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# THE CONVENIENCE INDEX

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LET'S MOVE NASHVILLE'S IMPACT ON COMMUTING  
OPTIONS, NEIGHBORHOOD ACCESS AND TRAVEL TIMES

APRIL 2018

# INTRODUCTION

With the 2017 passage of the IMPROVE Act, cities across Tennessee now have the authority to implement a new local option to fund public transit. **Nashville voters will be the first in the state to decide whether to exercise that option** when they head to the polls to cast their vote either for or against the city's proposed transit program, *Let's Move Nashville*.

The measure would allow the Metropolitan Government to improve transit service countywide by expanding bus service; adding new transit lines, including light rail and rapid bus; building a tunnel connection through downtown Nashville; constructing new Neighborhood Transit Centers and expanding sidewalks and pedestrian connections.

The referendum comes at a time when many residents want to see improvements to Nashville's current transit system. In a wide-ranging survey of Nashville residents released on April 17, **Nashvillians listed public transportation as one of their top five priorities.** (i) The proposed transit overhaul has rallied strong opinions on both sides, with 71% of Nashvillians saying that they believe the referendum to be "essential" or "very important" to the future of Nashville. (ii)

As Nashville voters continue to cast their ballots on this hotly contested referendum, important questions remain. While *Let's Move Nashville's* projected effects on the economy, health and safety have been well-documented, less is known about the plan's impact on Nashville residents who, advocates assert, **might for the first time have a competitive alternative to driving to work.**

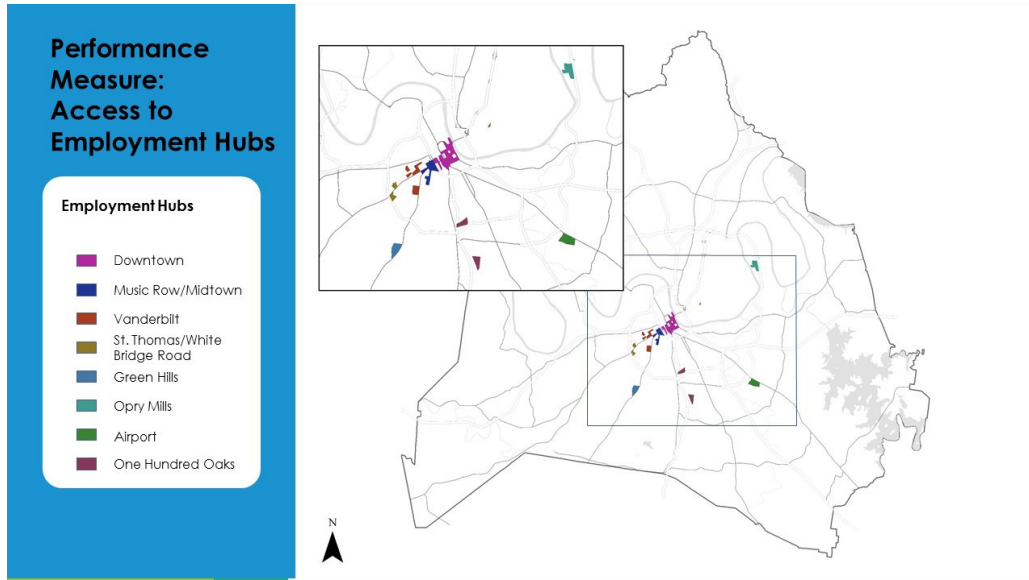
To answer these questions, ThinkTennessee partnered with Cambridge Systematics—an independent, nationally recognized transportation consultancy firm—to examine commuter options in 2033, the year after *Let's Move Nashville's* scheduled completion.

Our findings revealed that *Let's Move Nashville* will offer many Nashville riders more convenient commuting options and increased access:

- **More Nashvillians will be able to get to work via a transit ride lasting 20 minutes or less.**
- **Neighborhood access to transit centers, where riders can change lines and access parking, will increase significantly.**
- **Transit options will become increasingly competitive with car travel for many common routes.**

