City of Big Lake, Minnesota

This project was funded in part by the Initiative Foundation, a regional foundation.

Transit-Oriented Development

DESIGN MANUAL

DECEMBER 2008

TABLE OF CONTENTS

Page

Executive Summary **3**

1.0 Introduction **4-6**
- 1.1 Transit-Oriented Development Definition **4**
- 1.2 Benefits of TOD **4**
- 1.3 TOD Context **5-6**

2.0 Transit Station Planning Areas **7-8**
- 2.1 Station Planning Area **7-8**

3.0 Transit-Oriented Development Principles **9**

4.0 General Policies **10**

5.0 Land Use Policies **11-13**
- 5.1 Land use and transportation **11**
- 5.2 TOD and surrounding area compatibility **11**
- 5.3 Economically viable land uses **11**
- 5.4 Future infill density **12**
- 5.5 Market land use dictation **12**
- 5.6 Development philosophy **13**
- 5.7 Housing choices **13**
- 5.8 Mixed use buildings **13**

6.0 Site Planning Policies **14-16**
- 6.1 Compact development **14**
- 6.2 Environmental site design **15**
- 6.3 Streetscape treatments **15-16**
- 6.4 Public plazas and open space **16**

7.0 Transportation Policies **17-20**
- 7.1 Automobile parking strategies **17**
- 7.2 Integrated multi-modal transportation elements **17-18**
- 7.3 Safe travel **18-19**
- 7.4 Congestion and air pollution **19**
- 7.5 Context connectivity **19**
- 7.6 Pedestrian connections **20**

TABLE OF CONTENTS

Page

8.0 Architecture Policies..... 21-22
8.1 Architectural style/theme..... **21**
8.2 Context sensitive design..... **21**
8.3 Climate sensitive design..... **21**
8.4 Design/development quality control..... **21-22**

9.0 Concept Plan..... 23-24

10.0 Implementation..... 25-26
10.1 TOD Ordinance..... **25**
10.2 Station Area Plan(s)..... **25-26**

11.0 Resources..... 27

12.0 Bibliography..... 28

This project was funded in part, by the Initiative Foundation, a regional foundation.

EXECUTIVE SUMMARY

The Northstar Corridor Development Authority (NCDA) identified the northwest corner of the County Road 43 and Burlington Northern Santa Fe (BNSF) rail line in the City of Big Lake as a trail station location. Construction of the rail station site and an associated maintenance building is now underway.

In recognition of the rail station's likely impacts upon the City, the Big Lake Comprehensive Plan (2000) directs community staff and elected officials to initiate actions necessary to link commuter rail to current and future land uses in the community. Further, the Plan specifically directs the preparation of a land use plan for an area one half mile around the station.

This design manual is intended to implement the preceding Comprehensive Plan directive, create a shared understanding of Transit-Oriented Development (TOD) and its benefits and identify key elements and factors for a successful TOD in the City of Big Lake.

More specifically, this design manual;

- Reaffirms the importance of commuter rail and the Big Lake station as a city-wide asset and the need to optimize the use of this investment through supportive land use policies.
- Establishes broad, city wide goals, policies and guidelines for the future development of lands in the transit station vicinity.
- Provides framework for evaluating land use, development proposals and/or subdivision applications in the transit station study area.
- Provides a graphical representation of the City's TOD vision (in the form of a concept plan).
- Identifies implementation measures including a draft TOD ordinance and station area plan process
- Lists several TOD resources.

It is hoped this document will be especially useful to those participating in the creation, review, and/or adoption of TOD plans including City Council members, Planning Commissioners, City staff, developers, and area residents/property owners.

1.0 INTRODUCTION

1.1 Transit-Oriented Development Definition

Transit-Oriented Development (TOD) is the functional integration of land use and transit via the creation of compact, walkable, mixed-use communities within walking distance of a transit stop or station. TOD brings together people, jobs, and services and is designed in a way that makes it efficient, safe, and convenient to travel on foot or by bicycle, transit, or car.

1.2 Benefits of TOD

TODs strive to implement a more sustainable approach to development. Generally speaking, a successful TOD includes the following:

Mixed and Concentrated Land Use

Diversity of complimentary uses within easy walking distance of transit stations and stops, promote balanced level of transit ridership throughout the day, promote pedestrian activity and reduce dependence on the automobile.

Supportive Access Patterns

Circulation patterns that form a convenient, safe and accessible network of types of transportation, that interconnect surrounding residential, commercial and employment areas, and that provide direct connections to transit stations and stops.

Adequate, and in some cases structured, parking facilities that do not visibly dominate the station area or consume large amounts of land.

Enhanced Environment

An environment for transit users and others that is safe, attractive and functional.

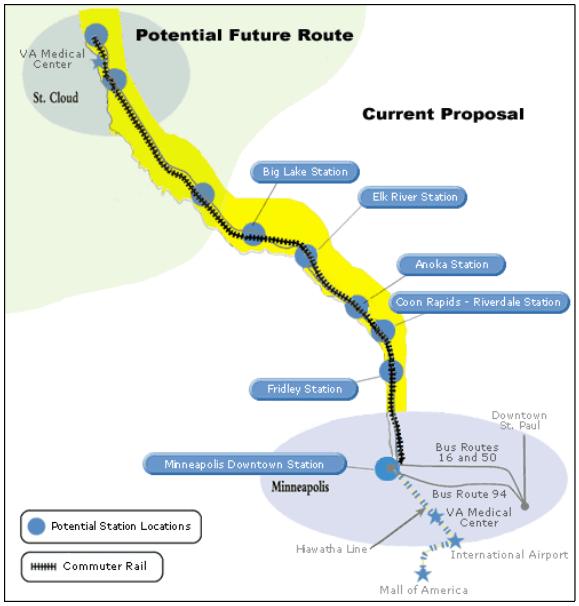
Public and private spaces that invite pedestrian activity and incorporate design elements to increase public access, comfort and security.

