

### NASHVILLE-DAVIDSON COUNTY STRATEGIC PLAN FOR SIDEWALKS AND BIKEWAYS





# March 22<sup>nd</sup> Organizational Meeting

"Core of Nashville has much higher walking and biking rates then the suburbs...which pulls the average down"

"We need a plan that addresses the different segments of the population. Where they live, work, need access. Sidewalks that are friendly to ambulatory users."

"Transit perspective is challenging...lack of infrastructure, crosswalks, sidewalks, access to transit stops"

"Lots of opportunities for walking, but you have to be very defensive"

"Patchy access...some sections are awesome but then you get to a barrier or different neighborhood that is challenging"

"Past two years there has been a ton of change! Lot's more people coming which is increasing transportation needs!

"We need a clear prioritization plan that acknowledges that sometimes it's better to get it done right rather then take low hanging fruit"

\*\*Metro Nativille\*\*

\*\*Metro Nativille\*\*

# walk





# Proposed Subcommittee Topics

Outreach and Education
Policy and Enforcement
Prioritization Methodology
Design Practices
Other Ideas?

Sign-Up Sheet by Topic, check if you're interested in serving as Chair

Metro Staff will be assigned to each committee to help facilitate meetings





# walk





## **Project Purpose**

The purpose of the plan is to outline goals, priorities and policies regarding location of the countywide sidewalk and bikeways network and provide a method for prioritizing improvements to ensure a healthy, active, safe and vibrant community.





# Project Team













## Steering Committee



PROJECT MANAGER:

WalknBike Project Manager, Metro

Info@nashvillewalknbike.com

Bicycle & Pedestrian Coordinator

The WalknBike's steering

committee will be broken

into four subcommittees:

Outreach and Education

Policy and Enforcement

the plan is complete and

implementation starts.

2. Design Practices

Jason Radinger

E-MAIL:





METRO TRANSIT

Felix Castrodad

Director of Planning

AUTHORITY

Steve Bland

and Grants

CEO



HEALTH

Tracy Buck

Dr. Bill Paul

Director

John Vick

Division of

Research

Director, Prevention

Epidemiology and

and Wellness Division



WORKS

Director

Mark Macv



PLANNING

Adams Carroll

MPO Regional

Active Mobility

Doug Sloan

Planner



Nancy Whittemore Director Bridget Galvin Executive Director Support Specialist Jerry Hall

ADA Coordinator



Assistant Director, Sustainability Manager Greenways and Open Space Division Cindy Harrison Project Manager Tommy Lynch Director

LEADERSHIP

Angle Henderson Metro Councilmember, District 34 Mary Beth Ikard

Transportation and Sustainability Manager, Mayor's Office



METRO POLICE

Steve Anderson

Chief of Police

John Drake

commander

Central Precinct

Michael Gillland

Lieutenant, Special

Operation Division



NASHVILLE AREA METROPOLITAN PLANNING ORGANIZATION

Rochelle Carpenter Senior Policy Analyst Michelle Lacewell Deputy Director Michael Skipper Executive Director



CONEXION AMERICAS

Mayra Cervantes Marketing and Community Engagement Conndinator

TENNESSEE DISABILITY COALITION

Kenton Dickerson Volunteer

WALK BIKE NASHVILLE Dr. Stacy Dorris

Executive Director

Board Member, Assistant Professor of Pediatrics, Vanderbilt University School of Medicine: Nora Kern

NASHVILLE CIVIC DESIGN CENTER

DESIGN

Gary Gaston Executive Director Ron Yearwood Assistant Director

BELMONT UNIVERSITY Debra Gibbs

Occupational Therapy, Council on Aging Board Member Evan Pendygraft Student

Assistant Professor in



BARGE CAUTHEN ASSOCIATES John Gore

Vice President

transii



METROPOLITAN DEPARTMENT NASHVILLE PUBLIC SCHOOLS

> Planning and Construction

NASHVILLE B CYCLE

General Manager

0

TENNESSEE DEPARTMENT OF TRANSPORTATION Jessica Wilson



TRANSIT NOW NASHVILLE

Mary Vavra Board Member, Senior Landscape Architect/ Planner, Lose & Associates

4. Prioritization Methodology These subcommittees will transition into the 6 E's once

NASHVILLE BICYCLE SKANSKA PEDESTRIAN ADVISORY COMMITTEE

> John Harkey Healthy Nashville Leadership Council Member Mary Pat Teague Associate Director. Community, Neighborhood and Government Relations: Vanderbilt University

TENNESSEE

Kristen Heggle OF HEALTH Project Manager Leslie Meehan Assistant Director of Primary Prevention

David Proffitt Director of Facility Keith Rawls

Biovole and Pedestrian Coordinator

DOWNTOWN PARTNERSHIP Tom Turner President and

OEO:



