 4. Costs

- Services are determined per vehicle and per service hour;
- Sufficient number of riders are needed to ensure route viability;
- Community contributions are encouraged and may be needed to help fund service and provide amenities.



CASE STUDY

# Milwaukee Avenue Corridor Plan

*Corridor Planning for Pace Fixed Route Bus*

**About:** The Milwaukee Avenue Plan is an outline for change along Niles' most important commercial corridor. The Village of Niles began the process of improving the Milwaukee Avenue Corridor in 2003 with a study funded by the Regional Transportation Authority (RTA). The purpose of this initial RTA study was to "improve Pace transit facilities and service along Milwaukee Avenue, within the context of an overall effort to improve the function and aesthetics of the Village's main commercial corridor." Since this initial study, the Village has received \$2.7 million in grant funding towards design and implementation.

**Strategy:** Improvements to transit facilities, new pedestrian amenities, streetscaping, traffic circulation, access to businesses, and potential redevelopment opportunities are major components that are addressed in the plan. Coordination with existing Pace service and the Niles Free Bus service was also explored. Additionally, Pace has identified Milwaukee Avenue as a priority corridor for an Arterial Rapid Transit (ART) system that will run from the Jefferson Park Transit Center in Chicago to Golf Mill Mall in Niles. One of the goals of the ART project is to improve bus travel time via traffic signal coordination and the application of Transit Signal Priority.

## NILES COURT DEVELOPMENT CONCEPT PLAN

### Transit Amenities

A dedicated bus lane extends along the length of the site from Dempster to Ballard Road. An ART station is provided for buses running on Dempster, with another station located around the corner on Milwaukee to facilitate quick transfers. Having the dedicated bus lane makes it possible for buses to remain out of the general flow of traffic making stopping more efficient.



Source: Camiros, Ltd.

# CTA Rail

The CTA Rail System, known locally as the “L”, consists of 8 train lines spanning the City of Chicago and neighboring communities. Carrying over 700,000 passengers every weekday, CTA rail provides regional access over its high speed system and is a primary mode of traveling to downtown Chicago. CTA rail works best in high demand corridors where ridership is sufficient to pay for its high, fixed costs in exclusive rights-of-way, stations, and vehicles. In these types of corridors, rail can economically move more people than bus. CTA identifies five measures (service coverage, span of service, frequency of service, passenger flow, and minimum productivity) for evaluating services and proposed changes for new and existing service design, expansion, and



Source: gridchicago.com

## SERVICE MEASURES

### WHERE CAN I ACCESS THIS SERVICE?



#### Service Coverage

Urban areas with access via connecting bus service, park-n-ride lots at major terminals, and bike/ped access

### WHERE IS THE SERVICE FOCUSED?



#### Configuration

Urban network with focus on the Central Business District (CBD)

### HOW FREQUENTLY DOES IT COME?



#### Service Frequency

3-12 min - peak;  
15-30 min - offpeak;  
weekday, weekend, evening, and rush hour service; some overnight

### HOW MANY PASSENGERS PER HOUR?



#### Passenger Capacity

3,000-24,000 passengers per hour

### HOW FAR BETWEEN STOPS?



#### Stop Spacing

Every 2-3 blocks downtown; 1/2-2 miles outside of downtown

## WHAT DO YOU NEED TO SUPPORT CTA RAIL?

Below are four factors to keep in mind if your community would like to develop CTA rail.

### 1. Density to Support Transit

- At least 14 dwelling units per acre and/or at least 125 employees per acre.

### 2. Land Uses to Support Ridership

- Attract development that can take advantage of frequent transit and site design that fits urban conditions and is convenient for pedestrians;
- Higher density within 1/4-1/2 mile of transit;
- Mixed-use (retail, services, residential, office);
- Clustered retail/shopping centers/destinations;
- Diversity of housing types and densities;
- Public places, civic space, parks, and plazas;
- Walkability and connectivity to bus lines;

### 3. Transit and Access Facilities

- Station and amenities (includes customer assistants, security, maintenance, small retail storefronts, heating lamps, electronic passenger information, and bike storage);
- Sidewalks and pedestrian accommodations leading to station;
- Bus route connections are preferred;
- Park-n-ride lots (primarily at out-lying stations that have supportive land uses and auto access).

### 4. Costs

- \$1.5 million per rail car;
- Station investments vary; priority is given where station demand is warranted;
- CTA evaluates service changes and makes adjustments within the constraints of budget and equipment availability; refer to the CTA *Service Standards* for guidelines on resource allocation decisions;
- Community contributions are needed and encouraged to provide new stations and improved station amenities;
- Station operating costs (customer assistants, security, and maintenance) are a considerable capital asset to build, maintain, and rebuild.



## CASE STUDY

## Skokie Oakton Street CTA “L” Station

*Village Uses Tax Increment Financing to Raise its Contribution for New Transit Station*

**About:** When the Village of Skokie began to experience a rebirth of residential growth in 2000 they set out to reinvigorate the community and capitalize on locational assets by enhancing walkability, nurturing commercial districts, and working to provide a range of housing options.

**Strategy:** In 2001, the Village completed an RTA funded feasibility study that determined that a Downtown Skokie Yellow Line station was both needed and viable. Village officials later lobbied for federal funds needed to carry out the project, and in subsequent years the Village secured approximately \$14 million in federal Congestion Mitigation and Air Quality (CMAQ) grant funds to build the Oakton Street station. The Village also committed about \$6 million through TIF district funds toward the project, and construction began in mid-2010. This planning initiative in combination with the Village's access benefits, destinations, residential and employment growth made the Village of Skokie an ideal location for a new downtown CTA station. The Village has continued to plan and implement transportation and land use related projects, strengthening the downtown and surrounding mixed-use districts. The Skokie Oakton Street Station officially opened on April 30th, 2012.

### TRANSIT-FRIENDLY FEATURES

- **Destinations:** There are nearby residential, shopping, dining, and cultural entertainment options.
- **Walkability:** The station is walking distance to Oakton Community College (4,000 current enrollment) and Skokie Public Library (2,000 visitors daily).
- **Transit:** 2 CTA bus lines (#54A North Cicero/Skokie Blvd. and #97 Skokie) and 2 Pace bus lines (#210 Lincoln Avenue and #226 Oakton Street, 3 blocks west) provide options for public transportation.
- **Employment:** 21 tenants and more than 1,200 employees occupy the Illinois Science + Technology Park that sits adjacent to the station.
- **Planning:** Community commitment to business and economic development.
- **Streetscape:** Sidewalks, bikeways, parks and walkway connectivity create an inviting place for pedestrians.



PASSENGERS BOARD AT THE OAKTON STREET CTA STATION



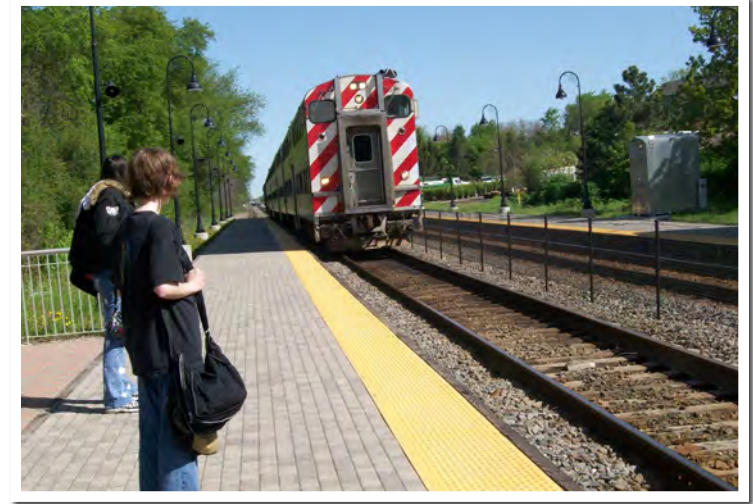
SKOKIE OAKTON STREET CTA STATION

Source: Teska Associates, Inc.

Source: Teska Associates, Inc.

# Metra Commuter Rail

Commuter rail service and stations can have the power to transform adjacent land uses. When properly planned, station area nodes can become focal points and magnets for economic development. In order for these nodes to thrive and function successfully, a number of planning and development elements should be addressed. Location on an existing Metra rail line can be advantageous compared to an area that requires an extension of service, but stations should maintain adequate station spacing. Additionally, the right type and mix of higher density developments within 1/2 mile of the station to support ridership is needed. Walkability, accessibility, and creating a safe environment for pedestrians are required for commuter rail station areas. Finally, adequate parking is a must for commuter rail that serves broad geographic areas.



Vernon Hills Metra Platform | Source: Teska Associates, Inc.

