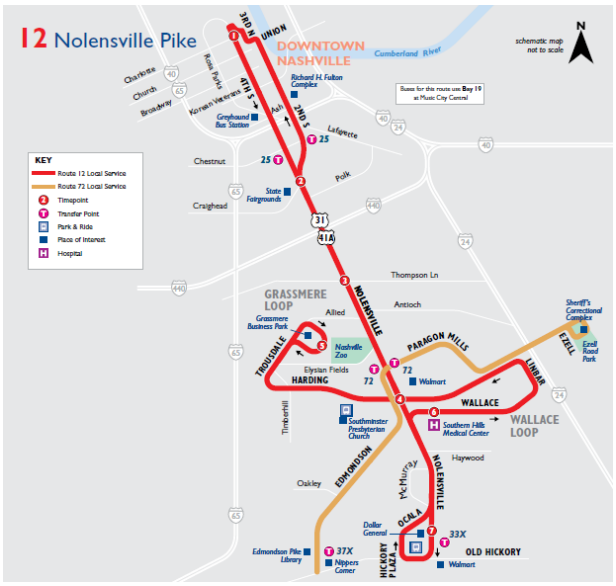
SCENARIO DETAILS: MAKE SERVICE EASIER TO UNDERSTAND AND USE

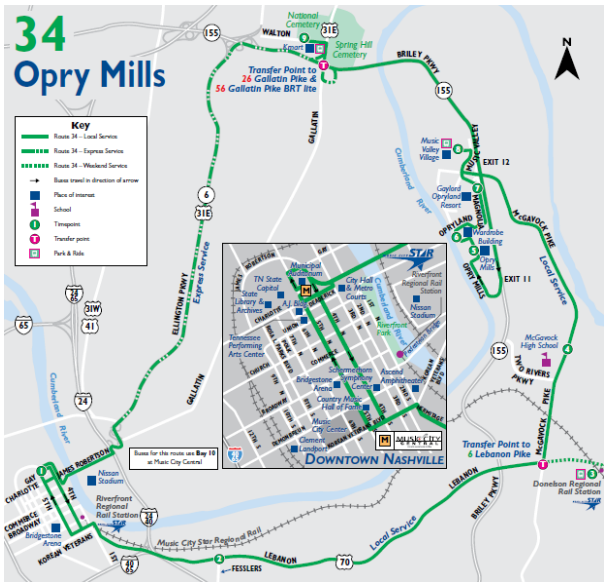
SIMPLIFY SERVICE

Because Nashville MTA operates a relatively small number of routes for a city the size of Nashville, it attempts to do many things with many of its routes. As a result, some of the service is very complicated, with many route variants and indirect service. Evidence from other systems indicates that a simpler route structure will attract more riders than a complex route structure. Therefore, the complexity of many of Nashville MTA's services likely deters some residents from using transit.

ROUTE 12 NOLENSVILLE PIKE: MANY SPUR SERVICES



ROUTE 34 OPRY MILLS: CONFUSING AND CIRCUITOUS



BENEFITS OF SIMPLER SERVICE

For people to use transit, they must be able to understand it, and simple route structures are easier to understand than complex route structures. As stated in the Transit Cooperative Research Program's (TCRP) "Traveler Response to Transportation System Changes" report,[1] "The degree of routing and scheduling simplicity offered to the transit user will affect the ease of which the rider becomes informed." The result is that "a readily transparent service design can to some extent market itself insofar as user information needs are concerned," while "a highly complex operation places heavy demand on the provision of information and the rider's ability to interpret and absorb it."

The importance of an easily understandable system is heightened by the fact that most transit systems experience very high levels of turnover (due to changes in residence and employment, family circumstances, driving and parking conditions, etc.). The TCRP report cited above reported that surveys of nine cities indicated that 24% to 50% of all bus riders had been using transit for less than one year. Furthermore, on any given day, one to eight percent of a system's riders may be using transit for the first time.

[1]Transit Cooperative Research Program, Transportation Research Board, Chapter 11, 2003.

