L. Prototype Plans

Initial Prototype Transit Corridor District Plan

A plan for the corridor was developed midway through the project to help in developing the guidelines and help illustrate some of the design concepts. This is shown in the figure. The eastern part of the corridor contains a town center with a mixture of retail, civic and commercial activities. Housing for the elderly as well as one and two bedroom apartments for young people would also be located in the town center area. To the west, there is a pattern of mixed land use along the corridor with a mixture of multifamily residential and small offices located directly along the transit route. Single family housing on relatively small lots are provided in the several blocks from the transit route. Extensive use is made of the natural features. Most wooded areas are retained as part of parks and nature preserves and the pathway system that connects residential areas to the transit route. Wetland areas are retained and in some cases converted to open water and storm water retention areas. A elementary school site along with an outdoor recreation area is provided near the center of the corridor. A strip type shopping center is located on the west of the site near the open water. It is expected that it would be served by both automobiles and transit with auto-oriented shopping on the north side, near the arterial, and transit-related, local shopping located on the south side of the parcel. The corridor roadway would be closed to automobile traffic in the town center and at one other location to the west.

This initial design provided a useful exercise in applying and developing the guidelines. Following its completion it was extensively critiqued to determine how a revised design might look. The design was evaluated based on the criteria developed to judge ICDC entries and exemplars as described in the *New Suburbs*.
PROTOTYPE DESIGN/RESULTS

report. Technical questions such as lot size and block width, street connectivity and pedestrian patterns, were examined. Following this review a final design was developed which is explained in the following section.
GUIDELINES FOR TRANSIT SENSITIVE SUBURBAN LAND USE DESIGN
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Final Prototype Design

The final prototype design was developed to provide a test of the guidelines for transit-sensitive suburban planning and to demonstrate the concept of a transit corridor district as it might be developed in a suburban area. Several concepts were continued from the first prototype, however, the final design involves significant changes over the first effort. The final design was developed by a team of architectural faculty and students following the guidelines developed for this project.

Four districts were identified as a basis for design. These areas—the Woods, the Farms, the Central District and the Estates Area—were identified based on existing land use and/or the impact of the transit system on design. These themes helped to develop a basis for design and also help to illustrate how different approaches can be blended within a Transit Corridor District, as well as examining how the guidelines would be used by different designers working on five sites with varying and other natural features such as woods, lakes and wetlands.
Overall Design

The overall design is shown on the following two pages. In general the design includes a band of high density housing and office facilities located along the east-west transit route and a lower density development at the fringes. A business district/civic center is located at the point of intersection of the two transit routes towards the east end of the site.

Smaller neighborhood business areas are located at other transit stops to the west. The plan would contain approximately 3,000 housing units and approximately 1,400,000 square feet of commercial/office space. Substantial retail areas are also included. This results in a net residential density of approximately 6.5 units per acre for residential areas only. Densities in individual areas may vary considerably ranging up to seven to ten residential units per acre near the center and eastern edge of the site. Commercial densities are highest in the central district and lower elsewhere. Actual densities could vary, however, depending on how individual lots and multifamily units were used.
GUIDELINES FOR TRANSIT SENSITIVE SUBURBAN LAND USE DESIGN

PROTOTYPE DESIGN/RESULTS
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Location of pathways (dashed lines) and transit route (solid line).
PROTOTYPE DESIGN/RESULTS

Pathways/Transit Service

Pathways are provided for pedestrians and bicycles parallel to the transit corridor and leading towards it from surrounding land uses. There are three major breaks in the transit corridor where auto usage would be restricted. These occur midway between the north-south arterials in the west, center and eastern portions of the site. The breaks in the west and center areas occurs in largely residential districts. In these areas the pathway/transit corridor passes through open space/recreational areas. Multifamily housing units open out to these zones to maximize green areas related to the housing. The break to the east occurs in the central commercial district. In this area the two transit lines cross at a central square and a pedestrian zone is provided along the transit corridor. The east-west bicycle path is separated from the transit corridor at the central district. The bicycle pathway is several blocks south of the transit corridor. This permits easy through movement of bicyclists away from the commercial area, yet still maintaining bicycle access to buildings in the commercial district.

East-west auto travel through the site is possible but made somewhat difficult because of closure of the transit corridor. In most cases a loop collector street is provided which permits auto access into the site from the surrounding arterials. This follows the design goal of emphasizing transit and having a reduced role of the automobile.
THE WOODS
An existing lakefront lands area remains undeveloped.

A small nature center overlooks this area. A pedestrian bridge connects the housing north of the lake to the boulevard leading to the transit stop.

The shopping center is oriented to serve shoppers arriving by either auto or transit. A large parking lot with easy access to a main arterial serves the north end of the center. A parking ratio of approximately 3 cars/1000 sq ft of GLA are provided.