## SERVICE MEASURES

### WHERE CAN I ACCESS THIS SERVICE?



#### Service Coverage

Suburban areas and city neighborhoods with access via bike/ped access, connecting bus service and park-n-ride lots

### WHERE IS THE SERVICE FOCUSED?



#### Configuration

Connects suburbs and city neighborhoods to the Central Business District (CBD); also serves reverse commute

### HOW FREQUENTLY DOES IT COME?



#### Service Frequency

20-40 min - peak;  
60 min - offpeak;  
(peak travel direction)

### HOW MANY PASSENGERS PER HOUR?



#### Passenger Capacity

5,000-15,000  
passengers per hour

### HOW FAR BETWEEN STOPS?



#### Stop Spacing

Stations every 2-5 miles

## WHAT DO YOU NEED TO SUPPORT METRA COMMUTER RAIL?

Below are four factors to keep in mind if your community would like to develop Metra commuter rail.

### 1. Density to Support Transit

- At least 10 dwelling units per acre;
- Employment density per acre varies;
- Densities do not account for needed land for park and ride.

### 2. Land Uses to Support Ridership

- Higher density within 1/4-1/2 mile of transit;
- Mixed-use (retail, services, residential, office);
- Ground-floor retail/commercial services;
- Clustered retail/shopping centers/destinations;
- Diversity of higher-density housing types;
- Public places, civic space, parks, and plazas;
- Walkability and connectivity;
- Adequate commuter parking.

### 3. Transit and Access Facilities

- Commuter station / parking areas ~ 12.5 acres for new stations;
- Parking amount depends on ridership;
- Typically a minimum of 1,250 parking spaces for a new station on an extension;
- Shared parking is encouraged;
- Kiss-N-Ride, drop-off areas;
- Station layouts vary due to site conditions or special design requirements;
- Pedestrian and bicycle amenities.

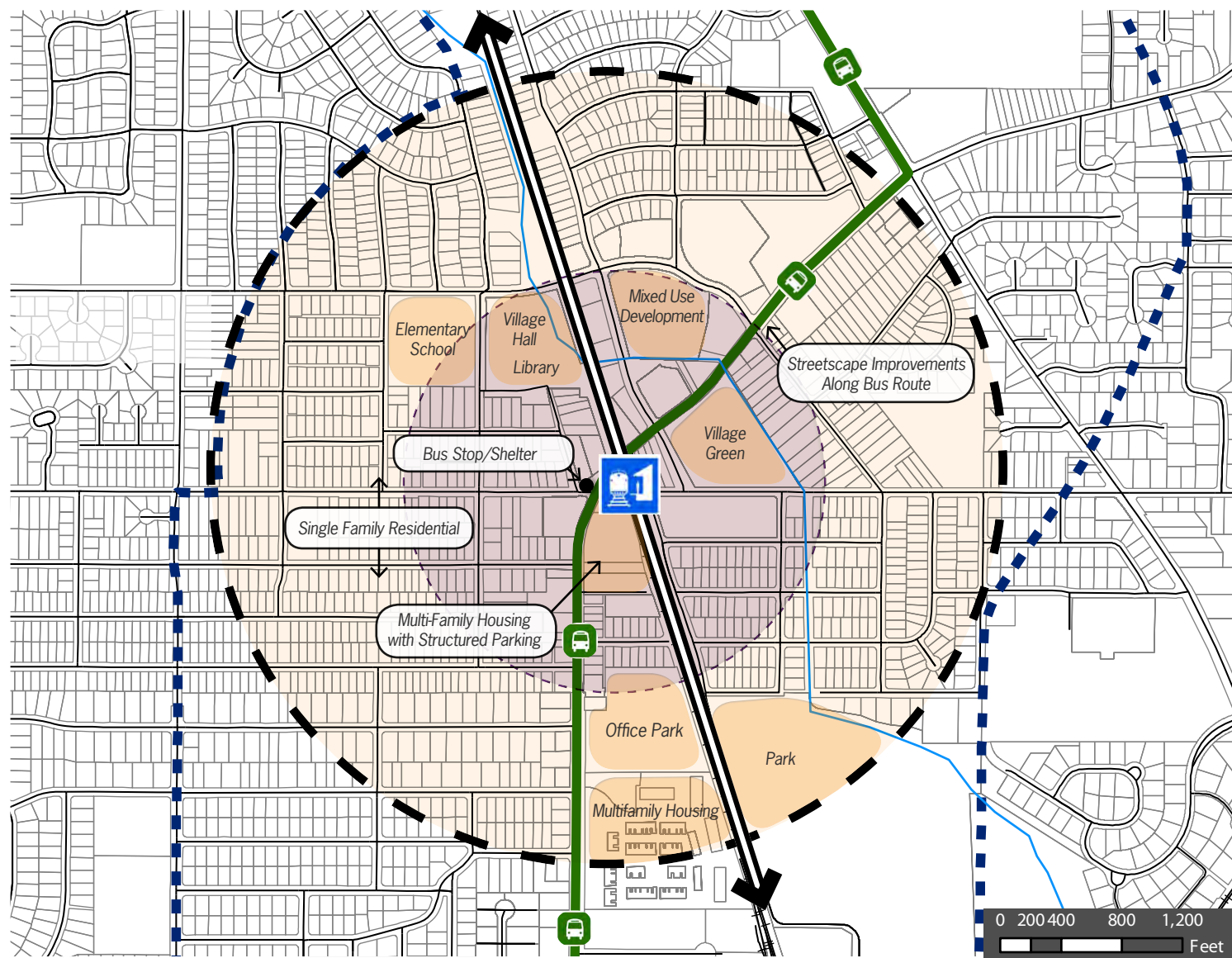
### 4. Costs

- \$2 - \$10+ million per new station;
- \$2.5 million for a gallery car;
- Station investments vary;
- Metra funds the rehabilitation or replacement of existing stations at the end of their useful life, but only base level investments;
- Community contributions are encouraged and may be needed to help fund service and provide improved amenities;
- Refer to the *Metra Station Manual* for more detailed information about Metra requirements.










# Access to Transit

Accessibility to transit is particularly important within 1/4 and 1/2 mile of bus routes and rail stations. This is a target area which can be looked towards for the promotion of new or repurposed development to take advantage of transit. Employment, retail goods and services, senior housing and services, and other community destinations are particularly important to enhance transit use and accessibility. Street connectivity, continuous sidewalks, and bicycle routes or paths are also important ways to improve the convenience of transit.



## LEGEND

-  Pace Bus Route
-  Metra Rail
-  Metra Rail Station
-  1/2 Mile Walking Radius Around Metra Rail Station or 10 Minute Walk
-  1/2 Mile Walking Radius Around Pace Bus Route.
-  1/4 Mile Radius Around Metra Rail Station or 5 Minute Walk
-  Destinations and Focal Points within Walking Distance of Transit.

### Walkable Destinations:

- 1/2 Mile ~ 10 Minute Walk
- 1/4 Mile ~ 5 Minutes Walk

### 5 Minute or Less Walk from Metra:

- Bus Stop/Shelter
- Village Hall, Library
- Office Park
- Mixed Use Development
- Multi-/Single-Family Housing
- Village Green

CASE STUDY

## Orland Park TOD Study & 143rd Street Metra Station

*Station Area Transformation: From Industrial Park to Mixed-Use Town Center*

**About:** After completing a TOD Planning Study in 2000 through the RTA's Community Planning program the Village of Orland Park began developing a concept plan to facilitate a 36-acre mixed-use development for the area that surrounds the 143rd Street Metra station.

**Strategy:** Following an extensive public outreach session and a scope of work that consisted of land planning, urban design, demographic, market, and transportation analysis, a shared vision for the station area was created. The concept plan that resulted in the implementation and construction of the 143rd Street Metra Station was based on sound TOD principles, community preferences, desires of Orland Park officials, a market analysis, urban design issues, and the needs of the RTA and its service boards. Additionally, the plan thematically ties the station area to other districts of the Village's downtown, including the Old Orland Historic District, the Civic Center, and the Orland Crossing shopping area.

Following the construction and opening of the new 143rd Street Metra station in April 2007, service doubled on the SW Service line and ridership increased 20%. The station area includes a café (per the 2000 TOD Concept Plan) and Kiss-N-Ride drop-off. Furthermore, the Village has recently updated their zoning ordinance to include transit-supportive regulations and constructed infrastructure improvements including roadways, a decorative detention pond, and park located near the train station. The infrastructure investments have resulted in substantial new private investment in and adjacent to the study area.