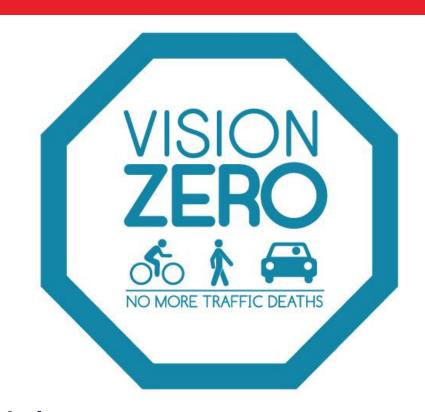


\*Some committee members represent multiple stakeholders



## **Project Focus**

"As Mayor I will continue to engage our bicycle and pedestrian advocates, nonprofits like Walk-Bike Nashville, and our Metro departments to ensure we are implementing polices that will enable more people to safely take advantage of all modalities of transit." - Nashville Mayor Megan Barry



4 Key Principles: Ethics, Responsibility, Safety and Mechanism for Change





## **Project Focus**



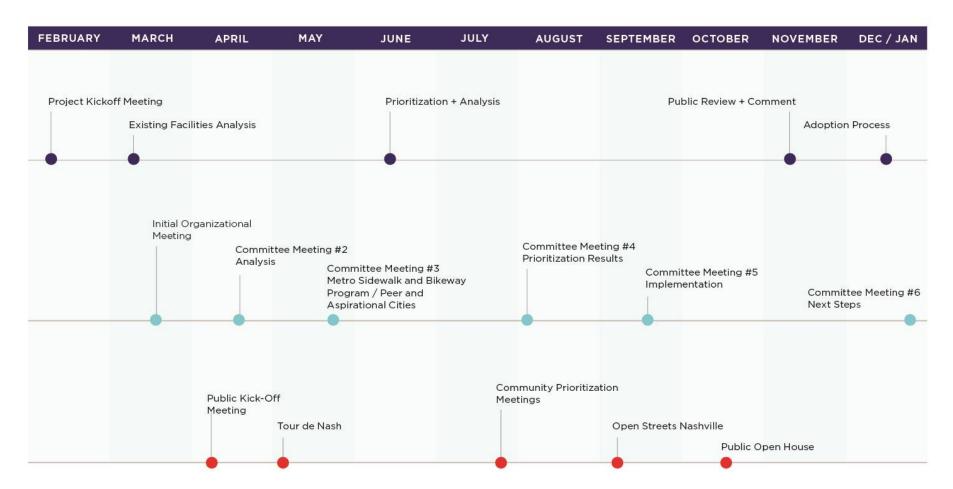






### PROJECT SCHEDULE

GENERALSTEERING COMMITTEEPUBLIC OUTREACH





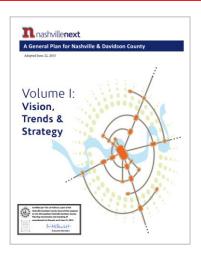


# walk

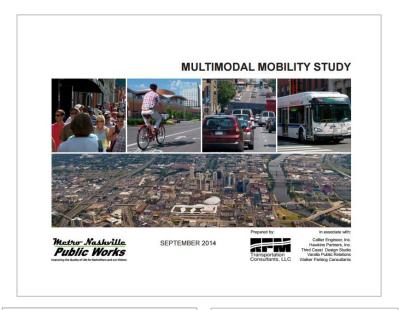




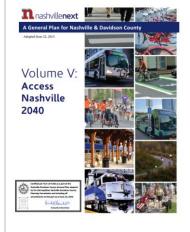
# A Sampling of Previous Planning Efforts











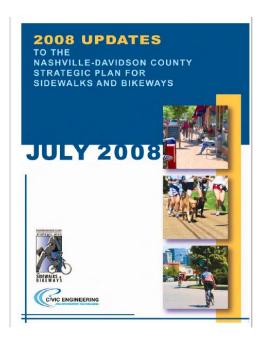






# Program History







2003 2008 2016





## **Program Accomplishments**

#### Added since 2013:

Approx. 22 miles of buffered bike lanes Approx. 2.5 miles of protected/separated bike lanes

### Complete/Green Streets

- 28th/31st Connector (with separated protected bike lane)
- 11th Avenue / Gulch Green Street (with separated protected bike lane)
- Demonbreun Green Street
- Korean Veteran's Blvd (w bike lanes)
- Division Street Connector under construction



Korean Veterans Blvd



#### Nashville b-cycle

Currently 31 stations (41% more stations in January 2016 than in January 2015) and up from original 20 stations in December 2012.



