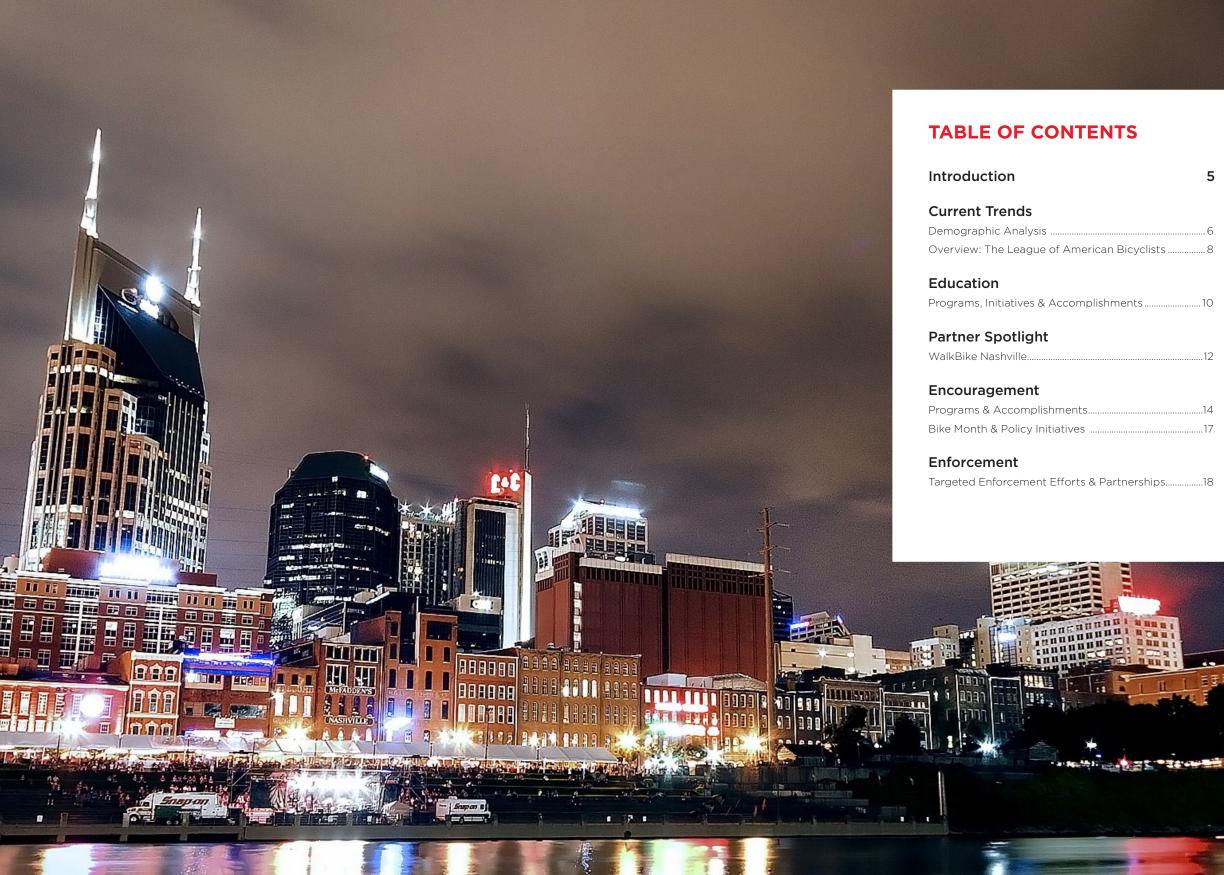
# walkhbike

STATE OF PRACTICE REPORT (EXISTING CONDITIONS)

#### NASHVILLE, TENNESSEE





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#### Introduction-

is grounded in the practice of evaluating and understanding existing conditions to identify what is working well and what needs improvement.

Over the last 10 years, Nashville has made significant improvements to its walking and biking infrastructure. The State of Practice Report provides a point-in-time overview of the current initiatives, programs, infrastructure, and data collection related to walking and biking. This report is a snapshot of what is happening in Nashville; as such, it is not meant to comprehensively cover each aspect of walking and biking, but provide the reader an overview of the existing state of practice. As Metro Nashville continues to expand walking and biking infrastructure, this report will serve as a reference to evaluate progress and prioritize future work.

