

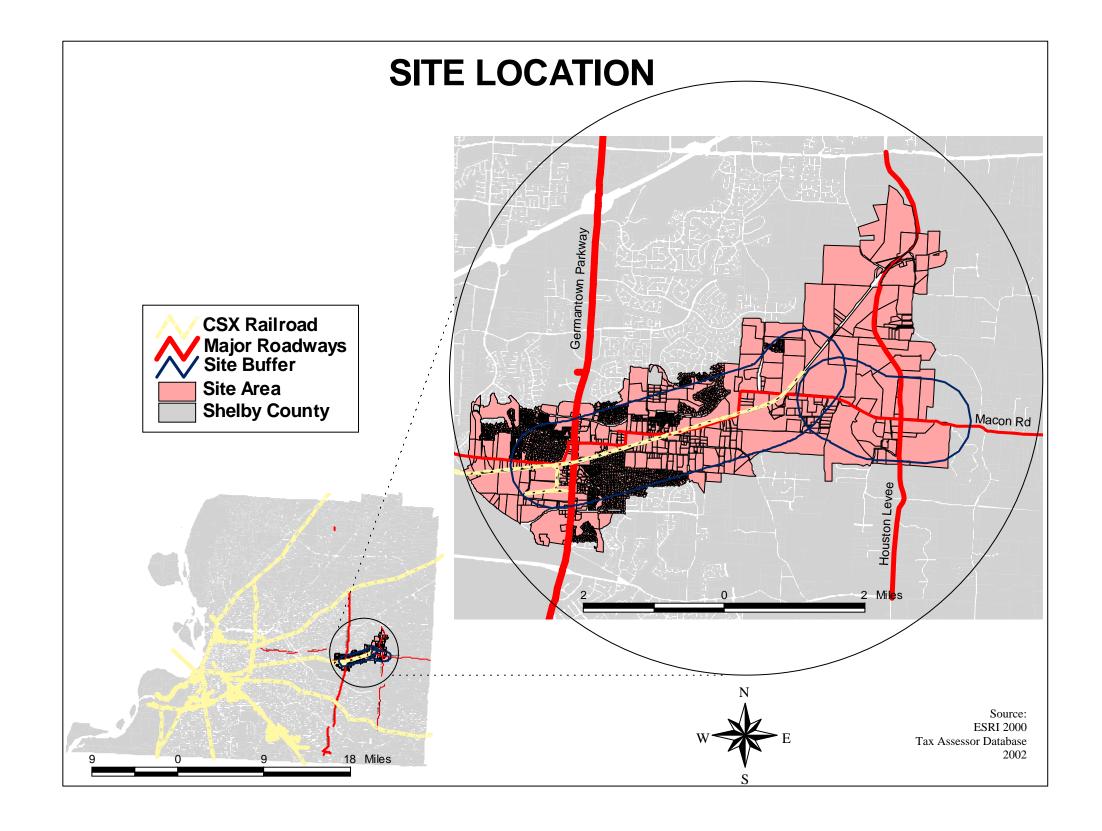
CSX POTENTIAL LIGHT RAIL TRANSIT SUPPORTIVE DEVELOPMENT: CORRIDOR CONCEPTS AND SITE DESIGNS

University of Memphis Graduate Program in City and Regional Planning Site Planning, PLAN 7008, Fall 2004 Prof. Reza Banai

Cordova Statistics

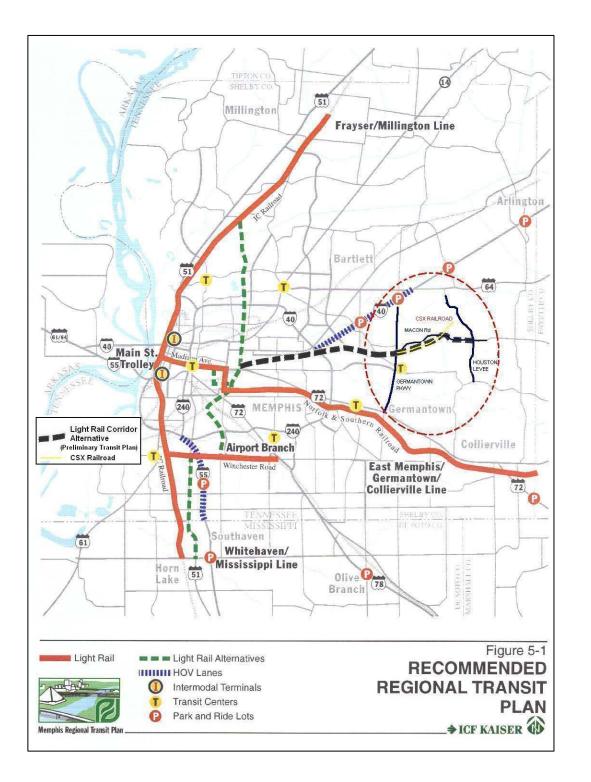
Source: Home Town USA (www.hometownusa.com) FIPS Code - 157 Metropolitan Statistical Area # - 4920 Core Based Statistical Area # - 32820

Population - 52710 White Population - 45612 Black Population - 4149 Hispanic Population - 984 Households - 21917 Persons Per Household - 2.72 Income Per Household - \$63973 Average House Value - \$158400



Originally settled in 1835, Marysville was an agricultural settlement that produced livestock, cotton, vegetables, tobacco and flowers (Cordova's Past is Prolog, 1996). In 1903, the town was renamed Cordova. At this time, Cordova was recognized for its flower farms that supplied fresh cut flowers to markets in downtown Memphis (Obermark, 1987). The main commercial area of Cordova was situated near the intersection of Macon Road and Dexter Lane, where buildings from the 1920's to 1940's still remain (Bailey, 1993). The Louisville & Nashville (L&N) passenger rail line connected Cordova residents with downtown Memphis shopping and employment opportunities (Erskine, 1998). With the advent of the automobile, the passenger line became obsolete and ceased operations in the late 50's. The train depot, located in the center of old Cordova, was converted into a library in 1977 ("Trips into Literature..." 1977). Later, the library expanded and relocated leaving the depot empty again.

Cordova first began to experience suburban growth in the 1970's with the development of the Country wood subdivision. As Cordova grew over the next 20 years, annexation by the City of Memphis became one of the primary concerns for local residents (Ward, 1982). In the 1980's retail and commercial centers began popping up along Germantown Road. Cordova was eventually incorporated into greater Memphis in 1990. (Memphis Police Department Website).During the ten-year period from 1988 to 1998, Germantown Parkway expanded from a two-lane road to a major six-lane thoroughfare (Erskine, 1998). The Wolf chase Mall opened in 1997 at the intersection of Germantown Parkway and Stage Road, generating more suburban growth and consequential traffic problems in Cordova (Erskine 1998). In the mid 1990's developer Ray Gill began the neo traditional Cordova the Town development in old Cordova ("Cordova's Past is Prolog, 1996). Currently, Cordova continues to grow and expand in the fashion of typical suburban sprawl.

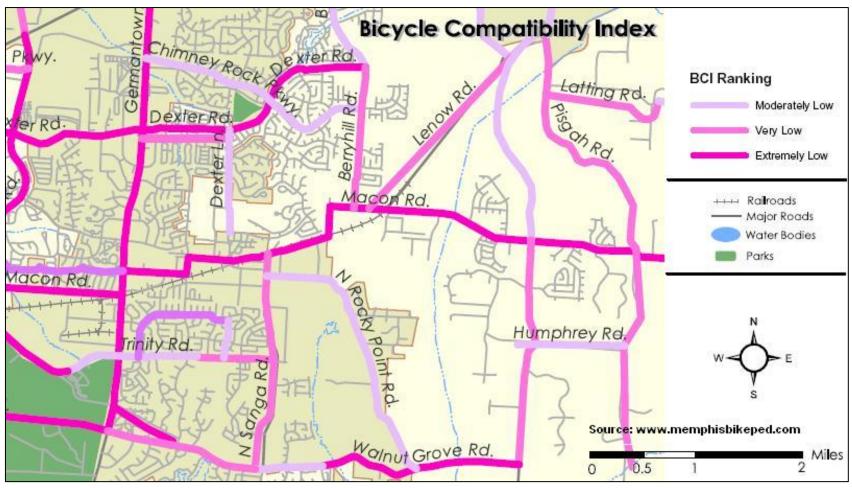


The CSX line is an alternative light rail route in the Memphis Regional Transit Plan. The alternative line would serve users commuting to and from the Cordova area, located east of Memphis and north of Germantown. Currently, commuters rely on the heavily congested corridors of Interstate 40, Germantown Parkway, and Walnut Grove Road. The CSX line would connect with other proposed light rail lines and in the City of Memphis and provide high-speed public transportation to various destinations in Memphis.

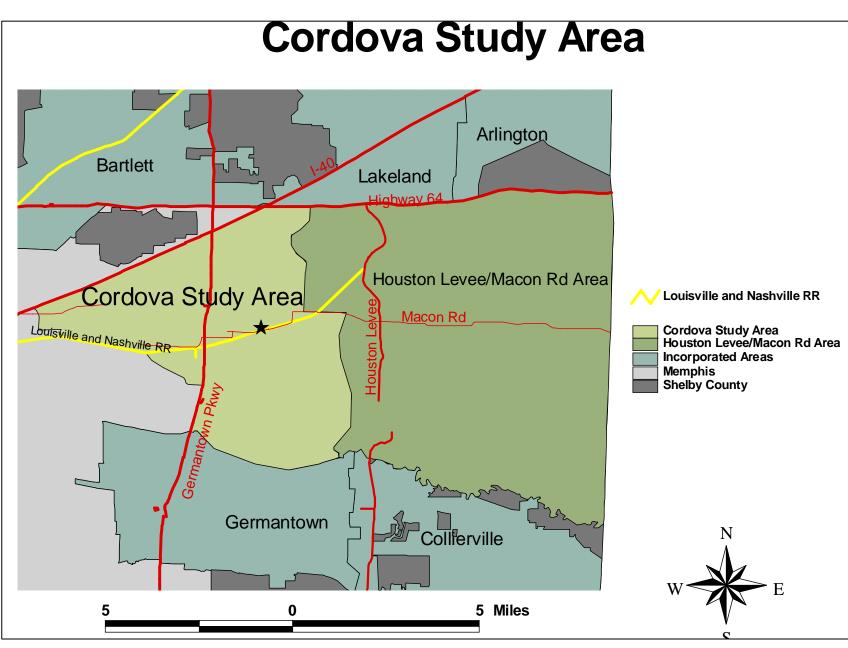
Left: Although not a primary focus of the Regional Transit plan, the potential exits for alight rail transit line using the CSX corridor reconnecting the Cordova area with greater Memphis.

