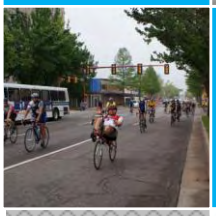
2010

Transit Supportive Development Guidebook

Central Oklahoma



RTD CENTRAL OKLAHOMA

Technical/Land Use Subcommittee
Regional Transit Dialogue
7/7/2010

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Introduction

This document represents the beginning of a journey to bring a regional transit system to Central Oklahoma. The benefits of such a system are numerous, giving Central Oklahomans access to a better, more livable lifestyle, while decreasing air pollutants and driving economic development.

Now is an exciting time to look at Central Oklahoma's future. The region is in a better position now, than just a few years ago. Advancements in livability concepts, community dialogue on health, transit options and connectivity, and a burgeoning awareness of the legacy we will leave to future generations have increased ten-fold.

This document represents a consensus of the Technical/Land Use Subcommittee's discussions on transit supportive development, but it is only a small step towards a bigger, brighter future.

Purpose Statement

This guidebook is intended to illustrate the Regional Transit Dialogue -Technical/Land Use Subcommittee's vision of how to assemble a regional transit system and create necessary transit supportive development policies. The process began over a year ago and focused on different modes of transportation and land uses that could be successfully utilized in the Central Oklahoma region. The subcommittee's overall recommendation for a regional approach includes municipal adoption in order for the process to be successful. The guidebook provides a current public transit system snapshot of Oklahoma City and its surrounding suburbs. The guidebook also defines Transit Oriented Development (TOD) and its benefits, in addition to identifying the key elements and factors for its success.

TLUS Mission

The Technical/Land Use Subcommittee (TLUS) explored and introduced land use and planning policies that encourage transit and mobility-oriented development throughout Central Oklahoma. The subcommittee reviewed and recommended corridors and technologies that support a regional approach to public transportation.

TLUS Committee Description

The TLUS committee is made up of several voluntary public officials, planners, engineers, architects, community organizers, and health officials. The committee has been tasked with providing information regarding the technical and land use aspects of a potential regional transportation system.

Hanz E. Butzer – Professor, OU College of Architecture

Susan Connors – Planning and Community Development Director, City of Norman

Randy Entz – Transportation Planner, City of Oklahoma

Shannon Entz, Chair - Community Development Manager, City of Edmond

Nathaniel Harding – Founder, Harding & Shelton, Inc

Billy Harless – Community Development Director, City of Midwest City

John Hasley – Chairman of the Board, Capital Chamber of Commerce, Oklahoma City

Larry Hopper – Planning Manager, COTPA

Grant Humphreys – CEO, The Humphreys Company

Marion Hutchison – ONTRAC

Kyran Mish – Professor, OU Civil Engineering

Cody Ponder – Planning and Grants Administrator, CART

Mark Seibold, Vice Chair - City Planner, City of Choctaw; Architect

Anais Starr – Comprehensive Planner, City of Midwest City

Doug Tennant – Senior Planner, Jacobs

Marisa New Wells - Director, Health Equity & Resource Opportunities, Oklahoma State Department of Health