Because of these factors, a simple route structure will attract more riders than a complex system. Potential new riders will be more willing to try the system, and once they do, the simpler route structure will help to ensure that they get to where they want to go when they want to go there without experiencing problems. In short, a simpler route structure can:

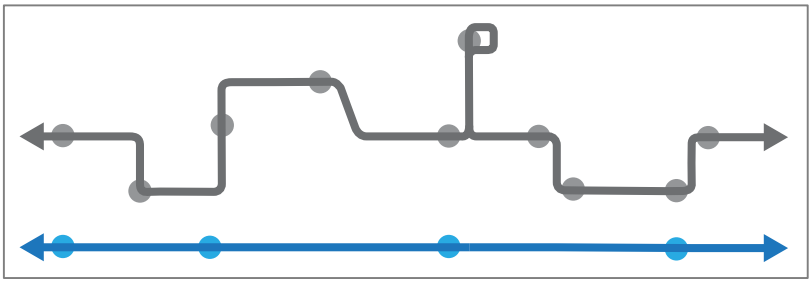
- Increase the number of regular riders
- Increase use of the system by "casual" or infrequent riders
- Minimize the number of problems that all riders have using the system

DESIGN PRINCIPLES FOR SIMPLER SERVICE

Updating service based on service design principles that emphasize simplicity and clarity would attract more riders, especially occasional riders who have other travel options.

- Routes Should Serve Well-Defined Markets: To make service easy to understand and to eliminate service duplication, service should be developed to serve clearly defined markets. Ideally, major corridors should be served by only one route, with more service provided by increasing frequency rather than adding routes.
- Transit Routes Should Operate Along Arterials or Collector Streets: Potential transit users generally have at least a basic knowledge of an area's arterial road system and use that knowledge as a point of reference. The operation of bus service along arterials or neighborhood collector streets, whenever possible, makes transit service easier to figure out and to use.
- Transit Service Should Be Focused Around Landmarks: Most potential transit users have a basic knowledge of major landmarks (and are often traveling to them). When transit service is focused around landmarks, these locations can also become transit hubs. People traveling in an unfamiliar area can more easily find their way to a landmark to make a transfer than to a lesser-known area.
- Routes Should Operate Along a Direct Path: The fewer directional changes a route makes, the easier it is to understand. Conversely, circuitous alignments are disorienting and difficult to remember. Routes should not deviate from the most direct alignment unless there is a compelling reason.

DIRECT AND INDIRECT SERVICE



Faster, more direct service will attract more riders than slower, indirect service. It is also less expensive to operate.

- Routes Should Be Symmetrical: Routes should operate along the same alignment in both directions to make it easy for riders to know how to get back to where they came from.
- Route Deviations Should Be Minimized: As described above, service should be relatively direct, and to make service direct, the use of route deviations—the deviation of service off the most direct route—should be minimized. There are instances when the deviation of service is appropriate, for example to provide service to major ridership generators like shopping centers, employment sites, schools, etc.

- Route Variants Should Be Minimized: Transit systems frequently receive requests for individual trips to serve off-route locations (schools are a common example), but having different trips on the same route operate differently at different times makes service confusing, especially for occasional riders. As with route deviations, individual trips should not vary from the regular pattern unless there is a very compelling reason.

For additional information on simpler service, including examples of how other transit systems have simplified service, see: nmotion2015.com/wp-content/uploads/2015/10/nMotion-Route-Simplification-151018_FINAL.pdf

SUMMARY OF SCENARIO IMPROVEMENTS

In all scenarios, as a short-term way to improve service, MTA and RTA will conduct a Comprehensive Operations Analysis (COA) that will entail an in-depth analysis of existing services to determine short-term changes that can be made within existing budget levels. In many respects, a COA will follow a similar process as this Strategic Plan but with an exclusive and more in-depth focus on improving existing services in the very short-term. The basic structure of the COA will entail:

- Extensive public participation (as in nMotion 2016)
- A market analysis to determine underlying market demands (which was conducted as part of nMotion 2016)
- A comprehensive evaluation of each individual route to determine strengths, weaknesses, and potential improvement opportunities
- The development of potential short-term service changes and the development of multiple service scenarios (However, unlike the nMotion 2015 Strategic Plan scenarios, all scenarios would represent changes that could be made within existing budget levels or with only minor increases in resources)
- The evaluation and vetting of the scenarios with stakeholders
- The development of recommendations