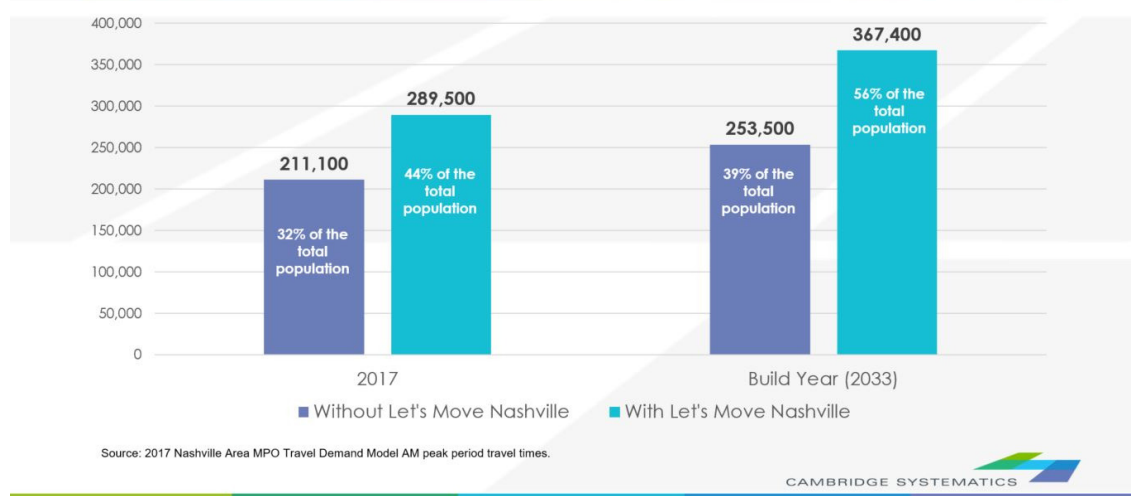
# COMMUTING OPTIONS

Nashvillians, on average, report that their commute to work takes about 24 minutes each way. (iii) For many, that commute involves driving to and from one of the city's seven largest employment hubs. (iv)



Today, about 32% of people in Nashville (211,000 people) live within a 20-minute transit ride of at least one of these employment hubs. With *Let's Move Nashville*, in 2033, 56% of city residents (367,400 people) will live within a 20-minute transit commute of at least one employment hub. If the plan is not executed, that future rate will instead be 39% (253,500 people).

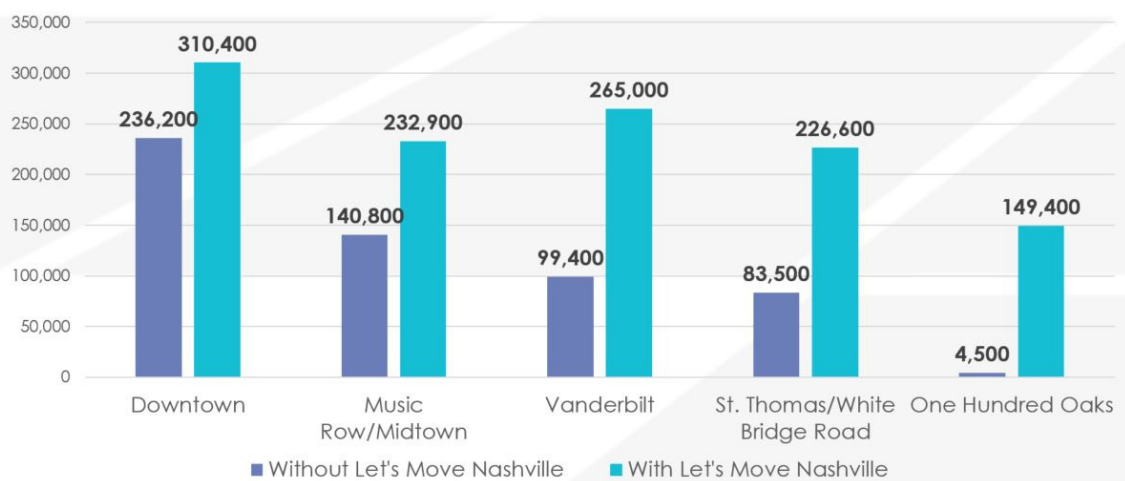
## Population Within a 20-Minute Transit Commute of Employment Hubs



# COMMUTING OPTIONS

While the difference between commute times with and without *Let's Move Nashville* is significant for downtown Nashville, one of the largest apparent benefits of the plan appears to be its ability to provide transit accessibility to employment centers outside of downtown. Indeed, some of the biggest gulfs in transit access between the build and no-build scenarios are seen in high-job areas like Vanderbilt University, Music Row/Midtown, Saint Thomas Hospital West/White Bridge Road and One Hundred Oaks.

## Build Year (2033) Population Within a 20-Minute Transit Commute of Employment Hubs



Source: 2017 Nashville Area MPO Travel Demand Model AM peak period travel times.

# NEIGHBORHOOD ACCESS

Neighborhood Transit Centers are a key component of commuter access under *Let's Move Nashville*. According to the plan, these centers will function as access points to Nashville's broader transit system and will feature dedicated parking, bikeshare stations and improved pedestrian access. Such amenities are often critical to riders seeking to make "first and last mile" connections to home and work.