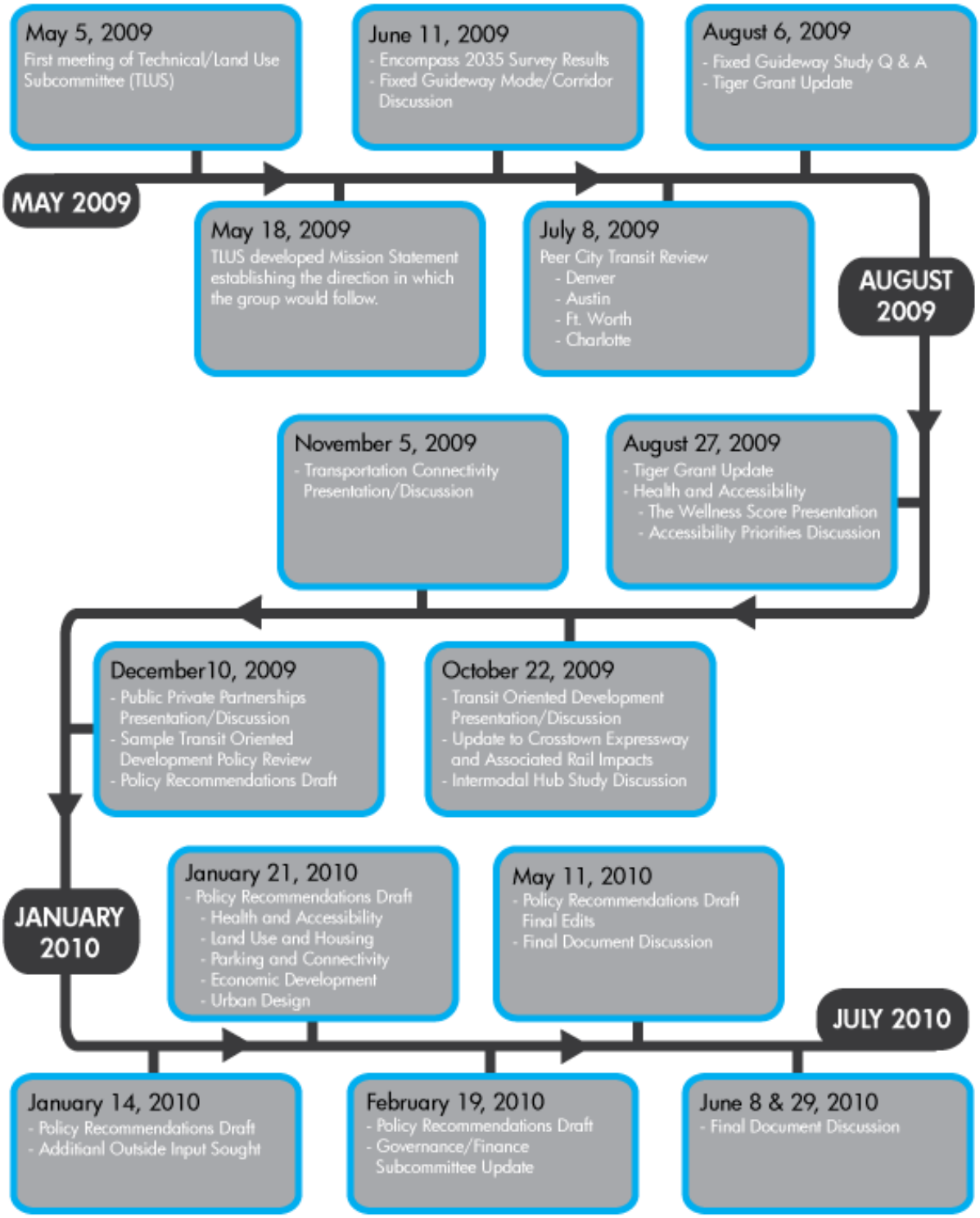
TLUS Committee Staff

Ryan Billings – Transportation Planner, ACOG

Daniel Fazekas – Transportation Planner, ACOG

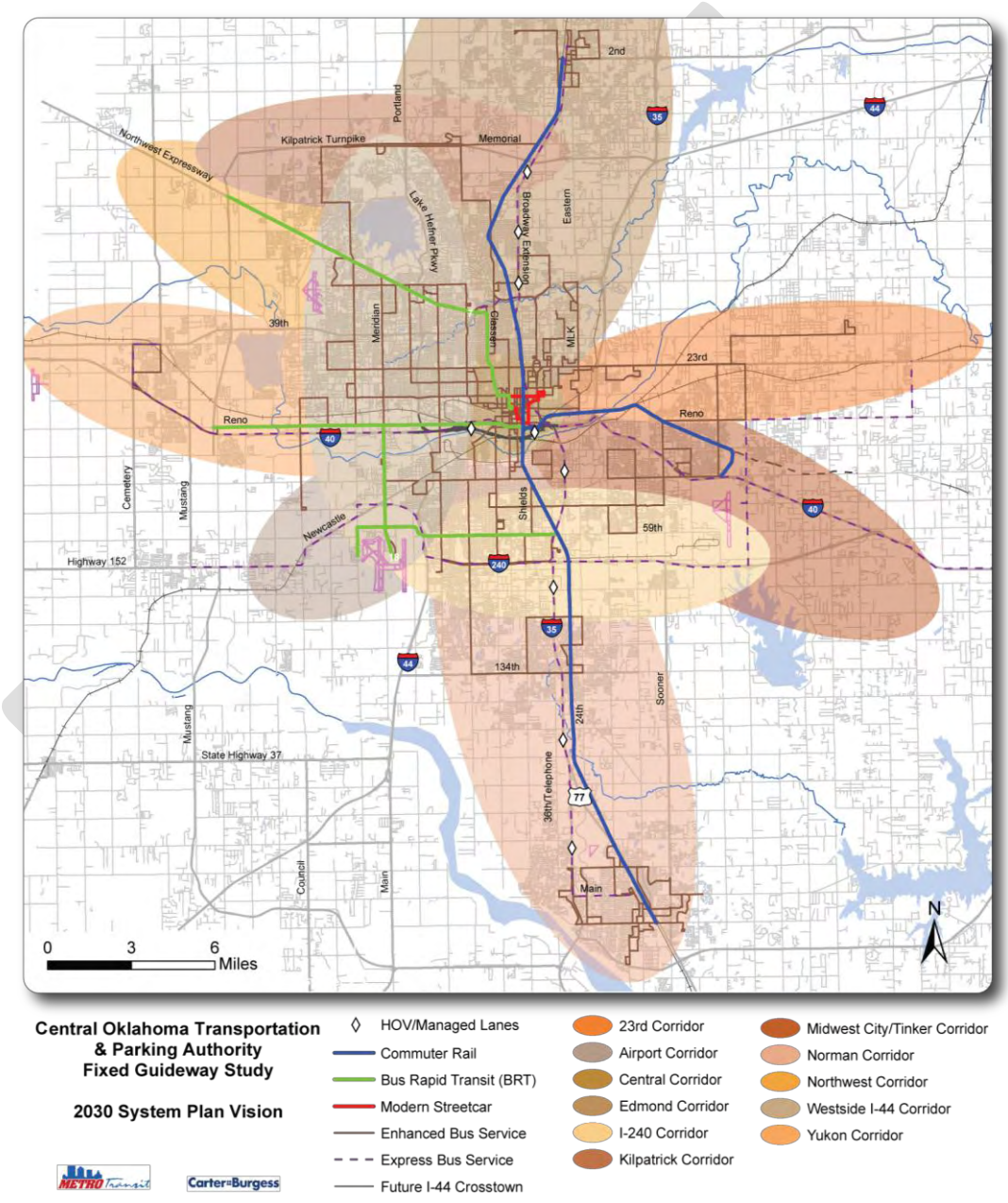
Meeting Timeline

During the past year, the TLUS committee has been hard at work exploring, analyzing, and developing land use and mobility-oriented-development planning policy recommendations.



2030 Fixed Guideway Study System Plan Vision

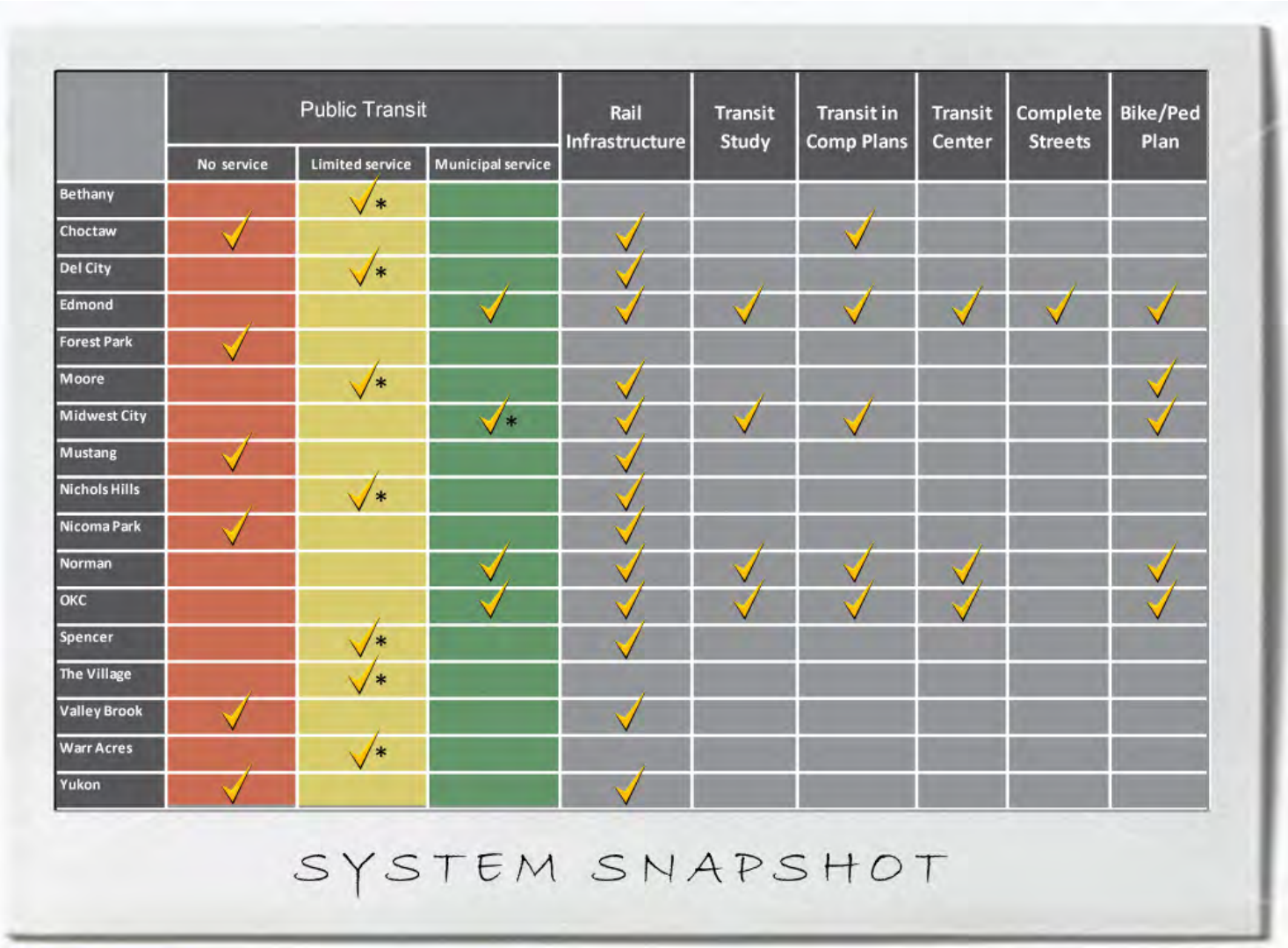
The 2030 System Plan Vision was developed in 2005 as part of the Fixed Guideway Study, identifying transportation solutions for the Oklahoma City Metropolitan Area. The 2030 System Plan Vision* illustrates the study's final recommendations for Commuter Rail, Modern Streetcar, Bus Rapid Transit, and Enhanced Bus alignments. The TLUS committee utilized the 2030 System Plan Vision as the basis for the exploration of land use planning and mobility-oriented-development policy recommendations.