### KEY IMPLEMENTATION ELEMENTS

- Solid TOD Planning Study
- Strong leadership, support, and persistence
- Mixed-use developments surrounding commuter rail station
- Civic feature/park directly in front of station
- Street linkages between station and downtown
- Updated zoning
- Established TIF
- Land assemblage
- New Metra station
- Weathered economic downturn
- Public investment in catalyst project



NEW ORLAND PARK 143RD STREET METRA STATION

Source: Village of Orland Park



MAIN STREET TRIANGLE DISTRICT DEVELOPMENT

Source: RTA

*Lying just west of the 143rd Street Metra Station, the Main Street Triangle District will feature a mixed-use, pedestrian-oriented development including upscale shopping, dining, and entertainment attractions.*

*Construction of a 295-unit luxury apartment complex has begun and is scheduled for completion in Spring 2013.*

# PART 3

## SCENARIOS



### Applying Transit Supportive Design

The following section focuses on three typical land use scenarios and depicts how your community can apply transit supportive design depending on the setting and service type. Each scenario includes two scaled aerial renderings; the first depicts “the before” or existing conditions and the second exhibits “the after” or how the site can be enhanced via transit supportive design.

#### SCENARIO 1 CORRIDORS

Introducing Bus Service & Transit Supportive Design

Community Type:

**Suburban**

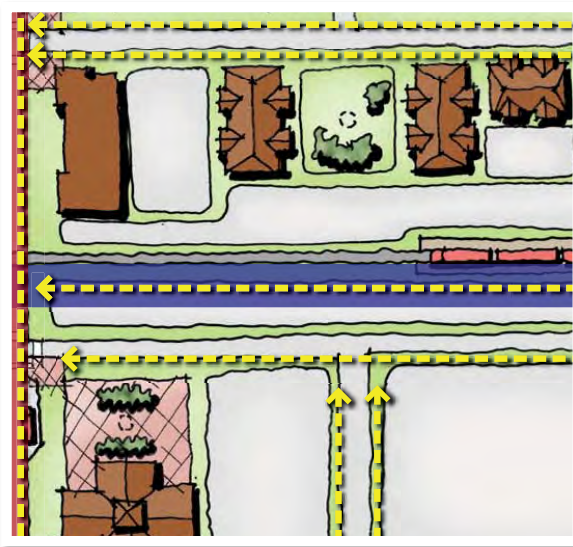


#### SCENARIO 2 STATION AREAS

Introducing Bus and Rail Service & Transit Supportive Design

Community Type:

**Suburban - Urban**

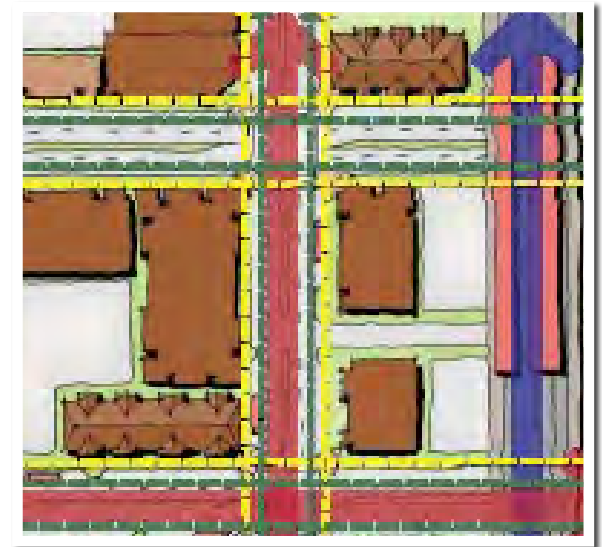


#### SCENARIO 3 URBAN INFILL

Introducing Development & Transit Supportive Design Around Bus & Rail Stations

Community Type:

**Urban**





# Scenario 1 Corridors

## Existing Conditions

Current conditions of low-density, segregated land uses makes fixed-bus routes infeasible. Community based services could be utilized to serve an area until sufficient ridership or land use changes are built to support the service.

Transit Access	
A	No fixed route bus service is available due to insufficient pedestrian accommodations to access service and low demand from riders
Site Design	
B	Single-family housing isolated along cul de sac
C	Commercial buildings are set back toward rear of lots
Roadway / Pedestrian Design	
D	Multiple curb-cuts, lack of sidewalks, and buildings set back from roads make environment hostile to pedestrians
E	No pedestrian lighting or other amenities for pedestrians
F	No path to walk or bike from homes to school
G	No direct road from homes to school requires cars travel along arterial road
Parking	
H	Large parking lots along commercial arterial road impede travel by pedestrians from bus stops to destinations





**SCENARIO 1 CORRIDORS:**

**Introducing Bus Service & Transit Supportive Design**

In order to support a Pace fixed route bus, several changes are made to increase the potential for ridership and improve access to the service. Changes include creating a new collector road between the single family homes and school, encouraging new commercial buildings along the arterial, and adding pedestrian and transit amenities. Taken together, these changes would make it safe, convenient, and fast to take a bus through this corridor.

**Transit Access**

- A Pace fixed route bus along arterial road
- B Bus pullovers, pads, and shelters allow safe loading and unloading for passengers along arterial road; the bus pullovers provide safe passenger access and do not require a detour into the site

**Site Design**

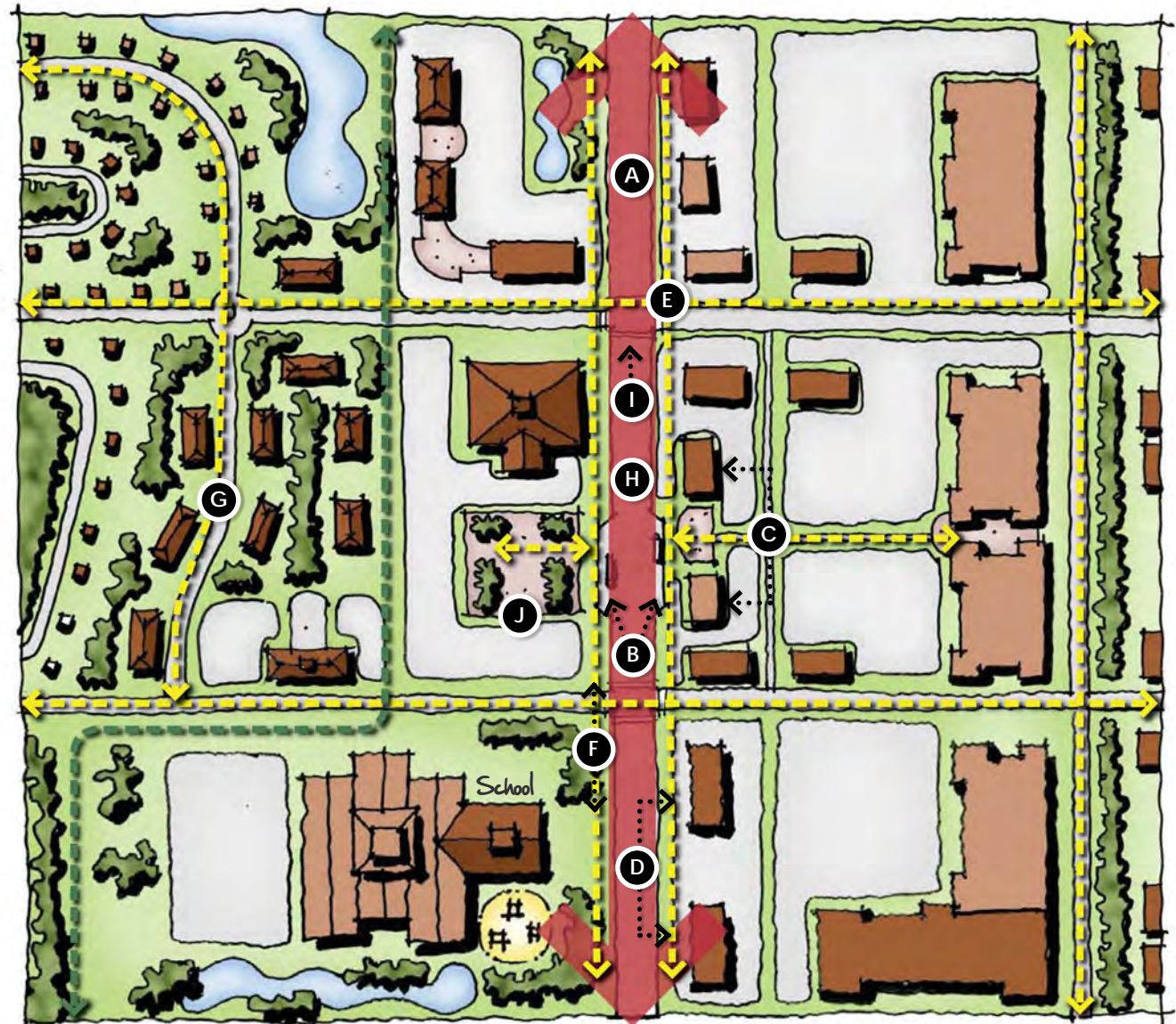
- C New buildings and additions built close to street with minimal setbacks
- D Primary entrances are directly accessible from sidewalk and viewable from street
- E Curb cuts to arterial road are minimized, improving walkability along sidewalks