Right: Currently the Bicycle Compatibility Index shows that the area is not suitable for pedestrian or bicycle traffic

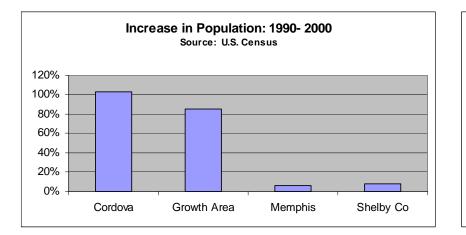
The Memphis Metropolitan Planning Organization has prepared a C bicycle and pedestrian plan, which references the potential light rail b transit corridors in the Memphis area. Using the bicycle compatibility p index (BCI), a systematic means of measuring the suitability of o roadways for bicycling, MMPO prepared a color-coded map of d Memphis-area roads and assigned compatibility ratings to these transit routes. Traffic VOLUME and average vehicle speed are two determining factors for road compatibility. MMPO's map designated all roads in the CSX light rail corridor as "Extremely Low," "Very Low," tr and "Moderately Low" in terms of compatibility with bicycle and pedestrian routes. b

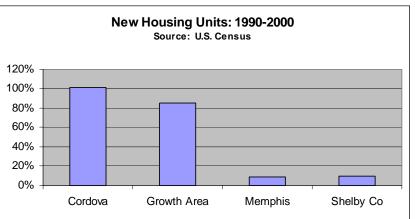


Considering these ratings, the CSX light rail line offers potential benefits for bikers and pedestrians in the Cordova area. The CSX plan would reduce vehicular traffic, thereby improving the safety of roadways for cyclists. In addition, future transit-oriented developments located along the Macon Road corridor between Germantown Pkwy and Houston Levee would post reduced speed limit signs, and future road design and expansion in this area could incorporate medians and crosswalks to slow vehicular traffic. Rather than racing between destinations, vehicles would reduce their speed while passing through these pedestrian and bicycle friendly cores.



Source: ESRI 2000 and Tax Assessor Database 2002





Trend Study

annexation. density double since 1990. development within the area. Levee/Macon Rd study area.

The CSX rail corridor within the Cordova area is currently not a primary focus of the Regional Mass Transit Plan for the City of Memphis. It is the intent of this study to examine the existing conditions of the Cordova area, including potential trends regarding population, gross density, and housing stock to better understand the future feasibility of light rail transit within this corridor.

The Cordova study area is here defined as all census tracts that were included in the original Cordova Annexation of 1990, and also includes two additional census tracts (211.21 and 211.34) that were not involved in the original

Changes in residential and commercial land use were examined for the Cordova study area as potential indicators of growth. The total population for this area has more than doubled since the 1990 census, resulting in a similar doubling in the total number of housing units that were built to meet this new demand. Once known primarily as a farming community, the Cordova study area has seen gross density double since 1990.

Commercial activity has also increased noticeably within the study area. Germantown Rd is known as a primary commercial arterial within the city, serving as a north-south armature of economic activity. Anecdotally, it can be seen that the amount and density of commercial land use continues to increase along Germantown Rd, responding to an increasing demand for new residential development within the area.

Houston Levee is an emerging commercial destination that has seen rapid development as suburban expansion continues eastward from the city of Memphis. Although not within the Cordova study area, the area surrounding both Houston Levee and Macon Rd is being examined due to its location and the development potential of relatively large amounts of currently undeveloped land. Any LRT alignment within the existing CSX rail corridor would most likely significantly affect the property value and land use potential within the Houston Levee/Macon Rd study area.

If the current trends of higher density development, measurable population growth, and increased levels of commercial activity continue, the Cordova study area will become better suited for LRT alignment over the next 10 years. In addition to the changing conditions within the Cordova study area, the amount of currently vacant land along the existing CSX line within the Houston Levee/Macon Rd study area seem to designate this corridor as a prime candidate for future LRT alignment within the city of Memphis.

1. DOWNTOWN CORDOVA: Once an important stop on the L&N Railroad, the formally active downtown remains largely underutilized and mostly forgotten.

2. CORDOVA COMMUNITY CENTER: Once the center of the community 3. TYPRICAL SUBURBAN STREET: The roads located throughout the site are nothing more than paths for the car.





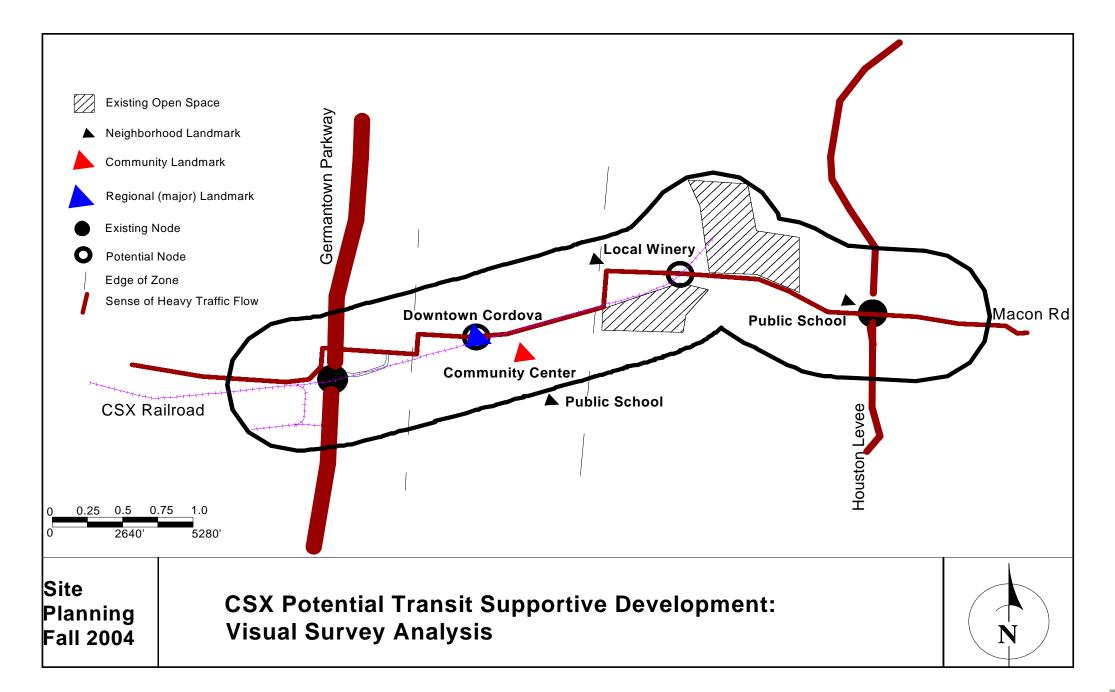
Assets:

- 1. Potential Transit Line- direct connection to downtown Memphis
- 2. Historic Downtown
- 3. Walkable schools
- 4. Old trees along Macon Rd.
- 5. *Cordova The Town* development- a good local model of some TND principals
- 6. Excellent housing stock
- 7. Identifiable history and heritage
- 8. Germantown Pkwy- major commercial destination

Liabilities:

- 1. Few sidewalks
- 2. Existing rail tracks cross Macon Rd 3 times
- 3. Overhead power lines
- 4. Non-integrated zoning
- 5. Visually unpleasant surface parking lots
- 6. Narrow Macon Road dangerous for vehicles
- 7. Scattered municipal resources
- 8. Poor interconnectivity of residential streets

The community of Cordova has an important decision to make regarding their collective future. As it stands, suburban sprawl is slowly but consistently consuming the land available for future responsible development. The decline of Cordova can partially be attributed to the closure of the rail depot and the subsequent effect that it had on nearby commercial enterprises. The loss of area business not only hurt the area economy, but more significantly it initiated the erosion of community identity. Cordova lost its significance as a separate and distinct place, becoming just another obstacle for the incessant suburban escape from downtown Memphis. Proposed LRT alignment within the CSX corridor has the potential to be the catalyst that makes Cordova once again a relevant and viable place. Station placement will re-establish the connection to downtown Memphis that gave birth to this community. New development within the corridor will help revitalize station areas, bringing jobs and commercial land uses to an area dominated by single family homes. The actual benefit of an LRT system would not only be measured in property value and land use impact, but in the self-determination and sense of community identity that is so vital to the future of Cordova.



Analysis of existing conditions

The single most dominant site feature is Macon Road, a vehicular path that acts as an armature, dividing the corridor in half. Presently, it is a connection between the larger arterials bounding it on the East and to the West. Access is also provided to the various residential clusters located along the length of Macon road. Two major nodes define the boundaries of the focus area: On the west at the Germantown Parkway/Macon node, and on the East at the Houston Levee/Macon crossing. These nodes are primarily dedicated to commercial uses, blanketing the landscape

with a sea of parking lots. Both commercial nodes are high traffic areas, making them compatible with future development.

Downtown Cordova has the potential of being developed as an important commercial and residential center in the future. The site has both cultural and historical significance as a landmark, and is the only location within the corridor that already possesses an unambiguous sense of place. Historically, the rail stop was an integral part of this once vibrant community and can be again. The site has a modest amount of land available for new development, and more space available for urban infill and adaptive reuse within the existing downtown core. Located ¹/₂ mile southeast of downtown is an existing community center that hosts annual events, such as the arts and crafts fair. This landmark is currently underutilized as a community facility, but remains in a geographically significant location, surrounded by existing residential land use and a moderate amount of open land.

A local winery is also located on Macon road, serving as a destination point. The winery hosts annual outdoor concerts and wine tasting events that attract local residents and area visitors. The cotton field found to the North of Macon Road is a cultural landmark that should be preserved to the extent possible to help reflect the agricultural history of the region. If not kept agricultural, the area could be retained as open space. South of the cotton field is a substantial open area originally designated as an industrial park. Industry has yet to fully locate here, leaving the site primarily open and unused. Development of this site would require a minimum environmental impact since the area is clear of trees and service roads are already in place.