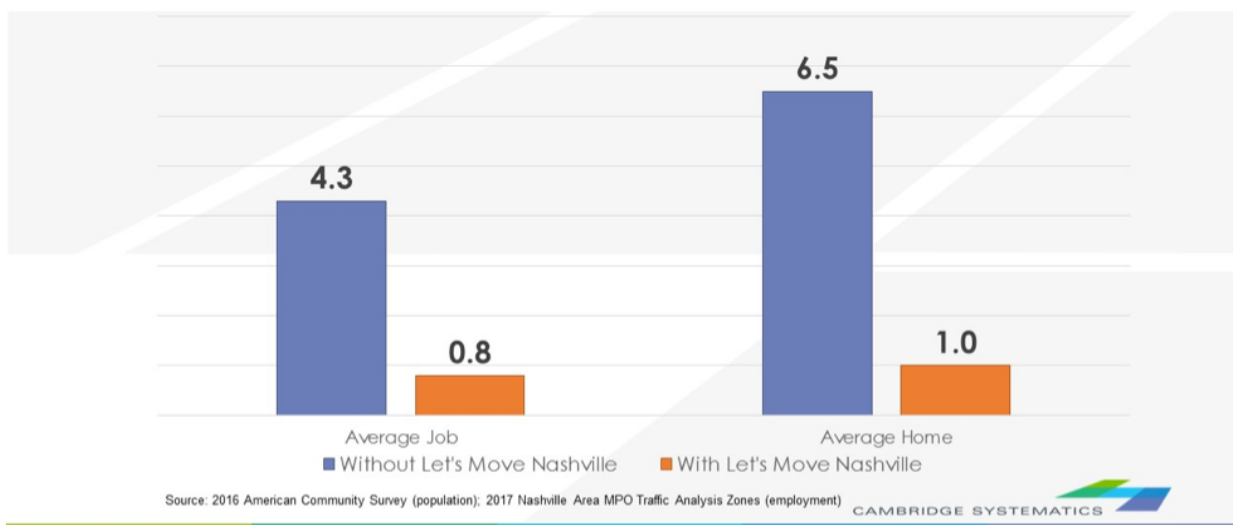
Approximately 28 locations have been proposed for these transit centers. Most can be found at the intersections of multiple transit routes and are intended to help commuters reach their destinations more quickly, without needing to connect downtown.

## ***Distance from Home and Work***

Today, Music City Central is the city's sole transit center, and on average, most Nashvillians live and work relatively far away from it (6.5 miles and 4.3 miles, respectively).

If each of the proposed Neighborhood Transit Centers were to be constructed, however, the typical Nashville resident would see this distance drop dramatically. Nashvillians on average would for the first time live and work within walking or biking distance of a transit center. (v) For many, easy access to a transit center would greatly increase the likelihood of transit becoming a convenient commuting option.

## Average Distance to a Transit Center (miles)



# NEIGHBORHOOD ACCESS

## ***Access for Potentially Transit-Dependent Populations***

As ThinkTennessee's recent *Who Needs Transit* report revealed, (vi) high rates of potentially transit-dependent households are interspersed throughout Nashville. If each proposed Neighborhood Transit Center is constructed, these populations in particular would see a significant improvement in access. Indeed, access for many such households will outpace that of the population as a whole.

Based on today's population density, 30% of all Nashville households will be located within one mile of a Neighborhood Transit Center. In comparison, within that same distance will be ...

**35%**

*of single-parent households*

For single parents, increased transit options might help ease the burden of getting children to afterschool activities—or to school itself. Those options in turn reduce the burden of certain employment issues, such as inflexible schedules, which can make it difficult for single parents who are responsible for transporting children during work hours.

**36%**

*of households with limited or no vehicle access*

For residents in households with access to zero or one vehicle(s), Neighborhood Transit Centers may provide critical connections to jobs. Absenteeism, sometimes due to the lack of a way to get to work, is one of the most common reasons the working poor are fired.

**32%**

*of households home to someone with a disability*

For households home to someone with a disability, Neighborhood Transit Centers could provide critical transit connections. Lack of transportation access is more prevalent among individuals with disabilities—and more likely to leave them stuck at home. Nationally, roughly one-third (34%) of adults with disabilities report that they have difficulties obtaining the transportation they need—a rate more than twice as high as for those without a disability (16%).