1.3 TOD Context

Commuter rail (or regional rail) transit is defined as rail service between city centers and outlining communities or other locations that draw large numbers of commuters on a daily basis. Commuter lines are built to heavy rail standards but differ from light rail or rapid transit systems in the following ways:

- Commuter lines are larger.
- Commuter lines (in most cases) have lower frequency of service.
- Commuter lines run at specific hours rather than at specific intervals.
- Commuter lines serve lower density areas, typically connecting suburbs to city.
- Commuter lines share track or right-of-way with intercity or freight trains.

The Northstar Corridor is an 82 mile transportation corridor that runs along Highway 10 from downtown Minneapolis to the Cities of St. Cloud and Rice area. The Northstar Commuter Rail project is being developed to serve a 40 mile portion of that corridor from Big Lake to Minneapolis. Eventually, the line will extend the full length of the corridor. The commuter rail will utilize existing Burlington Northern Santa Fe (BNSF) rail lines and have intermodal connections to existing bus service within the corridor as well as to future LRT corridors.



The complete 82 mile Northstar Corridor Rail route stretches from St. Cloud to Minneapolis. Currently, the 40 mile stretch from Big Lake to Minneapolis is being developed.
Photo credit: Northstar Commuter Rail

Northstar Line locomotive

Photo credit: Northstar Commuter Rail

The following are some "facts and figures" regarding the Northstar Commuter Rail line:

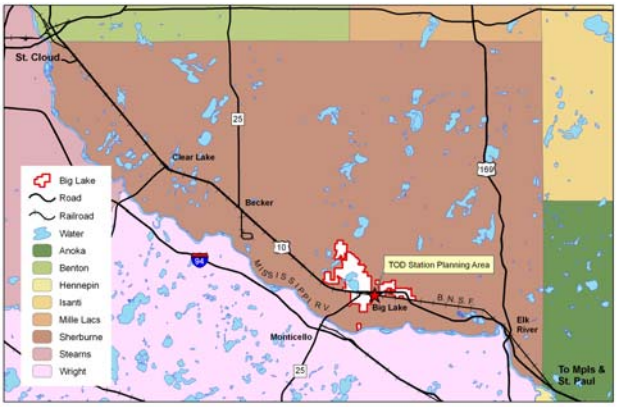
Length:	40 miles from Big Lake to Minneapolis
Annual Capacity:	2.1 million riders
Service Begins:	Estimated 2009
Base Service:	5 trips from Big Lake to Minneapolis and 1 reverse trip weekday mornings; 5 trips from Minneapolis to Big Lake and 1 reverse trip weekday afternoon/ evenings; 3 roundtrips each weekend day; possible special event service.
Connections:	Feeder buses to stations, Hiawatha LRT in downtown Minneapolis.
Accessibility:	Fully ADA (Americans with Disabilities Act of 1990) compliant

