STATION TYPES & URBAN DESIGN FRAMEWORK
Charlotte’s Program Guides to Building Community with Transit

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RAILVOLUTION
Building Communities with Transit
Salt Lake City, UT
Implementing Cats System Plan

- 5 Transit Corridors (58 Stations)

- South Corridor – LRT – Under Construction
  - 15 stations

- 4 Transit Corridors in DEIS
  - North Corridor – Commuter Rail (12 Stations)
  - Northeast Corridor – LRT (13 Stations)
  - Southeast Corridor – LRT/BRT (9 Stations)
  - West Corridor – LRT/BRT (13 Stations)

1 Street Car Corridor in DEIS
Implementing the Program to build community

Schedule
Implementing the Program to build community
Implementing the Program to build community
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Implementing the Program to build community
2025 Centers & Corridors
The CATS System Plan
Transit Station Area Principles

Defines:
- Roles of Stations
- Area's Context

Station Types & Urban Design Framework

Informs:
- TOD Opportunities
- Joint Development Roles
- Infrastructure Needs
- Amenity Needs

Informs:
- Mitigation Strategies
- Station Elements
- Conceptual Design

Station Area Planning & Design

Transit Engineering & Design
Establishing the Program

INTEGRATED LAND USE & TRANSIT PLAN

2025 Integrated Land Use & Transit Plan Implementation

System Plan Approach
INTEGRATED LAND USE & TRANSIT PLAN
Establishing the Program

Station Area Planning & Design Potential

Transit Planning & Design

MIS

DEIS

AEP/LPA
PE/FEIS

ROD

FFGA

Development & Conceptual Infrastructure

Detailed Station Area Plans & Conceptual Infrastructure

Pre-Alignment & Station Designs Conceptual Infrastructure Plans

Station Area Zoning, Design & Infrastructure

Construction Facility Construction

Transit Facility Construction

Infrastructure Construction

Pre-Alignment

Devoliation Design Station Area Plans

Concealment Alignment & Station Designs Conceptual Infrastructure Plans

MIS

DEIS

AEP/LPA
PE/FEIS

ROD

FFGA
Station Service Area – All Modes

- Walk-up: 1/2 Mile
- Bicycle & Circulator: 1 Mile
- Bus Transit & Car: 3 Miles
- Large & Terminal P & R: 5 Miles or More
Station Service Area – All Modes

½ - Mile Service Area

• Only serve a localized area immediately around the station

• Stations can be grouped to provide better service area overlay in the densest of areas

• Locate near minor thoroughfare
Station Service Area – All Modes

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1 - Mile Service Area
- Most common transit stations
- Reliant on bus connections to the station
- Some customers will arrive by car - need for adequate parking and Kiss & Ride areas.
- Locate near thoroughfare

Large & Terminal P & R
- 5 Miles or More

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1/2 Mile

Bicycle & Circulator
1 Mile

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**3-Mile Service Area**
- Access by a more limited feeder bus network and a larger number of private vehicles
- Provide adequate facilities for all modes of travel
- Locate near major thoroughfare
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5 - Mile Service Area
- Typically the station’s toward the end of the line.
- Access primarily by private vehicles
- Access to major thoroughfare or freeways.
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Station Area Context

**High Intensity Urban Core**

- Uptown
  Most accessible place in the region

- Well-established and connected street pattern

- Densities supportive of transit

- Transit ranges from small local stations to large multi-modal stations

- Strong TOD development market
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Established Urban Neighborhoods & Historic Communities

- Includes South End, NoDa, Plaza Midwood, Elizabeth, and West Morehead
- Also includes Mooresville, Davidson, Cornelius, and Huntersville
- All have individual character built-up over time
- All feature a connected block system and transit-supportive densities
- TOD development market varies, may need assistance.
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Industrial Communities
- Important Centers of Employment
- Many have individual character built-up over time
- Generally well connected street network
- Often there are physical barriers to TOD Development
- TOD development market varies, and may need assistance.
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**Established Suburban Neighborhoods**
- Most common built form
- These areas are well developed, but lack orientation to the public realm
- Access usually comes from a fewer large roads
- Densities tend to be below transit-supportive levels.
- Few centers of activity
- TOD development market varies, may need assistance.
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**New Suburban and Greenfields**
- Outermost edge of the transit region
- Areas are quickly developing
- Connections are limited; but opportunities abound
- Densities are well below transit-supportive levels
- Stations located here will attract riders from a larger area
- No existing centers of activity
- TOD development varies.
Regional Areas & Built Form