1st Street

#### **Bike Boxes**

- · Church Street
- Natchez Trace





Diagonal crosswalks and pedestrian scrambler on Lower Broadway

### **Complete Streets**

- 46th Ave North (w BL and buffered bike lanes)
- 0.20 mile Separated/protected two-way cycle track at Riverfront Park
- •1.8 mile protected bike lanes along Davidson Street (using flexible bollards)
- 0.47 ml protected bike lane on Amalie Dr



11th Avenue Protected Bike Lanes



Added since 2008: 200 miles of sidewalks



Metro Nashville

Public Works



## **Program Accomplishments**





# **NASHVILLE, TN**

634,464

TOTAL AREA (sq. miles)
504

1.258

# OF LOCAL BICYCLE FRIENDLY BUSINESSES

16





walk









# walk





# Community Outreach Strategy







### www.nashvillewalknbike.com

# Stay Involved!



Home Get Involved Materials News Contact Us

NASHVILLE-DAVIDSON COUNTY STRATEGIC PLAN FOR SIDEWALKS & BIKEWAYS



Please join us for our PUBLIC KICKOFF MEETING

April 15th, 12pm-1:30pm

Nashville Public Library 615 Church St, Nashville, TN 37219

### Home

- "Planning for, building, and maintaining great sidewalks and bikeways are imperative for a healthy, active, safe and vibrant community. I encourage citizens to participate in this process and to work with us to ensure Nashville's sidewalks and bikeways are safe, useable and welcoming to people of all abilities."
- Mayor Barry





## Take the Survey!

## www.nashvillewalknbike.com



WalkNBike - 2016 Strategic Plan for Sidewalks and Bikeways Update

Walking in Nashville

1,535
Surveys
Complete
to Date

500 Email Contacts

PLEASE TELL US ABOUT	TWALKING IN NASHVILL	E AND DAVIDSON COUNTY
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	hat is your opinion of the following statement: "In Nashville, walking is a safe, convenient, and practical way to get I one place to another"
) 4	Agree
) [	Disagree
) 1	No Opinion
2. WI	hat prevents you from walking more often? Please choose up to five.
l	nsufficient lighting
	Roads and sidewalks do not feel safe
1	Not enough time/destinations are too far
	Disability/other health impairment

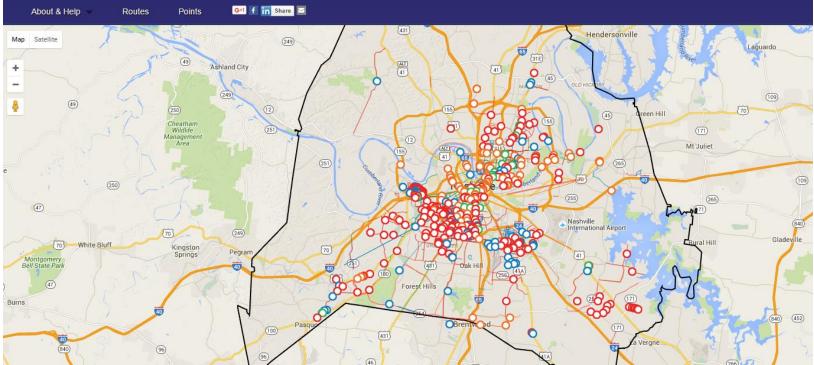




## www.nashvillewalknbike.com

# Draw on the Map!









## Request a "WalknBike Talk"!

Help us identify groups to talk to and events to attend! Contact us at Info@nashvillewalknbike.com





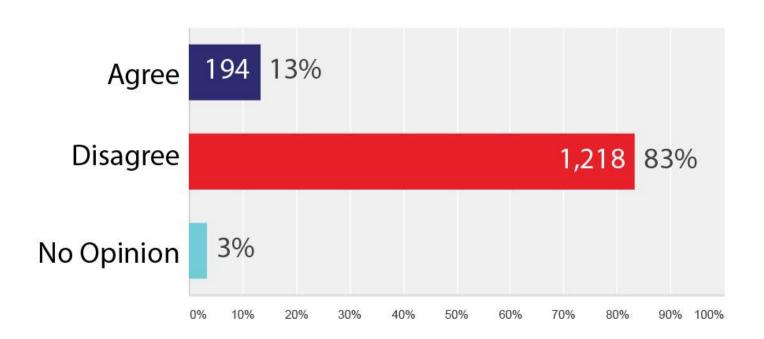


# walk





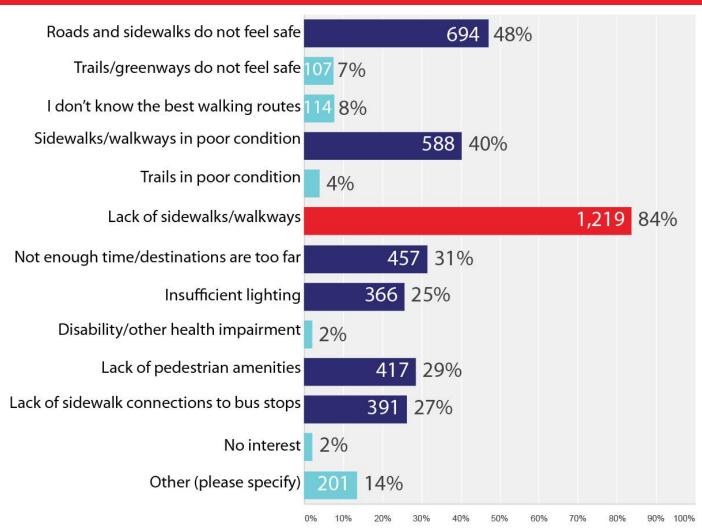
# "In Nashville, walking is a safe, convenient, and practical way to get from one place to another"