2.0 TRANSIT STATION PLANNING AREAS

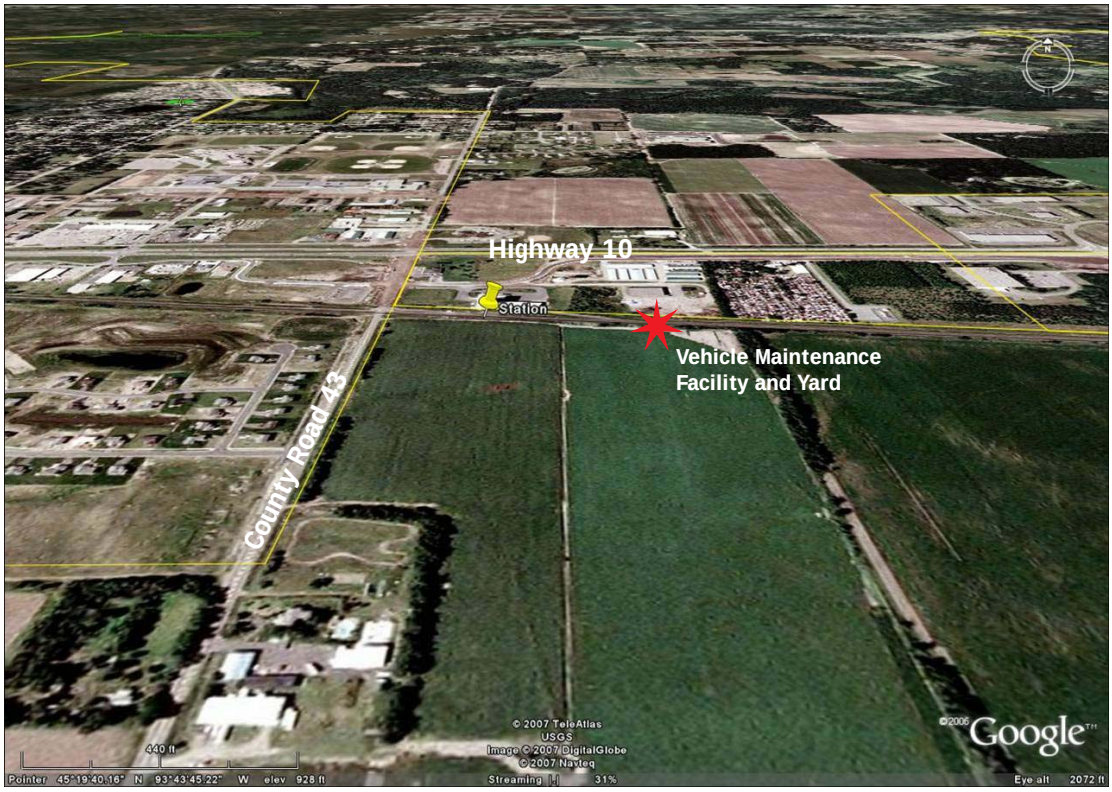
2.1 Station Planning Area

The Big Lake station is located south of Highway 10 and east of County Road 43, directly adjacent to the existing BNSF railroad line.

As the City of Big Lake is the current, temporary terminus of the Northstar Commuter Rail to downtown Minneapolis, a Vehicle Maintenance Facility and Yard is also being constructed east of the proposed rail station. This storage facility will be used to store and maintain the Northstar Commuter Rail fleet.



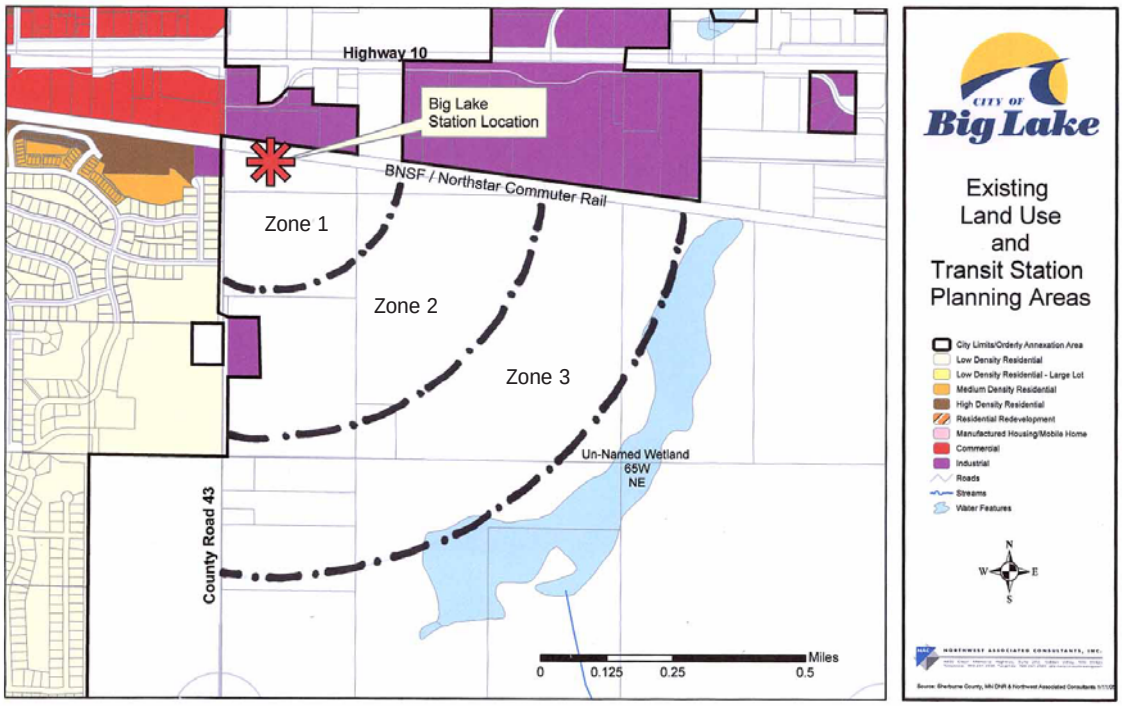
Context map showing regional connections.



Axonometric view of the TOD Station Planning Area, looking north across the site.
Photo credit: Google

The station planning area has been defined in three zones radiating from the station nucleus. These zones and subsequent land uses are based on the distance that a pedestrian is likely to travel to take transit. The TOD Policy Guidelines represent these three zones surrounding the transit station. Development of lands within the zones will be required to follow these planning guidelines. However, in some cases it may be appropriate to extend the station area beyond these radii. Also, these zones have been reduced where existing residential communities exist around the Big Lake station. Physical barriers that prevent pedestrians access to the station also were considered in defining the station area.

Zone 1, Station:	1/4 mile	= 59 acres
Zone 2, Midway:	1/2 mile	= 127 acres
Zone 3, Transition:	3/4 mile	= 162 acres
		348 acres



3.0 TOD PRINCIPLES

One of the functions of this document is to set out the key policies for Big Lake's Transit-Oriented Development. These policies reflect current strategic policy, with specific reference to new policy objectives for development around the transit station. The policies strive to discuss these eleven key Big Lake TOD principles:

1. Create a compact development within an easy walk of public transit and with sufficient density to support ridership.

2. Make the pedestrian the focus of the development strategy without excluding the automobile.

3. Create active places and livable communities that service daily needs and where people feel a sense of belonging and ownership.

4. Include engaging, high quality civic spaces (e.g. small parks or plazas) as organizing features and gathering places for the neighborhood.