* The above map illustrates potential transit corridors and alignments.

Transit Considerations

Based on the District Model, the following communities will potentially be members of a Regional Transit Authority (RTA). The below "System Snapshot" illustrates the current level of public transit service and transit-related development planning. While these considerations are not mandatory, communities should strive to have them in place before/during the development of the RTA.



	Public Transit			Rail Infrastructure	Transit Study	Transit in Comp Plans	Transit Center	Complete Streets	Bike/Ped Plan
	No service	Limited service	Municipal service						
Bethany		✓*							
Choctaw	✓			✓		✓			
Del City		✓*		✓					
Edmond			✓	✓	✓	✓	✓	✓	✓
Forest Park	✓								
Moore		✓*		✓					✓
Midwest City			✓*	✓	✓	✓			✓
Mustang	✓			✓					
Nichols Hills		✓*		✓					
Nicoma Park	✓			✓					
Norman			✓	✓	✓	✓	✓		✓
OKC			✓	✓	✓	✓	✓		✓
Spencer		✓*		✓					
The Village		✓*							
Valley Brook	✓			✓					
Warr Acres		✓*							
Yukon	✓			✓					

*Denotes service provided by Metro Transit (Oklahoma City)

The system snapshot serves as a guideline for communities to better understand where they stand and what pieces of the puzzle are needed for future development of a regional transportation system.

Community Considerations

The following represents areas of consideration for communities with no/limited or municipal public transit. Suggestions provided offer guidance to communities in evaluating current service, assessing needs, and developing policies for an efficient transit system.

No/Limited Public Transit

- Evaluate current services provided
  - Create a simple spreadsheet of all taxis, volunteer groups, government-funded, non-profits, ambulatory – do you see a gap in service that will help justify the study expense?
  - Highlight applicable FGS recommendations in relation to your community.
- Transit study/Needs assessment
  - Outreach to local groups, such as schools, businesses, social service agencies, medical centers, services for people with disabilities, neighborhood associations, churches, and developers.
  - Build public leadership understanding of basic transit terms and needs.
  - Provide data and modeling to determine best solutions.
  - Identify potential locations for bus transfer center or commuter rail terminal.
  - Develop short and long range goals and strategies.
  - Instill trust, sense of ownership and confidence that the service created is great and the expense is justified.
- Develop Policies
  - Determine if local zoning, infrastructure, traffic and growth patterns enhance or impede your ability to accomplish your transit goals listed in the study.
  - Find pockets of community that may be conducive to higher density and pedestrian activity with access to day-to-day amenities.
  - Preserve existing workforce housing and support quality, new affordable housing located adjacent or near transit, especially multifamily and mixed-use.
  - Preserve and integrate community character and identity.
  - Enhance employment opportunities at or near transit stations.
  - For those that interface with interstate and/or rail, look at potential hubs and platform locations.
  - Create policies that promote accessibility, connectivity to medical services and employment centers, outreach to underserved, green space preservation, bike and pedestrian paths, safe travel, overall health, and quality of life.

Municipal Public Transit

- Evaluate the service. Transit should:
  - Provide for needs and demand.
  - Be cost effective to operate.
  - Enable service provider to be more responsive to customer service needs.
  - Be accessible to all mobility levels.
  - Connect to other communities in the metro area.
  - Be affordable for targeted users.
  - Positively impact the health of communities.

Modes

Commuter Rail

Passenger capacity, development costs, train speeds and access to central cities are the primary advantages of commuter rail. Trains can comfortably accommodate a

large number of seated passengers over a long distance. Where existing track and signal systems are in good condition, service can be implemented at a relatively low cost and within a short time frame. Advances in diesel-electric engines for commuter rail locomotives provide for faster acceleration and allow for closer station spacing.

Commuter rail serving Del City, Edmond, Moore, Midwest City, and Norman can penetrate the core of a central business district (CBD) or entertainment district. Existing rail infrastructure and track alignments provide the opportunity for the development of a commuter rail system, centered on a downtown hub and extending to surrounding communities and employment centers.

Development of commuter rail may not always be feasible due to limitations on existing rail infrastructure, geometric constraints, conflicts with freight traffic, and problematic access for vehicles and pedestrians. Grade separation of commuter rail, especially in downtown areas, can be advantageous but costly to develop. In Oklahoma City the grade separation is already present.

Modern Streetcar

Modern streetcar technology is a low-floor vehicle with no steps which typically operates in an urban or downtown setting on rails embedded in the road or other right-of-way. The vehicles have a modern streamline appearance and typically travel in the flow of mixed traffic, have a much higher passenger capacity than a bus, and feature more room for standing passengers and bicycles. A streetcar is usually only one car long, powered by overhead electricity via unobtrusive cable strands,

and is articulated. Articulated means the car has subsections that bend much like an accordion so that it can turn on a short radius. Streetcars typically have a low average speed and are generally used as circulators to connect destinations in walkable, higher density, mixed use districts.