DRAFT

Nashville is a city that is committed to providing residents and visitors with a quality walking and biking experience. That commitment



# DEMOGRAPHICS

This State of Practice Report for Nashville is a snapshot of the existing bicycling and pedestrian environment. The information contained within this document will provide context and background about changes in Nashville's bike and pedestrian facilities since 2008 when the last plan was completed. Another important aspect of this report is to raise awareness of the increasingly strong desire of Nashville citizens to improve & expand pedestrian and bike infrastructure.

This section provides helpful demographic data that will reinforce the need and usefulness of this report. Nashville is growing—and quickly. Along with Nashville's robust population growth, trends in travel behavior are also shifting. As more people live in downtown and in other dense, amenity-rich neighborhoods, walking and cycling trips are becoming a more viable and desirable mode of transportation for many Nashville residents.

# **AND TRENDS**

#### A GROWING METROPOLIS

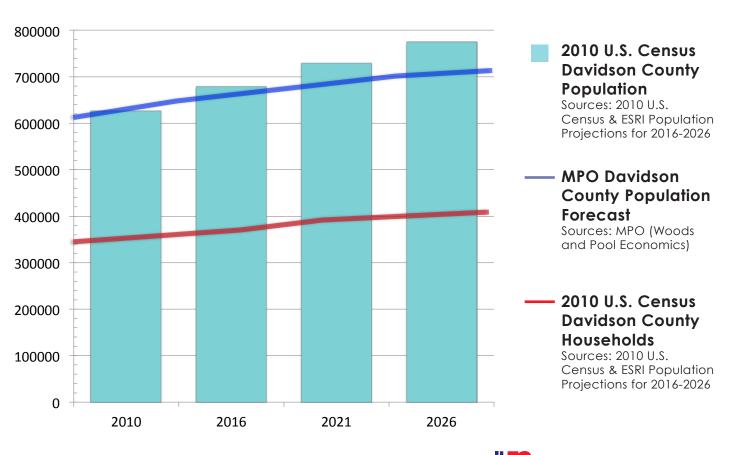
- experienced ±8.9% growth.
- population forecast.
- Population density in Nashville has increased 13% since 2000.
- 774,310 people living within 313,610 households.



#### **TRANSPORTATION TRENDS**

As the population of Nashville has grown, the way that people aet around is also changing. The Nashville Area MPO and the National Household Transportation Survey (NHTS) provide helpful insights and illuminate trends and shifts in travel behavior and preferences. The Nashville Area MPO conducted a study in the Nashville metropolitan area about travel behavior and public health in 2012 and found that:

- Roughly 7% of all trips are walking or cycling trips (6% walking, 1% cycling).
- Roughly 7% of commuting trips are made by walking or cycling.
- 6% of school-aged children either walk or bike to school.



• The Census Bureau & American Community Survey estimate that between April 2010 and July 2015, Nashville arew by over 53,000 people; an 8.5% increase in only 5 years. Nashville grew faster than 3 of its 4 peer cities in population growth (Indianapolis, Louisville, Memphis), and is only slightly behind Raleigh which

• Population growth as well as current estimates exceed the Nashville Area MPO's

• Looking ahead over the next 10 years, Metro Nashville is expected to grow to

# A BICYCLE FRIENDLY METRO NASHVILLE

#### Created by the League of American Bicyclists, the Bicycle Friendly America program recognizes cities, colleges and universities, and businesses for their efforts to improve bicycling in five different categories: Enforcement, Education, Engineering, Education and Encouragement. The League provides feedback. recommendations, and consultation to help communities, businesses, and universities improve their bike friendliness. This feedback is used as an evaluation tool to identify areas for improvements and investment.



#### **Bike Friendly Community**

In 2009, Metro Nashville submitted its first application to be a recognized Bike Friendly Community. This first application was awarded an Honorable Mention for its efforts to promote bicycling. In 2012 and again in 2015, Metro Nashville was awarded Bronze status.

