

Chapter 5 - Transit-Oriented Design and Joint Development

Introduction

Recent research by the Brookings Institution and others has found that many U.S. metropolitan areas are adding urbanized land at a much faster rate than they are adding population. Unlike areas in the West and the South that are gaining population, the Northeast and Midwest are increasing the amount of developed land and only redistributing residences and jobs across a broader area. Also known as "sprawl," this inefficient use of land makes it difficult or impossible for public transit to accommodate travel needs. Most challenged by this are the transit dependent, who cannot easily get to jobs that are increasingly locating beyond the easy reach of transit.

One way that RTA can better serve the future travel needs of Greater Cleveland will be through better coordination of transit service planning with land use planning in partnership with municipal, county and regional entities. For example, public transportation should be an integral part of any major new development or redevelopment project. Transit should be incorporated at the outset, when major development decisions are made, rather than as an afterthought. For example as part of the TOD philosophy, Crime Prevention Through Environmental Design (CPTED) concepts will be melded into new transit facilities thereby enhancing the quality of life for those using public transportation.

This chapter presents an overview of Transit-Oriented Design, why it's important, and how RTA can pursue it while developing the future transit system. This chapter also discusses RTA's Joint Development Policy. If TOD describes a vision of how Greater Cleveland and its transportation system are re-integrated, then Joint Development is the method by which TOD is implemented. Simply put, TOD is what RTA aspires to with respect to transit-focused development, and Joint Development is how that is accomplished.

What is Transit-Oriented Design (TOD)?

TOD can be defined as any medium or high-density, mixed-use development 1,200 to 2,000 feet (an approximate 5-minute walk distance) from a transit node. TOD draws heavily on the more traditional design principles found in older central cities and suburbs. These include a mix of land use (residential, retail, offices), a centrally located commercial corridor, well-connected grid street networks, and proximity to transit. Joint planning of facilities can also help reduce costs for infrastructure and operations.

TOD utilizes traditional land-use and development strategies to aesthetically and functionally cluster pedestrian activities around bus/rail transit stops/stations. Research has shown that transit-oriented development can increase transit ridership. But perhaps more important, TOD can improve quality of life, and under the right circumstances, encourage development to occur in close proximity to existing transit facilities.

There are numerous benefits of TOD, some of which are summarized as follows.

Economic Benefits of TOD

- With TOD, people have better access to jobs and employers have better access to workers

- TOD provides more travel options. Fewer automobiles and parking spaces are needed. Land for parking can instead be used for other purposes. Families and businesses can reinvest the savings.
- The cost to provide parking continues to skyrocket. In one inner ring Cleveland suburb, below-ground parking costs approximately \$20,000/space to construct. Above-ground parking structures range in cost from \$10,000/space to \$15,000/space, depending upon site conditions. A surface lot costs about \$1,500/space *in addition to the cost of the land.*
- A study several years ago quantified some of RTA's economic benefit to the region. In addition to environmental and other less tangible benefits, RTA contributes about \$1 billion annually to the region's economy, as shown below (1998 RTA budget analysis figures updated to 2004 dollars. Does not reflect growth in RTA budget since 1998.)

Value of RTA Operations/Expenditures	\$857 Million
Maintenance of Access to Jobs	\$166 Million
Transit User Net Savings	\$63 Million
Auto User Cost Savings	<u>\$70 Million</u>
Total	\$1.156 Billion (2004 dollars)

By promoting compact, walkable areas where transit is easily accessible, TOD enables transit to make even greater economic contributions.

Environmental Benefits of TOD

- Air quality is improved;
- Green space is preserved;
- Parking lot rainwater run-off to sewers is minimized.

Social Benefits of TOD

- TOD facilitates labor force involvement for those without, and those who choose not to own, an automobile;
- Livability and other quality of life factors are enhanced throughout communities and the region
- A sense of place and community ownership is increased;
- TOD creates attractive places that bring people and dollars into the community. Kamm's Corners and Shaker Square in Cleveland, and Coventry Village in Cleveland Heights, are local examples;
- The typical commute becomes less stressful and more productive;
- TOD supports neighborhood revitalization, which in turn promotes economic development and long-term growth.

A Federal Transit Administration-funded Transit Cooperative Research Program study identified characteristics common to regions that have successfully promoted transit-supportive development activities, such as TOD. These characteristics include:

- Commitment to a regional vision of high-capacity transit connections between regional centers or in development corridors;
- Political cultures that value transit;
- High-quality transit services that attract riders;
- Regional growth that provides the development to channel to station areas;
- Transit stations in areas where the market supports development;

- Regional policies that focus growth in transit corridors and limit it elsewhere;
- Station area policies and programs to support private-sector investments and transit-friendly development; and
- Long-term commitment.