The flexibility and relative low cost compared to some rail alternatives could

allow a modern streetcar system to emerge as a viable alternative in various high-capacity transit corridors. The streetcar stop platforms are relatively small, ADA accessible for level boarding, require minimal passenger shelters, and usually separated by only a couple of blocks. Oklahoma City voters approved modern streetcar in MAPS3, which can complement and be used in conjunction with other forms of bus, rail, and paratransit.

Bus Rapid Transit

Bus Rapid Transit (BRT) on busways provide the speed and guideway advantages typically attributed to rail transit in high-capacity transit corridors but a fraction of the capital cost. BRT has the added advantage of circulation within local areas. BRT and busways allow higher-speed

operation, express/non-stop service and one-seat rides. BRT vehicles are visually more streamlined to look more like rail vehicles and may be articulated due to being nearly twice the length of some buses. BRT buses are more accessible and convenient than standard buses due to the wide doors, large windows, low floor access, and technologies like wi-fi and on-board stop announcements. BRT stops are spaced several blocks apart, and service is more frequent than typical bus routes. BRT stops are also designed to resemble smaller-scale streetcar stations with off-vehicle fair collection, and intelligent transportation systems (ITS) that show the arrival time for the next bus.

Although not presently in operation within the region, BRT operates effectively in various urban settings. For an at-grade busway to be effective and provide faster operating speeds the numbers of grade crossings should be limited. BRT vehicles often operate in the flow of mixed traffic, but may have their own dedicated lane for a substantial part of the route. BRT routes could service areas of Central Oklahoma where existing infrastructure or capital costs prohibit rail transit.

Bus

The primary advantages of bus operations are low cost and high flexibility. Buses do not require a significant initial investment in infrastructure. Capital costs are primarily limited to vehicles and

maintenance facilities. Operating costs per passenger are also on the lower side when compared with those for most other alternatives. Routes can be flexible. Routing changes can be implemented, for all practical purposes, immediately. Buses can serve a wide range of passenger

demand and bus size can be adapted to passenger loads. Small or mid-sized buses can be assigned to routes with lower peak demand. For high ridership routes with frequent service, economies of scale can be realized with articulated buses which can accommodate 50 percent more passengers with one bus operator.

Buses are compatible with the existing transit system. However, the efficiency and effectiveness of additional routes in attracting ridership and providing a significant improvement in travel time would be less than that of a fixed guideway option. Operating costs would also rise substantially to provide significantly increased capacity. Bus stops are typically low cost and easily accessible since stop spacing is close. Buses on streets and roadways are subject to traffic delays. Diesel emissions create a localized environmental impact, but use of alternative fuel buses may reduce bus emissions.

Paratransit

Paratransit is an alternative mode of flexible passenger transportation that operates in parallel with the fixed route buses and is typically used by persons with limited mobility. Paratransit does not follow fixed routes or schedules. Paratransit services may vary considerably on the degree of flexibility they provide their customers. Paratransit offers on-demand, call-up, door-to-door, and even through-the-door service from any origin to any destination in a service area. Paratransit services are typically funded by public transit agencies, but are sometimes operated by not-for-profit organizations

and by for-profit private companies like taxicab operators.

Bicycle and Pedestrian

Bicycle and Pedestrian facilities integrated into the transportation system are a necessity. Bicycle lanes, routes, and multi-use trails connecting communities with transit stations and stops provide added transportation options for citizen trips. Bike-on-Bus and Bike-on-Rail programs give riders increased travel distances, while providing additional linkages to their origin and destination.

Pedestrian facilities must be made available within and adjacent to transit stations and stops. Stops should have benches and sidewalks connecting to other pedestrian infrastructure. Sidewalks should be required within in all development near transit stations.

System Stations/Stops

A robust transit system utilizes multiple modes to provide service to as many people as possible. With each mode there is the opportunity for several types of stations and stops. Commuter Rail and Bus/BRT will serve as the backbone for a Central Oklahoma transit system. Both have unique station/stop configurations and possibilities. The Station Types graphic on page 15 illustrates potential transit stations along hypothetical commuter rail or enhanced bus/BRT lines.

Commuter Rail

Downtown Hub: A downtown transit hub consists of several transportation modes and routes (spokes) all converging at one centralized station (hub). The downtown hub would serve as the central access point for downtown employment/residential and the main transfer location for all modes.

Neighborhood Station: A neighborhood station consists of a commuter rail platform, covered shelter, and ticket kiosks strategically placed within an established neighborhood providing citizens direct access to public transportation while maintaining the character and scale of that neighborhood. The neighborhood station could be the start of a feeder bus route to areas of the neighborhood too far for walking or riding a bicycle.

Transit Oriented Development (TOD) Station: A TOD neighborhood typically has a center with a transit station or stop (train station, metro station, tram stop, or bus stop), surrounded by relatively high-density development with progressively lower-density development spreading outwards from the center. TOD generally radiates one-quarter to one-half mile from the TOD station, as this is considered to be an appropriate scale for pedestrians.

Park and Ride Station: Park and Ride stations consist of a station platform, platform shelter, and ticket kiosks surrounded by ample parking. Park and Ride stations should utilize shared parking principles when available and maximize land efficiency by constructing parking garages.

