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## Mobility Hub Case Studies

The following case studies provide examples of mobility hubs in North America that have elements similar to the concepts important to the proposed North Temple Mobility Hub. Each mobility hub was established for different purposes, but ultimately, they all aim to improve access to a variety of transportation options throughout their community and/or region. Referencing these case studies can provide ideas for technical elements to include, determine what challenges might arise in the development process, and help gauge what makes a successful mobility hub.

TABLE 1. SELECTED CASE STUDIES

Case Study Examples	City	Year Implemented
<b>Montpelier Transit Center</b>	Montpelier, Vermont	2019
<b>Crystal City Station</b>	Arlington, Virginia	Final design in the works
<b>Silver Spring Library</b>	Silver Spring, Maryland	2015
<b>Boulder Junction TOD</b>	Boulder, Colorado	2015
<b>Julia Carson Transit Center</b>	Indianapolis, Indiana	2016

Key considerations of the proposed North Temple Mobility Hub that are explored through the case studies include:

- Access to both TRAX (light rail service) and bus service at a single site
- Potential for housing as part of the site's development, specifically a mix of market rate and affordable, which would allow for RDA loan funding
- Active ground floor uses whether retail, community services, or something else
- Distinction between designing a mixed use building on-site that includes transit service or designing a transit facility and community center that is adjacent to commercial/retail mixed uses

### Overview

Many of the case study projects experienced challenges in securing the needed funding to provide all of the desired services for the mobility hub. Several projects were able to secure the needed funding after extending the project planning timeline, while some decided to cut back or change the amenities that would be part of the hub. Another challenge faced by several projects was coordination between many different groups in the planning process. Eventually, agreements were made and problems were solved, but the varying opinions and needs of each group made the planning process more challenging. Overall, each case study played a role in consolidating transit routes, both local and regional, and making the act of taking public transportation more safe, seamless, and user-friendly.

## Montpelier Transit Center (Montpelier, Vermont)

Stage: Implemented in 2019

The \$17 million Montpelier Transit Center was a 21-year work in process, but once implemented in 2019, became a centralized hub for transportation options.



### Project Goals and Successes

#### Key Themes/Goals

- Centralize Green Mountain Transit (Bus) routes
- Create a centralized station with customer amenities

#### Successes

- Created a safe location for bus pickup/dropoff as opposed to pickup/dropoff in the middle of busy streets
- Centralized gathering location established
- Created housing in Montpelier, a city with a current housing shortage
  - Established more affordable housing options

#### Project Challenges Overcome

- Initial funding shortfall before receiving a grant from the Vermont Agency of Commerce and Community Development
- Difficulty with right-of-way acquisition, including a privately-owned building and VTrans rail realignment
- Brownfield site

### Technical Aspects

#### Location

- Heart of Downtown Montpelier
- Placed on the site of an old scrap yard
- Located alongside a rail line, bike path, and a proposed parking garage

#### Features

- Full bus terminal
- Greyhound bus stop
- 30 housing units
  - 19 affordable housing units, 11 market-rate units
- Customer service space
- Indoor lobby
- Operator break space
- Restrooms
- Private vendor space available at the ground level

### Similarities to North Temple Project

- Placed in a formerly industrial space, where a scrap yard used to be located
- Inclusion of affordable housing, private vendor space
- Bus operation is one of the transportation services available

# Crystal City Station (Arlington, VA)

Stage: Final design

Part of Arlington County's 2010 Crystal City Sector Plan, 2016 Transit Development Plan, and Capital Improvement Plan



## Project Goals and Successes

### Key Themes/Goals

- Improve the ability to transfer among Metrorail, Metroway, VRE, ART, and Metrobus services and improve pedestrian and bicycle connections
- Increase connections to employment centers
- Relieve congested conditions at the current Metro station entrance and on the station platform
- Provide direct access for customers with mobility challenges to areas east of the station