#### **Bike Friendly University**

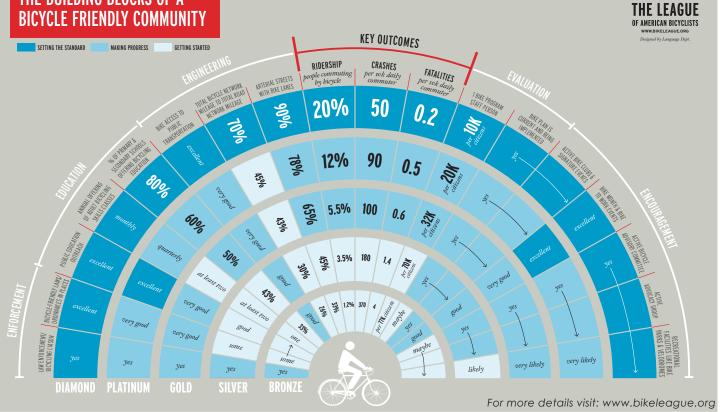
In 2015, Vanderbilt University, located in the heart of Nashville, achieved Bronze status.

#### THE LEAGUE OF **AMERICAN BICYCLISTS:**

"...represents bicyclists in the movement to create safer roads, stronger communities, and a bicyclefriendly America. Through information, advocacy and promotion, we work to celebrate and preserve the freedom cycling brings to our members everywhere."



## THE BUILDING BLOCKS OF A



<b>Bike Friendly Business</b> <b>17 BUSINESSES</b> in Metro Nashville have achieved Bicycle Friendly Business status.						
LATINUM	GOLD	SILVER	BRONZE			
2	4	4	7			
PLATINUM BUSINESSES:						
<ul> <li>RPM Transportation Consultants</li> <li>Walk/Bike Nashville</li> </ul>						

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# **EDUCATION**

Metro Nashville offers its community members many different ways to learn about bicycling and walking, making facilities safer for everyone. This section highlights some of the many accomplishments that Metro Nashville and its partners have achieved as they strive to ensure that bicycle and pedestrian safety and education are a core part of public education and outreach.



#### **CPPW** Grant

A Communities Putting Prevention to Work (CPPW) grant was funded by the CDC and began in 2010. Among the initiatives backed by this grant was Moving in Harmony, a data driven traffic campaign that worked to eliminate deaths and injuries resulting from collisions between pedestrians, cyclists and motorists. Other initiatives include seed funding for the initial B-Cycle roll out, pedestrian wayfinding signage, and The Groove Map.



#### Walk Bike University

(WBU) is a program administered by Walk Bike Nashville that teaches people of all ages pedestrian advocacy and the riding skills they need to stay safe and have fun.

INSTRUCTORS **REGISTERED WITH LEAGUE OF AMERICAN CYCLISTS** 

**38**ASSES AND WORKSHOPS HELD

560 ATTENDEES

**GAMBASSADORS OF** WALK BIKE NASHVILLE

#### **NashVitality**

The NashVitality App was created as part of Mayor Dean's effort to encourage healthy, green, active living. It provides educational opportunities for bicycling and walking as a means of exercise and transportation.

14,500+**DOWNLOADS TO-**DATE



The reCYCLE program, offered by Walk Bike Nashville and Hands on Nashville, gives participants an opportunity to learn bike mechanic skills while rebuilding bikes that are donated to lowincome youth in Metro Nashville. Since 2012, **1,600 volunteers** have helped provide nearly 1,000 Nashville youth with a bike, helmet, lock, and

safety education.



#### **Travel Green**

businesses include:

NEE





In addition to these businesses, all Metro Departments receive Travel Green consultation.

Walk Bike Nashville administers Travel Green classes and consultations, which helps businesses better incorporate active transportation options for their employees. Participating

#### **Oasis Bike Workshop**

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This workshop is a free, volunteer powered program aimed at empowering and educating youth on bicycle and life skills. Program participants learn the skills needed to build and maintain their own bike and also ride safely around Metro Nashville. The program has a 95% completion rate and has graduated 1,100 young adults since 2009.



