

SCENARIO DETAILS: DEVELOP PREMIUM SERVICES

FREEWAY BUS RAPID TRANSIT

Most decisions about whether or not to use transit involve time and cost, and most transit services are slower than travel by private vehicle. However, when transit is faster or nearly as fast as travel by private vehicle (for example, many rail services), large numbers of travelers will choose to travel by transit instead of by car. Thus, one of the most effective ways to encourage transit use is to make transit as fast as possible. Freeway BRT services are designed to do this and, compared to other transit services, are unique in that they:

1. Operate largely along freeways in exclusive transit or managed lanes.
2. Have stations within the freeway right-of-way to minimize travel times by eliminating the local circulation that is required to serve stops or stations outside of the freeway right-of-way.

FIGURE 1 | SEATTLE MOUNTLAKE TERRACE FREEWAY BRT STATION



www.rtd-fastracks.com

FREEWAY RUNNING WAYS

For the most part, Freeway BRT runs operates in managed lanes that designed to ensure free flowing traffic –typically High Occupancy Vehicle (HOV) lanes or High Occupancy Toll (HOT) lanes.

FREEWAY BUS STOPS AND STATIONS

One of the most time-consuming aspects of freeway bus service can be the time it takes to get off the freeway in order to serve local stops and then get back on again. To reduce these delays, many areas have

developed stops and stations that are located directly along freeways, with most “retrofitted” into existing freeways. In general, there are three types of freeway stops and stations:

1. Stops located along freeway shoulders
2. Stops located along freeway interchange ramps
3. Stops located in freeway medians

FIGURE 2 | FREEWAY BRT STATION ON I-35W AT 46TH STREET IN MINNEAPOLIS



Additional information about Freeway BRT service is provided in the Freeway BRT Transit Strategy document: nMotion2015.com/wp-content/uploads/2015/08/nMotion-Freeway-BRT-150712_FINAL.pdf.

SUMMARY OF SCENARIO SERVICES

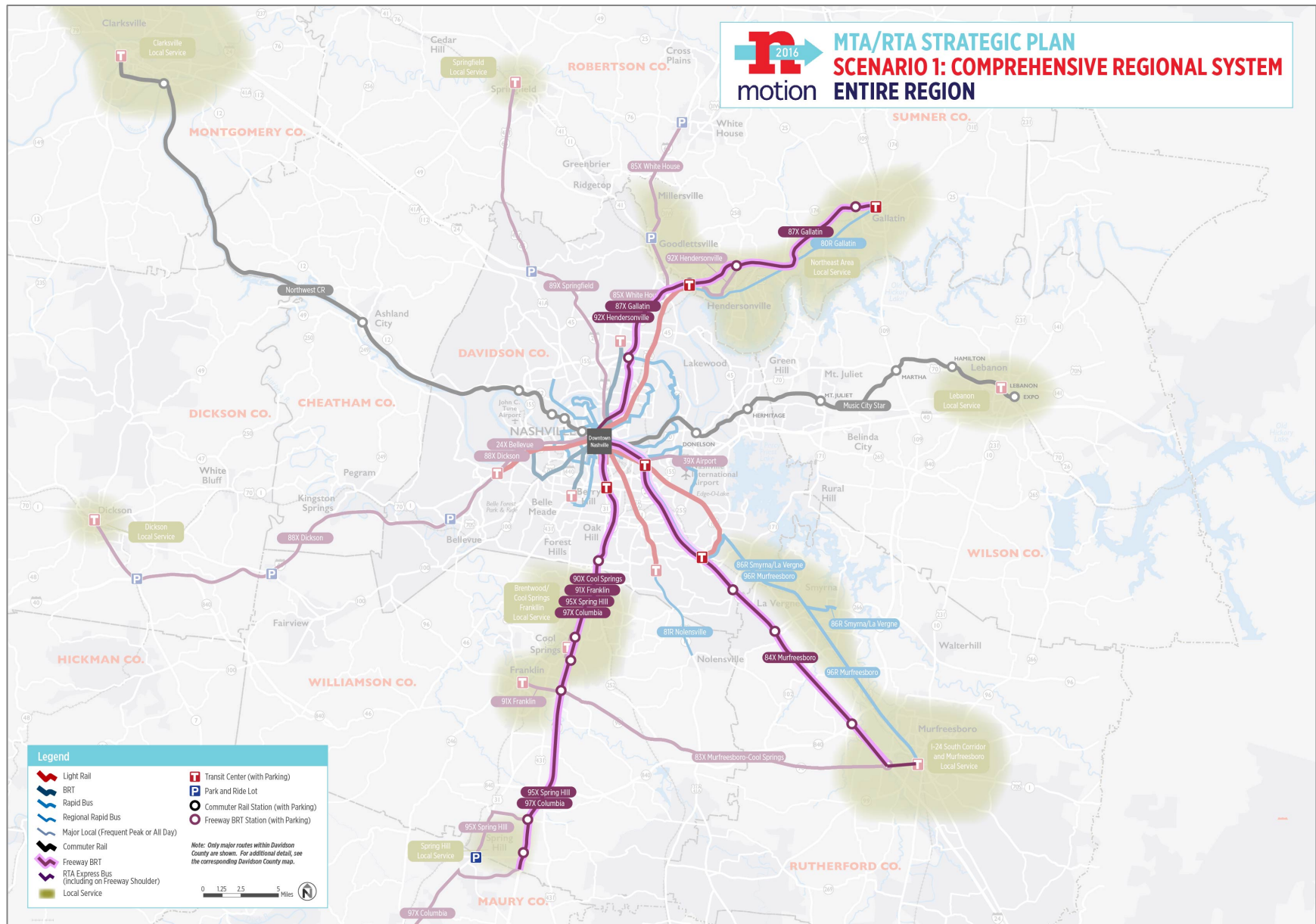
Freeway BRT service is included in Scenarios 1 and 2 in the Northeast, Southeast, and South corridors, which are three congested corridors with high demand for transit service.