# TRANSIT TIME

## ***Transit Options Become Increasingly Competitive With Car Travel***

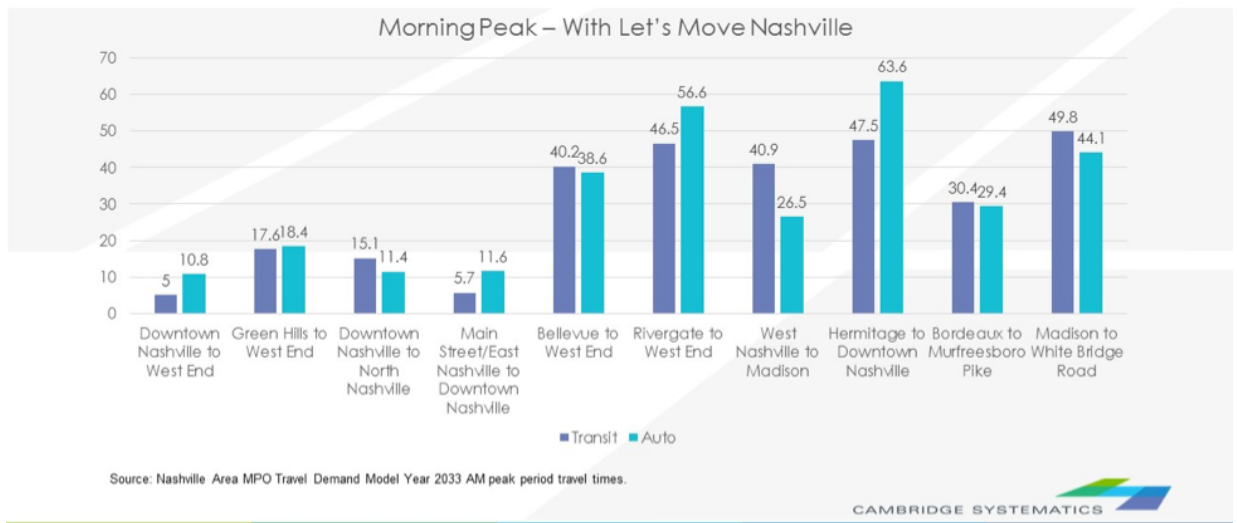
Some opponents of *Let's Move Nashville* claim that, in a sprawling, relatively car-friendly city like Nashville, most residents have become accustomed to car travel and will always prefer it to taking transit. Current statistics help support that theory: Four in five Nashvillians—79.5%—report that they currently drive to work alone. (vii)

To convince some Nashvillians to get out of their cars, transit will need to become more competitive with car travel. While commuters might consider many factors when choosing a preferred mode of travel—from reliability to quality to cost—travel time remains a critical component.

An analysis of 10 of the most common commutes in Nashville found that, for half, travel times in 2033 with *Let's Move Nashville* will be shorter on transit than they are in a car. For other routes, car travel will take about the same amount of time as transit trips.

With *Let's Move Nashville*, Nashville residents traveling to locations outside downtown, e.g., from Green Hills to West End or Bordeaux to Murfreesboro Pike, may for the first time consider transit to be a competitive commuting option.

## Transit vs. Auto Travel Time





# CONCLUSION

Think *Tennessee* has spent the last year working to inform the transit debate, providing facts and evidence-based analysis on topics ranging from the cost of traffic to the distribution of transit-disadvantaged populations across the city.

In this study, we addressed questions about the impact of *Let's Move Nashville* on individuals. Our findings revealed that, if *Let's Move Nashville* is implemented:

- More Nashvillians will be able to get to work, including to employment hubs outside of downtown, via a transit ride lasting 20 minutes or less.
- Planned Neighborhood Transit Centers, coupled with increased "first and last mile" connections to home and work, will significantly expand access to the transit system.
- On many routes, including to some outside of downtown, transit trips will be faster than driving alone.

As voters make up their minds about *Let's Move Nashville*, this new information will help them determine whether the plan will make their commute more convenient.



# REFERENCES

i. Center for the Study of Democratic Institutions, The Vanderbilt University Poll (March 2018), available at [https://www.vanderbilt.edu/csdi/Nashville\\_2018\\_toplevel.pdf](https://www.vanderbilt.edu/csdi/Nashville_2018_toplevel.pdf).

ii. ETC Institute, Nashville-Davidson County Resident Survey 2018Q1 (April 2018), available at <http://www.nashville.gov/Portals/0/SiteContent/MayorsOffice/docs/news/2018-04-16%20Nashville-Davidson%20County%20Resident%20Survey%20Results%202018Q1.pdf>.

iii. U.S. Census Bureau, SO801-Commuting Characteristics by Sex, 2012-2016 American Community Survey Five-Year Estimates, available at [https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?\\_afpt=table](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?_afpt=table).

iv. Employment hubs were identified based on the Nashville Area MPO's year 2017 Traffic Analysis Zone employment data using a criteria of a minimum 100 acres in size and a minimum gross density of 50 employees per acre.

v. Walking distance is traditionally considered to be up to one-half mile and biking distance up to three miles. Federal Transit Administration, Manual on Pedestrian and Bicycle Connections to Transit (Aug. 2017), available at <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/64496/ftareportno0111.pdf>.

vi. ThinkTennessee, Who Needs Transit (Jan. 2018), available at <http://thinktennessee.org/research/who-needs-transit/>.

vii. U.S. Census Bureau, SO801-Commuting Characteristics by Sex, 2012-2016 American Community Survey Five-Year Estimates, available at [https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?\\_afpt=table](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?_afpt=table).