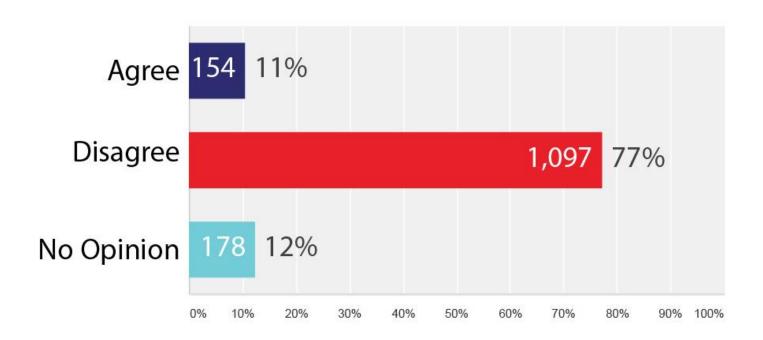
## What prevents you from walking more often?







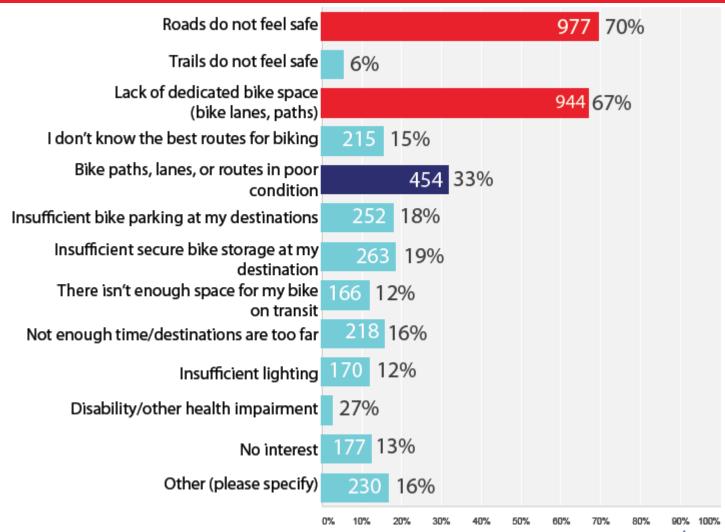
# "In Nashville, biking is a safe, convenient, and practical way to get from one place to another"







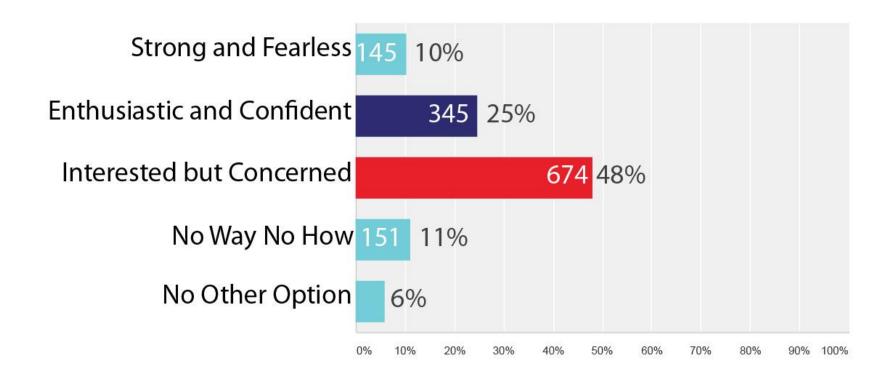
# What prevents you from biking more often?