TOD Principles - Euclid Corridor Transportation Project

RTA is applying the following TOD principles to its Euclid Corridor Transportation Project, where new development has been, and continues to be focused by the City of Cleveland. These principles can be applied throughout RTA's service area in order to encourage transit-supportive development, improve mobility and increase transit ridership.

1. Mixed and Concentrated Land Use

Locate a diversity of complementary uses within easy walking distance of transit stations and stops, promote balanced levels of transit ridership throughout the day, promote pedestrian activity and reduce dependence on the automobile.

2. Supportive Access Patterns

Create circulation patterns that form a convenient, safe and accessible network types of transportation, that interconnect surrounding residential, commercial, and employment areas, and that provide direct connections to transit stations and stops. Provide adequate, and in some cases structured, parking facilities that do not visibly dominate the station area or consume large amounts of land.

3. Enhanced Environment

Create an environment for transit users and others that is safe, attractive and functional. Organize public and private spaces to invite pedestrian activity and incorporate design elements to increase public access, comfort, and security.

It should be also be noted that the combined construction investments and focused development associated with the Euclid Corridor Transportation Project are expected to bring the following long-term economic benefits:

- Commercial Development – 7.9 million square feet
- Residential Units – More than 5,400
- Capital Investment - \$1.3 billion
- Annual Local Taxes - \$62.1 million
- GCRTA Annual Sales Tax Revenues - \$1.98 million
- Person-Years of Employment During Construction – 13,000

RTA TOD Guidelines

The following guidelines have been successfully employed across the U.S. to promote transit-supportive development. They elaborate on some of the above principles and can further help RTA promote TOD around Greater Cleveland. Because TOD reflects traditional development practices, RTA's application of these guidelines will help promote a more people-centered pattern of urban development.

TOD Guideline #1: Create pedestrian linkages that connect transit facilities to surrounding communities.

People like places where a walking environment is safe and comfortable. This can be accomplished by ensuring that sidewalks are wide and protected from traffic with on-street parking, by planting street trees and by locating storefronts and building entrances close to the sidewalk. People like to walk about well-lit streets lined with trees and pleasant storefronts and away from fast-moving traffic. These areas will show an appreciation for the design elements that contribute to fear reduction by the enhancement of lines of sight with areas of refuge and assistance being readily identifiable. Streets that are narrower and have slower speeds allow children to walk and bicycle more safely in the neighborhood. Including this type of pedestrian-friendly street design in new developments can play a major role in encouraging walking and the use of transit.

An example of this is Cleveland's Shaker Square. The many retail stores and eating establishments are all located within easy walking distance to RTA's Blue/Green Line rapid station, and local bus stops around the Square.

TOD Guideline #2: Intensify activity within walking distances of transit stations and stops.

Since people must travel to and from activity centers, such as work, school, shopping and recreation, transit stations and stops, transit stations and stops should be co-located with these activities. This helps create lively activity in, as well as safe and convenient access to, community activity centers, streets and transit stations.

A recent example of this is the CEOGC Headstart Daycare Center in East Cleveland, which opened in 2002. This facility was conveniently located directly adjacent to RTA's Windermere rapid transit terminus and park & ride lot, where a covered walkway links the station to the center.

TOD Guideline #3: Diversify land uses.

Diversifying land uses helps create self-contained walkable neighborhoods. The mix of uses should include residential, retail, and public facilities such as libraries or parks. This way, everyday activities are easily reached by walking and bicycling, which reduces the need to use a car.

Coventry Village in Cleveland Heights exemplifies this guideline. This quarter-mile area roughly encompassing both sides of a two-lane street is home to a wide variety of establishments including restaurants, bars, banks, bookstores, specialty clothing stores, video and electronic game stores and a movie theatre, laundromat, drugstore, hardware store, an elementary school with playground, and a library. Above many of these commercial establishments, and along many of the intersecting street, are apartments and homes.

TOD Guideline #4: Apply good urban design.

Pedestrians and transit users prefer to walk along areas that are both safe and interesting. People avoid areas with large blank walls, a lack of lighting, overgrown vegetation, and a lack of other people. Developments that are successful in attracting people generally have attractive architecture, interesting storefronts, visible and accessible building entrances, adequate lighting,

and are designed with safety in mind. Good transit-oriented design also means locating buildings close to sidewalks and transit and not behind large parking lots, walls or other barriers. This must also include Crime Prevention Through Environmental Design (CPTED) principles.