# **PARTNER SPOTLIGHT**



Since 1998, Walk Bike Nashville (WBN) has sought to make active transportation an option for Nashvillians, no matter where they live or where they're trying to go. What started as an all volunteer organization in 1998, has grown to 4 full time and 1 part time staff. WBN want our sidewalks and bikeways to support active living, additional commuting options, and recreational opportunities. To pursue these goals, they use a mix of educational programs focused on safety and skills, and membership outreach focused on advocacy.

# WALK BIKE NASHVILLE

#### Walk Bike University

WBU seeks to arow the number of Nashvillians biking and walking through education, raising awareness, and cultivating bicycle and pedestrian leaders. This is achieved through workshops and classes on pedestrian and cyclist skills and issues.

#### Safe Routes to School

Safe Routes to School encourages students to commute to school via walking or biking; educates teachers, parents, and students about safe walking and biking commutes to school; and provides opportunities for students to be more physically active.

#### **EDUCATE:**

Educate Nashvillians about road safety to prevent pedestrian and bicycling injuries and deaths.

#### **ENGAGE:**

Engage the Nashville community in walking and biking opportunities to increase pedestrian and bicycling activity.

#### **ADVOCATE:**

Promote public policy that supports our mission and serve as an advocate for pedestrians and bicyclists by working with key stakeholders to continually improve the availability and safety of sidewalks, bikeways, and greenways.







#### **Travel Green**

Travel Green provides education to local businesses to help grow their walking and biking culture. We work with businesses to provide information and guidance on expanding their active transportation culture. Businesses can participate by hosting lunch and learns and promoting active transportation.

#### **Livable Streets**

The Livable Streets Project is a new initiative to energize new neighborhood voices around active transit. Working with the community, this initiative explores travel corridors around the city through the walking, biking, and transit lens.

**Businesses** with discounts

> **Policy Walk** Attendees

Largest Walk to School Day in USA

@walkbikenash www.walkbikenashville.org

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# ENCOURAGEMENT

Encouragement programs promote cycling and walking and help build a supportive community of people passionate about biking and walking in Metro Nashville. The more fun people have getting around on foot or by bike, the more likely they are to use the new bike and pedestrian facilities that Metro Nashville is building. Bike and Pedestrian encouragement takes many different forms. Government agencies, informal community groups, nonprofit organizations, businesses, and local residents all play a role in promoting walking and cycling in Metro Nashville.



#### Safe Routes to Schools Bik

is administered by Walk Bike Nashville and BPAC, and aims to get elementary and middle school kids excited about walking and/or biking to school.

In 2015, **74 schools participated** by hosting group rides, bike rodeos, and "walking school buses," to bring participants from their home to their local school.



#### Bike to School Day

is a part of bike month and encourages students to get out and bike to school. 2014 was the first time Walk Bike Nashville officially hosted Bike to School Day events, and had more than 1000 participants. In 2015, more than 2400 students across Metro Nashville participated.



# WALK MONTH

is held each October and is dedicated to engaging Nashvillians in walking and raising awareness of pedestrian safety issues. Walk Bike Nashville helps organize the events.





# **TOUR de NASH**

Since 2004, Walk Bike Nashville has hosted Metro Nashville's largest urban bike ride. With refreshments, bicycle mechanics, and bathroom stops along the way, the Tour de Nash gives participants a chance to explore Nashville-Davidson County's neighborhoods and bicycle infrastructure safely on roads and greenways. In 2011, nearly 650 people participated in the Tour de Nash. In 2016, that number was nearly doubled with more than 1,250 participants.



#### WALK TO SCHOOL DAY:

 2014: 11,100 STUDENTS 4,000 OTHER WALKERS 63 SCHOOLS <u>2015:</u>
 12,450 STUDENTS
 4,900 OTHER WALKERS
 69 SCHOOLS



# **BIKE MONTH**

Each May, Nashvillians and local advocacy organizations take to the streets and greenways to promote bicycling in Metro Nashville. Many events, rides and meet-ups take place all over Nashville during Bike Month. Walk Bike Nashville leads the charge in planning events such as bike to work day, bike to school day, and Tour de Nash. As cycling becomes a larger part of getting around Nashville, Bike Month helps new and experienced riders alike become more knowledgeable and comfortable biking in Nashville. This month-long series of events and workshops helps to build a vibrant and supportive cycling community.