5. Encourage a variety of housing types near transit facilities available to a wide range of ages and incomes, including seniors and other people with special needs.

6. Incorporate retail into the development if it is a viable use at the location without the transit component, ideally drawing customers from both the TOD and a major street.

7. Ensure compatibility and connectivity with surrounding neighborhoods.

8. Introduce creative parking strategies that integrate, rather than divide the site and reduce the sense of auto domination.

9. Create TOD plans that are flexible so they can respond to changing conditions.

10. Strive to make TODs realistic yet economically viable and valuable from a diversity of perspectives (city, transit agency, developer, resident, employer).

11. Recognize that all TODs are not the same; each development is located within its own unique context and serves a specific purpose in the larger context.

4.0 GENERAL POLICIES

Based on a series of public workshop meetings, a set of general policies have been formulated for the TOD area. These policy statements are categorized into general and more specific policies related to land use, site planning, transportation and architecture. These general policy statements are provided below.

4.1 Maximize commuter rail ridership (at the Big Lake Transit Station)

4.2 Create a development which is a source of pride for area residents.

4.3 Generate long-term revenue for the City of Big Lake.

4.4 Foster economic development and an enhanced tax base.

4.5 Provide a catalyst for private investment and development.

4.6 Enhance the quality of life in the TOD area through high quality, pedestrian-friendly development.

4.7 Provide job opportunities for area residents.

4.8 Protect the environment through environmentally friendly development.

4.9 Establish a predictable and consistent development process.

4.10 Create a "destination" which attracts both corporate users and visitors.

4.11 Strive for an economically viable project not only from the City's perspective but the perspective of the transit agency, developers, residents and employers as well.

4.12 Work collaboratively with other stakeholders in the region including but not limited to, nearby communities, businesses, neighborhoods and the Minnesota Department of Transportation.

4.13 Enhance the overall quality of life of Big Lake residents by creating great places and communities.

5.0 LAND USE POLICIES

5.1 Coordinate land use planning with various transportation modes (in a safe, efficient and appealing manner).

- Relate land uses to types of available transportation, whether vehicular or pedestrian.
- Provide for a wide variety of transportation styles, including routes, improvements, and other infrastructure.

5.2 Maintain community compatibility between the transit village and the surrounding area.

- Choose land uses that incorporate the existing land use pattern into the TOD area, rather than create a sudden edge.
- Consider traffic impacts of various land uses when selecting land uses that adjoin other existing neighborhoods.
- Encourage or require (where appropriate) true mixed uses to allow acceptable transitions to neighboring land uses.
- Consider future land use and site planning at highly visable external gateways (i.e. Highway 43 / 10 intersection and future intersection of Highwy 43 to the south).

5.3 Encourage a mixture of economically viable land uses.

- Avoid over-concentration of specific land use types.
- Encourage vertical mixing of land uses, including office, retail, and residential.
- Specify zoning standards that limit negative impacts of mixed use, including service and infrastructure incompatibilities.
- Provide for the possibility of governmental uses within the general TOD area.

5.4 Plan for increased density over time (future infill).

- Create specific land use zones that, based on proximity to the transit station, are designed to interact with transit station patrons.
- In areas of closest proximity to the station, avoid land uses that are not dependent upon transit activity.
- In areas farthest from the station, allow a broad variety of land use types that help build market for the transit activity, but do not rely on it.
- Maintain a specific zoning standard that avoids land being consumed without regard for station activity.

5.5 Allow the market to dictate types of land uses within the TOD larger area; however, create a smaller Station Area planning zone where land will be designated for specific transit supportive uses.

- Specify those uses that are truly transit-reliant for the Station Area development.
- Create regulations that prohibit encroachment into the core area prematurely.
- Establish a broad list of potential uses in non-core areas of the TOD and permit the marketplace to define location and pace of development.

5.6 Establish a development philosophy which focuses on the pedestrian within the Station Area, otherwise, provide for all transportation modes within the TOD area.

- Identify key pedestrian routes for visitors, transit users, neighbors, and users of both commercial and residential development within the TOD area.
- Protect pedestrian routes from encroachment.
- Develop a program for constructing and maintaining pedestrian facilities over time as a key amenity to transit station development.

5.7 Provide for a mixture of housing choices, including opportunities for varied incomes and generations that are sensitive to market trends and demand.

- Select specific styles of housing for the TOD area that provide market demand for commercial services.
- Select specific styles of housing for the TOD area that complement the level of activity expected with proximity to a major transit hub.
- Avoid low housing densities that consume excessive land in the TOD area but minimize the market potential for the district.

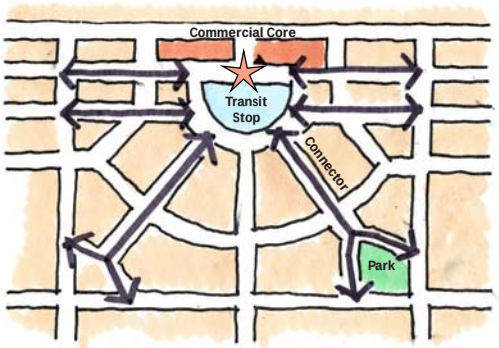
5.8 Encourage the combination of different uses (i.e. retail and residential) within single, multiple-story buildings.

- While single-use buildings are permitted, the opportunity for mixed use in the transit station area should be highly encouraged.
- Single story buildings should be discouraged within the Station Area to avoid over-consumption of land in a low-intensity pattern.