# What type of bicyclist do you consider yourself when riding alone?



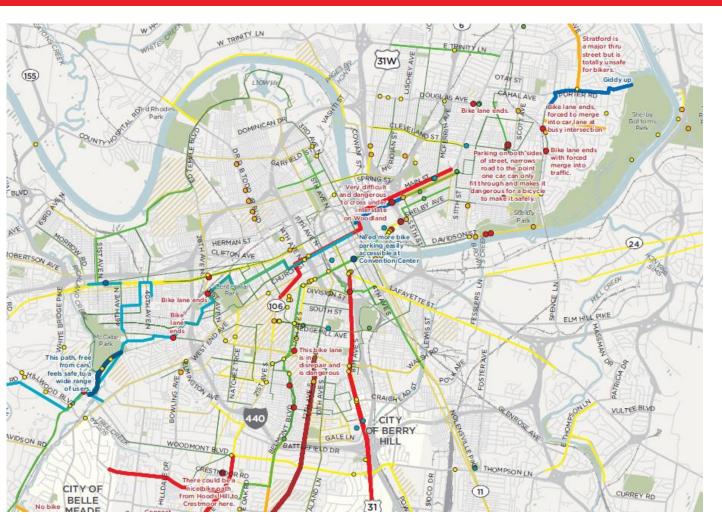




# Interactive Map Comments To-Date

702 Points

1,231 Routes/ Lines





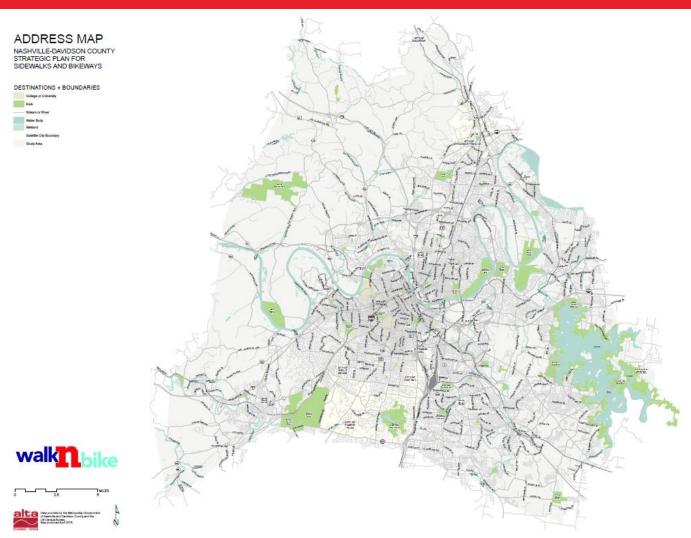


# walk





# Station #1: Sign-In and Address Map







## Station #2: Project Overview, Previous Planning Efforts, & Program Accomplishments

### **METRO SIDEWALK AND BIKEWAY HISTORY**





The 2008 strategic plan for sidewalks and bikeways undated the original 2003 plan and established the following key objectives (among others):

- 🏠 To provide safe, comfortable, continuous, direct, and convenient pedestrian facilities for users with all levels of physical ability.
- No reduce the number of injuries and death resulting from crashes between motorists, bicyclists, and pedestrians.
- 於 To ensure that all new streets are safe and comfortable for pedestrians, bicyclists, and motorists,
- 🏠 To increase the percentage of trips undertaken in Nashville & Davidson County on foot and by bicycle
- 🏌 To establish a methodology for prioritizing sidewalk projects on existing streets





#### A SAMPLING OF RECENT AND ONGOING PLANNING INITIATIVES



'The WalknBike Plan will build upon recent planning initiatives that articulated public need for a more walkable and bikeable Davidson County. In addition, the WalknBike Plan will be coordinated with nMotion and the Parks and Recreation Plan. nMotion focuses on public transportation and the Parks and Recreation

Plan includes a focus on off-road greenways.

NASHVILLEWALKNBIKE.COM

#### walkinhike **PROJECT OVERVIEW**

"Planning for, building, and maintaining great sidewalks and bikeways are imperative for a healthy, active, safe and vibrant community. I encourage citizens to participate in this process and to work with us to ensure Nashville's sidewalks and bikeways are safe, useable and welcoming to people of all abilities." Mayor Barry

#### THE E'S OF PLANNING

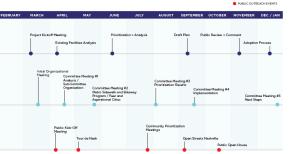


There are often thought to be 5 essential E's to bicycle and pedestrian planning. They are: Engineering, Education, Encouragement Enforcement, and Evaluation. Currently, a 6th E, equity, is starting to gain recognition as another essential component of planning processes

Nashville's leaders have heard the demand to improve walking and biking and Mayor Megan Barry is committed to meeting the need for more sidewalks and bikeways. WalknBike will upgrade the Strategic Plan for Sidewalks and Bikeways with a robust public engagement process, evaluation of peer and aspirational cities, updated GIS inventory of Davidson County's Sidewalk and Bikeways. modernized project prioritization, a comprehensive funding strategy, and new tools to provide easier access to information about implementation and program progress. This year-long process depends on your input. Help Nashville prioritize strategic, equitable investment in sidewalks and bikeways. Stay connected for ways to engage and participate in the development of WalknBike!

PROJECT SCHEDULE





meetings, social media, and stakeholder outreach throughout the duration of the project. Public outreach will be conducted with community meetings and other events when available. See below for how to participate!