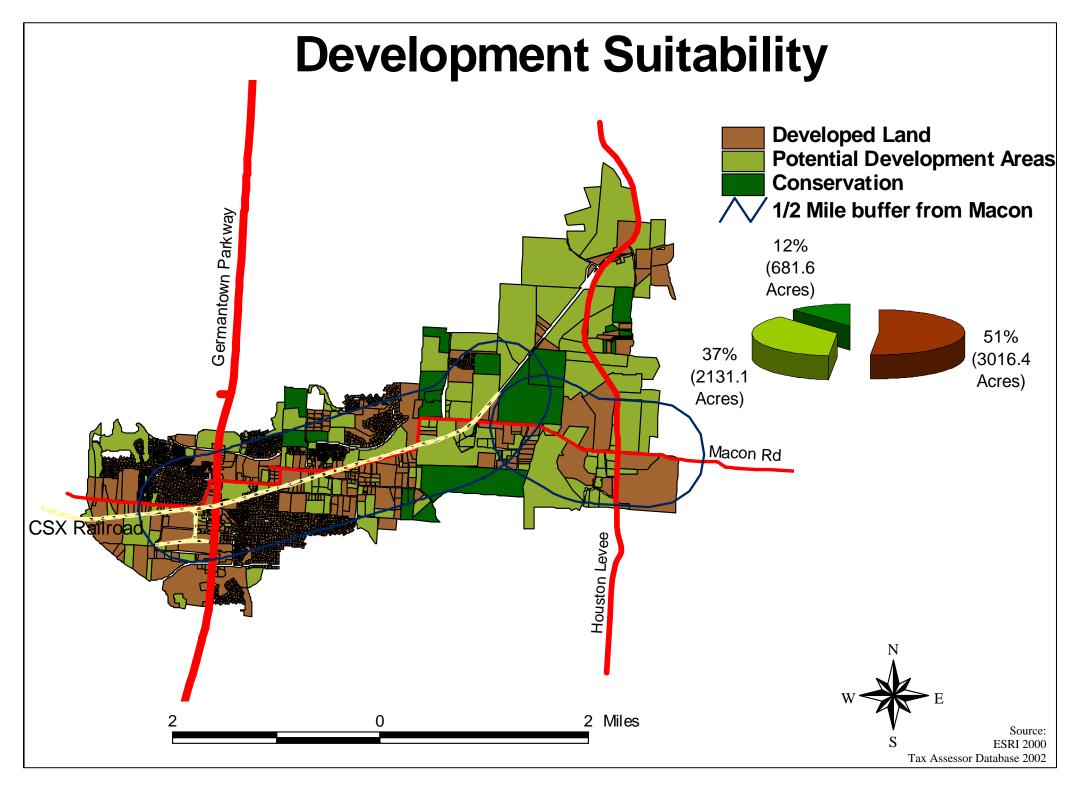
Below: Lack of pedestrian infrastructure makes streets only accessible for automobile



Development Suitability

Certain areas within the light rail corridor should be conserved in their present state. One of these areas is located to the south of the industrial area and is heavily wooded. The second conservation area lies north of Macon Road, on the immediate west side of Houston Levee Road.

A proposed track extension will traverse through this presently agricultural area with a minimum of environmental impact, as it connects with a potential node on Houston Levee. Through sensitive construction and planning techniques, this land will remain much as it does today with the exception of the light rail line and any other required structures, however minimal.



Vacant parcels located in the proximity of existing CSX rail line show the greatest development potential. The intersection of Germantown Pkwy and Macon Rd contains little open land, but is heavily dominated by existing retail and commercial establishments with large amounts of parking currently available. Germantown Rd is a primary vehicular thoroughfare, which also serves as a major route for the Memphis City bus line.

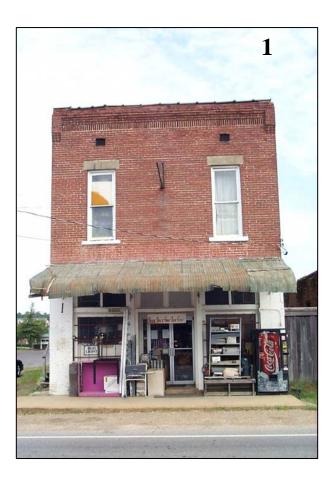
Downtown Cordova has historically served as a stop on the CSX rail line. The formerly active downtown is currently in decline resulting in neglected and languishing structures and open space. The downtown area shows potential for mixed-use infill and adaptive re-use.

The area designated for an Industrial park was not built out and the majority of the land and facilities are underutilized. Infill here will require less environmental impact, due to the large amount of presently cleared space.

The border of Houston Levee to the North is primarily developed, with churches and residential property. There are areas of open space that will host the light rail station. The rail line would need to be extended to the northeast to intersect with Houston Levee. North Houston Levee is located within easy access of existing residential neighborhoods and Highway 64.

PRIME UNDEVELOPED LAND: Vacant Property near Germantown Pkwy





1. Although a small amount of commercial activity still exists downtown, the potential remains for redevelopment of existing and underused structures.

2. Current Zoning:

Isolated and separate land uses create poor interconnectivity between jobs and housing, and require *dependence upon the automobile*

3. Balance: Jobs to Housing Sites:

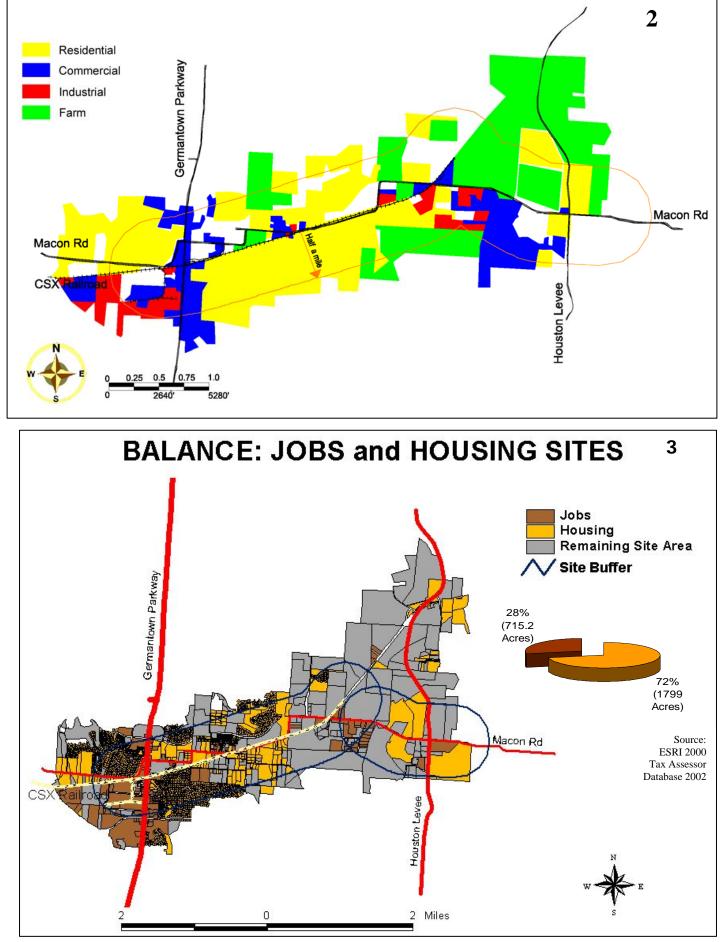
Within the study area, residential land use is overwhelmingly the dominating element. Increasing the amount of commercial land use will allow for a future influx of jobs to the area. Primary commercial boundaries of this highly residential area are located on the west by Germantown Pkwy and on the east by Houston Levee Rd.

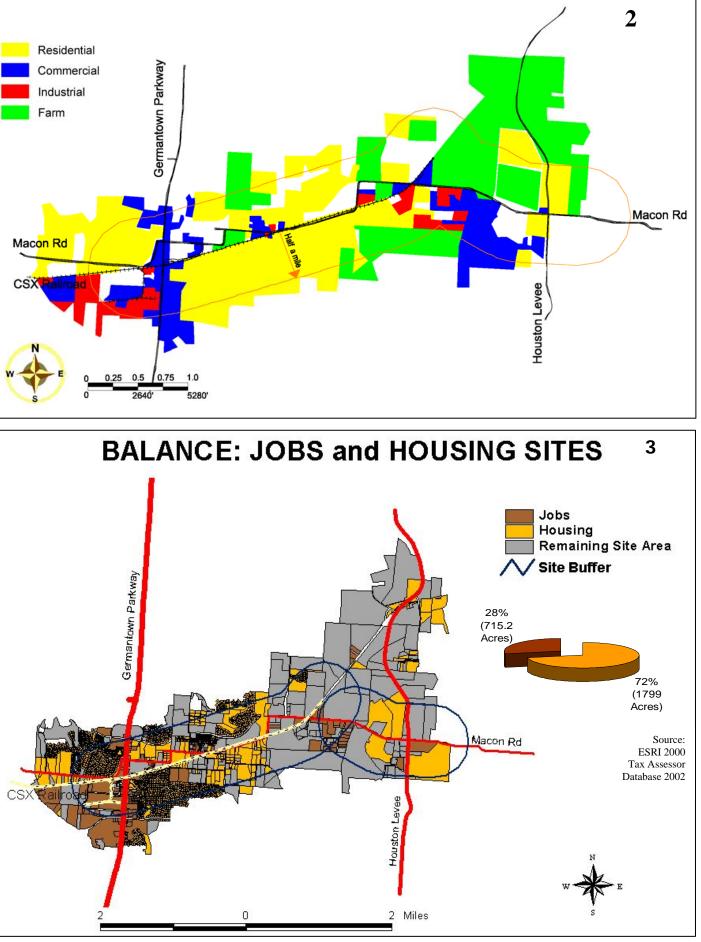
CURRENT STATUS OF THE CSX CORRIDOR

Currently in a state of disuse, the CSX rail line has the potential to be purchased by Shelby County and the City of Memphis for future public transportation use. About 3 years ago CSX petitioned the Federal Surface Transportation Board (FSTB) with a "request for abandonment" of the rail corridor. If FSTB granted the request, FSTB would have been required to take responsibility for control and maintenance of the property. The FSTB is unwilling to take responsibility for a property existing in a state of disuse and requiring extensive cleanup and maintenance. As part of the abandonment process, the existing rail line and any supporting infrastructure would need be either revamped or removed before the FSTB would consider another petition.

Although the FSTB denied the "request for abandonment," they granted a "request for discontinuance of service," the first step in the abandonment process. The city/county partnership expressed interest in owning the corridor; however, they are concerned about the financial burden and extensive work required to dismantle the existing rail line. The Greater Memphis Green-line Group, a citizen organization, has formed with the intention of assisting the rail banking process. The group is interested in cleaning up the corridor with the ultimate goal of establishing hiking/biking/and walking trails along the rail line. Also of note, the potential exists for a third party donor to contribute to the cleanup effort, if indeed the municipal entities take control of the land.