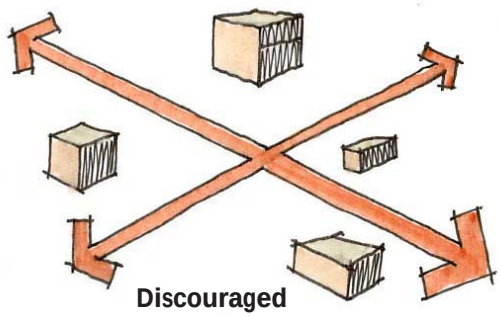
6.0 SITE PLANNING POLICIES

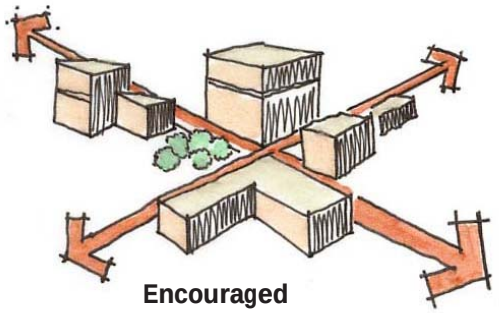
6.1 Design for compact development.

- Integrate short blocks of 300 - 500 feet with narrow, interconnected streets that support continuous walking, calm traffic speeds and promote neighborhood cohesion.
- Street layout pattern should be grid-based to offer multiple access points to the rail station and other development uses. Street layout should also be oriented toward the transit station.
- Cluster/group buildings to allow for easy pedestrian access to destinations. These clusters also frame the spaces which makes for legible routes and wayfinding.
- Design street and building configurations, wherever possible, to create vistas or to terminate views with landmark features, buildings or public spaces.



Calthorpe example of grid based street pattern with multiple access points to station and other uses.





Development patterns in TOD planning area should be compact. Preferred development should be built adjacent to the street and have parking located behind buidings.

6.2 Promote environmentally-friendly site design (acknowledging natural features as part of site design efforts).

- Review local, regional and state land use and environmental regulations with prospective developers early in the development process.
- Require an environmental review analysis of the TOD's natural resources including, but not limited to water, soil, vegetation, habitat impact, topography etc. Preserve existing natural resources as amenities for the higher intensity of use in the TOD area.
- Explore land conservation techniques to conserve groundwater resources and reduce surface water runoff.
- Incorporate innovative environmental construction techniques where applicable.
- Orient roadway corridors away from sensitive environmental areas, whenever possible, limiting such areas to lower impact users.
- Develop and enforce regulations that preserve adequate buffers from sensitive environmental areas.
- Maintain attractive views to environmental assets to heighten appreciation for such areas in the urban landscape.

6.3 Create visually appealing and comfortable environments for commuters, shoppers and residents through consistent and high quality, streetscape treatments and open spaces.

- Establish consistent streetscape character with significant gateway elements at TOD entrances to draw people.
- Utilize a system of wayfinding signage to create unique identity for TOD and guide visitors to the area.

- Conceal loading and service areas to minimize their impact on surrounding uses.

- Require significant buffering at locations where commercial or mixed use buildings are directly adjacent to single family homes.

- Provide streetlights at pedestrian and auto-oriented scale which offer visibility along with greater perception of safety.

- Provide a varied array of boulevard tree species which act as a buffer between pedestrians and automobiles.

- Utilize required detention areas as visual feature and buffering devices.

- Limit surface parking lots and blank exterior building walls along major pedestrian streets.

Boulevard trees offer a transition between building and street.
Photo Credit: RTKL Associates

Informal landscaping offers a multi-colored horizontal green corridor.
Photo Credit: Metropolitan Design Center Image Bank. Used with permission.

6.4 Provide public open spaces throughout the TOD which act as activity and gathering points for the local community.

- Emphasize the rail transit station as a public space by providing comfortable walking and drop-off areas for transit users.

Plazas and public open spaces give transit users places to rest and relax.
Photo Credit: Metropolitan Design Center Image Bank. Used with permission.

- Strategically plan small parks and/or plazas throughout the TOD to gather, rest and relax. Provide connections between these natural and man-made open spaces

7.0 TRANSPORTATION POLICIES

7.1 Recognize the automobile as the current key component of the TOD area, promoting visible, easily accessible parking areas as well as creative parking strategies.

- Provide structured parking to accommodate transit, resident and visitor automobiles.
- Provide/encourage shared parking lots, including accommodating evening and weekend commercial parking demand in parking structure.
- Encourage phased temporary parking lots which transition from surface lots to structures. Parking structures consume less land and allow maximum development.
- Locate parking structures along key walking routes with pedestrian friendly facades to enhance the public environment.
- Establish both minimum and maximum parking standards to ensure the success of the station area as well as optimize transit ridership.
- Locate parking to the rear and sides of buildings to keep the rail station and building entrances oriented to the sidewalk and pedestrians.
- Divide larger parking lots into smaller lots separated by landscaped sidewalks, as to not overwhelm a rail station area.

7.2 Integrate automobile, bicycle and pedestrian facilities with various site components (buildings, parking areas, circulations routes, open space etc.) in an efficient and visually appealing manner.

- Identify major destinations such as public buildings, parks, commercial and residential districts, places of employment, transit stops and other attractions and plan for automobile, bicycle and pedestrian connections among them.