### Station #3: Prioritization Overview

#### walkibike THE CURRENT PGI & PRIORITIZATION DESCRIBED The Pedestrian Generator Index (PGI) is a prioritization tool that helps Metro make decisions about investments for both new The factors that go into the three main PGI categories at The Sidewalk Matrix sidewalks and existing sidewalks needing repair. The PGI uses left (land use, destinations, and major streets) are organized below according to their score (or "weight") that is used land use categories, destinations, and major streets to estimate The Sidewalk Matrix provides prioritization demand for walking. in the PGI analysis. Higher numbers mean a potentially logic for Sidewalk Projects. stronger indicator of pedestrian demand. How are PGI Scores Calculated? Pedestrian Generator Index (PGI) Land Use Intensity and Mix of Uses **Current Sidewalk Condition** Points are assigned to different (worse=higher priority) areas of Davidson County based on Transect Zones and the Urban Services District boundary. Dense urban areas recieve more points. walkinbike and less dense suburban areas SHARE YOUR THOUGHTS ON HOW PROJECTS ARE PRIORITIZED... recieve fewer points. Points are subtracted for rural and natural preservation areas. 2 Destinations Walking buffers are drawn LAND USE DESTINATIONS SCHOOLS around 16 distinct types of destinations or "pedestrian generators" such as schools, parks, greenways, transit routes, and retail centers. Areas closer to each generator recieve more IMPORTANT SOMEWHAT IMPORTANT Existing sidewalks along major roadways recieve additional points for repair projects. Gaps in the sidewalk IMPODTANT roadways recieve additional points for new sidewalk construction projects. TRANSPORTATION OTHER IDEAS FOR NEW CRITERIA (WRITE-IN) E-MAIL: info@nashvillewalknbike.com **⋙**@NashWalknBike IMPORTANT SOMEWHAT IMPORTANT IMPORTANT Westro Nashville Public Works





facebook.com/NashvilleWalknBike NASHVILLEWALKNBIKE.COM

## Station #3: Visual Preference Survey

### walkinbike **BICYCLE FACILITY TYPES** SHARED BIKE **SEPARATED SHARED USE ROADWAYS LANES BIKEWAYS PATHS** URBAN URBAN **POSSIBLE PEDESTRIAN AMENITIES** walkinbike **FOR NASHVILLE** RURAL SHARED-USE PATHS (AWAY FROM ROADWAY) SIDEWALKS BOARDWALKS SHARED-USE SIDE PATHS (ALONG SIDE ROADWAY) facebook.com/NashvilleWalknBike NASHVILLEWALKNBIKE.COM PEDESTRIAN-ACTIVATED SIGNALS & CROSSINGS WITH LIGHTS





facebook.com/NashvilleWalknBike NASHVILLEWALKNBIKE.COM

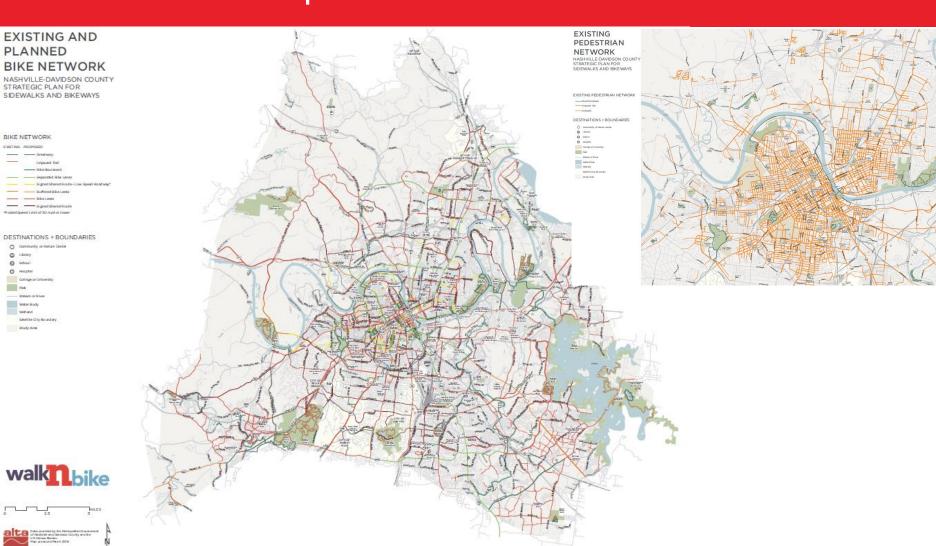
## Station #4: Public Statements

WALKING IN NASHVILLE IS	walk <mark>n</mark> bike
WALKING IN NASHVILLE SHOULD BE	walkinbike
BIKING IN NASHVILLE IS	walk <mark>n</mark> bike
BIKING IN NASHVILLE SHOULD BE	walkinbike
I WOULD BIKE MORE IF	walkinbike
I WOULD WALK MORE IF	walk <mark>n</mark> bike
PROJECTS SHOULD BE PRIORITIZED BY	walknbike