- Uncertain future for the site
- Possible reversion to non-transit use
- Decisions primarily driven by cost cutting efforts



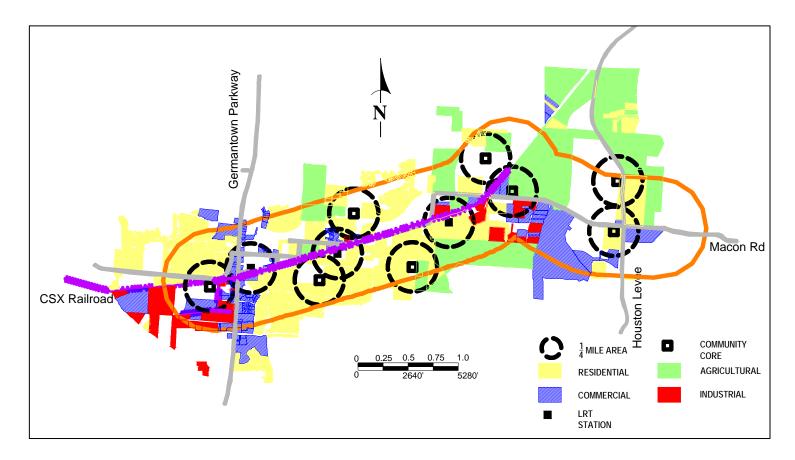


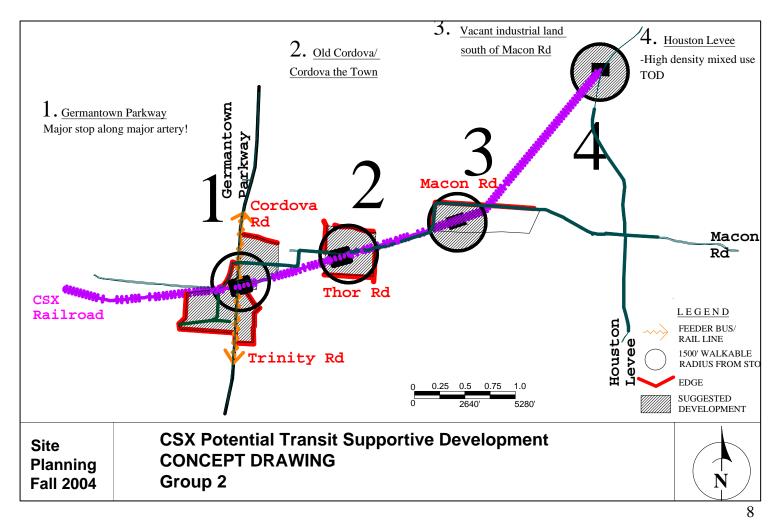
Concept A

This corridor concept establishes a series of community cores that will give structure to a regional transit system. Three LRT stations will be placed along the existing CSX right of way, accessible from nearby residential and commercial activity, but also able to accommodate the daily commuter through the use of parking structures and park and ride lots.

Each community core is located on land that is currently vacant within existing residential areas, but not within walking distance of a proposed LRT station. Each community core will be linked by a bus transit system, connecting each neighborhood to the nearest LRT station area.

Existing farmland should be preserved during future development and will remain open. The industrial park will be used to accommodate a substantial amount of the new development within the corridor, with an emphasis on land uses that is committed to local employment. The emphasis of this proposal is on serving the existing population by providing increased modal choice, while promoting new development where possible, via station areas that will best accommodate growth.





Concept B

Goals

- Transit-oriented development at four optimal locations, chosen based on
 - LRT spacing interval
 - o Amount of developable land
 - o economic significance of existing development (shopping, office, employment)
 - historic significance
 - o environmental impact

Transit Oriented Development:

Station 1: Germantown Pkwy

- Major arterial in Shelby Co, high volume of traffic
- Existing streets define walkable radius from suggested rail stations



GERMANTOWN PKWY: Relatively serene queue of traffic at the typically choked Macon/Germantown Node

Station 2: "Downtown Cordova"/ Cordova the Town

- Downtown-historic, largely vacant town center/old rail depot
- Cordova the town- new TND

Recommendations:

- Suburban retrofit of strip center and big box commercial
- Multi-level garages for park and ride
- Footbridge to facilitate pedestrian crossing

Station 3: New Transit-Oriented Development

- Underutilized industrial park with large tracts of open, cleared land
- Developable area well-defined by existing streets

Recommendations:

- Creation of transit-oriented development with significant office and industrial employment, low and high density residential, school, community buildings
- Construction of "Park and Ride" lot to facilitate development of major employment destination in eastern Shelby County

Station 4: Houston Levee

- Cleared and agricultural land
- Proximity to new residential development
- Proximity to major artery US 64 (Stage Rd)
- Houston Levee Rd slated for improvements development on a large scale

Recommendations:

- Adaptive re-use of existing historic buildings for retail
- Addition of parking garage or landscaped ground parking



DOWNTOWN CORDOVA: The Depot is an integral part of Cordova's past and vital to its future



HOUSTON LEVEE: Automotive dominated Houston Levee node shows little consideration for the pedestrian element

ts of open, cleared land treets



INDUSTRIAL PARK: Open space in industrial districts silently

Houston Levee Rd slated for improvements in the regional transportation plan that will facilitate

*Recommendations:*Creation of transit-oriented development along future major arterial

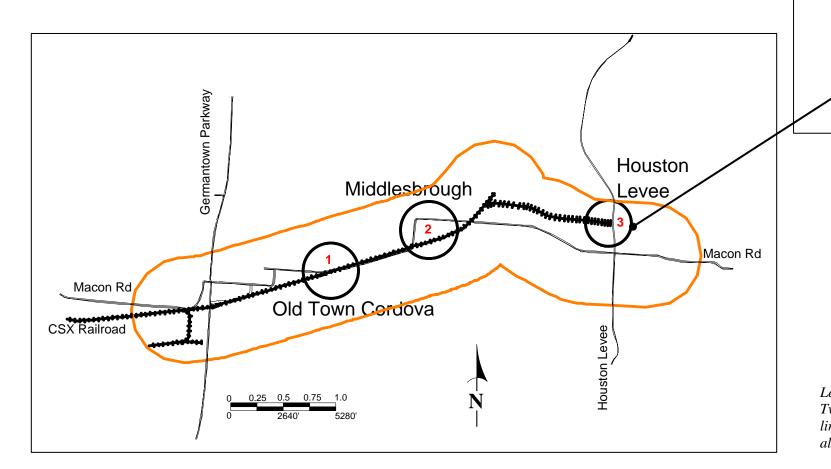
Concept C

This design concept proposes the conversion of the inactive CSX rail line into a light rail transit system for Cordova, Tennessee using principles of new urbanism, TOD design, and TND design principles. The design will focus on the conversion of the inactive CSX railroad into a light rail transit line along Macon Road between Germantown Parkway and Houston Levee, linking the area with downtown Memphis. A successful transit-oriented neighborhood center exhibits compact development that is focused around bus and rail stations; provides opportunities to shop, work, live, learn and play for its residents; and has a defined boundary and character that is distinct from the surrounding areas.

This site plan was created with attention to four design principles: ecological responsibility, mobility and linkages, settlement patterns, balance of uses and housing.

The site designs contained in this proposal focus on three areas (see Map 1) for which a transit oriented design has been located around a proposed light rail stop. The areas planned include:

- Area 1: Old Town Cordova
- Area 2: Macon Road and Cordova Park Road (termed Middlesbrough)
- Area 3: Houston Levee north of Macon Road



Left: POTENTIAL SITE LOCATIONS FOR LRT STATIONS: Two stations are to be established on the existing CSX rail line which will be extended to accommodate a third station along Houston Levee.

Park and Ride

Open Space

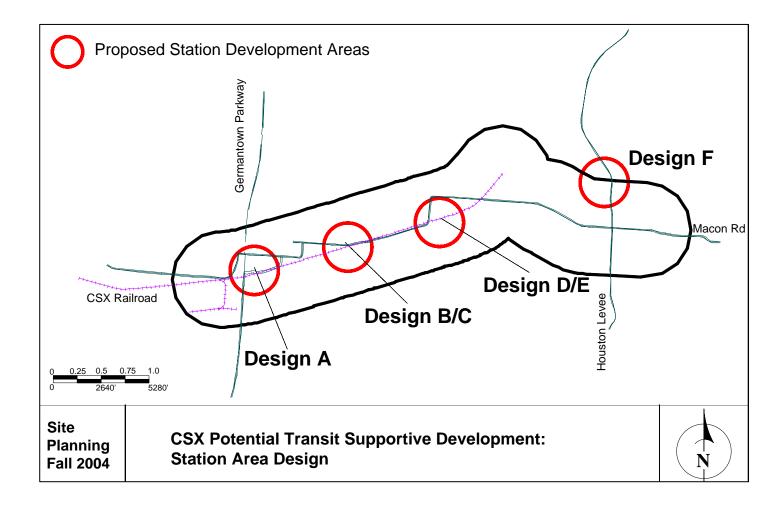
Commercial

Residential

0



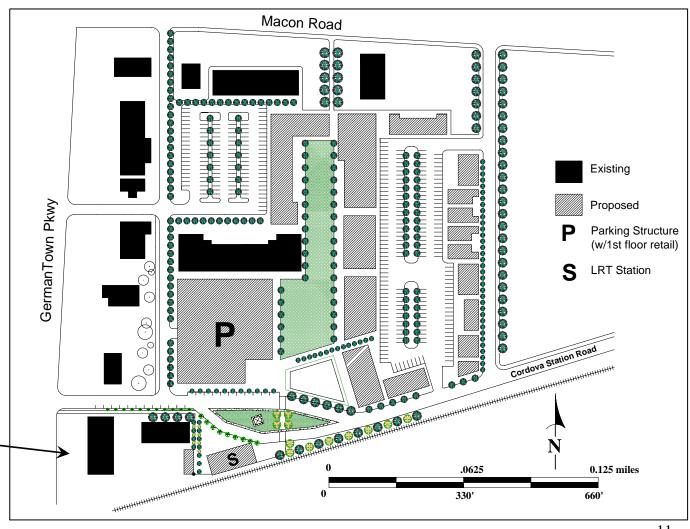
Above: POTENTIAL SATION DESIGN: Residential and commercial land uses are integrated and located within walking distance from the Station.



DESIGN A: GERMANTOWN PKWY STATION

Germantown Parkway Station will be a primary stop on the light rail line. The prime commercial development is located on a major traffic thoroughfare and in close proximity to new residential neighborhood. These factors establish this node as a place of regional significance and an essential site for the creation of a light rail stop. The transit station and proposed development will be located on the east side of Germantown Parkway, bounded by Macon Rd to the north and the CSX rail line to the south.