TOD Checklist

When projects are proposed for new development or redevelopment many elements must be taken into account in order to effectively incorporate TOD. The following checklist provides examples of those elements. Appendix C. gives the clearance and turning radius specifications for rapid transit cars, transit buses, and passenger shelters needed by municipal planners and engineers in order to plan for transit.

Land Use

- Encourage a mix of land uses
- Locate highest density development closest to transit stops
- Locate new development near transit stops and existing developments.

Site design

- Locate buildings near roadways
- Place pedestrian oriented retail uses along roadways
- Orient buildings towards transit stops
- Minimize distances to building entrances
- Discourage abundant free parking
- Connect neighborhoods and transit stops with walkways
- Allow for efficient multi-modal access, especially bicycles and buses
- Link adjacent development parcels with roadways and walkways

Pedestrian and transit facilities

- Design roads to accommodate transit vehicles
- Provide transit shelters, safe street crossings, paved walkways, bicycle- friendly facilities, and ample landscaping
- Make buildings, walkways, and transit facilities easily accessible to the young, the elderly, and the disabled
- Give high priority to transit passenger safety and security
- Make use of passive security systems e.g. closed circuit television and emergency phones
- Participate in Community and Transit Watch Programs

RTA Joint Development

Joint Development of homes or commercial revenue-generating facilities on, over, or adjacent to property owned by public transit providers like RTA is governed by Federal and State statutes. RTA also has a number of administrative policies and procedures on Joint Development and related matters like property acquisition, disposition, and management. The Property Management department handles these matters with the support of the Legal department and the Director of Programming and Planning.

This section briefly describes the legal framework for RTA's Joint Development activities, and mentions several types of joint development initiatives now underway. This also will include a discussion of potential TOD sites that have been analyzed and targeted for future TOD opportunities

As referenced in Chapter 1, RTA was created by state and municipal statutes for the primary purpose of public transportation. Ohio Revised Code (O.R.C.) Section 306.31 expands upon that purpose, saying that a regional transit authority may be created for any one or more of the following purposes:

"...acquiring, constructing, operating, maintaining, replacing, improving, and extending transit facilities; controlling and administering the public utilities franchise of such transit facilities; entering into and supervising franchise agreements; accepting assignment of and then supervising an existing franchise agreement; and accepting assignment of and exercising a right to purchase a transit system in accordance with the acquisition terms of an existing franchise agreement."

Thus, any RTA joint development project would then necessarily have to fall within the statutory purpose of regional transit authorities. Furthermore, O.R.C. 306.32 states that a regional transit authority so created is a political subdivision of the State and a body corporate with all the powers of a corporation. As well, the Ohio constitution governs RTA's ability to jointly develop projects with public or private sector interests.

Recognizing a need to insure comprehensive planning and uniform implementation of joint development projects, RTA adopted in 1991 a set of policies and procedures. These directives encouraged land use plans designed to enhance system ridership, and addressed areas such as joint development control, revenue generation, cost sharing, and value capture, land acquisition and disposition, and procedures for development of connectors to RTA rail and bus facilities.

In 1993, RTA amended its joint development policies to take advantage of an Ohio Revised Code amendment. This law change made competitive negotiation a permissible means by which the joint development rights of a particular transit facility may be awarded. The new RTA policies emphasize four joint development approaches: (1) negotiated investments, (2) public improvement districts; (3) connector fees, and (4) leasing of land and air rights. As a result, RTA has proactively engaged in joint development projects like the following:

- West 65th Street –Lorain- EcoVillage Rapid Transit Station Project (2004)
- Windermere Rapid Transit Station Council for Economic Opportunities of Greater Cleveland Headstart Child Care (2001),
- West 3rd Street Waterfront Line Station at Cleveland Browns Stadium (1999), and
- Walkway to Gateway pedestrian connector to Gund Arena and Jacobs Field (1994).

There are numerous joint development opportunities with RTA's Euclid Corridor Transportation Project, especially within the Midtown Corridor. The programmed renovations of RTA's West 117th, Brookpark, East 55th, and E. 105th Rapid Transit Stations also hold significant joint development potential as well.

While joint development in many U.S. cities has traditionally been focused around rapid transit stations, RTA and the Committee for Transit Oriented Design of Greater Cleveland have begun to explore development around major bus transit nodes. These include places like West 25th Street and Lorain, and East 93rd Street and Union Avenue. Research has begun to show how the potential for transit oriented joint development is in part dependent upon how easily accessible by walking these transit nodes are. The appendix includes a report on this notion of "pedestrian sheds" with regard to the idea that the most efficient sidewalk-roadway network for

facilitating access to a transit stop, bus or rail, is one that minimizes the distance between the stop and a person's intermediate or final destination. Following is a vision statement describing a desirable future for RTA's transit-oriented joint development program.