**Roadway / Pedestrian Design**

- F Pedestrian improvements include sidewalks, lighting, pavers, and crosswalks
- G New collector street connects single family homes directly to school
- H Arterial road is redesigned with 12' minimum lane width to accommodate buses
- I Turn lanes / crosswalks at intersections minimize safety hazards and enhance traffic flow

**Parking**

- J Convenient, safe parking areas should enhance surrounding streetscape and design of the area



**Transit Legend**



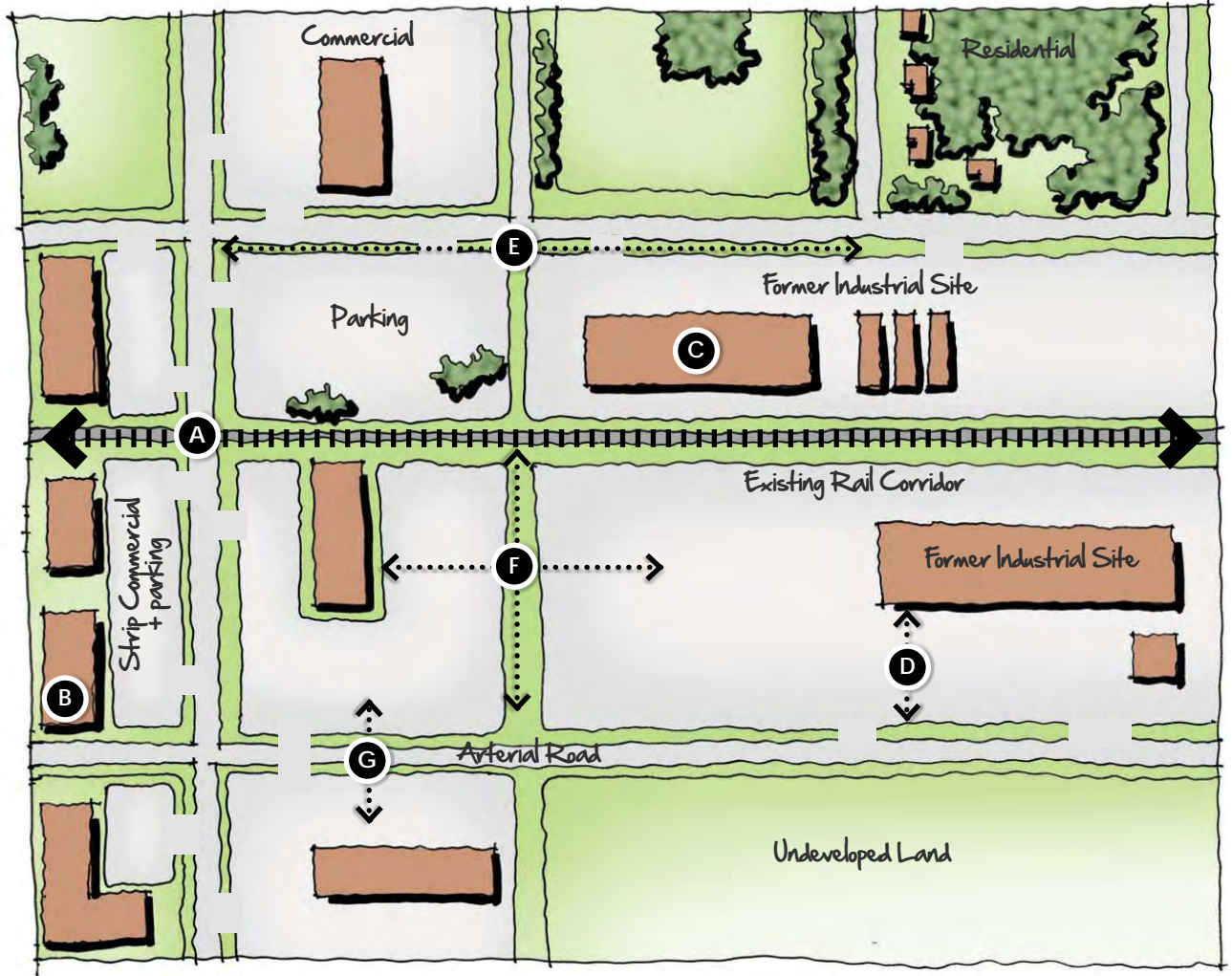


# Scenario 2 Station Areas

## Existing Conditions

Existing rail corridor is planned for future Metra service, but is several years off from service introduction. Former industrial land along rail line and strip commercial development along arterial make bus service challenging.

- Transit Access**
  - A There is no current bus or Metra service, but the area could be improved to support transit
- Site Design**
  - B Strip commercial development surrounded by parking lots
  - C Vacant commercial and industrial sites adjacent to rail could be used for new station and commuter parking
  - D Large building setbacks
- Roadway / Pedestrian Design**
  - E No amenities for pedestrians; few sidewalks
  - F Lack of connectivity and shared-use pathways
- Parking**
  - G Large parking lots off of arterial



Source: Teska Associates, Inc.

## SCENARIO 2 STATION AREAS

### Introducing Bus and Rail Service & Transit Supportive Design

The community has the potential for the extension of Metra service on an existing rail corridor. The community in conjunction with Metra intends to install a station on the proposed extension. Current vacant and underutilized properties are repurposed to create a commercial and residential district around the planned Metra station, while preserving sufficient vacant land for future commuter parking. Following the "Complete Street" principles, the design of these spaces enables safe access for pedestrians, bicyclists, motorists, and transit users; buses can run on time and people can walk safely to and from the planned station.

#### Transit Access

- A Pace fixed route service is introduced along arterial road as demand for transit grows
- B Future Metra station is planned with sufficient clearance from intersection

#### Site Design

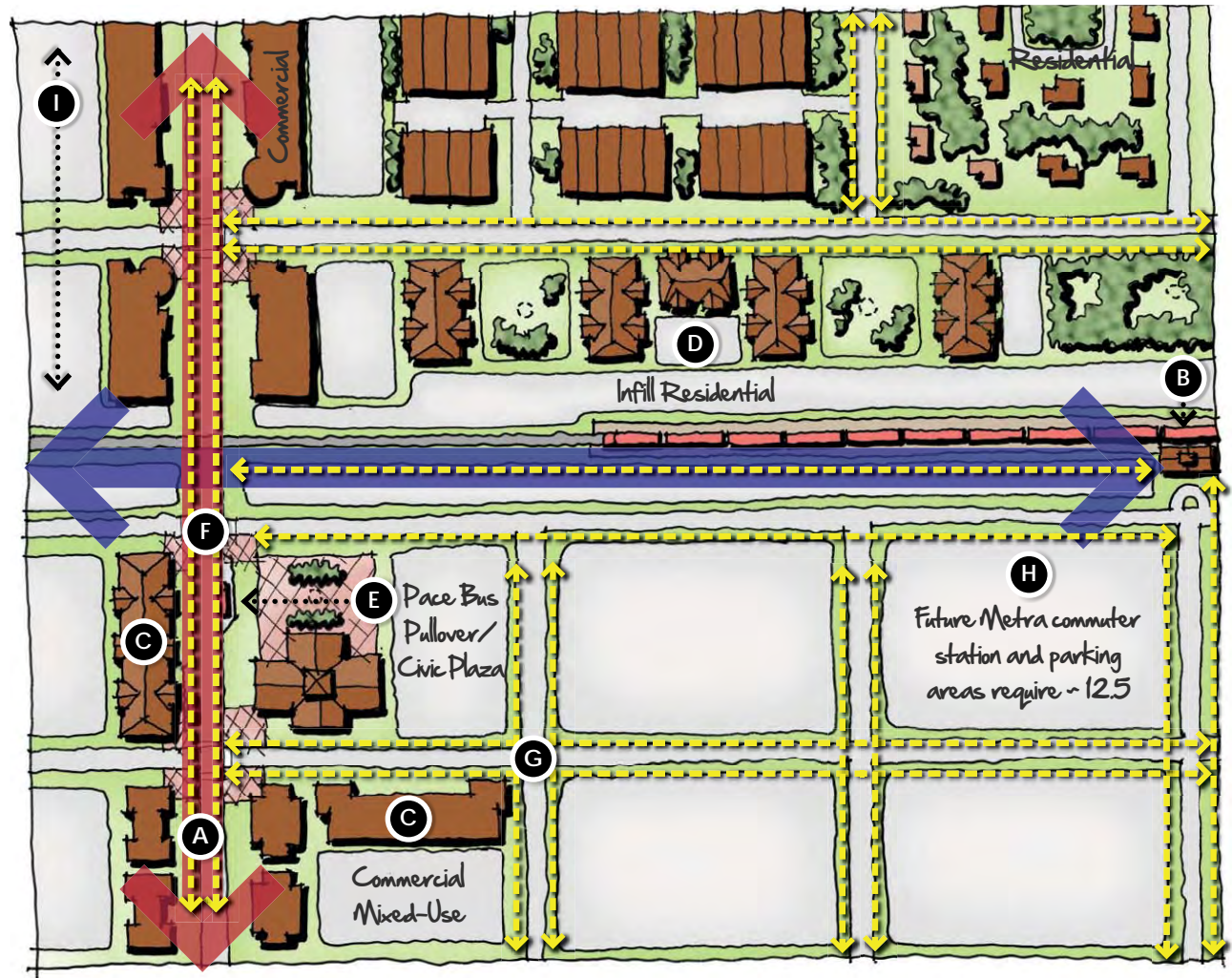
- C New residential, commercial, and mixed-use development near the planned park-n-ride / future Metra station
- D New, infill housing is built within ½ mile of Metra station