The primary goal of the Germantown Parkway Station design is the creation a pedestrian-scaled environment. Designed in a Neo-traditional fashion, the site plan includes wide sidewalks and crosswalks, mixed-use buildings facing a common green space, minimal setbacks, and rear access parking for retail establishments. Located directly across Cordova Station Road, a multi-level parking garage will provide convenient parking for local commuters. In addition, the station will feature a "kiss and ride" drop off point accessible from Cordova Station Road. Locating parking spaces to a multi-level park-and-ride garage and to rear access parking behind future retail will enhance the aesthetic appeal of the site and contribute to the success of this pedestrian design. Ultimately, the design of the Germantown Parkway Station will benefit pedestrians and drivers alike.



Proposed Areas

Mixed –**use**: 67,500 Sq. Ft

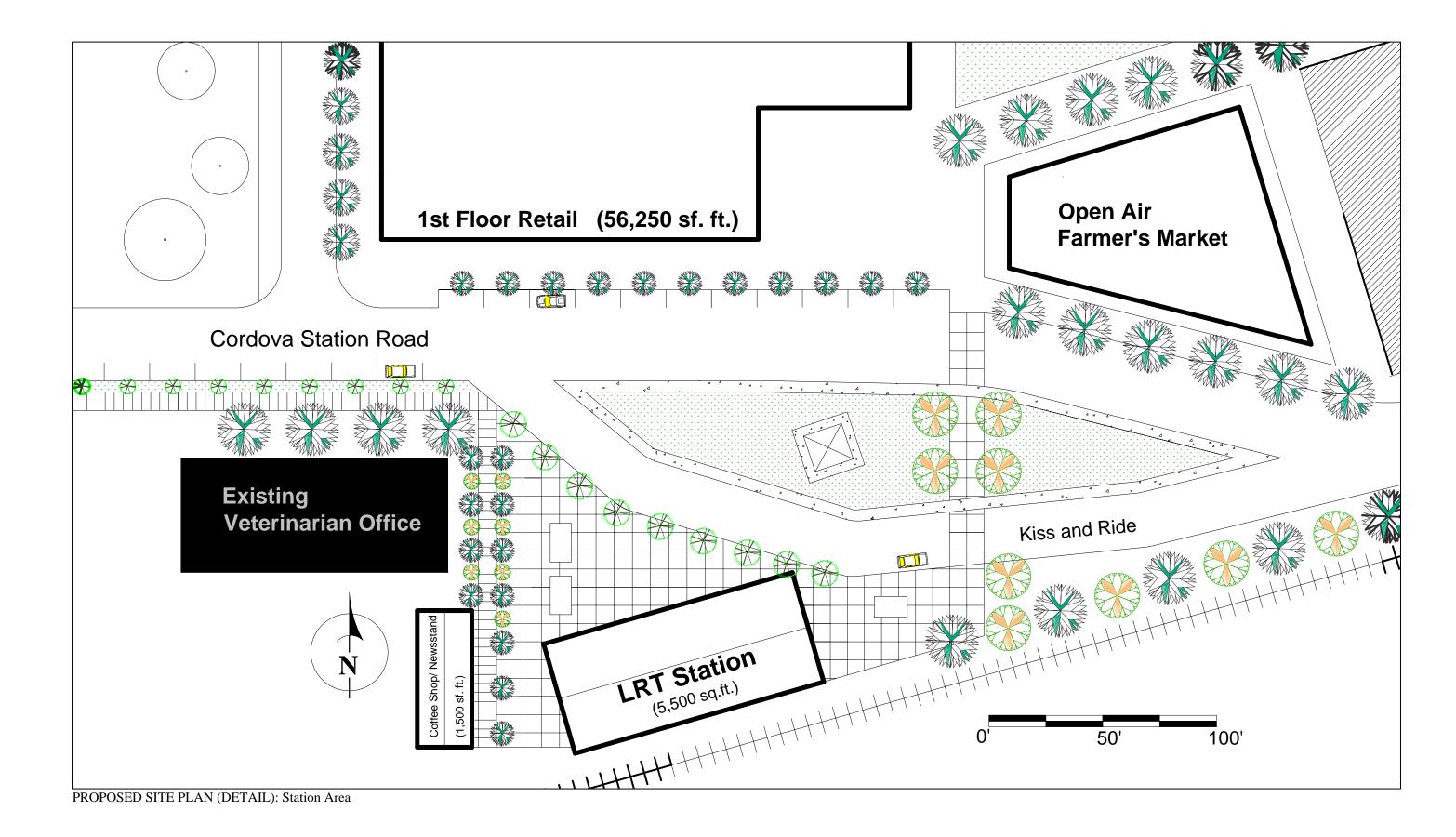
Housing: 75,000 Sq. Ft (70 units approximately)

Parking Garage: 400 parking spaces

First floor of the retail area: 56,250 Sq. Ft

Surface Parking: 300 spaces.





DESIGN B: OLD CORDOVA

The downtown Cordova node will serve as the civic, cultural, and historical center in the CSX transit oriented design. The concept and site plans for the downtown node focus on preserving the quaint, old-town feel of Cordova. This pedestrian oriented node will feature small retail establishments, civic greens, public gathering spaces, and parking.

The downtown site plan places emphasis on transit-oriented design principles. The historic Cordova train depot will be the location of the light stop in the area. The addition of a passenger platform will facilitate passenger arrival and departure. To improve safety for pedestrians and to reduce dependence on private automobiles, sidewalks will be either installed or widened throughout the commercial and residential areas of this node. Parking areas are strategically located near the depot to create greater access for residents who live beyond a reasonable walking distance of the transit stop.

Historic properties such as the original depot/post office, Cordova community center, bank, and various multi-level brick structures that date to the early 20th century, are focus areas for historic preservation and redevelopment. Adapted to contemporary uses, these buildings form the distinct sense of place of the downtown node and will be central to the design vocabulary of additional structures.

The site plan also proposes future retail and residential land uses with increased densities. Four, eight-unit apartment buildings have been located in the existing open spaces south of Macon Road near B and A streets, a new retail building will replace an existing industrial site at the corner of Macon Rd. and A Street, and a neighborhood grocery store is envisioned south of Fay Rd.

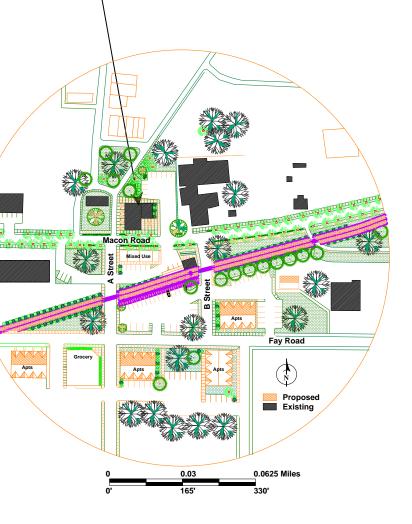
To further improve the appearance of the node, trees, shrubbery, and other forms of landscaping will be added along the borders of sidewalks and parking lots. Public green spaces are located throughout the node and directly east of the depot, providing areas for picnicking and other leisure activities.

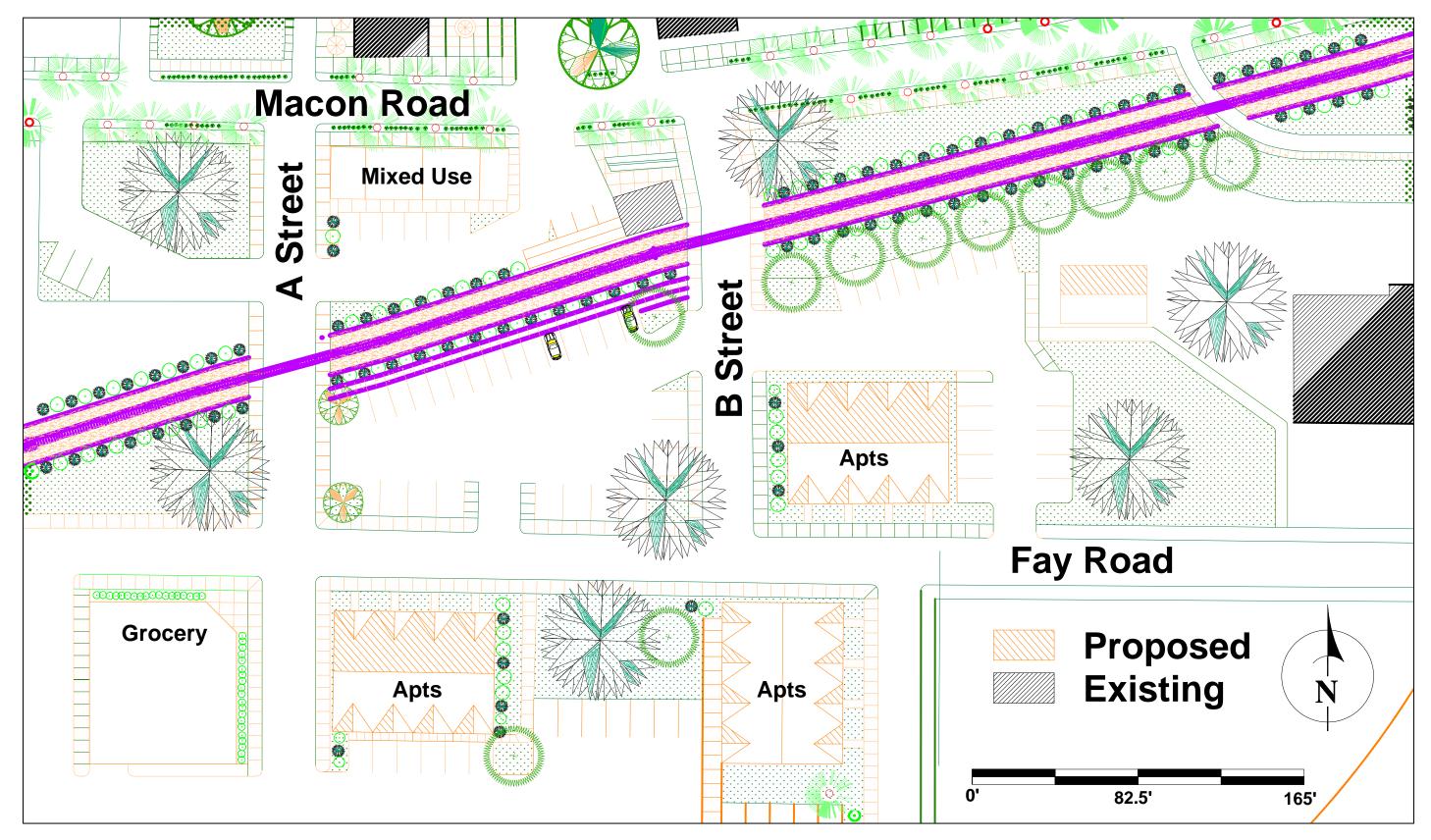


Proposed Areas

Multi-family: 18,200 Sq. Ft (16 units, 2 stories) Mixed + Adaptive: 4900 Sq. Ft (9 units, 2 stories) Station + Platform: 1100 Sq. Ft (1 unit, 1 storey) Grocery: 5800 Sq. Ft (1 unit, 1 storey) Parking Spaces: 76