Vision of RTA's future transit-oriented Joint Development Program

RTA has a very active public/private Joint Development Program. Through this program, RTA aggressively seeks partners to develop RTA-owned real property to complement transit station and related facility operations. RTA's Joint Development Program seeks to promote projects that achieve the following goals:

- Promote Transit Oriented Development (TOD) by giving priority to Joint Development proposals which contain the following smart growth development principles; reduce automobile dependency; increase pedestrian/bicycle originated transit trips; foster safe station areas; enhance surrounding area connections to transit stations, including bus access; provide mixed uses development, including housing in compliance with local regulations; and the opportunity to obtain goods and services near transit stations and offer active public spaces;
- Attract new riders to the transit system by fostering commercial and residential development projects on RTA owned or controlled land and on private properties adjacent to key bus and rapid transit stops;
- Create a source of revenue for the Authority to operate and maintain the transit system by expediently negotiating joint development agreements between RTA and public or private development entities; and
- Assist local jurisdictions served by RTA in recapturing a portion of their past financial contributions and to continue making subsidy payments by expanding the local property tax base and adding value to available local revenue.

Location Efficient Mortgages

The Location Efficient Mortgage® (LEM) is a fairly new type of mortgage loan that supports public transit use, and may possibly help create more transit-friendly communities. Typical mortgage lending programs don't acknowledge the cost of transportation, but the average household in Northeast Ohio actually spends more on transportation than housing. For example, a family of four moves from Lakewood to Medina in order to get "more house/yard for their money," but needs to buy an additional car to maintain their same level of mobility/access to goods and services. The monthly cost of the additional car is substantial, but is completely ignored by the banker.

The LEM allows lenders to acknowledge that some places are less car-dependent than others, and that being less car-dependent can translate into lower monthly transportation expenses (less miles driven, fewer vehicles owned, etc). A portion of this savings (i.e. - avoided additional expense) can be applied to a larger mortgage payment without increasing the borrower's risk of default. So whereas a person might qualify for a \$100,000 loan with a standard mortgage formula, they might qualify for \$130,000 in a location-efficient area.

Mortgage lending policies don't affect municipal housing policy, planning, zoning, etc by themselves, but the awareness raised by creation of a LEM can inspire local officials to

pay more attention to areas that score well for location efficiency. This can make living near public transit much more attractive, possibly leading to higher population densities near transit lines and increased ridership.

In 2004 GCRTA and the Federal National Mortgage Association (Fannie Mae) launched a local LEM program called the Greater Cleveland Area Smart Commute Initiative, which will give prospective homebuyers the opportunity to qualify for a mortgage with the help of savings realized from using public transportation. Highly endorsed by key local officials, Smart Commute will help the region by encouraging development along existing corridors already well-served by GCRTA, which will help ease congestion and improve the quality of life in Northeast Ohio.

Transit Waiting Environments (TWE)

During 2004 GCRTA developed new guidelines for improving bus stop areas, with assistance from Kent State University's Urban Design Center and a multidisciplinary advisory task force. Directly supportive of TOD principles, these guidelines expanded upon an idea from RTA's Citizen's Advisory Committee and was based on national research showing that a high quality transit passenger waiting experience not only improved ridership, but also positively influenced transit's image in the community. Drawing upon that national research and a local survey of customer preferences, RTA TWE design team developed the following guidelines for improving areas around bus stops. These guidelines are helping RTA and its partner communities identify specific design improvements, which are both affordable and practical from a purchase, installation and maintenance perspective.

TWE Guidelines

- 1) Waiting for the bus should be a comfortable, safe and predictable experience.**
- 2) Waiting for the bus should be a convenient part of everyday life**
- 3) Bus stops must be easily identified**
- 4) Bus stops are a community responsibility**
- 5) Basic amenities should be provided at all stops, with added amenities at stops serving the greatest number of potential riders**

Conclusion

TOD and joint development are tools for locating transit and residential and activity centers closer together. Location Efficient Mortgages are a new transit-supportive tool. Communities can take additional steps to support TOD, the most positive of which would include creating zoning overlays that increase density and limit parking near key activity centers and corridors that are well-served by transit. Appendices B, D, E and F present additional information on sprawl, transit and livable communities, Location Efficient Mortgages, and Transit Oriented Design (TOD)/transit-supportive development. An analysis of several potential TOD sites for RTA to consider is found in Appendix B, and research and examples of successful TOD programs at other transit authorities make up Appendix E.