BIKE MONTH DATA



83 EVENTS ORGANIZED IN NASHVILLE

2015

2016 90+ EVENTS ORGANIZED IN NASHVILLE





#### **Group Rides**

More than **20 different groups** organize rides in and around Metro Nashville for all skill levels and abilities. Group rides provide opportunities for less experienced riders to gain confidence, while also offering seasoned riders opportunities to explore new routes.



## BIKE TO WORK DAY

Each May during National Bike Month, Walk Bike Nashville, MTA and the Music City Star invite commuters to bike to work. Bike commuters are invited to meet up at several locations around town and commute to work together. This day brings together new and seasoned commuters, and highlights the option of bicycling as a way of commuting to work.

#### **Policy Initiatives**

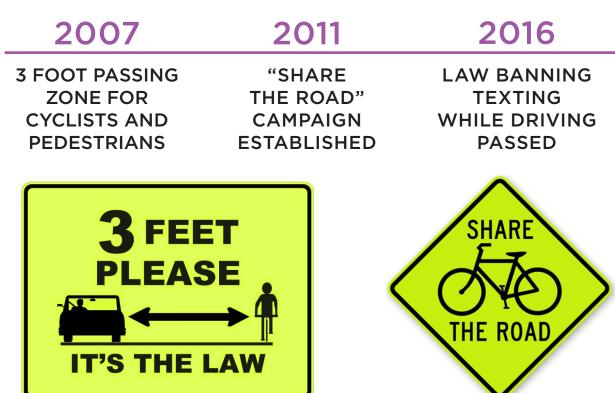
In addition to classes, workshops, and events, policies are just as important to promote and encourage biking and walking in Metro Nashville. The Bicycle & Pedestrian Advisory Council and Walk Bike Nashville together hold "policy rides" and "policy walks" where they invite governments officials and citizens on a walk or bicycle ride to review conflict areas and identify potential opportunities where new policies can improve walking and biking in Metro Nashville. Some initiatives include:

- Complete Streets Initiative: 2010
- Bike Parking Referendum for Urban Zoning Overlay: 2014
- Complete Street Executive Order: 2016
- Construction Zone Ordinance Filed: 2016
- Bicycle and Pedestrian Work Zone Safety Act: 2016

# **ENFORCEMENT**

In addition to creating safer facilities for cyclists and pedestrians, Metro Nashville law enforcement also play an important part in ensuring the comfort and safety of cyclists and pedestrians and the vehicles with whom they often share facilities. Since 2009, the Metro Nashville Police Department has played an active role in educating officers and community members about the rules and responsibilities of all transportation users.





# **PARTNERSHIPS**

Nashville The Police Department partnered with Walk Bike Nashville to hold a "Traffic Safety and Impaired Awareness Day" to discuss the impact of motorists on cyclists and pedestrians.

Nashville Police The Department has an officer representative serve on **BPAC** to ensure law enforcement officials have a voice in any changes to transportation facilities.

**Bike-mounted police officers** have been trained in an International Mountain Bike Association course on bike handling and bike safety.



BICYCLE PEDESTRIAN **ADVISORY** COUNCIL





Law enforcement has been issuing citations for specific penalties for motorists such as:

- Failure to yield to cyclists
- Parking in a marked bike lane
- Passing within 3 feet of a cyclist

## **GREENWAYS**

Metro Nashville Parks and Recreation officers also patrol the system of Greenways to ensure users stay safe.



# ENGINEERING

Since 2008, Metro Nashville has made on-the ground improvements to its bike and pedestrian facilities. Engineering improvements are made to enhance access, safety, and routes for pedestrians and cyclists. Improvements cover a broad spectrum of infrastructure including traditional bike lanes, separated bike lanes, cycle tracks, buffered bike lanes, greenways, bike racks, signage and route designation, sidewalk and curb-cut repair and replacement, and signal improvements.



# ACCOMPLISHMENTS

#### COMPLETE STREETS

## **5** Complete

**Street** projects have taken place or are under construction in Metro Nashville since 2008. Metro Nashville has been committed to **"Complete Streets"** since 2010 when Mayor Dean issued an executive order officially establishing a precedent that streets in Metro Nashville should serve all users: cyclists, pedestrians, transit users, and vehicular traffic.