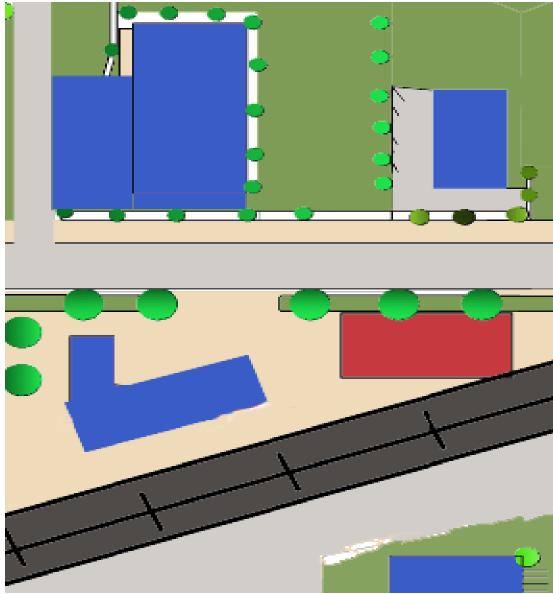


PROPOSED SITE PLAN: Station Area

DESIGN C: OLD TOWN CORDOVA

(Alternative Plan)

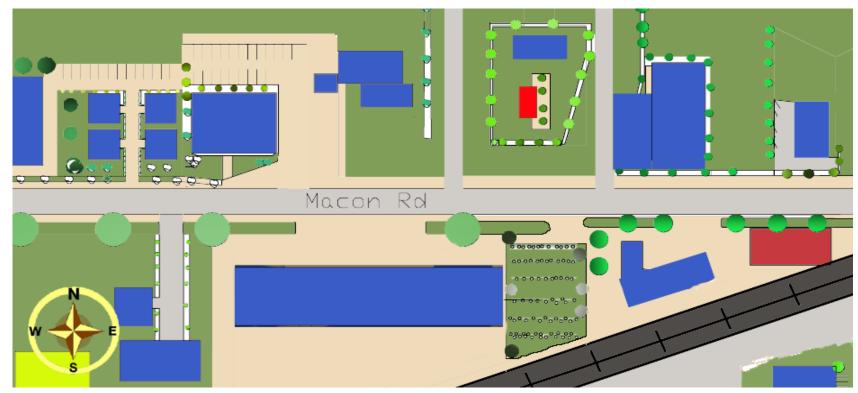
The objective of the site plan for the downtown area of old Cordova is to create a transit oriented development by optimizing use of existing structures through subdividing commercial lots and adding structures for maximum use of space and compact development. Pedestrian friendly environment is to be created by installing 10 foot wide sidewalks along the commercial areas and 5 foot wide sidewalks in areas connecting the existing residential subdivisions. Connections between the residential subdivisions and the commercial areas are achieved through the addition of crosswalks and streetscape improvements. The old town Cordova plan would also call for the conversion of historic Rail Depot in to a light transit stop. Additionally, the Old town Cordova plan converts vacant land into parks for further linkages between residential areas and recreation. Specifically a proposed new park is approximately one acre.



Old Cordova Rail Depot Detail



Old Cordova Site Plan Detail

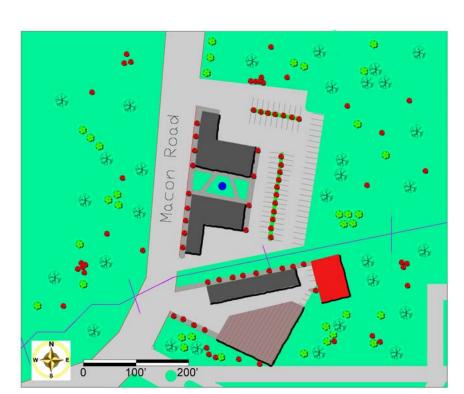


Old Cordova Site Plan



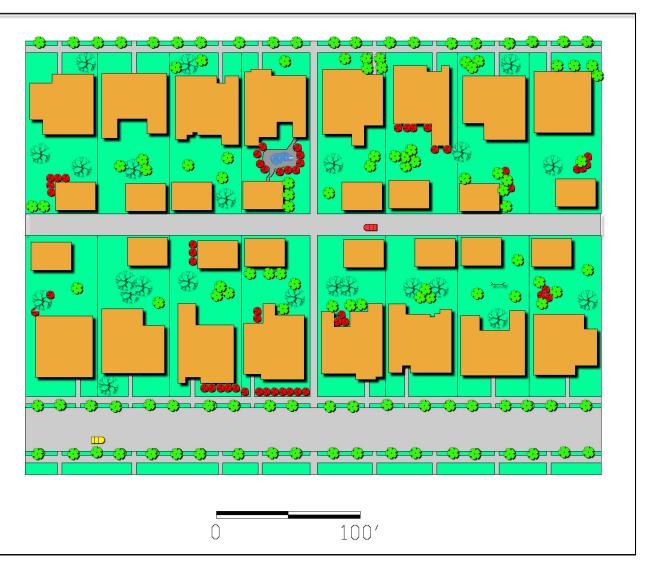
DESIGN D: MIDDLESBROUGH

This site is located almost exactly in the middle of Macon Road, between Germantown Parkway and Houston Levee. It is just southeast of Macon Road in the open space below the 90 degree turn of Macon Road. This site was chosen because of its prime location and current undeveloped status. The TND portion of the site design is made up of residential lots sized at an average of 50 feet wide and 120 feet deep. There are also three planned community parks, including a large roundabout-park, which also serves as a traffic calming device. The neighborhood is laid out in a network of 30 foot wide streets, in order to accommodate two-way traffic and on-street parking. The houses are accesses by vehicle via 15 foot wide alleys, where parking garages are located. On average houses respect a setback of 15 feet, in front of which are sidewalks and landscaped buffers. The sidewalks in the residential section of Middlesbrough are 5 feet wide, with a 3 foot wide landscaped buffer between them and the street. Additionally there are 5 foot wide pedestrian paths that cut through the center of each block in order to facilitate linkages between areas in the development for pedestrians. This focus on linkages and a dense development pattern are all part of the design's focus on following the principles of TOD.



Middlesbrough Commercial Site Detail

Goals for the site design of Middlesbrough were to create a community with a walkable transit originated neighborhood (TOD) design. The design incorporates a mixed-use commercial zone along Macon Road, and a traditional neighborhood to the southern section of the site to provide a balance of uses. The mixed-use commercial zone has 13,257 square feet of residential space and 18,341 sq of commercial space. At the center of Middlesbrough is placed a train station which serves as a mixed-use facility that houses a post office annex and a community center. A three story parking garage which functions as a park and ride for the surrounding residents and the surrounding region is also provided.



Middlesbrough Typical Residential Block

DESIGN C: MACON PARK

The site design for Macon Park proposes the development of a mixed-use neighborhood on a former industrial park site south of Macon Road. The neighborhood will be compact in design and cater to pedestrians. In addition, the site plan includes mixed-use commercial and residential buildings within proximity of the transit stop, sidewalks, and civic green spaces that offer places for gathering and recreation.

The mixed use core situated on a traditional main street near the transit center will serve as the commercial and retail center for the neighborhood. Apartments will be located above shops and office spaces. The neighborhood extends 1500 feet from the center of the site plan to the edge in all directions. Thus, all services and needs will be provided within a reasonable walking distance of neighborhood residents. Developed areas in the town center will be complemented with civic green spaces. The transit stop for Macon Park will also be situated in the mixed use center.

The residential areas of the site plan feature a wide range of lot types and widths, interspersed throughout the neighborhood with garages and alleys located behind houses. Sidewalks in residential areas will enable pedestrian to walk to shopping on the main street. Neighborhood parks, as well as agricultural land on the south side of the community, will provide additional green spaces and offer the best of nature, farmland and a compact, urban environment. Buffers areas will be created to protect future residential areas from existing industrial sites, as well as the rail line.

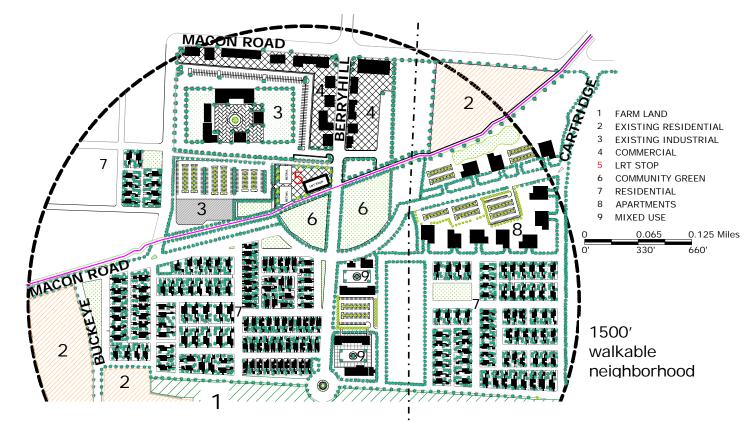


Below: View looking south from the proposed station

Proposed areas

Multi family: 288,000 Sq. Ft (10 apartments, 3 floors each) Single-family: 2,090, 880 Sq. Ft (180 units, single storey) Retail: 230,868 Sq. Ft Office: 435,600 Sq. Ft Parking: 1500 spaces

Left: Looking east into the site from Macon Road Right: Abandoned Industrial building at the north end of the site









DESIGN F - HOUSTON LEVEE

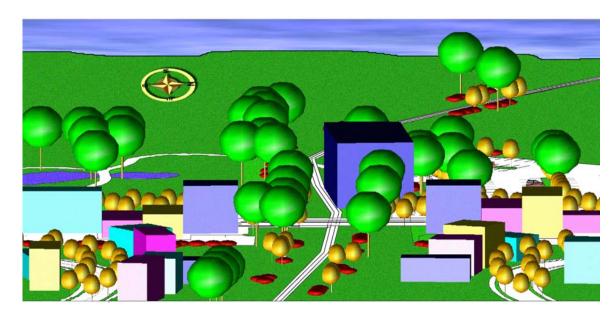
The proposed site design will contain a total of approximately 193 acres of which 153 acres are residential, 750,000 square feet of commercial space, and 17 acres of green space. The Houston Levee area is designated as a mixed-use development zone. There will be a 50 foot build up line. Commercial areas have residential on the upper levels of the buildings with 5 feet setbacks. Residential areas will have a set back of 15 feet. Sidewalks are 10ft wide in commercial areas and areas with high foot traffic. Sidewalks will be 5-7 feet in areas with less foot traffic. Pedestrian scale lighting will be installed along all streets with benches and waste cans provided along commercial fronts. There will also be a light rail transit stop in the commercial zone. Roads are 25 feet wide with 3ft of green space on each side. An exclusive bike lane is to be provided within streets.