### Successes

- Able to handle longer trains and allow for bidirectional service by adding a center platform that serves two tracks
- Less congestion and larger ridership capacity
- Possible future stop for Amtrak trains
- Included in plans for many years, allowing for extensive public feedback

### Project Challenges

- Limited funding initially
- Previous drop in transit use in the area, hopefully brought back up by the improved station

## Technical Aspects

### Location

- Newly-developing area, just south of D.C. and east of Arlington
- Located with access to trains, Bus Rapid Transit, on-site bikeshare, electric scooters, and Reagan National Airport
- Close to the Mt. Vernon Trail

### Features

- Full-length center platform serving two tracks
- Potential pedestrian or bridge connection to Ronald Reagan National Airport

## Similarities to North Temple Project

- Proximity to a bike trail
- Bus and light rail operation
- Connection provided between multiple forms of transportation

## Silver Spring Library (Silver Spring, MD)

Stage: Implemented in 2015

### Project Goals and Successes

#### Key Themes/Goals

- Create a many-purpose space
- Bring community voices together to shape community

#### Successes

- Address the needs and desires of the community
- Create community gathering space

#### Project Challenges Overcome

- Initial difficulty filling the bottom floor spaces
  - Original arts space planned fell through

### Technical Aspects

#### Location

- Downtown silver spring
- Train access

#### Features

- County office space
- Ground level coffee shop
- Meeting rooms
- Restrooms
- Purple Line transit on-site
- Parking garage located across the street
- Bonifant Library Residences located next door, including 149 mixed-income condos focused on senior living, and 10,000 sf of retail space
- LEED Gold certification

### Similarities to North Temple Project

- Direct connection with light rail and pickup/drop-off for bus system
- Inclusion of affordable housing/vendor space



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## Boulder Junction Transit-Oriented Development (TOD) (Boulder, CO)

Stage: Implemented in 2015

Part of 2007 Transit Village Area Plan (TVAP)

### Project Goals and Successes

#### Key Themes/Goals

- Creating a mixed-use, pedestrian-oriented place where people live, work, shop, and have access to both local and regional transit

#### Successes

- Created a hub for regional transportation connections where transit demand was growing
- Took advantage of an opportunity to increase mixed-use development

#### Project Challenges Overcome

- 

### Technical Aspects

#### Location

- Northeast Boulder, just outside of the city center
- Access to the Goose Creek Greenway, BRT, regular bus service, and pedestrian access (called the Paseo)

#### Features

- 160 acre Transit Village development area
  - 1000 units built/proposed
  - 175 affordable units (60% AMI)
- Station Development
  - 150 room hotel
  - Depot Square apartment building, with 71 affordable housing units
  - Parking garage with 386 space (75 reserved for Regional Transportation District (RTD) patrons)

### Similarities to North Temple Project

- Bus connections
- Affordable housing options



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# Julia Carson Transit Center (Indianapolis, IN)

Stage: Implemented in 2016

## Project Goals and Successes

### Key Themes/Goals

- Creating a hub for public transit in Indianapolis
- Creating the place to go to learn about all IndyGo resources

### Successes

- Filled in the space of a surface parking lot
- Improved convenience of riding transit in Indianapolis
  - 26/31 bus routes end at the Transit Center

### Project Challenges Overcome

- Archaeological finds unearthed during construction (created seven month delay and \$5 million in added costs)
- Poor soil conditions
- Shallow tunnel was located below the site

## Technical Aspects

### Features

- 19 covered bus bays
- WiFi
- Indoor waiting area
- Customer service/pass sale station
- Arrival/Departure screens
- Driver breakroom
- Conference room
- Administrative offices
- Restrooms
- 700 sf retail space
- LEED Gold certified
- Program offerings
  - Example: "Food in Transit" program - Visitors to the Transit Center can purchase produce every Friday from 3 p.m. to 6 p.m. during certain months

### Location

- Close proximity to downtown
- Access to the Cultural Trail, and the YMCA Bike Hub

## Similarities to North Temple Project

- Close proximity to trail
- Bus connections