#### Roadway / Pedestrian Design

- E Bus pullovers on arterial road near planned station
- F Pedestrian improvements include sidewalks, lighting, pavers, and crosswalks
- G Bike routes and pedestrian-friendly access to all uses in area

#### Parking

- H Future commuter parking and bike storage is reserved near planned Metra station
- I Parking for commercial structures is placed to the side or rear of development



#### Transit Legend





# Scenario 3 Urban Infill

## Existing Conditions

Vacant and underutilized land is adjacent to existing CTA rail and bus service.

### Transit Access

- A East-west and north-south CTA bus routes
- B CTA "L" Station

### Site Design

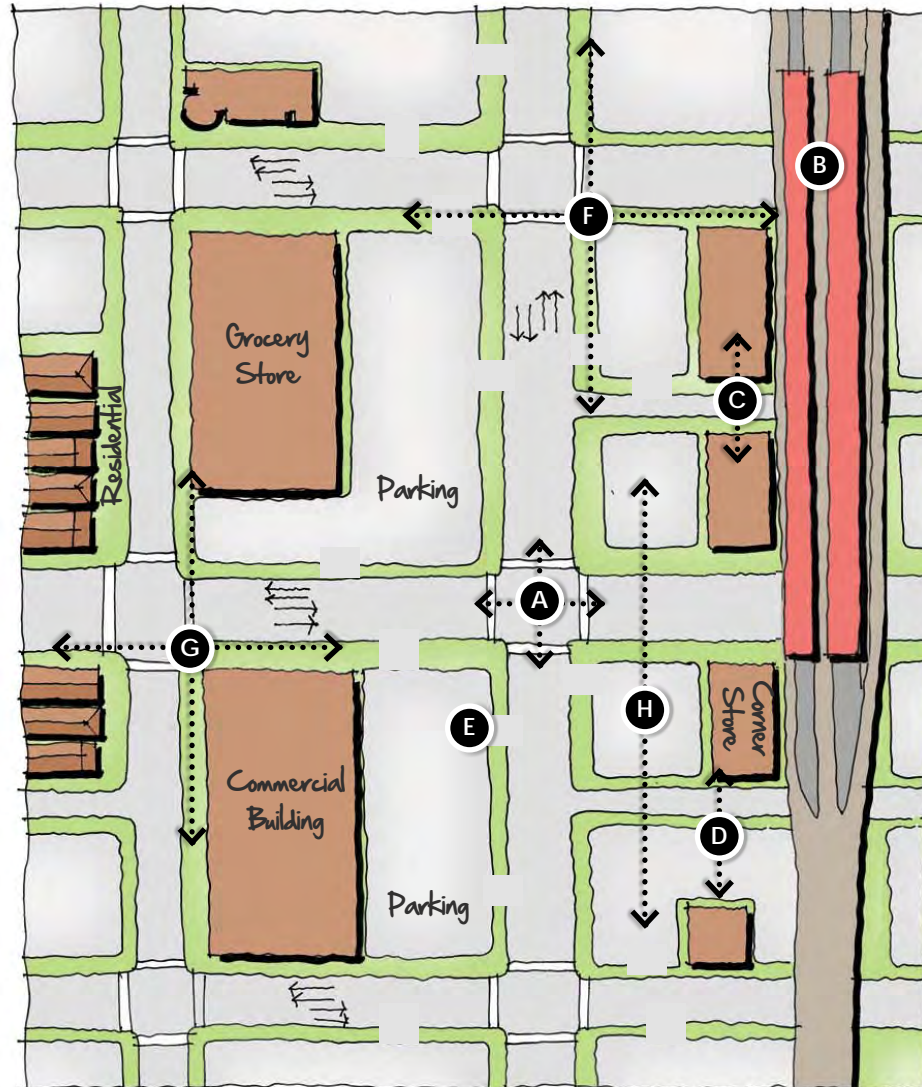
- C Vacant and underutilized lots surround much of this transit-rich area
- D Lack of mixed-use development or higher-density residential to take advantage of highly accessible locations

### Roadway / Pedestrian Design

- E Multiple curb cuts make the arterial less pedestrian friendly
- F Lack of pedestrian lights, signage, and bus shelters
- G Sidewalks in poor condition and lack amenities.

### Parking

- H Parking lots are oriented toward the front of the lot, facing the arterial creating a less pedestrian-friendly orientation of stores to streets





**SCENARIO 3 URBAN INFILL**

**Introducing Development & Transit Supportive Design Around Existing Bus & Rail Stations**

New development and redevelopment is encouraged and improvements to streetscapes are made to promote use of the existing CTA "L" station and bus routes.

**Transit Access**

- A East-west and north-south CTA bus routes
- B CTA "L" Station
- C Bus rapid transit could be considered along one of the major arterials, providing dedicated lanes and safe boarding in a sheltered area

**Site Design**

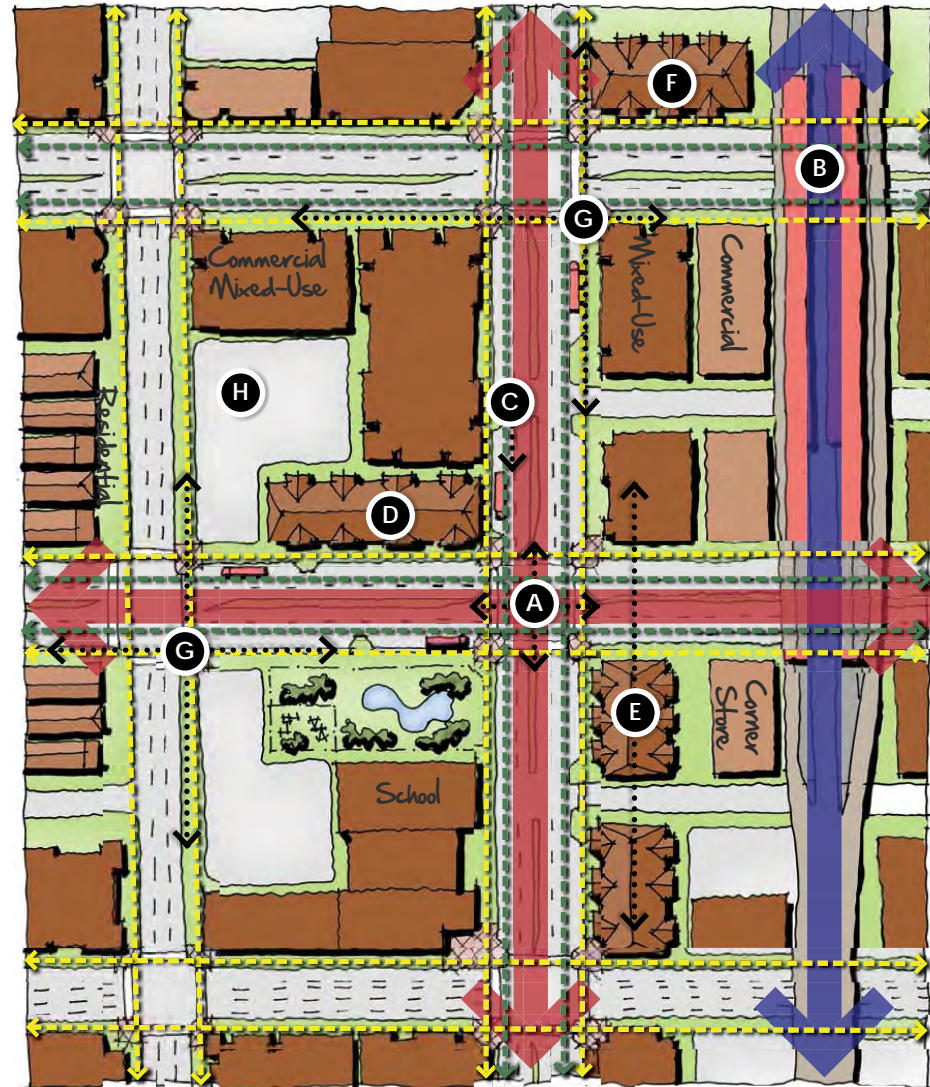
- D Vacant and underutilized lots are redeveloped for commercial, mixed-use, and multifamily housing
- E Buildings are designed close to the street, forming a strong "streetwall" that anchors new development
- F The area's zoning map would be updated to promote new housing, commercial, and mixed-uses around transit