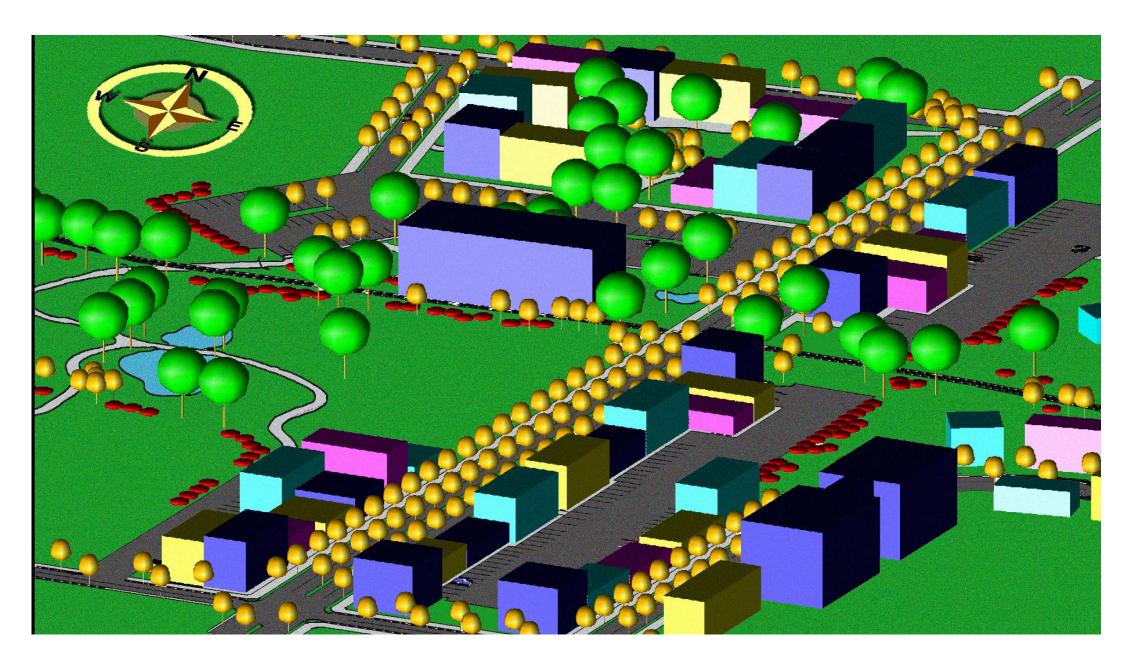
Bottom Left: Axonometric of the proposed Houston Levee TOD

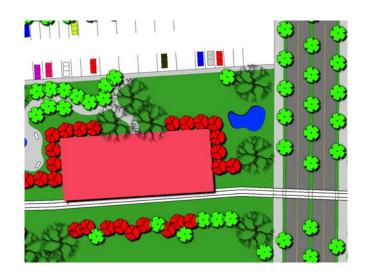
Top Right: Looking west from Houston Levee Rd

Middle Right: Detail of Transit stop design

Bottom Right: Site plan showing station placement in relationship to proposed commercial development and the new public park









IMPLEMENTATION: OVERLAY ZONING

Two options can be considered in order for the site plans to be implemented and fulfill the overall vision of this proposal. The current zoning ordinance for the area could be completely rewritten in order to facilitate the transformation of the area into a TOD corridor, or the creation of a new TOD overlay could be established for the community.

Although a possibility, the wholesale rewriting of the zoning ordinance could encounter opposition from the public due to how it would affect their ability to make future developments on their own property.

Overlay zoning is a tool that municipalities may use to supplement the existing zoning ordinance in such a way that they are able to implement special zoning districts such as TODs and historic neighborhood zoning that require special regulation on top of the existing zoning (Overlay Zoning, n.d., ¶ 1-3). An overlay zone can work with the underlying zoning, giving it more detail, or even allowing more/different uses in an area than those specified by the zoning ordinance (Envision Utah, n.d., ¶ 38).

The overlay zoning for the Macon Road region should be that of a TOD overlay. The overlay district will encompass the area of a half-mile buffer around Macon Road from Germantown Road, eastward to Houston Levee and Macon Road (see Map 5). The overlay zoning will allow high density TOD neighborhoods - mixed-use commercial interspersed with residential - near the proposed light rail stops and the major nodes in the district. It will promote bicycle lanes and trails. Also, the overlay will mandate sidewalks and provide for pedestrian friendly, contiguous green space. Sidewalks will be required to be a minimum of 5 feet in residential neighborhoods and 10 feet in commercial and retail districts. A 3 foot green space easement will be required for developments on major streets. The overlay will also call for a minimum residential setback of 15 feet and a 5 foot setback for retail. Onstreet parking will be encouraged, and off-street parking will be required to be at least 30% landscaped. Open space requirements on new developments will be at least a 5% set aside. The overlay will also require high-density infill development, and encourage the retrofitting of existing areas to match TOD principles, with pedestrian linkages and contiguous green spaces. The overlay zoning will provide a further benefit through its the ability to include a section that establishes a design vocabulary to guide development in those areas covered by the overlay.

Existing Zoning Districts and Regulations

The Memphis Planning and Development Department's IMAP shows the following zoning districts comprise the three nodes of study.

- Germantown Parkway & Macon Southeast Corner AG
- Downtown Cordova Quarter Mile Radius AG, R-S6 & CL
- Industrial Park South and East of Macon Road IL

The intent of each district, as defined by the Memphis Zoning Ordinance is as follows:

- and protect agricultural use and conservation of undeveloped areas.
- plan review and approval or the issuance of a special permit therefore.
- a unit or on individual parcels.
- nearby districts.



Left: Development potential within downtown Cordova Right: Existing commercial/industrial along Macon Rd.

• AG – Agricultural District - This district is intended to conserve agricultural land and undeveloped natural amenities while preventing the encroachment of urban and other incompatible land uses on farm land and other undeveloped areas. The types, area and intensity of permitted land uses in this district are designed to encourage

• *R-S6 single-family residential district*. This district is intended to permit the development and maintenance of single-family residential areas characterized by relatively moderate overall density with lots of at least six thousand (6,000) square feet per dwelling unit. Other uses such as schools, churches and specified services associated with or compatible with the residential uses allowed in this district are also permitted subject to site

• C-L local commercial district. This district is intended to permit the development and continued maintenance of commercial retail uses and personal services serving the needs of a relatively small area and developed either as

• I-L light industrial district. This industrial district is intended to provide areas in which the principal uses permitted are manufacturing, wholesaling or warehousing, and which are accessible to major transportation routes. The regulations of this district are designed to minimize the adverse impact such uses may have on



It is clear that each of these districts is not intended for mixed use or multiple use applications. Specifically, the AG does allow for low, medium or high density single family structures and does allow for select commercial land uses, it does not allow for multifamily or combination commercial/residential structures. R-S6 districts are more restrictive regarding commercial enterprises and, again, do not allow for mixed uses.

C-L districts allow for a variety of commercial and institutional uses but limit their residential uses to group homes. I-L districts allow for numerous commercial uses and focus on light industrial uses (distribution centers and light manufacturing) but do not allow for residential uses.

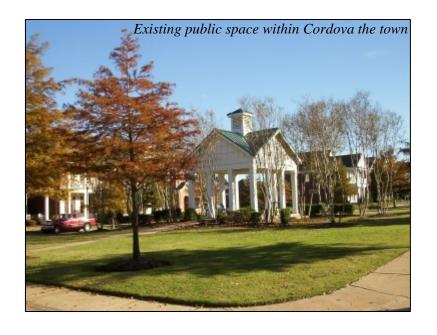
Bulk regulations appear to be accommodating in all districts. Specifications ranging from no minimum lot areas, narrow lot widths, shallow front, side and rear yard setbacks would work to this plans advantage if it were not for the restrictions on uses.

The Memphis Zoning Ordinance is void of illustrations or a Design Vocabulary. Including both of these tools would assist the public and developers to gain a better understanding of the development expectation.

Working to amend the current zoning regulations is anticipated to take a minimum of six months – assuming the objectives of this plan were to be negotiated, agreed upon and passed by the governing legislative bodies. In all likelihood, modifying these regulations would not be undertaken since any modification the AG, R-S6, C-L and I-L districts in the Cordova area would apply to other land areas classified as AG, R-S6, C-L and I-L.

Cordova Town Centre Special District

In addition to the specific use and bulk regulations to the aforementioned districts, the Memphis Zoning Ordinance outlines regulations governing the Cordova Town Centre Special District. Section 25 of the Memphis Zoning Regulations indicates that district is defined by the Cordova Town Centre Plan. However, IMAP does not list or detail this special district.



The purpose of this district is stated as follows:

"... to provide zoning classifications for land consistent with the policies and intent of the Cordova Town Centre Plan approved and adopted April 5, 1994, by the Memphis city council and March 21, 1994, by the Shelby County board of commissioners and to promote and encourage the development and redevelopment of these lands in accordance with the design features of traditional neighborhoods and small towns.

These goals and design principles include among others the following: 1). To promote and provide for the creation of distinct, identifiable new neighborhoods that exhibit the site design features common to traditional neighborhoods and small towns and are generally characterized by a core area of community commerce and civic activity conveniently accessible by pedestrians from the surrounding residential areas; 2). To foster innovative land development practices which will enhance and improve the public health, safety and general welfare; and discourage conventional, use segregated development such as self contained suburban subdivisions or disconnected, non-integrated strip commercial centers; 3). To encourage development with a mix of lot sizes and a diversity of housing types, including the use of a mix of residential use above ground level commercial and office space in the town centre; 4). To advocate the development of places that are responsive to the human scale, where destinations are designed to encourage pedestrian activity, stimulate increased social interaction and engender a sense of place; and,

5). To produce a street system for the Cordova Town Special District designed to provide a functioning pattern of public roadways connecting all activities within neighborhoods in the district and to neighborhoods beyond Cordova Town Centre Special District. Special attention is paid to ensure that pedestrian and bicycle paths provide active linkage within Cordova Town Center and to adjacent developments. – Memphis Zoning Ordinance

The provisions outlined in this special district come close to establishing codes intended to encourage development put forth in this plan. For example, the district allows for planned developments and allows mixed use applications (e.g. residential above commercial – limited to no more than sixty-six percent of the gross floor area), billboards are prohibited, street and lot landscaping is required, and, parking is limited to side and

rear locations. However, the regulations fall short in a number of other areas. Much like the codes governing the single purpose districts the special district's code does not contain a design vocabulary nor does it possess any illustrations. More importantly, the special district limits the function of accessory structures to storage facilities (not to exceed 500 square feet), employees liberal parking space standards in commercial areas (three per 1,000 square feet versus one per 1,000 square feet), and, sets the minimum open space requirement at fifteen percent. Open space requirements should be substantially increased to encourage more efficient land use and provide for significant community areas.