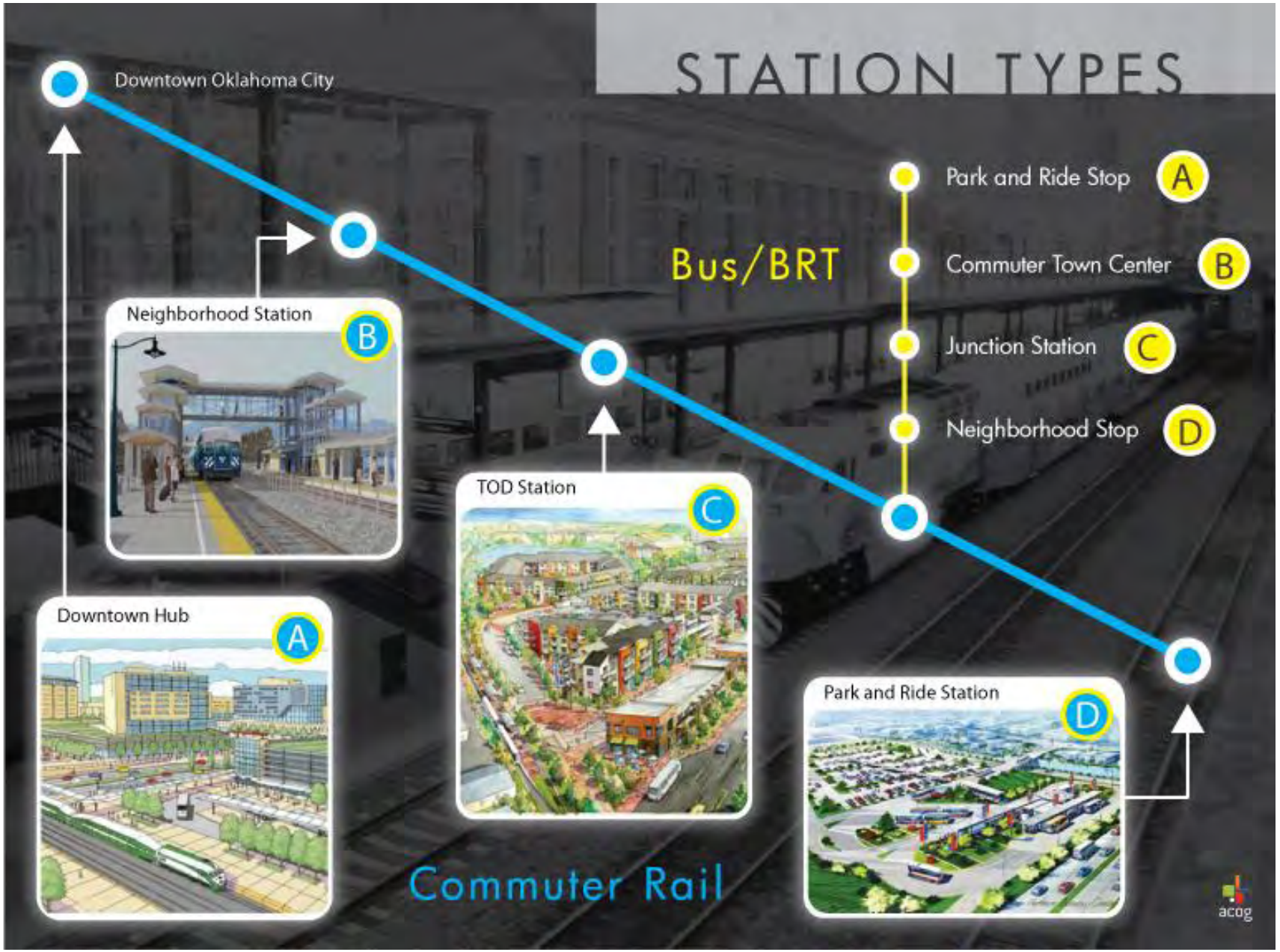
Bus/BRT

Park and Ride Station: This is a Commuter Town Center with ample amounts of land for parking or a shared parking arrangement. Such arrangements must be approved under local zoning to share spaces with a temporally compatible use such as a church or movie theater.

Commuter Town Center (CTC): Facilities that may be integral to a planned unit development with that allow several bus and BRT routes to meet for an easy exchange of passengers. Express buses will be a key type of route that stops here. These may be developed at the outskirts or core of an office, shopping, housing or other area as part of a Common Lot improvement and can be dedicated to the municipality as a public improvement. They will have many of the features of the Neighborhood Stops but may also involve a rail stop, restrooms, vending machines, and security cameras. The can also be developed with public funds, as though a G.O. bond issue.

Junction Station: Such locations are where two or more bus or BRT routes intersect, sometimes from perpendicular roadway directions. These may involve any of the improvements of a neighborhood stop, but may involve having shelter at all four intersections of major arterial intersection. These may be designed with landscaping, banners or matching elements to reinforce the identity of both the area and the transit station. Zoning codes can be written so that Junction Stations or a fee-in-lieu-of are mandatory for developments of a certain size. These can be "sponsored" by abutting businesses.

Neighborhood Stop: These are key locations along bus rapid transit (BRT), express buses, and local bus routes. These can be rather simple stops installed and sponsored by municipalities and private businesses that have a bench (sheltered or unsheltered) and ADA landing pad. All must have a connecting sidewalk sufficient that the passenger need not walk or roll along any unpaved walkway to reach the abutting business housing or other land use. The stop may or may not feature real time bus arrival L.E.D. displays, three-minute-limit radiant heaters, a trash receptacle, emergency call box, commercial advertising, bicycle rack, night time lighting, or a shopping cart corral. The stop may have an easement and walkway extending approximately perpendicular to the curb to enable immediate connectivity to the abutting land use. The stop may or may not have a bus pull-off lane so that the bus, paratransit van, and social service van, does not stop any traffic. In areas without benches a stop will have be at an area where there is an ADA 5'x8' landing pad and the sidewalk paved out to the actual street curb. All of a neighborhood stop can be placed on private property or in the public right-of-way (R-O-W), or a combination of the two. Those put on the public R-O-W can be privately developed and potentially dedicated to the municipality as a public improvement, much like other infrastructure is. Zoning codes can be written so that Neighborhood Stops or fee in-lieu-of are mandatory for developments of a certain size.


STATION TYPES
Downtown Oklahoma City
Bus/BRT
Park and Ride Stop
A
Commuter Town Center
B
Junction Station
C
Neighborhood Stop
D
Neighborhood Station
B
TOD Station
C
Downtown Hub
A
Park and Ride Station
D
Commuter Rail
acog

Transit Supportive Development Recommendations

The following policy recommendations seek to focus development within transit center station areas to achieve compact development. These critical areas of development reinforce, and, in turn, are supported by the transit system.

Land Use

The intent of the land use policy is to concentrate compact development around transit center stations. That concentration may include any one or a combination of employment, commercial, multi-family residential, mixed commercial/residential or public/quasi-public uses, depending on the local situation.

- Develop appropriate type and scale of transit for community and transit corridor enhancement.
- Encourage community development and redevelopment in and around transit station areas as identified by local comprehensive or transit plans.
- Protect and preserve existing neighborhoods in and around transit stations as identified by local comprehensive or specific transit-related plans.
- Achieve and/or maintain compact development patterns that facilitate direct, safe, and convenient pedestrian and bicycle connections in and around stations and bus stops.

- Ensure adequate infrastructure and access are in place or planned when considering stop and station locations.
- Consider potential transit demand and connectivity to other modes when new developments are proposed.
- Consider and encourage vertically and horizontally integrated mixed-use residential and commercial developments which directly complement the surrounding community.
- Prioritize transportation investments in areas with high unemployment and poverty rates to stimulate economic growth, jobs, new public/private, commercial and residential partnerships.
- Establish robust community participation to guide the planning and development process.
- Develop join use agreements to provide access to school land after hours.

Urban Design

The intent of the urban design policy is to create pedestrian-oriented neighborhoods, and improve the overall quality of the environment of the station area and surroundings so that transit-related development will be able to function effectively as an asset to the community.