**Roadway / Pedestrian Design**

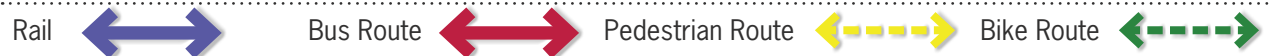
- G New streetscapes would provide wider sidewalks, landscaping, pedestrian lighting, bicycle storage, and bus shelters

**Parking**

- H Parking is provided along streets, under new buildings, or to the side or rear of new construction



**Transit Legend**



# Summary of Transit & Design Principles

## Transit Access

- Plan for continuous bus service; routes should run on regularly scheduled timetables users can rely on.
- Bus shelters and pick-up/drop-off zones should be placed in safe, accessible locations and not require a detour into site.
- Where feasible, pick-up/drop-off zones should be placed within a pull-off area that is recessed within the curb.
- Rail station location and site design should provide access to other transit facilities including fixed-route and bus/rail interchange facilities.

## Site Design

- Maximize building frontage along streetscape.
- Minimize building setbacks and/or build-to lines.
- Primary entrances should be accessible from sidewalk and visible from street.
- Buildings on sites with multiple structures should relate to each other, front primary roadways, and create pockets of shared parking within site interior.
- Take advantage of transit locations by locating more intensive uses such as multi-family housing and mixed-uses near transit.

## Roadway / Pedestrian Design

- Roadways should be designed to permit transit, such as 12' lane minimums.
- Widen right-of-way or reduce lanes to accommodate improvements for pedestrians.
- Incorporate turn lanes and crosswalks to minimize safety hazards and enhance traffic flow.
- Sidewalks and shared-use pedestrian and bicycle pathways should be well lit and have direct access to and between transit shelters and surrounding amenities
- Walkway and bikeway systems should be interconnected and reach transit without gaps.

## Parking

- Consider shared parking between non-conflicting or compatible uses to reduce overall need.
- Convenient, safe parking areas should enhance surrounding streetscape and overall design of sites via connectivity, landscaping, and lighting.
- To the extent possible, parking lots should be located to the side or to the rear of buildings to bring front entrances close to the street and the pedestrian zone.
- Consider pervious pavers, naturalized landscaping and bioswales in parking lots and along roadways to reduce impervious surfaces and aid in stormwater management.
- Park-n-ride locations can be utilized to support high capacity fixed bus Pace routes and cut down on road congestion.



Source: Teska Associates, Inc.

### Western Springs Station Area

The Village of Western Springs incorporates covered bicycle parking along the Metra platform to support a multi-modal environment to and from the station. Additionally, a mixed-use, tree lined street with minimal building setbacks is situated behind the Metra platform, helping to further support ridership and revenue within the station area.

# PART 4

## ACTIONS



### **Next Steps: Actions, procedures, programs or techniques that implement transit supportive policies and plans.**

Updating policies, creating action plans, and developing programs and review processes can set the stage for long-term success when planning for and implementing transit supportive projects. Policies that integrate transportation and community land use objectives help further community goals and overcome challenges. This section provides an overview of tools that can be used to implement livable, transit-oriented solutions while demonstrating well-planned goals and intentions - aligning your community for success.

#### **ACTION AREAS OVERVIEW**

##### **1. What policy tools can be reviewed, revised or created to help support transit?**

- Zoning
- Form-Based Codes
- Design Review
- Land Use
- Density
- Access and Parking
- Setbacks
- Planned Development/Subdivision
- Streamlined Development Process

##### **2. What financing tools and funding sources are available?**

- Business Districts
- CMAP Local Technical Assistance (LTA)
- Congestion, Mitigation and Air Quality (CMAQ)
- DNR Bike and Recreational Path Programs
- Illinois Transportation Enhancement Program (ITEP)
- RTA/CMAP Community Planning Program
- RTA Innovation, Coordination and Enhancement Program (ICE)
- RTA TOD Implementation Technical Assistance
- Special Service Areas (SSA)
- Tax Increment Financing (TIF)



## Policy Tools

Consider creating a strategic plan or updating your Comprehensive Plan / Transit-Oriented Plan to align necessary planning steps with short-term and long-term transit goals.

**Zoning.** Many zoning codes were drafted years ago and often hinder transit use due to large set-backs, parking requirements and restrictive regulation of land use. Zoning rewrites can help communities return to the values of traditional centers by bringing buildings up to the street and planning for shared parking, mixed land uses, and higher density nodes around transit. The basic elements of zoning that may need to be modified to make areas more transit accessible include land use, density, parking standards, and setbacks.

**Form-Based Codes.** Form-based codes are utilized to regulate the design and form of buildings in relation to the scale of their surrounding environment. The regulations and standards, which are presented in words, clearly drawn diagrams, and visuals, commonly include public space, building form, signage, landscaping, and architectural guidelines. Most form-based codes being utilized in and around Chicago regulate both form and use.

**Design Review.** Consider creating a design review process for proposed developments that fall within transit districts (areas within 1/2 to 1/4 mile of major stations, stops or routes) to ensure key design elements are met. Take special care to ensure the process is predictable and efficient, as to not discourage development in these vital nodes.

**Land Use.** Conventional zoning separates land use into zones based on varying levels of density for residential, commercial (retail), office, and industrial uses. Since transit ridership is associated with mixed land uses in walking distance to transit, there are several components for a community to address in its zoning ordinance and project review including: (1) plan for a variety of uses and ensure streets and sidewalks interconnect so residents can walk or bike; (2) write and map "mixed-use zoning districts" into the zoning code (you may require commercial use on first floor with residential or office above); (3) carefully consider auto-oriented uses such as drive-thrus; they may hinder and disrupt walkability. A "special use" classification can be applied to these uses so they fall under review.

**Density.** As discussed in 'Part 2: Transit', zoning should incorporate density levels sufficient to support transit. For example, research has shown that the optimum density levels needed to support 30-minute fixed route bus service range from 6 to 8 units per acre or 30 employees per acre, while the optimum density levels for CTA rail service have to be at least 12 units per acre or 125 employees per acre. In the case of Metra, population and employment densities within an easy walk or 1/2 mile of the station significantly enhance the use of transit. In sum, mixed land uses paired with sufficient density will lead to greater transit usage in both rail and bus service.

### Six Principles of Livability



#### 1. Provide more transportation choices.

Develop safe, reliable and economical transportation choices.



#### 2. Promote equitable, affordable housing.

Expand location- and energy-efficient housing choices for people of all ages, incomes, races and ethnicities.



#### 3. Enhance economic competitiveness.

Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers, as well as expanded business access to markets.



#### 4. Support existing communities.

Target federal funding toward existing communities—through such strategies as transit-oriented, mixed-use development and land recycling.



#### 5. Coordinate policies & leverage investment.

Align federal policies and funding to remove barriers to collaboration, leverage funding and increase the accountability and effectiveness of all levels of government.



#### 6. Value communities and neighborhoods.

Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods - rural, urban, or suburban.

Source: HUD-DOT-EPA Partnership for Sustainable Communities

**Access and Parking.** Transit accessible areas need to incorporate sufficient access and parking infrastructure for all land uses, designed in such a way to promote a walkable experience. Parking policy shapes travel behavior, community design, and development economics and can improve the performance of transit and transit-oriented development. There are a variety of parking strategies municipalities should consider to support their transit objectives including the use of shared parking to reduce the amount of overall parking stalls and land needed. Shared parking should be encouraged when two or more adjacent uses generate different peak period parking demand. Additionally, communities can actively manage on-street parking to control overspill parking by prioritizing rapid-turnover or short-term, visitor parking. For more information on parking and access strategies, please refer to [RTA's Access and Parking Strategies for TOD Guide](#).

**Setbacks.** Zoning setbacks should reinforce a strong “streetwall” along the street by establishing a “build-to” line in the zoning code. The build-to line establishes a consistent frontage along the street at a set distance from the right-of-way. By establishing this line, and relatively shallow setbacks, a more pedestrian oriented environment can be established in a transit area. In the case of downtowns, communities may establish zero setbacks, bringing buildings up to the property line and public realm. In bus corridors, the setback should be large enough to accommodate landscape buffers, but not so far back as to create a barrier between the public realm for pedestrians, and the commercial frontages of the stores.