- Provide on-street automobile parking which slows speeds of through-traffic and provides a buffer between pedestrians and moving vehicles.

- Provide ample, convenient and secure bicycle parking / storage facilities in close proximity to the rail station entrance.

- Emphasize sightlines and views to and from the station to help orient automobiles, cyclists and pedestrians to their surroundings.

- Design pedestrian sidewalks so that access is directly to commercial and residential districts without walking through parking lots.

- Provide wide sidewalks to allow for benches, outdoor seating for restaurants and activities that bring people together.

Structured parking in close proximity to rail station entrance provides transit users with convenient access to commuter rail.
Photo Credit: Ramsey, MN - LSA Design

Separated pedestrian, bicycle and automobile routes minimizes conflicts.
Photo Credit: Metropolitan Design Center Image Bank. Used with permission.

7.3 Promote and design safe travel for all transportation modes.

- Ensure all street widths, parking areas and drive aisles are sufficient to allow for the free movement of all types of emergency vehicles.

- Provide temporary parking areas and drop-off lanes without impairing the main drive lanes.

Secure bicycle facilities offer transit users a safe option for storage.
Photo Credit: Metropolitan Design Center Image Bank. Used with permission.

- Provide sidewalks on both sides of the road that can accommodate high volume pedestrian activity.

- Provide crosswalks and signalized intersections to allow for pedestrian access from all sides.

7.4 Minimize congestion and air pollution associated with the automobile.

- Consider joint parking where different uses require parking at different times of day.

- Allow for a reduction in the required parking for uses that are mainly dependent upon transit related traffic.

- Encourage shuttle buses and park and ride facilities.

- Facilitate community car-sharing and car-pooling by providing preferential parking spaces for such users.

7.5 Improve connectivity between the TOD site and surrounding areas.

- Identify primary and secondary transportation routes for automobiles, pedestrians and bicycles between the rail station site and destinations in the surrounding community.

- Improve the County Road 43 and Highway 10 intersection.

- Locate regional pathways and bicycle routes close to, but physically separated from the rail station, vehicle drop off zones or bus stops to avoid potential conflict with cyclists and transit passengers.

7.6 Create convenient pedestrian connections.

- Provide short, street level, continuous walking distances with direct access to transit.
- Create separated pathways for pedestrians and to allow for the free movement of vehicles and bicycles.
- Protect pedestrian routes from encroachment.
- Develop a program for constructing and maintaining pedestrian facilities over time as a key amenity to transit station development.

Bicycle lanes are separated to allow pedestrians free movement on sidewalks.
Photo Credit: Metropolitan Design Center Image Bank. Used with permission.

Continuous walking paths offer pedestrians connections to transit and other transit oriented destinations.
Photo Credit: Metropolitan Design Center Image Bank. Used with permission.

8.0 ARCHITECTURE POLICIES

8.1 Create an architectural environment that is distinctive to Big Lake.

- Apply the Big Lake Downtown Design Standards to specified areas within the TOD to incorporate elements of "prairie style" or "main street" architecture.
- Design buildings in the TOD that are respectful and harmonious with the historical character of Big Lake.
- Complement the TOD with the creative use of open space (interesting station waiting/drop-off areas).

8.2 Establish the TOD development as a dominant center while being sensitive to the scale of the surrounding community.

- Design buildings to consider context in regard to building massing, materials, style and color.
- Recognize the design and location of nearby residences and in the design and location of new buildings.
- Utilize building transition between established residential areas and the TOD via a sensitive interface (e.g. low rise/profile buildings, medium density residential use, mixed use).

8.3 Design for all seasons.

- Incorporate climate and weather protection features in the design of commuter rail waiting areas, shelters and buildings (building projections, awnings, landscape treatments that offer multi-season interest, snow storage retention areas, etc.).

8.4 Utilize architectural design to create high quality, attractive streetscapes and neighborhoods which create a "sense of place."

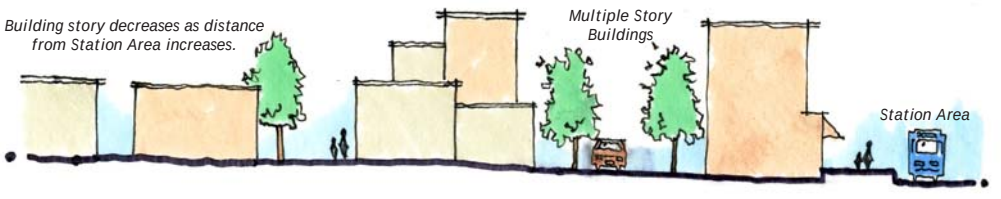
- Make public and/or high profile buildings (i.e. rail station, large commercial, prominent residential) highly visible landmarks within the TOD via distinctive design features, rooflines and landmark locations.

- Create a destination with a collection of unique places to attract visitors.
- Orient buildings (including doorways and windows) to the street level in order to provide pedestrian ease of entrance, visual interest and increased security through informal viewing.
- Utilize architectural variety (windows, building materials, projections) on the lower stories of buildings to provide visual interest.
- Design buildings to ensure that human comfort is of primary importance
- Group buildings together to accommodate pedestrian access between buildings and to frame the pedestrian spaces which makes for legible routes.

Transit townhome residential units offer ground level access.
Photo Credit: Noah Berger, BART.

An example of a building grouping with entrances, windows and projections focused towards the street to provide visual interest.
Photo Credit: Myhre Group Architecture.