Cordova TOD Overlay District

As stated before, the exact area covered by this special district is unknown. Assuming the special district includes the three areas of focus by this plan, working to amend these requirements will take a minimum of six months. Although it is possible to achieve the standards put forth in this plan with a zoning text amendment, proposing an overlay district blanketing the Germantown Parkway & Macon Road, Downtown Cordova and Industrial Cordova is the preferred strategy.

Defining and establishing land use and bulk regulations, with illustrations and design vocabulary, is the most efficient and effective way of addressing the realization of the concepts publish in this plan. An overlay district could be put into effect in as little as three months. This assumes all parties are agreeable to the regulations decided upon. The regulations instituted could specifically target the designs found in this plan thereby ensuring compliance with the district standards.

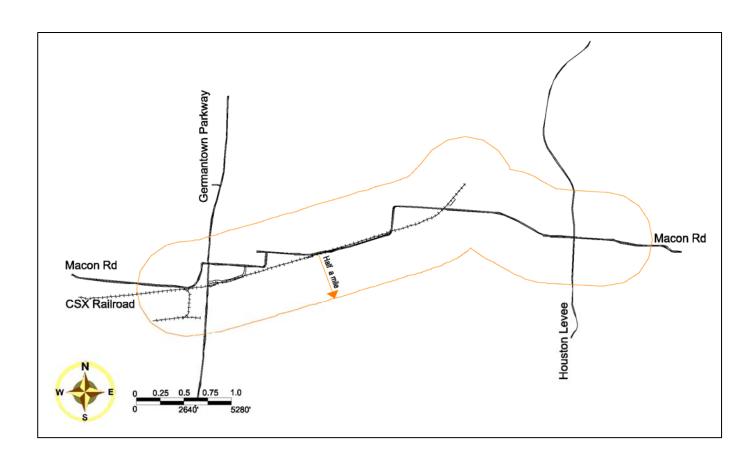
The ideas presented here build upon similar undertakings in Memphis and Shelby County, following in the tradition of Cordova the town, and inspired by the principals of new-urbanism being applied in the Lakeland area. Throughout this report, four different sites along the Cordova corridor were presented as potential locations for future TOD development as part of the Memphis Regional Transit Plan. The concept and site plans listed here should initiate discussion and deliberation among area stakeholders as to the true potential of the region, and help inform more responsible growth and development patterns for future of this community. The scope of this plan does not permit a detailed ordinance regarding specific building form recommended for the Cordova TOD Overlay District. However, the Design Matrix should provide an excellent illustration of the type, form and style of development expected in the district.

Top Left: Celebration, FL - an example of a pedestrian friendly street Bottom Right: Proposed Overlay Zoning

CONCLUSION:

Through the option of overlay district zoning, and the proper implementation of design matrix and vocabulary, our design proposals for Cordova's LRT could be effectively executed in a relatively short amount of time. With regards to the concepts we have proposed, the existing zoning regulations are fairy conducive and would require slight amendments.

The overlay zoning for the Macon Road region should be that of a TOD overlay. The overlay district will encompass the area of a half-mile buffer around Macon Road from Germantown Road, eastward to Houston Levee and Macon Road (see Map 5). The overlay zoning will allow high density TOD neighborhoods - mixed-use commercial interspersed with residential - near the proposed light rail stops and the major nodes in the district. It will promote bicycle lanes and trails. Also, the overlay will mandate sidewalks and provide for pedestrian friendly, contiguous green space. Sidewalks will be required to be a minimum of 5 feet in residential neighborhoods and 10 feet in commercial and retail districts. A 3 foot green space easement will be required for developments on major streets. The overlay will also call for a minimum residential setback of 15 feet and a 5 foot setback for retail. On-street parking will be encouraged, and off-street parking will be required to be at least 30% landscaped. Open space requirements on new developments will be at least a 5% set aside. The overlay will also require high-density infill development, and encourage the retrofitting of existing areas to match TOD principles, with pedestrian linkages and contiguous green spaces. The overlay zoning will provide a further benefit through its the ability to include a section that establishes a design vocabulary to guide development in those areas covered by the overlay.



Existing Commercial Area:



Low density shopping center with parking lot in front of building.

Envisioned in Site Plan: High Density



High density mixed -use commercial center with parking in center of block.

Existing in Cordova: Large Parking



Shopping centers with large parking lots offer minimal green space and fail to promote a sense of community.

Existing Commercial: No



Without sidewalks, the commercial area is unfriendly to pedestrians. Access is possible only via automobile.

Envisioned in Site Plan: 12 – 15 ft.



Wide sidewalks with tree buffers create a safe and welcoming environment for pedestrians and potential customers.

Existing in Cordova:

Wide Roads and Intersections



Wide roads prevent pedestrianism and permit potentially dangerous speeding.

Envisioned in Site Plan:

Community Green



Community green spaces offer a pleasant alternative to pavement and create areas for community gathering and leisure.

Envisioned in Site Plan: Roads with Landscaped Medians



Landscaped medians create traffic buffers, slow speeds, and provide a stopping place for pedestrians.



DESIGN MATRIX

The purpose of this design matrix is to provide insight into the character of the regional and local building vernacular. The photographs used illustrate positive examples of building form and architectural details that are consistent with the desired image of the community. This matrix was left incomplete so as to provide community members with the opportunity to add local and regional examples that match their shared vision for future development within Cordova.

Regional Residential Building Types

1. Building Massing and Style











2. Roof Types & Materials















3. Façade Treatment & **Materials**































Regional Residential Building Types

6. Eaves, Porches & Arcades











7. Trim





8. Towers

9. Cross Gables and Dormers



10. Gutters

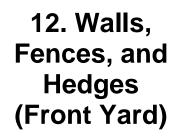






11. Chimneys













13. Walls, Fences and Hedges (Side and Rear Yards)

14. Colors











15. Driveway





















1111.2

Regional Residential Building Types





Regional Residential Building Types

16. Pavement Materials and Textures











17. Curb Treatment



18. Streetlights



19. Street Signs









20. Street Furniture







Regional Commercial Building Types

1. Building Massing and Style

2. Roof

Types &

Materials















3. Façade Treatment & **Materials**























5. Windows



























6. Eaves, Porches & Arcades

7. Trim

8. Towers

9. Cross Gables and Dormers



10. Gutters







Regional Commercial Building Types





11. Chimneys

12. Walls, Fences, and Hedges (Front)

13. Walls, Fences and Hedges (Side and Rear)



14. Colors



15. Parking











Regional Commercial Building Types







16. Pavement Materials and Textures



17. Curb Treatment

18. Streetlights

19. Signs



20. Street Furniture











Regional Commercial Building Types















Cordova Civic Building Types

Regional Civic Building Types

1. Building Massing and Style









2. Roof Types & Materials





3. Façade Treatment & Materials



4. Entry and Doors





5. Windows





Cordova Civic Building Types

6. Eaves, Porches & Arcades



7. Trim



8. Towers



9. Cross Gables and Dormers

10. Gutters

Regional Civic Building Types

Cordova Civic Building Types

11.Colors

12. Curb Treatment

13. Streetlights



14. Signs



15. Street Furniture









Regional Civic Building Types







Cordova Outbuilding Types







Final Presentation Comments: 12/14/04

A public presentation was held in Rm. 209 of McCord Hall, at the campus of the University of Memphis. The following comments were at the conclusion of the presentation:

Local Leadership

The Cordova Leadership Council was represented at the presentation. This group holds four public forums a year to address issues affecting the people of Cordova. One of the major problems this group has identified is the lack of a community identity. The group has recently completed a walking tour of the downtown Cordova area, and identified many of the same assets and liabilities that were discussed in this presentation. The Cordova Leadership Council representative commented on how he was very pleased to see interest in the present condition and possible future direction of the Cordova community. He posed the question to the class "Where do we go from here?" An interest was also expressed in the possibility of this presentation being made again so that the people of Cordova might participate.

Local Development:

A private developer who works within the Cordova area offered a unique perspective to the discussion. The primary site design issues that he feels most relevant for the future of Cordova involve discernable public space, and a street plan that allows for the creation of a pedestrian friendly environment. He also commented on how several of the streets in Cordova date back to the WW II era, and need repair. Although the area was annexed into the city of Memphis several years ago, it was suggested that the city could do a better job using tax dollars to improve and maintain the existing infrastructure in the Cordova area.

Implementation

When asked "where to start," another local developer responded that the development of pedestrian infrastructure would be a good place to begin. Start small, with the creation of sidewalks and pedestrian friendly infrastructure such as sidewalks, parallel parking downtown, and street trees. He also discussed the potential of the few remaining downtown buildings, and how exterior facade improvements could help create increased development interest within old Cordova

Demand/Ridership

The question of whether or not there was sufficient demand required for this project to succeed was raised. There was also a question of what the expected ridership would have to be to support the amount of proposed development. It was also suggested that the two groups "skirted" the primary issue-of the focused development of a real town center. The question was also raised regarding potential homeowner/ Cordova resident reactions to potentially being linked (by LRT) to the thing they may have been escaping from ("the city") in the first place.

List of Agencies:

A list of agencies and community groups who have an interest in the future of Cordova is being generated so as to begin a dialogue between interested parties. 1. Cordova Leadership Council: Contact-Stephen McManus (901.737.8691) 2. (Memphis) Division of Planning and Development: (office) 901.758.1100 **3. MATA- Office of Planning And Capital Projects:**

- (Assistant General Manager Tom Fox) 901.722.7160
- 4. (Shelby) County Real Estate Office: (Bill Goss, Manager) 901.545.3498
- 5. Gill Properties:

(Ray Gill, developer) 901.758.1100

- 6. Friends of Shelby Farms Park: www.friendsofshelbyfarms.org
- 7. Office of the Mayor, Shelby County: (office) 901.545.4500
- 8. The Cordova Beacon

(office) 901.388.1500

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