The southern edge of the shopping center contains the transit stop and a pedestrian-oriented plaza and pond. The parking ratio in this area is 1 car/1000 sq ft of GLA.

The western area of the site is heavily wooded and also contains a pond.

This collector street runs across a small ridge in this area and ends at the transit station.

Larger parks are located at the edges of the TCD.
The Woods

The westernmost segment of the TCD – ‘The Woods’ -- lies between Marcy and One Mile Roads. As its name implies, this area has large, well developed wooded areas as well as open space. The area also includes a pond near the western edge and a large wetland to the north. Design in this area emphasizes the natural features of the site with wooded areas. The area will be family oriented with a mix of other uses. Upper income residential would be used in conjunction with the amenities of the site. The pond/wetland areas dominate the design with clusters of housing surrounding each area. Access for automobiles to the area would be from adjacent arterials. Street patterns within The Woods are strongly affected by the areas of water where roadways follow edges of the water. Elsewhere a more traditional curvilinear pattern is used.

One unique feature of the Woods is the shopping area located in the northeast corner at the intersection of Silver Spring and Marcy. This area is expected to be served by both autos and transit. Parking is located mostly on the arterial (north) side of the site, while the shops are located on the transit (south) side with a small plaza used to connect the buildings to the transit route. The shopping center would be relatively small, with several small shops/restaurants located at the south end and a larger building (discount store, etc.) to the north edge.
THE FARMS

Deeper sites are located at the edge of this district to form a buffer between it and the arterials.

Each quadrant of this area contains a neighborhood open space with a different character.

The transitway in this area is a linear park containing recreation areas such as tennis courts and soccer fields as well as paths leading to the transit stops.

The collector road connects the quadrants of this tract and leads to the north south arterials as well as to the transit stop.

This area of the tract has existing woods and a small pond and contains larger single family housing and large duplexes.
The Farms

The ‘Farms’ area is largely open and flat land and includes three farms located in this area. The Farms area consists of four quadrants, each with its own character and features. The overall area consists of a mix of land uses with a mixture of midrise, town house, duplexes, triplexes and single family housing. The two transit stops located in this area have small scaled retail and office uses.

The street pattern is mostly grid shaped with a distinctive loop collector street that allows auto access to different areas. Multifamily housing is located near the center of the area, with the open space/pathway/transit corridor located through the area.
THE CENTRAL DISTRICT
Uses near the arterial are auto oriented though they are only 2 blocks or one-quarter mile from a transit stop.

A ring road for autos and servicing vehicles surrounds the core of the central district.

A parking structure and open lots are available for autos. Though many employees will arrive via transit the auto will still be used.

Woonerfs- pedestrian/service streets or courtyards are located in the densest part of this district. Buildings can be entered through these areas on the major streets.

The Transitway in this district is pedestrian oriented with only transit vehicles and taxis allowed in order to minimize congestion and create a quality environment. Some 4,000 employees will eventually work within a block of this main street which also contains significant retail development.

A open market structure and indoor market hall ends the mainstreet area on the east. In winter the market becomes an ice-skating rink.

Housing is located in the southern part of the central district and focuses on a tree lined boulevard and plaza. The bicycle path, through the TCD uses this boulevard to bypass the transitway in this area.
The Central District

The Central District is the high density mixed-use center of the entire scheme. Two main transit lines intersect here and form a core area for a concentration of office and retail uses. Surrounding this area is high density housing for the elderly and single/couples with few children in the area. There would be few, if any, single family houses in the area.

Immediately west of the intersection of the transit routes a civic complex would be located in what is now a heavily treed area. This would consist of a city hall, police and fire station, churches, a library and an athletic club. A civic park forms the center of this complex. The east side of the central area features an open farmers’ market type area, convenient to housing and also served by the transit line.
ESTATES AREA
This area contains more single family housing than other parts of the site. 2, 3 and 4 unit houses are also used extensively to fit into this district.

Two major boulevards are the focus for this area. All housing is within a block of a boulevard, which are linear parks through this site.

Apartments face the boulevard and a central common for the entire area.

The transitway diverges from the collector streets and is routed through a wooded area. As the vehicles move through the site there are a variety of experiences for the transit riders.

An elementary school is located near the transit stop. An existing housing development south of the site is also part of the district for this school.
PROTOTYPE DESIGN/RESULTS

The Estates

The ‘Estates’ area, located east of the central district, is designed to fit between existing single family housing to the north and south of the site. This area would consist of mostly detached housing, however, a large number of the structures would be duplex and triplex type housing. Apartment units and garden apartments are located adjacent to the transitway. A formal grid street pattern is used in this area with boulevards forming the spine along both east-west and north-south axes of the site. A school is located on the southwest corner of the area. The school would be directly served by transit. Substantial open space is provided near the school for outdoor education and recreational use.