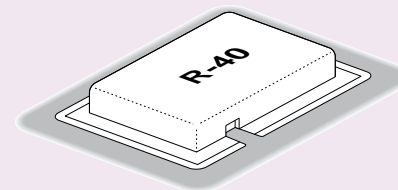
**Planned Development and Subdivision Regulations.** Communities should explore how planned development processes and subdivision regulations can provide amenities to support transit. Revising these standards and regulations as they relate to parking, density, Floor Area Ratio (FAR), lot sizes, and the overall review process should be modified to ensure they are supportive of transit.

**Streamlined Entitlement Process.** Streamlining the entitlement process provides a structured approach for revisiting and reviewing entitlement. It helps encourage development by making the development process predictable, effective, and efficient. The process of streamlining should focus on examining and fixing the individual steps constituting it.

## Development Guides

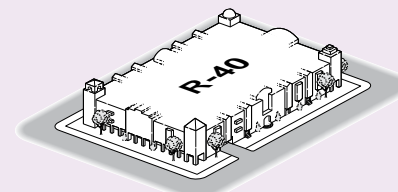
### How zoning defines a 1 block parcel:

Density, use, FAR (floor-area ratio), setbacks, parking requirements, and maximum building height(s) specified.



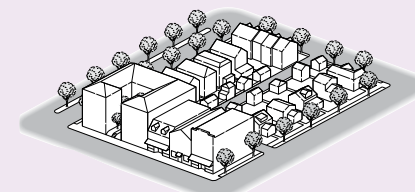
### How design guidelines define a 1 block parcel:

Density, use, FAR (floor-area ratio), setbacks, parking requirements, maximum building height(s), frequency of openings, and surface articulation specified.



### How form-based codes define a 1 block parcel:

Street and building types (or mix of types), build-to lines, number of floors, and percentage of built site frontage specified.



## Financing Tools and Funding Sources

Transit Oriented Development Plans, Comprehensive Plans, Strategic and Special District Plans all should include a framework for implementation that outlines short- and long-term strategies supported by potential financing tools or funding sources. These tools, as well as others, are worth exploring to determine if they can help support your community's desired transit objectives.

**Business Districts.** Provides the ability for municipalities to levy up to an additional 1% sales tax within the boundaries of the district for expenses such as infrastructure and other local improvements.

**CMAP Local Technical Assistance (LTA).** Chicago Metropolitan Agency for Planning (CMAP) provides technical assistance information for a variety of planning and transportation needs, including financial resource information related to transportation planning.

**Congestion, Mitigation and Air Quality (CMAQ).** CMAQ improvement funding is available via the Federal Highway Administration (FHWA) and IDOT. This program is intended to reduce traffic congestion, improve air quality, improve intersections, and increase and enhance multiple travel options, such as biking and walking. These funds are available locally through the Chicago Metropolitan Agency for Planning (CMAP). Note: A local matching source is typically required.

**Department of Natural Resources (DNR) Bike and Recreational Path Programs.** Illinois' DNR offers two programs: (1) The Illinois Bicycle Path Grant is a reimbursement program for multiple bike path development activities, including land acquisition, path development/renovation, and the development of support facilities for the path. This grant would be an appropriate funding source for trails along the Fox River and trails leading into and through the TOD area. (2) The Recreational Trails Program funds land acquisition, trail construction, and trail renovation for recreational paths/trails that can be used by multiple users.

**Illinois Transportation Enhancement Program (ITEP).** ITEP, administered by the Illinois Department of Transportation (IDOT), is a reimbursement program for local governments applying for federal transportation funding. ITEP provides assistance to help local communities achieve their transportation initiatives and expand travel choices. The program also supports broader aesthetic, cultural, and environmental aspects of transportation infrastructure.



Source: Teska Associates, Inc.

### Skokie Swift Oakton Street Station

The Village of Skokie was awarded an Innovation, Coordination and Enhancement (ICE) grant to fund needed improvements to complement the new CMAQ funded Oakton Street station on the CTA Yellow Line which opened in April 2012. Improvements will include bus stops, bus and new taxi access lanes, sheltered waiting areas, pedestrian walkways, shared vehicle lanes, kiss-n-ride, bicycle parking, and landscape improvements. The new station located in downtown Skokie also serves the 23.4 acre Illinois Science and Technology Park, providing access to an estimated 5,000 jobs once the park is fully developed.



**RTA/CMAP Community Planning Program.** The Community Planning program provides funding and planning assistance for planning projects that benefit the community and the regional transportation system. Community Planning offers applicants an opportunity to participate in the planning of local transportation, transit and transit-related opportunities. Services offered include the creation of transit-oriented development plans, transit improvement plans, and integrated transportation and land use plans.

**RTA Innovation, Coordination and Enhancement (ICE) Program.** RTA's ICE program provides operating and capital assistance to enhance the coordination and integration of public transportation and to develop and implement innovations to improve the quality and delivery of public transportation. Projects funded through this program advance the vision and goals of the RTA Strategic Plan by providing reliable and convenient transit services and enhancing efficiencies through effective management, innovation, and technology.

**RTA TOD Implementation Technical Assistance Program.** The RTA offers a complementary technical assistance program for past RTA grant recipients through the TOD Implementation Technical Assistance Program. This program helps to provide a seamless transition from planning to implementation through technical assistance and support upon the completion of the planning study. Such assistance includes implementation task force/steering committee participation, grant/funding opportunity research, letters of support for transit-related projects and grant applications and review of TOD concept plans for proposed development. The RTA also administers a competitive program for past grant recipients to fund land use control documents, developer recruitment, plan updates, and innovative financing plans.

**Special Service Areas (SSA).** An SSA is a taxing mechanism that can be used to fund a wide range of special or additional services and/or physical improvements in a defined geographic area within a municipality or jurisdiction. This type of district allows local governments to establish such areas without incurring debt or levying a tax on the entire municipality. An SSA can be used to issue bonds in order to pay for such services or improvements. The bonds are not a general obligation of the municipality. Under SSA bonds, only the property owners that benefit from the improvements are assessed an additional tax that is used to pay debt service and administrative expenses on the bonds. The SSA tax is collected through the property tax system, and is calculated on the basis of benefit, but is NOT a part of the Illinois real property tax system.

**Tax Increment Financing (TIF).** TIF districts are used to help improve a stagnant area that requires significant public infrastructure improvements to attract private investment. Once implemented, a TIF allows public improvement costs to be repaid by the increased property tax revenue that is generated by private development. State law allows TIF funds to be used for planning studies, land acquisition, demolition and site preparation, and public infrastructure.



Concept Plan Rendering | Source: Bondy Studio and Teska Associates, Inc.

#### Village of Prairie Grove Town Center TOD Plan

The Village of Prairie Grove was awarded a Community Planning grant to prepare a Town Center and Transit-Oriented Development (TOD) Plan. The Plan focuses on the opportunity to create a transit hub that would provide Prairie Grove with local access to Metra commuter rail and Pace bus service. The potential for transit service in Prairie Grove requires a phasing of transit facilities, beginning with a new transit facility site that could initially serve as a park-n-ride commuter lot with bus service to Metra Stations in the area.

# PART 5

## RESOURCES



### Further Learning: Organizations, publications, and additional online resources.

#### Organizations

**Regional Transportation Authority**  
175 W. Jackson Blvd, Suite 1650  
Chicago, IL 60604  
[www.rtachicago.com](http://www.rtachicago.com)

#### SERVICE BOARDS

**Chicago Transit Authority** - Nation's second largest public transportation system; covers the City of Chicago and 40 surrounding suburbs.  
[www.transitchicago.com](http://www.transitchicago.com)

**Metra** - Northeast Illinois commuter rail agency serving Cook, DuPage, Will, Lake, Kane, and McHenry counties in the Chicago area.  
[www.metrarail.com](http://www.metrarail.com)

**Pace** - Local public transportation agency for the Chicago area suburbs.  
[www.pacebus.com](http://www.pacebus.com)

**Active Transportation Alliance** - A member supported non-profit transportation advocacy group.  
[www.activetrans.org/](http://www.activetrans.org/)

**American Planning Association** - National membership organization promoting planning practice.  
[www.planning.org](http://www.planning.org)

**Center for Neighborhood Technology** - Chicago-based non-profit promoting economic sustainability.  
[www.cnt.org](http://www.cnt.org)

**Chicago Metropolitan Agency for Planning** - Chicago region's metropolitan planning organization.  
[www.cmap.illinois.gov](http://www.cmap.illinois.gov)

**Congress for New Urbanism** - National membership organization promoting new urbanist design and development.  
[www.cnu.org](http://www.cnu.org)

**Delta Institute** - Provides assistance on brownfield, environmental sustainability in the Great Lakes area.  
[www.delta-institute.org](http://www.delta-institute.org)

**Illinois Department of Transportation (IDOT) Division of Public and Intermodal Transportation** - State agency that oversees transit and funding.  
[www.dot.state.il.us/dpit/index.html](http://www.dot.state.il.us/dpit/index.html)

**Metropolitan Planning Council** - Civic organization promoting planning / regional solutions in Chicago region.  
[www.metroplanning.org](http://www.metroplanning.org)

**Reconnecting America** - National organization providing best practices for Transit Oriented Development (TOD).  
[www.reconnectingamerica.org](http://www.reconnectingamerica.org)

**Urban Land Institute** - Real estate organization providing leadership in the responsible use of land and in creating and sustaining thriving communities.  
[www.uli.org](http://www.uli.org)

#### Video Library

##### CHANNEL 1: REGIONAL TRANSPORTATION AUTHORITY

- Learn the basics on taking transit from northeastern Illinois suburbs to downtown Chicago as well as how to get around downtown. Three basic transit operators are identified as well as using an online trip planner (GoRoo).