- The unique cultural and physical identity of each community should be reflected in station area art, architecture, planning and design.
- The impact of building facades at the street level and focus design on features should be human in scale and comprehensible to pedestrians.
- Design bus stops and junction stations that are safe, accessible, dignified, and aesthetically pleasing for people of all ages and abilities.
- Develop safe and attractive streetscapes which preserve views and landscapes, and incorporate existing green spaces.
- Incorporate crime prevention through environmental design principles.
- Incorporate facilities for bicycles and signage which describe connections and destinations for those on foot, bicycle or transit.

Housing

The intent of the housing policy is to provide a mix of housing products and prices within walking distance of transit center stations.

- Encourage a diversity of housing prices and accessible residential development in and around transit station areas, through districts, overlay zones, or comprehensive plans.
- Near stations, utilize redevelopment, mixed-use projects and locally designated incentives to stimulate and preserve a broad range of housing choices.
- Support the character and age of the area by locating, designing or maintaining quality housing development.
- Provide affordable senior and special needs housing where feasible and appropriate.
- Incorporate sidewalks, trails, schools, parks, and other “smart growth” amenities in transit supportive housing.
- Incorporate low maintenance regional landscaping and green building principles when feasible.

Parking

The intent of the parking policy is to encourage parking location and design within the station area that provides for shared or joint-use parking, allows for the productive reuse of land, and integrates parking in an unobtrusive manner.

- Develop transit-specific parking and loading regulations separate from traditional ordinances.
- Integrate Park and Ride development to have low impact on the area.
- Utilize low maintenance landscaping and eco-friendly parking surfaces when feasible.
- Consider use of existing parking lots and vacant properties before new lots are built for Park and Ride facilities.
- Consume the least land area possible for parking.
- Evaluate parking policies/standards and phase in new parking management programs and reduction strategies.
- Design parking areas to provide effective and efficient connections between different transportation modes.

- Encourage parking structures over surface parking.
- Encourage shared-use parking as part of an overall parking management program.
- Encourage ground floor commercial use of parking structures to contribute to a more pedestrian friendly and economically viable street level environment.
- Devise parking strategies that do not result in overflow parking on surrounding residential neighborhood streets.
- Strategically locate park and ride facilities in commuter-oriented station areas.
- Locate parking on the periphery - allowing development to occur near the station area.

Connectivity

The primary objective of the transportation system must be to connect people to housing, jobs, local services that improve access to shopping, medical care and other basic services.

- Create linkages between transit center stations and other modes of transportation, including pedestrian, bicycle, automobile, bus, commuter rail, and airport facilities.
- Support balanced (regional) growth, walkable communities, the renewal of long-neglected neighborhoods and street design that make all forms of transportation safe and accessible.
- Add neighborhood bus stops, junction stations, and commuter town stations as part of the connectivity of places, people, and transit modes.
- Design roadways, pedestrian walkways, bikeways, and transit routes to minimize conflicts between different modes occupying the same space.
- Design convenient bicycle facilities in the station area, connected to bicycle routes

serving the surrounding areas.

- Improve the connection to station areas with neighboring parks, residential areas, commercial districts, and transportation corridors.
- Develop sidewalk transition and trail plans providing adequate safety features for pedestrians and bicyclists to connect with existing systems.

Economic Development

The intent of the economic development policy is to support and encourage economic development opportunities in areas surrounding transit center stations.

- Seek planning funds and allocate them to the development of transit station area plans that encourage transit-supportive development or redevelopment.
- Seek capital funds that upgrade bus stops so they meet minimum "Neighborhood Stop" standards.
- Encourage public-private partnerships that use development incentives as a means of achieving transit-oriented development and economic development goals.
- Exercise city powers in combination with public/private partnerships to accomplish measures such as land assembly in station areas.
- Reinforce community revitalization programs, such as redevelopment project area plans and enterprise zones, with policies established for transit station areas.

Accessibility and Health

Transportation and land use policies directly affect the health viability and health equity of a community. To that degree, the following policies are recommended.

- Incorporate sidewalks, bicycle facilities, trails and bus stops into all development proposals.
- Integrate community gardens, farmers markets and usable green space into transit-oriented areas as feasible and appropriate.
- Incorporate public/private transportation to shuttle customers to basic services, grocery stores, and medical services.
- Provide facilities that encourage and welcome users of all mobility levels and languages.

- Increase opportunities for physical activity by devoting increased resources to non-motorized transportation options.
- Explore opportunities to increase funding to strengthen the positive health impacts associated with expanded public transportation options.
- Promote safe and convenient opportunities for physical activity by supporting active transportation infrastructure.

Transit Oriented Development

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

Transit Oriented Development Principles

Recognizing that each TOD in Central Oklahoma will have its own unique character and that the districts will vary with respect to layout, design, land use composition and function, the following principles are presented to provide an understanding of the essential elements and characteristics of TOD. They will serve as the foundation for the station area planning process:

- Create TOD plans that are flexible so they can respond to changing conditions.
- Create a compact development within an easy walk of public transit and with sufficient density to support ridership.
- Make the pedestrian the focus of the development strategy without excluding the auto.
- Create active places and livable communities that service daily needs and where people feel a sense of belonging and ownership.
- Include engaging, high quality public spaces (e.g. small parks or plazas) as organizing features and gathering places for the neighborhood.
- Encourage a variety of housing types near transit facilities available to a wide range of ages and incomes.
- Incorporate retail into the development if it is a viable use at the location without the transit component, ideally drawing customers both from both the TOD and a major street.
- Ensure compatibility and connectivity with surrounding neighborhoods.
- Introduce creative parking strategies that integrate, rather than divide the site and reduce the sense of auto domination.
- Strive to make TODs realistic, economically viable and valuable from a diversity of perspectives (city, transit agency, developer, resident, and employer).