SCENARIO 1: COMPREHENSIVE REGIONAL SYSTEM

Scenario 1 includes the development of Freeway BRT facilities in three corridors (see Figure 3):

- Northeast: Ellington Parkway/State Route 386 between Gallatin and downtown Nashville
- Southeast: I-24 as far south as Murfreesboro
- South I-65 as far south as Franklin or Spring Hill

FIGURE 3 | SCENARIO 1 FREEWAY BRT



In each of these corridors, Freeway BRT would be implemented through the use of existing HOV lanes and the development of new managed lanes along with measures to ensure that these lanes operate smoothly. Stations would be developed within freeway rights-of-way at key locations (as shown in Figure 3). These stations would provide local access through local transit connections, park and ride and kiss and ride, bicycle, and in places where there is surrounding development, pedestrian access.

In each Freeway BRT corridor, there would be a primary Freeway BRT route that would provide seven day a week all day service. Weekday service would operate from 5 AM to 11 PM, every 30 minutes during peak periods and every 60 minutes during other times. Weekend service would operate every 60 minutes for slightly shorter hours.

Other express and Regional Rapid routes would also use the BRT facilities. These routes, although they would operate via Freeway BRT facilities, would provide the same level of service as other express or Regional Rapid routes (as indicated by the service types in parentheses and the service levels shown in **Error! Reference source not found.**). In total, 11 routes would operate via the Freeway BRT facilities:

I-24 South

- Route 84X Murfreesboro Express (Freeway BRT)
- Route 86R Smyrna/La Vergne Rapid (Regional Rapid Bus)
- Route 96R Murfreesboro Rapid (Regional Rapid Bus)

I-65 South

- Route 90X Cool Springs Express (Express/Commuter)
- Route 91X Franklin Express (Freeway BRT)
- Route 95X Spring Hill (Express/Commuter)
- Route 97X Columbia (Express/Commuter)

Ellington Parkway/Route 386

- Route 85X White House Express (Express/Commuter)
- Route 87X Gallatin Express (Freeway BRT)
- Route 89X Springfield (Express/Commuter)
- Route 92X Hendersonville Express (Express/Commuter)

TABLE 1 | SCENARIO 1 WEEKDAY SERVICE SPANS AND FREQUENCIES

Service Type	Span of Service	Service Frequencies (mins)			
		Peak Periods	Midday	Evening	Early/Late
Regional Rapid Bus	5 am – 11 pm	30	60	60	60
Commuter/Express	5 am – 9 pm	30	120	120	
Freeway BRT	5 am – 11 pm	30	60	60	60

Note: Spans and frequencies represent minimums for each type of service; additional service could be provided.