Setting the Framework

Station Area Context

- High Intensity Urban Core
- Established Urban Neighborhoods & Historic Communities
- Industrial Communities
- First-Ring Suburban Neighborhoods
- New Suburban & Greenfields
Role of Stations within the Regional Context

Transit’s Role
Mobility, Placemaking, Development.

Transit’s Role
Required Basic Infrastructure

Station Area Context
Station Service Area
Roles of a Transit Station - Mobility

Station Area Context

- Serves existing nodes of activity
  - Pedestrian oriented
- Larger service areas
  - Fewer stations
  - Designed for all modes
- Smaller service areas
  - Pedestrian oriented
- N/A
- Regional service areas
  - Car-oriented
- Specialized stations
  - Multiple transit connections

Station Service Area

- Mobility
Roles of a Transit Station - Placemaking

Station Area Context

N/A

Station is a civic focal point and should develop into “place”

Station is a large part of the community, supporting existing communities.

Station helps define existing and future community fabric

Station is purely functional and should fit into the existing context. “Place” is established by surrounding fabric

Station is a focal point

Station Service Area

Mobility

Placemaking
Roles of a Transit Station – Development Opportunity

- **Mobility**
  - N/A
- **Placemaking**
  - N/A
- **Development Opportunity**
  - N/A

**Station Service Area**

- Station Area Context
- N/A
- Public / Private Partnerships
  - Strategic use of station needed to strengthen existing communities

- Civic / Joint Development Opportunities
- N/A

- Station itself is a TOD opportunity
  - Station parking should be designed to evolve over time.
Roles of a Transit Station - Composite

Station Area Context

- Neighborhood Stations
- Community Stations
- Urban Stations
- Multi-modal Stations
- Regional Stations

Station Service Area

- Mobility
- Placemaking
- Development Opportunity

N/A

Community Stations

Regional Stations
Typology - Multi-modal Stations

**Mobility Considerations**
Walk-up station
Multi-modal transit service and connections
Taxi / Kiss & Ride designated areas
Some shared parking

**Placemaking Considerations**
Station design should provide a public space
Station architecture should be a civic focal point

**Development Considerations**
Civic Joint Development Opportunity on-site

Regional area where typology occurs
Typology - Urban Stations

Mobility Considerations
Walk-up station
Bus connections on-street
No parking

Placemaking Considerations
Integrated into the existing fabric

Development Considerations
Serve existing development

Regional area where typology occurs
**Typology - Neighborhood Stations**

**Mobility Considerations**
- Walk-up Station
- Bus Connections on-street
- Small, or no parking
- Bicycle accommodations

**Placemaking Considerations**
- Integrated into the existing fabric

**Development Considerations**
- Serve existing development

Regional area where typology occurs
**Typology - Community Stations**

**Mobility Considerations**
Walk-up station
Bus connections within, or adjacent to station
Moderate amount of parking
Bicycle accommodations
Taxi / Kiss & Ride - Designated areas

**Placemaking Considerations**
Station is the center of the community
Public space may be needed

**Development Considerations**
Strategic Small scale public / private partnerships on-site

Regional area where typology occurs
**Typology - Regional Stations**

**Mobility Considerations**
- Bus connections adjacent to platform
- Large amount of parking
- Pedestrian and bicycle accommodations
- Taxi / Kiss & Ride - Designated areas

**Placemaking Considerations**
- Public space needed as focal point for new development

**Development Considerations**
- Large scale TOD opportunity on-site

Regional area where typology occurs
Implementing the Program
to build a Building Community

I-485 Station Design by Sasaki Associates
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