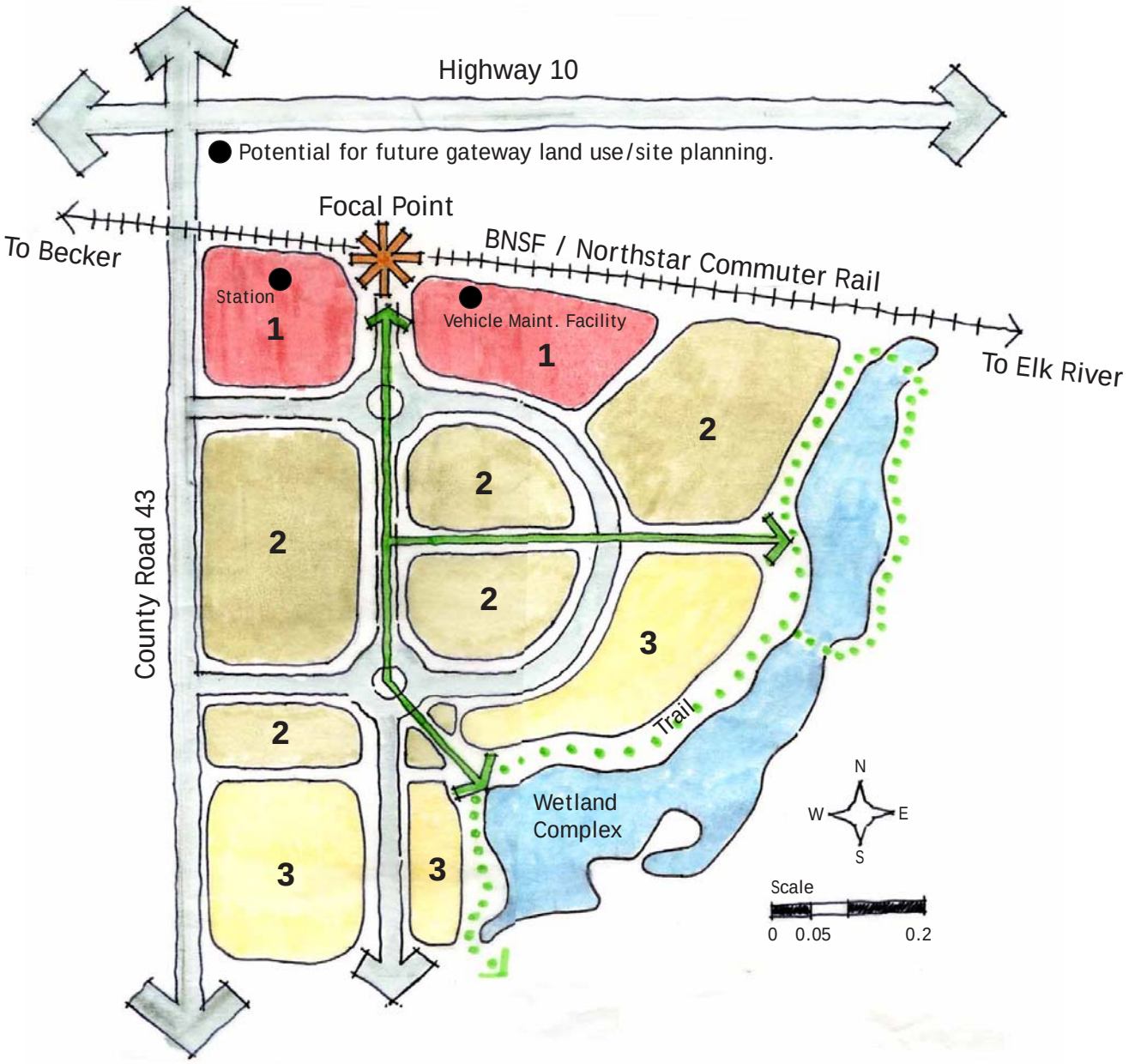
- Integrate public systems into architectural design (bicycle routes, sidewalks, public open space bus stops etc.)
- To the extent possible, require multiple story buildings at the Station Area of the TOD.



Example of multiple story buildings near Station Area. As the distance from the Station Area increases, the required building stories decrease.

9.0 CONCEPT PLAN

Based on the preceding principles, policies and guidelines, the following TOD concept plan has been prepared for the Big Lake TOD area. To be noted is that the plan is intended to serve as a framework used in the formulation of more detailed station area plan.



The Plan incorporates three differing areas or zones each having varied physical characteristics or features.

Station Area (Zone 1). The "Station Area" is located within 1/4 mile of the rail station and is intended to accommodate transit-oriented commercial uses. Within such area, multiple story buildings are to be encouraged. Such buildings should, to the extent possible, integrate elements of "main street" or "prairie style' architecture as required in the Big Lake Downtown area. The Station Area is intended to be the focal point of the TOD. In this regard, the inclusion of a unifying design element is encouraged (e.g. plaza, art work, clock tower etc.).

Midway Area (Zone 2). The "Midway Area" is located between 1/4 and 1/2 miles from the rail station. The area is intended to accommodate a mix of commercial and high density residential housing. Within this area, buildings which include ground floor commercial uses and residential uses on upper floors are to be encouraged.

Transition Area (Zone 3). The "Transition Area", as it's name implies, serves as a transitional zone between higher intensity uses within the Midway area and low density residential uses which surround the TOD. Generally speaking, such area is located between 1/2 and 3/4 miles from the rail station. The area is intended to accommodate business campus uses.