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

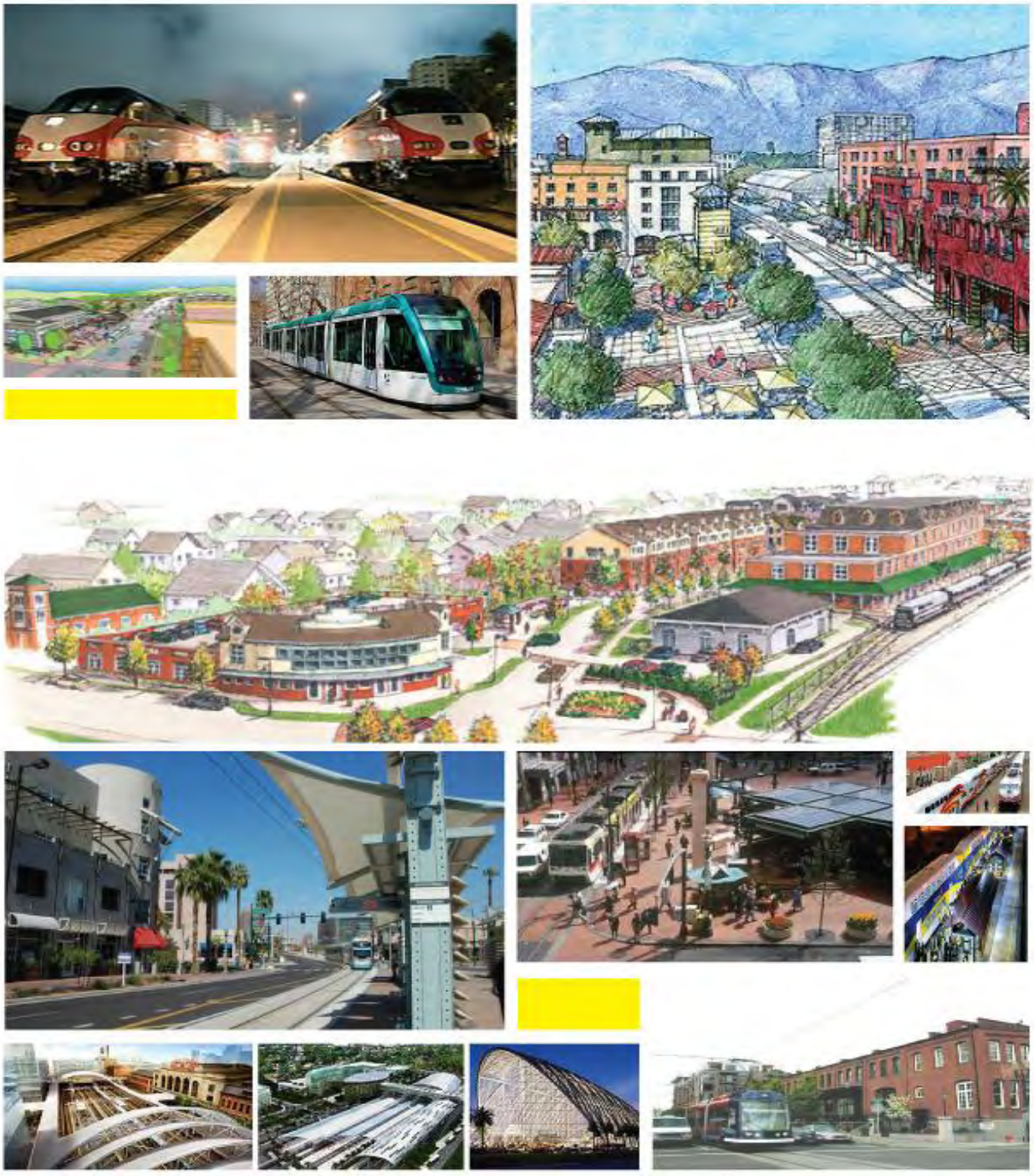
TOD Districts

- **Neighborhood center TOD** - located at the commercial center of a neighborhood; lowest density of all classifications.
- **Town center TOD** - located at a major commercial, employment or civic center; moderate densities relative to other classifications.
- **Regional center TOD** - located at the juncture of regional transportation lines or at a major commuter or employment center; greater densities relative to other classifications but less than in a downtown TOD.
- **Downtown TOD** - located in a highly urbanized area; highest density of all classifications; allows for high-rise development

Form Based Code

Form Based Code is a means of regulating development to achieve a specific urban form. Form-based codes create a predictable public realm by controlling physical form primarily,

with a lesser focus on land use, through city or county regulations. Form-based codes are a new response to the modern challenges of urban sprawl, deterioration of historic neighborhoods, and neglect of pedestrian safety in new development. Tradition has declined as a guide to development patterns, and the widespread adoption by cities of single-use zoning regulations has discouraged compact, walkable communities. Form-based codes are a tool to address these deficiencies, and to provide local governments the regulatory means to achieve development objectives with greater certainty.



Next Steps

The Technical/Land Use Subcommittee understands that the Regional Transit Dialogue represents one of the first steps in developing a Regional Transit Authority along with a comprehensive regional plan for transit supportive development. TLUS recommends the continuation of this process through several implementable mechanisms.

TOD Development Tool-Kit

- Developed with the cooperation of the Areawide Planning and Technical Advisory Committee (APTAC)
- Comprehensive how-to of transit oriented development for various Central Oklahoma communities.
- Provides detailed ordinance samples, steps for inclusion in city's comprehensive plan, and guidance for public support.
- Includes template for community resolution supporting TOD guidelines.

Strategic Regional Plan for Transit

- Comprehensive Transit Study implemented on a regional scale
- Communities develop study in coordination with the RTA.
- Address individual city needs and regional desires.

Regional Transit Dialogue 2

- Continued coordination and discussion with identified participating communities.
- Additional support for communities seeking TOD ordinance inclusion.

Glossary of Transit Terms

The terms below are used throughout the Fixed Guideway Study. The Technical land Use Subcommittee has added additional terminology.

A

Accessible Service — Buses operating in regular service with wheelchair lifts, kneeling functions or other devices that permit disabled passengers to use the service.

Accessibility — (1) The extent to which facilities are barrier free and useable by disabled persons, including wheelchair users. (2) A measure of the ability or ease of all people to travel among various origins and destinations.

Activity Center — An area with high population and concentrated activities which generate a large number of trips (e.g., CBD, shopping centers, business or industrial parks, recreational facilities (also known as trip generator).

Alignment — The horizontal and vertical ground plan of a roadway, railroad, transit route or other facility.

AMTRAK (National Railroad Passenger Corporation) — A quasi-public corporation created by the federal Rail Passenger Service Act of 1970 to improve and develop intercity passenger rail service throughout the United States.

Americans with Disabilities Act of 1990 (ADA) — The law passed by Congress in 1990 which makes it illegal to discriminate against people with disabilities in employment, services provided by state and local governments, public and private transportation, public accommodations and telecommunications.

B

Bus — A rubber-tired road vehicle designed to carry a substantial number of passengers (i.e., 10 or more), commonly operated on streets and highways for public transportation service.

Bus Hours — The total hours of travel by bus, including both revenue service and deadhead travel.

Bus Lane — A lane of roadway intended primarily for use by buses, either all day or during specified periods.

Bus Stop — A curbside place where passengers board or alight transit.

Bus Miles — The total miles of travel by bus, including both revenue and deadhead travel.

Bus Rapid Transit (BRT) - A Bus that provides the speed and fixed guideway advantages typically attributed to a rail line but on an existing road network. BRTs allow higher-speed operation, express/non-stop service and one-seat rides. BRT vehicles are designed to look more like rail vehicles with wide doors, large windows, and low floor access.

Bus Shelter — A structure constructed near a bus stop to provide seating and protection from the weather for the convenience of waiting passengers.