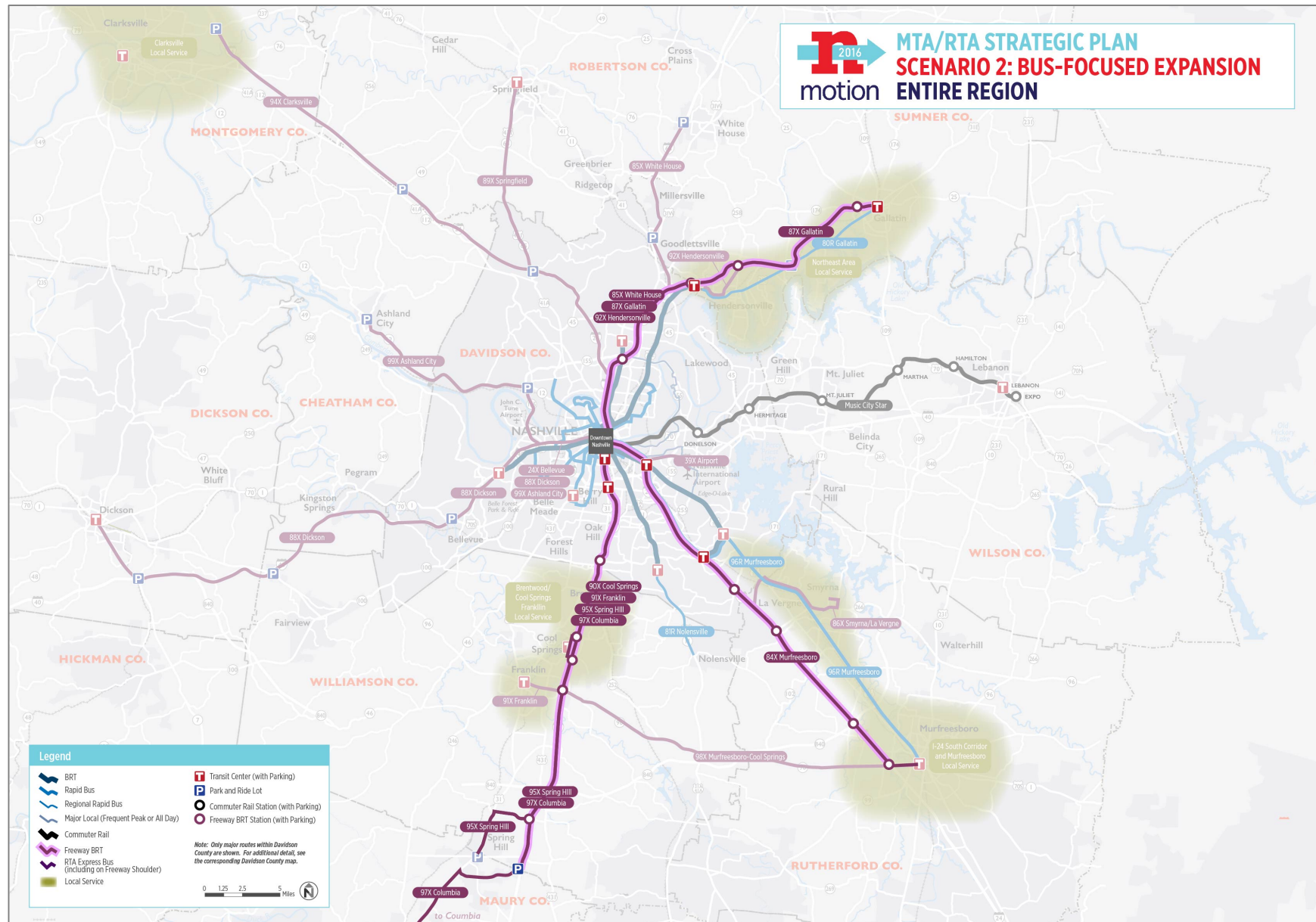
SCENARIO 2: BUS-FOCUSED EXPANSION

In a similar manner as with Scenario 1, Scenario 2 includes the development of Freeway BRT service in high volume corridors to provide very fast service. Compared to Scenario 1, the routes and infrastructure improvements would be similar. However, in the Northeast Corridor, Freeway BRT facilities would be developed along I-65 rather than Ellington Parkway. This would be done because Scenario 2 includes express bus service to Clarksville rather than commuter rail, and through the shifting of the Freeway BRT



facilities to I-65, Clarksville service could take advantage of Freeway BRT facilities south of the I-24/I-65 split.

FIGURE 4 | SCENARIO 2 FREEWAY BRT



Twelve routes would operate in these corridors; four of which would provide service throughout the day (Freeway BRT and Regional Rapid Bus service levels), and seven of which would operate via Freeway BRT facilities but provide the same level of service as other express routes (as indicated by the service types in parentheses and the service levels shown in Table 2):

I-24 South

- Route 84X Murfreesboro Express (Freeway BRT)
- Route 86X Smyrna/La Vergne Rapid (Express/Commuter)
- Route 96R Murfreesboro Rapid (Regional Rapid Bus)

I-65 South

- Route 90X Cool Springs Express (Express/Commuter)
- Route 91X Franklin Express (Freeway BRT)
- Route 95X Spring Hill (Express/Commuter)
- Route 97X Columbia (Express/Commuter)

I-65 North/Route 386

- Route 85X White House Express (Express/Commuter)
- Route 87X Gallatin Express (Freeway BRT)
- Route 89X Springfield (Express/Commuter)
- Route 92X Hendersonville Express (Express/Commuter)
- Route 94X Clarksville (south of I-24/I-65 junction (Express/Commuter)

TABLE 2 | SCENARIO 2 WEEKDAY SERVICE SPANS AND FREQUENCIES

Service Type	Span of Service	Service Frequencies (mins)			
		Peak Periods	Midday	Evening	Early/Late
Regional Rapid Bus	5 am – 11 pm	30	60	60	60
Commuter/Express	Peak Only	4 AM inbound trips; 4 PM outbound trips			
Freeway BRT	5 am – 11 pm	30	60	60	60

Note: Spans and frequencies represent minimums for each type of service; additional service could be provided.

SCENARIO 3: MODEST IMPROVEMENTS

Scenario 3 includes does not include the development of Freeway BRT service.