##### CHANNEL 2: CTA CONNECTIONS

- Learn about CTA's existing bus and rail service and the many initiatives, investments and programs being implemented to provide affordable, convenient travel options.

##### CHANNEL 3: PACE SUBURBAN BUS

- Learn about the different service types offered by Pace, including Van Pools, Dial-A-Ride, and ADA accessible features. Specific Pace bus routes, service areas, and destinations are also highlighted.



Many of the print publications listed below can be accessed on the web by visiting the agencies' websites.

## Print Publications

**Alameda-Contra Costa Transit District.** Designing with Transit. Rep. San Francisco: Alameda-Contra Costa Transit District, 2004. Print.

**Chicago Area Transportation Study.** Guidelines for Planning, Design, and Operatin of Rail Commuter Parking Facilities. Rep. Chicago: Chicago Area Transportation Study, March 1990. Print. Operation Greenlight.

**Chicago Transit Authority.** Bus Facilities Handbook. Chicago: Chicago Transit Authority, December 2007. Print.

**Chicago Transit Authority.** CTA Service Standards. Chicago: Chicago Transit Authority, July, 2001. Print.

**Chicago Transit Authority.** Guidelines for Transit-Supportive Development. Chicago: Chicago Transit Authority, 1996. Print.

**City of Chicago Dept. of Transportation.** Morgan Street Elevated Station. Rep. Chicago: City of Chicago, 2011. Print.

**Pace, and AECOM.** Randall Road Pace Route 529 Plan: Improving Access to Bus Service. Rep. Arlington Heights: Pace, July 2010. Print.

**Pace.** and STV. Arterial Rapid Transit Study. Arlington Heights: Pace, 2010. Print.

**Pace.** and Wilbur Smith Associates. Vision 2020 - Blueprint for the Future. Arlington Heights: Pace, July 2002. Print.

**Pace.** Pace Development Guidelines. Arlington Heights: Pace, November 1999. Print. *(currently undergoing update)*

**Pace.** Passenger Facility and Park-n-Ride Guidelines. Tech. Arlington Heights: Pace, May 1991. Print.

**Pace.** Service Criteria and Performance Guidelines for Fixed Route Service. Arlington Heights: Pace, June 1988. Print.

**Pace.** Service EvaluatiOn Benchmarks. Arlington Heights: Pace, May 2000. Print.

**Regional Transportation Authority.** Access & Parking Strategies for Transit-Oriented Development. Rep. Chicago: RTA, November 2011. Print.

**Regional Transportation Authority.** and Patty Mangano. Don't Miss the Bus - The Emerging Concept of Locally Based Transit Options. Tech. Chicago: RTA. Print.

**Regional Transportation Authority.** Setting Ideas in Motion - Highlights of RTA Implementation Efforts. Rep. Chicago: RTA, October 2011. Print.

**Regional Transportation Authority.** TOD Parking and Access Report. Rep. Chicago: RTA, September 2011. Print.

**Regional Transportation Authority.** Bus Transit Facility Tinley Park. Downtown Legacy Plan. Rep. Tinley Park: Tinley Park, 1998. Print.

**Regional Transportation Authority.** Transit Access Guidelines. Rep. Denver: RTD, 2009. Print.

**TranSystems Corporation.** Service Type Characteristics. 2011. Raw data. TranSystems, Chicago.

**Urban Land Institute,** Geoffrey Booth, Bruce Leonard, and Leonard Pawlukiewicz. Ten Principles for Transforming Suburban Cores. Tech. ULI, 2007. Print.

**Urban Land Institute,** Robert Dunphy, Deborah Myerson, and Michael Pawlukiewicz. Ten Principles for Successful Development Around Transit. Rep. Washington, D.C.: ULI, 2003. Print.

## Online Sources

**Access & Parking Strategies for Transit-Oriented Development.** Regional Transportation Authority. Web. 2011. [rtachicago.com/images/stories/Initiatives/landuse\\_tod/TOD%20Parking%20and%20Access%20Report%20Web\\_Final.pdf](http://rtachicago.com/images/stories/Initiatives/landuse_tod/TOD%20Parking%20and%20Access%20Report%20Web_Final.pdf)

**Bay Area Rapid Transit (BART) Station Access Guidelines.** Web. 2003. [www.bart.gov/docs/planning/access\\_guidelines.pdf](http://www.bart.gov/docs/planning/access_guidelines.pdf)

**Chicago Transit Authority.** "News." News - New Morgan Station. CTA. Web. 2012. [www.transitchicago.com/news](http://www.transitchicago.com/news)

**CTA Facts at a Glance.** CTA. Web. 2012. [www.transitchicago.com/about/facts.aspx](http://www.transitchicago.com/about/facts.aspx)

**CTA Transit Friendly Development Guide.** Station Area Typology. Web. 2009. [http://www.cityofchicago.org/dam/city/depts/zlup/Planning\\_and\\_Policy/Publications/Transit\\_Friendly\\_Development\\_Guide/CTA\\_Typology\\_Study.pdf](http://www.cityofchicago.org/dam/city/depts/zlup/Planning_and_Policy/Publications/Transit_Friendly_Development_Guide/CTA_Typology_Study.pdf)

**Design Criteria.** Regional Transportation District, Web. 2006. [www3.rtd-denver.com/elbert/Criteria/index.cfm](http://www3.rtd-denver.com/elbert/Criteria/index.cfm)

**Guidelines for Providing Access to Public Transportation Stations.** TCRP Report 153. Federal Transit Administration. Web. 2012. [onlinepubs.trb.org/onlinepubs/tcrp/tcrp\\_rpt\\_153.pdf](http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_153.pdf)

**Lake Cook Transportatoin Management Association.** TMA - Shuttle Program. Lake Cook TMA. Web. 2011. [www.tmalakecook.org/shuttle\\_overview.html](http://www.tmalakecook.org/shuttle_overview.html)

**McHenry County, TranSystems Corporation, and Fish Transportation Group.** McHenry County Transit Plan. Web. 2012. [www.co.mchenry.il.us/departments/dot/DOTDocuments/TPlanRpt.pdf](http://www.co.mchenry.il.us/departments/dot/DOTDocuments/TPlanRpt.pdf)

**Commuter Rail Station Guidelines and Standards.** Metra. Web. 2008. [www.metra.com/techservices/Downloads/STATIONS%20&%20PARKING%20DESIGN/STATIONS%20DESIGN/STATION%20MANUAL%2082907.pdf](http://www.metra.com/techservices/Downloads/STATIONS%20&%20PARKING%20DESIGN/STATIONS%20DESIGN/STATION%20MANUAL%2082907.pdf)

**Online TDM Encyclopedia - Transit Oriented Development.** Online TDM Encyclopedia - Transit Oriented Development. Victoria Transport Policy Institute. Web. 2012. [www.vtpi.org/tdm/tdm45.htm](http://www.vtpi.org/tdm/tdm45.htm)

**RTAMS List of Completed Studies.** Regional Transportation Authority Mapping and Statistics. Web. 2012. [www.rtams.org/rtams/planningProgram.jsp?id=1](http://www.rtams.org/rtams/planningProgram.jsp?id=1)

**Service Types.** Pace Bus -. Pace. Web. [www.pacebus.com/sub/general/service\\_types.asp](http://www.pacebus.com/sub/general/service_types.asp)

**Village of Niles,** Camiros, KLOA, Wilbur Smith Associates, and Valerie S. Kretchmer Assoc. Milwaukee Avenue Plan. Rep. Niles: Village of Niles, 2006. Village of Niles - Milwaukee Avenue Plan. Niles. Web. [www.vniles.com/Content/templates/?a=207&cat=45](http://www.vniles.com/Content/templates/?a=207&cat=45)