Mayor Berry expanded upon Nashville's commitment to Complete Streets in May 2016 by signing a **Complete & Green Streets Executive Order**, establishing Complete Green Streets as a major priority.

#### SIDEWALKS

## **91.5** MILES

of sidewalks have been repaired, rebuilt or added in Metro Nashville since 2008.

#### CURB RAMPS (ADA RAMPS)

## 3,354

The number of curb ramps added or rebuilt since 2008. Curb ramps enhance the accessibility and mobility of our sidewalks for all users.

#### **MUSIC CITY BIKEWAY**

## 26 MILES

In 2011, Metro Nashville completed the **Music City Bikeway**, a 26 mile route consisting of **greenways**, **bike lanes**, **and shared lane markings**, connecting Percy Warner Park to the west, through downtown and to Percy Priest Dam to the east.

#### INVESTMENT

# \$30 MILLION

The amount Metro Nashville has allocated in 2016 to the **sidewalk improvement program** to make sidewalk accessibility improvements. Since 2008, Metro has invested more annually in this program than the previous year.

## GREENWAYS

Greenways, or off-street paved trails, are an integral part of the pedestrian and bicycle infrastructure network in Metro Nashville. The Metro Nashville Parks & Recreation greenway system includes: **85 MILES** of existing off-street paved trails **46 MILES** of off-street paved trails currently in planning or development





#### **BIKE RACKS**



## 21 ART BIKE

RACKS have been installed throughout the city as part of an art competition through the Nashville Arts Commission. These creative bike racks bring together public art and improved bike facilities to neighborhoods throughout Metro Nashville.





28th/31st Connector (completed 2012): 2-way separated cycle track





In March 2016, Metro Nashville introduced its first "pedestrian scramble" intersection on lower Broadway. The all-way pedestrian crossings in downtown help improve pedestrian safety and mobility and maintain vehicle traffic flow.



(completed 2015): 2-way Riverfront Park separated cycle track



11th Avenue Complete Street (completed 2015): 2-way separated cycle track



Davidson Street (completed 2015): 1.8 mile atgrade cycle track



# **BIKEWAYS**

Since 2003, Metro Nashville has worked to expand bike facilities and infrastructure through policy initiatives as well as on-theground projects by adding:

**22+ MILES 2.5+ MILES Buffered Bike** Separated Bike Lanes Lanes

## A SAMPLING OF **COMPLETED PROJECTS**

Complete Streets	Separated Bike Lanes	Buffered Bike Lanes	
<ul> <li>11th Avenue</li> <li>28th/31st Connector</li> <li>Deaderick Street</li> <li>Korean Veterans Blvd.</li> <li>Division Street (under construction)</li> </ul>	<ul> <li>Davidson Street</li> <li>Cycle Tracks</li> <li>Riverfront Park (1st Ave)</li> <li>28th/31st Connector</li> <li>11th Avenue</li> <li>Division Street</li> </ul>	<ul> <li>Amalie Drive</li> <li>Church Street</li> <li>46th Avenue</li> <li>Demonbreun St.</li> <li>46th Ave.</li> <li>Korean Veterans Blvd.</li> </ul>	
	BIKE BOXES	<ul> <li>Natchez Trace</li> <li>Church Street</li> <li>Magnolia Blvd.</li> </ul>	



Korean Veterans Boulevard (completed 2012)



Church Street (installed 2014): Buffered bike lane Church Street (installed 2014): Bike box





Korean Veterans Boulevard (completed 2012)





# **PARTNER SPOTLIGHT B.P.A.C**

# **BIKE & PEDESTRIAN ADVISORY COUNCIL**

In 2008, BPAC was established by an Executive Order of Mayor Karl Dean to further Nashville's goal of becoming a bicycle- and pedestrian-friendly city. Its members, who are appointed by the Mayor, are Nashville-Davidson County citizens passionate about making Nashville a better place for biking and walking. The committee helps city staff identify priorities and create policies and plans for the city's bike and pedestrian improvement projects. BPAC furthers the cause of safe biking and walking as a viable and beneficial mode of transportation and recreation.