In review of the Concept Plan, the following should also be noted:

- The illustrated street network is intended to reinforce the "Station Area" as the focal point within the TOD while providing a logical circulation pattern throughout. The street design provides a future extension to the south in recognition of the Highway 10 bypass project.
- Two traffic circles/roundabouts have been incorporated within the main north-south thoroughfare. Such circles/roundabouts are intended to provide for the efficient movement of traffic (without stops) and visually establish the route as one of importance .
- The wetland complex in the southeastern portion of the TOD is considered an important area amenity, providing both open space and passive recreational opportunities. In this regard, a series of pedestrian trails which connect the complex to the three areas or zones has been proposed.

10.0 IMPLEMENTATION

10.1 TOD Ordinance

To implement the established goals and recommended TOD design practices, a draft TOD ordinance has been prepared. The draft ordinance is considered a starting point from which a more refined ordinance product may be developed based on stakeholder input.

Based upon the Concept Plan vision, the draft TOD ordinance proposes the creation of three zones within the TOD District; station (Zone 1, 1/4 mile), midway (Zone 2, 1/2 mile) and a transition (Zone 3, 3/4 mile).

Within each zone, a specific set of regulations related issues such as land use, parking, building design and setbacks are provided. The objective of such regulations is to "set the stage" for transit oriented development in advance of the preparation of a station area plan and specific development proposals.

10.2 Station Area Plan(s)

While the TOD ordinance will establish parameters to implement the vision for the three zones within the TOD District, a separate Station Area Plan (or plans according to zone) should be developed based on the general land use strategy, design standards, and recommendations provided within this design manual.

Prepared either by the City or a private developer, the Station Area Plan(s) should be based in reality (and determined to be financially feasible) but oriented toward the future. The detailed Station Area Plan(s) should reflect TOD policies considering land use, site planning, transportation and architecture on both a district-wide and site-specific context.

Obviously, a key principle of TOD is to create plans that are sensitive to the surrounding environment. Future development projects within the TOD should be compatible with the vision identified in this design manual and the corresponding TOD ordinance. Even though development and/or redevelopment may occur on a parcel-by-parcel basis, there will be a plan in place to serve as a guide and provide an understanding of what developers should work towards in the TOD district. Projects that are consistent with the City's vision for the area are more likely to be supported by the surrounding community.

The Station Area Plan(s) should include, based on the TOD District ordinance, the following:

- Identification of permitted and conditional uses
- Prescribed site development regulations
- Requirements for street, streetscape and other public area improvements
- A housing affordability analysis and feasibility review that describes potential strategies for achieving housing affordability goals
- Analysis of the need for public parking
- Consideration of public and civic art in or near transit stations

Whether prepared by the City or an individual developer(s) the Station Area Plan process should follow the following general procedure:

1. Preliminary work will be performed that includes reviewing, analyzing and organizing baseline information for the TOD areas.

2. An introductory public meeting will be held to present TOD concepts, goals and the station area planning process.

3. A public workshop will be held to present urban design, land use, transportation, open space and housing concepts and gather public input. A draft preliminary station area plan will be prepared utilizing public input, the market assessment and the affordable housing feasibility analysis.

4. A second workshop will be held to present the draft preliminary plan, identify major issues, and collect stakeholder feedback.

5. The draft Station Area Plan will be prepared. A third workshop will be held to present the draft Station Area Plan and gather public input.

6. The draft Station Area Plan will be revised and a presentation will be developed for the Planning Commission, City Council and any other appropriate boards or commissions.

7. The draft Station Area Plan will be presented to appropriate boards and commissions; public input will be documented for the City Council presentation.

8. The draft Station Area Plan will be presented to the City Council.

9. The Draft Station Area Plan will be revised and finalized per the City Council's direction.

11.0 RESOURCES

Additional information about the City of Big Lake TOD program is available on the City website at www.biglakemn.org.

For those wanting to learn more about transit oriented development concepts and issues, the following resources are available on-line:

- Center for Transit-Oriented Development:
  http://www.reconnectingamerica.org/html/TOD/index.htm
  http://www.reconnectingamerica.org/html/TOD/case_studies.htm

- Congress for New Urbanism:
  http://www.cnu.org/

- NewUrbanism.org:
  http://www.newurbanism.org/pages/532107/

- TransitOrientedDevelopment.org:
  http://www.transitorienteddevelopment.org/pages/1/index.htm

- TransitVillages.org
  http://www.transitvillages.org/pages/448644/index.htm

- Urban Land Institute
  www.uli.org

- Smart Growth Network
  www.smartgrowth.org

- Pennsylvania Environmental Council
  http://www.pecpa.org/_final_pec/html/TOD.htm

12.0 BIBLIOGRAPHY

Citizens' Planning Committee (CPC). *Citizens' Planning Committee Report*. January 1995.

Citizens' Planning Committee (CPC). *From Chaos to Common Ground: A Blueprint for Austin.* April 1996.

Citizens' Planning and Implementation Committee (CPIC). *The Challenges for Austin's Future.* September 1997.

City of Austin, Texas, *Transit-Oriented Development Guidebook*. April 2006

City of Calgary, Canada Planning Department, *Best Practices Guide.* 2004

Envision Central Texas (ECT). http://www.envisioncentraltexas.org/. Accessed February 12, 2006.

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