## Station #5: Map Exercise







## Station #6: User Survey & Comment Forms

wall

comfortable, and sa	fe sidewalks and bikeways.	
1. What is your opinion of the following statement: "In Nashville, walking is a safe, convenient, and	i. What type of bicyclist do you consider yourself hen riding alone?	
practical way to get from one place to another"	<ul> <li>Strong and Fearless: I feel very comfortable biking</li> </ul>	
☐ Agree	on all types of facilities, including streets without a	
Disagree	bike lane	
☐ No Opinion	<ul> <li>Enthusiastic and Confident: I feel comfortable</li> </ul>	
<ol><li>What prevents you from walking more often?</li><li>Please choose up to five.</li></ol>	biking on streets alongside cars as long as there is a designated bike facility. I feel comfortable biking	
<ul> <li>Roads and sidewalks do not feel safe</li> </ul>	on trails.	
☐ Trails/greenways do not feel safe	■ Interested but Concerned: I am not comfortable	
■ Not enough time/destinations are too far	riding alongside cars even with a bike lane. I'd like	
Lack of sidewalks/walkways	to travel by bike more if I felt more comfortable on	
☐ I don't know the best walking routes	the roads. I feel most comfortable biking on trails.	
Sidewalks/walkways in poor condition (not accessible)	■ No Way No How: I am not interested in bicycling	
☐ Trails in poor condition	or cannot bike.	
<ul> <li>Lack of sidewalk connections to bus stops</li> </ul>	■ No Other Option: I don't feel comfortable riding on	
☐ Insufficient lighting	roads with cars, but I don't have any other option.	
<ul> <li>Lack of pedestrian amenities (ex: benches, shade,</li> </ul>	I'd prefer to drive if I could.	
lighting)	6. What is your zipcode?	
☐ No interest	o. What is your zipcode:	
Disability/other health impairment		
Other (please specify)		
(p)/	7. What age group are you in?	
3. What is your opinion of the following statement: "In Nashville, biking is a safe, convenient, and practical way to get from one place to another"    Agree   Disagree	☐ Under 18 ☐ 18-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 65 and over	
3. What is your opinion of the following statement: "In Nashville, biking is a safe, convenient, and practical way to get from one place to another"    Agree	☐ Under 18 ☐ 18-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 65 and over 8. With which gender do you identify?	
3. What is your opinion of the following statement: "In Nashville, biking is a safe, convenient, and practical way to get from one place to another"    Agree   Disagree   No Opinion	☐ Under 18 ☐ 18-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 65 and over 8. With which gender do you identify? ☐ Male	
3. What is your opinion of the following statement: "In Nashville, biking is a safe, convenient, and practical way to get from one place to another"    Agree   Disagree   No Opinion  4. What prevents you from biking more often? Please choose up to five.	☐ Under 18 ☐ 18-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 65 and over  8. With which gender do you identify? ☐ Male ☐ Female	
3. What is your opinion of the following statement: "In Nashville, biking is a safe, convenient, and practical way to get from one place to another"    Agree   Disagree   No Opinion  4. What prevents you from biking more often? Please choose up to five.    Trails do not feel safe	☐ Under 18 ☐ 18-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 65 and over 8. With which gender do you identify? ☐ Male	
3. What is your opinion of the following statement: "In Nashville, biking is a safe, convenient, and practical way to get from one place to another"    Agree   Disagree   No Opinion  4. What prevents you from biking more often? Please choose up to five.   Trails do not feel safe   Insufficient Lighting	☐ Under 18 ☐ 18-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 65 and over  8. With which gender do you identify? ☐ Male ☐ Female ☐ Decline to State	
3. What is your opinion of the following statement: "In Nashville, biking is a safe, convenient, and practical way to get from one place to another"  Agree  Disagree  No Opinion  4. What prevents you from biking more often? Please choose up to five.  Trails do not feel safe  Insufficient Lighting  Disability/other health impairment	Under 18	
3. What is your opinion of the following statement: "In Nashville, biking is a safe, convenient, and practical way to get from one place to another"    Agree	Under 18	
3. What is your opinion of the following statement: "In Nashville, biking is a safe, convenient, and practical way to get from one place to another"    Agree	Under 18   18-24   25-34   35-44   45-54   55-64   65 and over   8. With which gender do you identify?   Male   Female   Decline to State   9. What is your ethnic background?   American Indian   Asian	
3. What is your opinion of the following statement: "In Nashville, biking is a safe, convenient, and practical way to get from one place to another"    Agree	Under 18   18-24   18-24   25-34   35-34   45-54   55-64   65 and over     Male   Female   Decline to State     Decline to State     American Indian   Asian   Black/African American	
3. What is your opinion of the following statement: "In Nashville, biking is a safe, convenient, and practical way to get from one place to another"    Agree	Under 18   18-24   25-34   35-44   45-54   55-64   65 and over   8. With which gender do you identify?   Male   Female   Decline to State   9. What is your ethnic background?   American Indian   Asian	
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3. What is your opinion of the following statement: "In Nashville, biking is a safe, convenient, and practical way to get from one place to another"    Agree	Under 18	
3. What is your opinion of the following statement: "In Nashville, biking is a safe, convenient, and practical way to get from one place to another"  Agree  Disagree  No Opinion  4. What prevents you from biking more often? Please choose up to five.  Trails do not feel safe  Insufficient Lighting  Disability/other health impairment  Bike paths, lanes, or routes in poor condition  There isn't enough space for my bike on transit  I don't know the best routes for biking  Insufficient secure bike storage at my destination  No interest	Under 18	