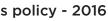
- BPAC brings together members of every Metro Nashville government department as well as members of community organizations such as YMCA of Middle Tennessee, the Community Foundation of Middle Tennessee, Murfreesboro Bicycle Club, and many others.
- BPAC works with Walk Bike Nashville to host walks and rides in the community and advocate for pedestrian and cyclist issues.
- A representative of the Metro Nashville PD participates on BPAC to ensure the police have a voice in any changes to transportation facilities that they are responsible for patrolling.



#### Some of BPAC's accomplishments include:

- Encouragement for Buffered and Separated Bike Lanes on primary commuter routes
- Encouragement for Bike Boxes
- Bike Friendly Community designation 2010
- Advocated for Bike/ Ped Coordinator Position at MPW - 2013
- Encouraged Pedestrian and Bicycle Crash Analysis study by MPW - 2013
- Established regular Policy Walks and Rides with community leaders - 2014
- Bike Parking Ordinance 2014
- Shelby Street Bridge Closure policy 2014
- Hosted Tennessee Bike Summit in Nashville 2014
- Bike Friendly Business Forums 2014
- Held Safer Streets work sessions with MPW 2015
- Advocated for Active Mobility Planner position at MPO 2015
- Encouragement for Council Bill for Pedestrian and Bike construction zone safety - 2016
- Advocated for a stronger Complete Streets policy 2016







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# EVALUATION

Evaluation tools help Metro Nashville determine where improvements are needed, measure the success of its projects, and plan for future improvements to bike and pedestrian infrastructure. Metro staff, advisory board members, Metro Council, and Metro Nashville residents play an important role in continually evaluating the progress in Metro Nashville and identifying opportunities to improve bicycle and pedestrian facilities.



2015 --**28**--WALK SCORE

## **BIKE & PEDESTRIAN COUNTS**

Starting in 2009, Metro Nashville has been conducting pedestrian & bike counts at intersections throughout the city. On one day in 2009, city staff and volunteers were positioned at 10 intersections throughout the city to count morning and evening "peak" pedestrian and bike traffic. The program was expanded in 2011, 2013, and again in 2014 to bring the total number of one-day study intersections to 28. The results from these one-day counts show that the amount of pedestrian and cyclist activity in Metro Nashville is increasing dramatically.

Metro Public Works

496 Calls for sidewalk related concerns or questions

25 Calls for new bike lane requests

#### BIKE COUNTS

- Bike counts increased 32% between 2009 and 2011
- Morning bike counts
   increased 42%
   between 2011 and 2013
  - Bike counts increased 10% between 2014 and 2015

#### PEDESTRIAN COUNTS

- Pedestrian counts increased 49% between 2009 and 2011
- Pedestrian counts increased nearly 50% between 2014 and 2015

# CRASH DATA

Metro Nashville collects data from vehicle-bike crashes and vehicle-pedestrian crashes, and also uses statewide crash data to identify the most dangerous roads and intersections around the city. Public Works uses this data to prioritize improvement projects and make safety improvements to dangerous intersections, roads, and sidewalks.

### SURVEY DATA

Metro Nashville uses survey data to better understand how people get around. The National Household Transportation Survey, data collected every 5 to 7 years by the Federal Highway Administration, as well as survey data from the Nashville Area MPO, is used to:

- Learn how people make short, medium, & long trips
- Learn what mode of travel people use to commute
- Learn how people travel for fun, exercise, or to run errands
- Better understand trends in travel behavior over time

## Nashville B-Cycle

is Nashville's bike share program that has 35 stations and over 250 bikes around Metro Nashville that allow residents, employees, and visitors the ability to check out a bike and return it to any station.

#### 2015 58,719 Bike Trips 320,198 Total Miles 12,754,723 Calories Burned

**2016 C SEPT 57,890** Bike Trips **392,920** Total Miles **15,664,035** Calories Burned

29

## PUBLIC INPUT

is an important part of identifying and evaluating projects. No one understands local needs like the people who live, work, and play using bike and pedestrian facilities. Metro Nashville Public Works also:

- Hosts neighborhood meetings to gather input for projects and evaluate design alternatives.
- Monitors a "3-1-1" call center where citizens can report problems.



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