Bus Turnout — Cutout in the roadside to permit a transit vehicle to dwell at a curb.

Busway — A special roadway designed for exclusive use by buses. It may be constructed at, above, or below grade and may be located in separate rights-of-way or within highway corridors.

C

Central Business District (CBD) — An area of a city that contains the greatest concentration of commercial activity, the "Downtown". The traditional downtown retail, trade, and commercial area of a city or an area of very high land valuation, traffic flow, and concentration of retail business offices, theaters, hotels and services.

Commuter Rail — Local and regional passenger train service between a central city, its suburbs and/or another central city, operating primarily during commutes hours. Designed to transport passengers from their residences to their job sites. Differs from rail rapid transit in that the passenger cars generally are heavier, the average trip lengths are usually longer, and the operations are carried out over tracks that are part of the railroad system.

Complete Streets- Policies designed to enable safe access for all users of a road network. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street. These policies ensure municipalities and transportation agencies to think of a road/street network more than primarily automotive uses.

Corridor — A broad geographical band that follows a general directional flow or connects major sources of trips. It may contain a number of streets and highways and many transit lines and routes.

E

Express Service — Express service is deployed in one of two general configurations: (1) A service generally connecting residential areas and activity centers via a high speed, non-stop connection, e.g., a freeway, or exclusive right-of-way such as a dedicated busway with limited stops at each end for collection and distribution. Residential collection can be exclusively or partially undertaken using park-and-ride facilities. (2) Service operated non-stop over a portion of an arterial in conjunction with other local services.

F

Federal Transit Administration (FTA, formerly UMTA, Urban Mass Transit Administration) — A part of the U.S. Department of Transportation (DOT) which administers the federal program of financial assistance to public transit.

Fixed-Guideway System — A system of vehicles that can operate only on its own guideway constructed for that purpose (e.g., rapid rail, light rail). Federal usage in funding legislation also includes exclusive right-of-way bus operations, trolley buses, and ferryboats as "fixed-guideway" transit.

Fixed Route — Transit service provided on a repetitive, fixed-schedule basis along a specific route, with vehicles stopping to pick up passengers at and deliver passengers to specific locations.

Form Based Codes (FBC) - a planning tool regulating development to achieve a specific urban form/design. Form-based codes can be used by controlling physical form primarily of façades and streetscapes. Generally FBCs are successfully applied in district/corridor areas of municipality or a main street/town center location.

H

Health Equity — highest attainable level of health for all people. Achieving health equity requires valuing all individuals and populations equally, developing societal efforts to address avoidable inequalities, and recognizing those who have experienced historical or contemporary injustices or socioeconomic disadvantages.

Heavy Rail — An electric railway with capacity for a "heavy volume" of traffic, and characterized by exclusive rights-of-way, high speed and rapid acceleration. Heavy rail is different from commuter rail and light rail.

I

Intercity Rail — A long distance passenger rail transportation system between at least two central cities that, in California, traditionally has been provided by AMTRAK either directly or through a local Joint Powers Authority.

Intermodal — Switching from one form of transportation to another.

Intermodal Facility — A building or site specifically designed to accommodate the meeting of two or more transit modes of travel.

K

Kiss and Ride — A place where commuters are driven and left at a station to board a public transportation vehicle.

L

Light Rail Transit (LRT) — An electric railway with a "light volume" traffic capacity compared with heavy rail.

Light Rail Vehicle (LRV) — Modern-day term for a streetcar type of transit vehicle, e.g., tram or trolley car.

Limited Service — Higher speed train or bus service where designated vehicles stop only at transfer points or major activity centers, usually about every 1/2 mile. Limited stop service is usually provided on major trunk lines operating during a certain part of the day or in a specified area in addition to local service that makes all stops. As opposed to express service, there is not usually a significant stretch of non-stop operation.

Linked Passenger Trips — A linked passenger trip is a trip from origin to destination on the transit system. Even if a passenger must make several transfers during a one way journey, the trip is counted as one linked trip on the system. Unlinked passenger trips count each boarding as a separate trip regardless of transfers.

Local Service — A type of operation that involves frequent stops and consequent low speeds, the purpose of which is to deliver and pick up transit passengers as close to their destinations or origins as possible.

M

Mixed Use Development- a practice of mixing different land uses and varied building types creates vibrant, pedestrian-friendly, and diverse communities

Mode — A particular form of travel (e.g., bus commuter tail, train, bicycle, walking or automobile.

P

Paratransit — Transportation service required by ADA for individuals with disabilities who are unable to use fixed-route transit systems. The service must be comparable to the fixed-route service.

Park-and-Ride — A parking area for automobile drivers who then board vehicles, shuttles or carpools from these locations.

Passenger — A person who rides a transportation vehicle, excluding the driver.

R

Ridesharing — A form of transportation, other than public transit, in which more than one person shares in the use of the vehicle, such as a van or car, to make a trip.

Right-of-Way (ROW, R/W) — The land over which a public road or rail line is built. An exclusive right-of-way is a road, lane, or other right-of-way designated exclusively for a specific purpose or for a particular group of users, such as light rail vehicles or buses..

Route — A specified path taken by a transit vehicle usually designated by a number or a name, along which passengers are picked up or discharged.

S

Schedule — From the transit agency (not the public timetable), a document that, at a minimum, shows the time of each revenue trip through the designated time points. Many properties include additional information such as route descriptions, deadhead times and amounts, interline information, run numbers, block numbers, etc.

Service Area — A geographic area which is provided with transit services. Service area is now defined consistent with ADA requirements.

Smart Growth- concentrates growth in the center of a city/town to avoid urban sprawl; and advocates compact, transit-oriented, walkable, bicycle-friendly land use, including neighborhood schools, complete streets, and mixed-use development with a range of housing choices.

T

Transit Center — A fixed location where passengers transfer from one route to another.

Transit Corridor — A broad geographic band that follows a general route alignment such as a roadway of rail right-of-way and includes a service area within that band that would be accessible to the transit system.

Transit Oriented Development (TOD) - A mixed-use of residential and commercial area designed to maximize access to public transport, and encourages transit ridership. A TOD is typically around a train or bus stations. A TOD is generally higher density development which surrounds the station locations.

Transit Study- To assess transit service needs in a municipality and/or region relative to mobility, economic vitality and overall quality of life. The study will articulate a transit vision for a municipality and/or region that encompasses a variety of transit technologies that are serving and/or technologies that could serve in future regional transit connections.

Transportation Equity Act for the 21st Century (TEA-21) — The 1998 law that reauthorizes federal surface transportation programs for six years (FY 1998 to FY 2003). TEA-21 preserves much of the basic programmatic structure of its predecessor, the Intermodal Surface Transportation Efficiency Act (ISTEA).

Resources

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