Bikewa	Bike will be an upgrade to the Strategic Plan for Sidewalks and lys, and this year-long process depends on your input. Help Nashville ze strategic, equitable investment in sidewalks and bikeways.	
Share your thoughts:		
-		
Name:	To learn more about the 2016	Walkni
Zin Code:	Plan Update and to stay involv	ved, go
Email Address:	PROJECT WEBSITI NASHVILLEWALKNBIK	
Elliali Address	@NashWalknBike	



Other (please specify)



THANK YOU FOR YOUR TIME!

# walk





## The Current Sidewalk Matrix

Pedestrian Generator Index (PGI)

+

**Current Sidewalk Condition** 

(worse=higher priority)

+

Coordination

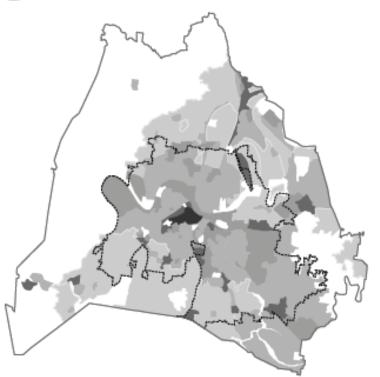
(parks, greenway)





## How are PGI Scores Calculated?

## Land Use Intensity and Mix of Uses



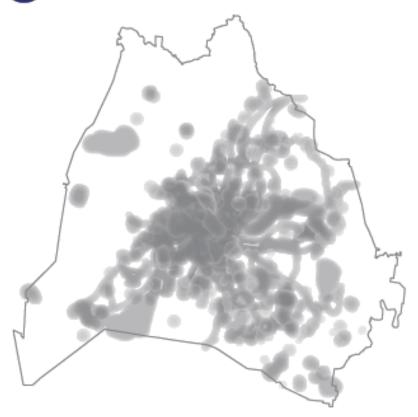
Points are assigned to different areas of Davidson County based on Transect Zones and the Urban Services District boundary. Dense urban areas recieve more points, and less dense suburban areas recieve fewer points. Points are subtracted for rural and natural preservation areas.





## How are PGI Scores Calculated?

# 2 Destinations



Walking buffers are drawn around 16 distinct types of destinations or "pedestrian generators" such as schools, parks, greenways, transit routes, and retail centers. Areas closer to each generator recieve more points.





## How are PGI Scores Calculated?

3 Major Streets



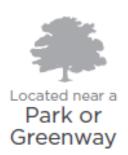
Existing sidewalks along major roadways recieve additional points for repair projects. Gaps in the sidewalk network along major roadways recieve additional points for new sidewalk construction projects.





# **Existing Prioritization Factors**

### **DESTINATIONS**













## **SCHOOLS**















## **Existing Prioritization Factors**

#### LAND USE













Downtown or Center Transect Zone (T5 or T6)



Located near a Neighborhood or Commercial Center



Located Inside the Urban Services District



District

#### TRANSPORTATION





Located along a Rural Arterial Street



Located along an Urban Arterial Street



Located along a Collector Street





# Sidewalk Matrix Example

## The Sidewalk Matrix Example

Project Candidate	PGI	Condition	Coordinating Project
А	35	Fair	No
В	32	Poor	No
С	31	Poor	Yes
D	30	Good	No

Project C was selected first because it met more objectives.





# walk





# walk





# **Next Steps**

# Future Committee Meetings

- Early June, (Doodle poll)
- Existing conditions report and Peer City discussion
  - Subcommittee work
  - Prep for Prioritization Methodology workshops
- Early August meeting (Doodle poll)

# Public Engagement

- May 21<sup>st</sup>, Tour de Nash tabling
- Local community outreach TBD
- Next round of surveys in May and June (Prioritization methodology)
- Phase 1 Prioritization Methodology workshops across Metro area – May/June



## Contact Us!

#### PROJECT MANAGER:

Jason Radinger (Public Works) WalknBike Project Manager, Metro Bicycle & Pedestrian Coordinator

#### **EMAIL:**

info@nashvillewalknbike.com

#### WEBSITE:

www.nashvillewalknbike.com







