

LEVERAGING CENSUS DATA FOR MPO EQUITY ANALYSES



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Planner*

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LEVERAGING CENSUS DATA FOR MPO EQUITY ANALYSES

Overview

- About DVRPC
- DVRPC's Approach to Equity Analysis: *Indicators of Potential Disadvantage (IPD)*
- Understanding Equity Regulations for IPD 2.0
- Updating DVRPC's Methodology for IPD 2.0
- Lessons Learned: Beyond the Legislation
- IPD 2.1 Experiments:
 - Workplace and Journey to Work
 - Statistical Significance



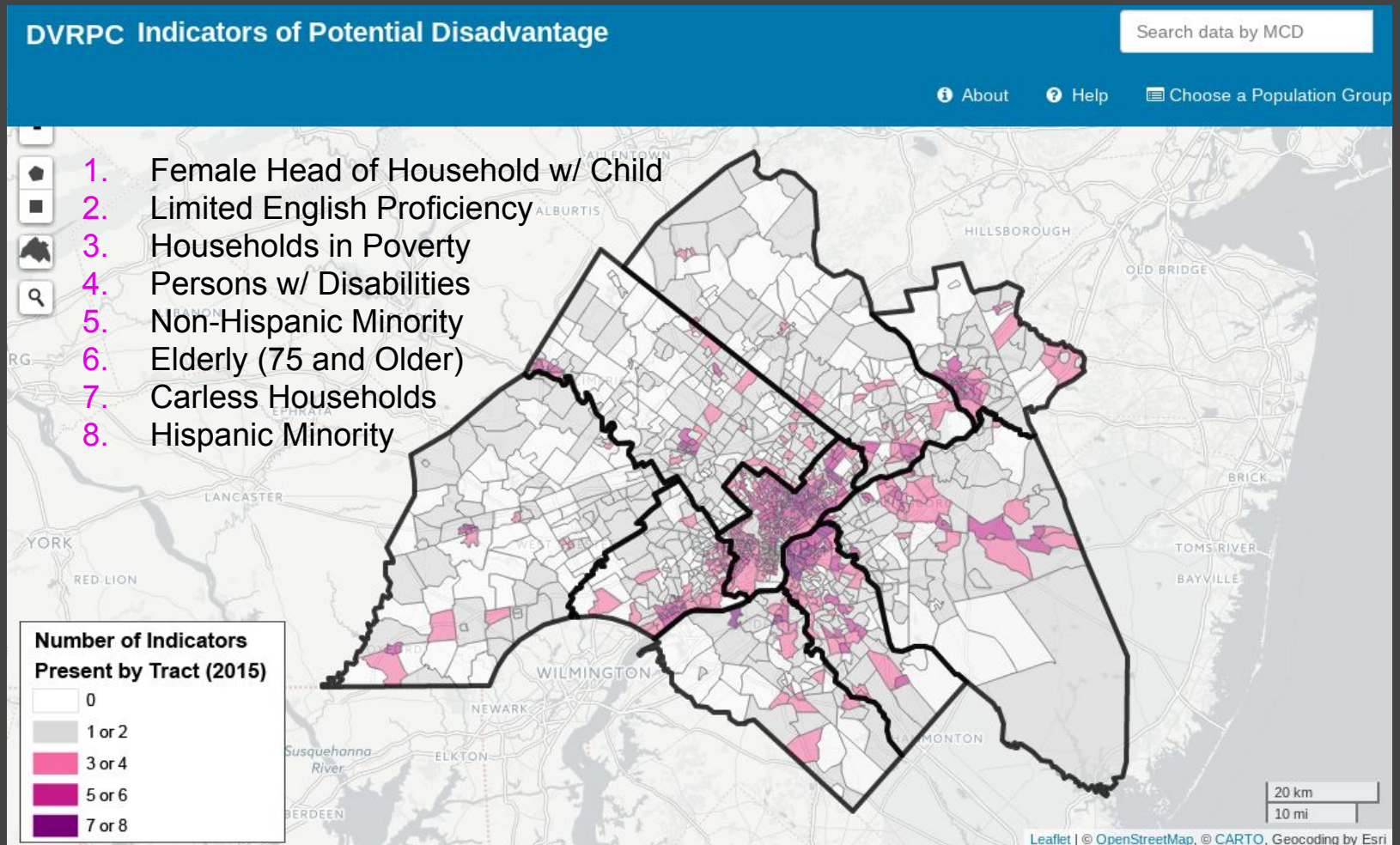
DELAWARE VALLEY REGIONAL PLANNING COMMISSION

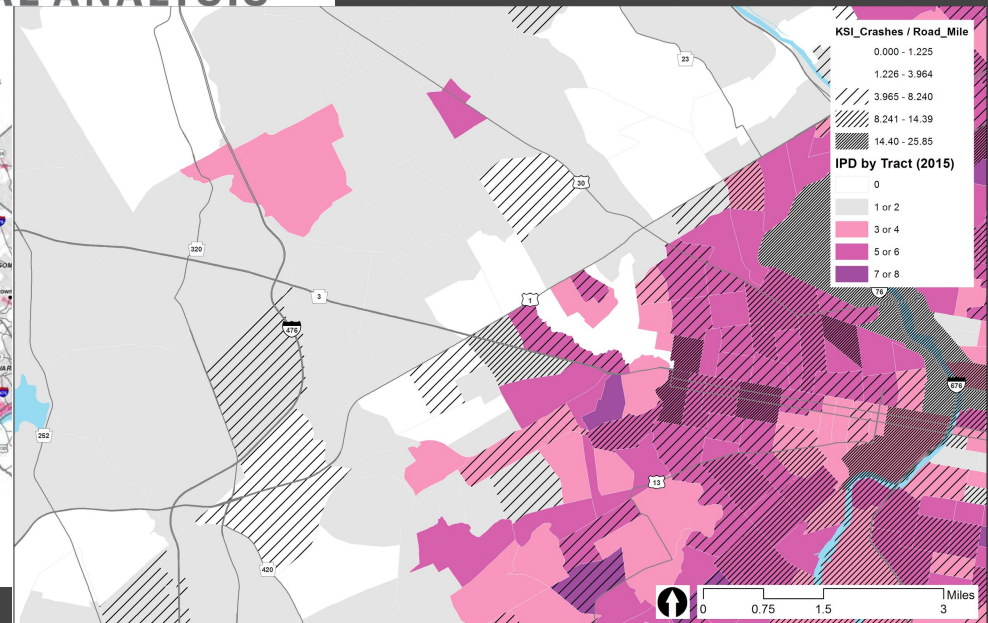
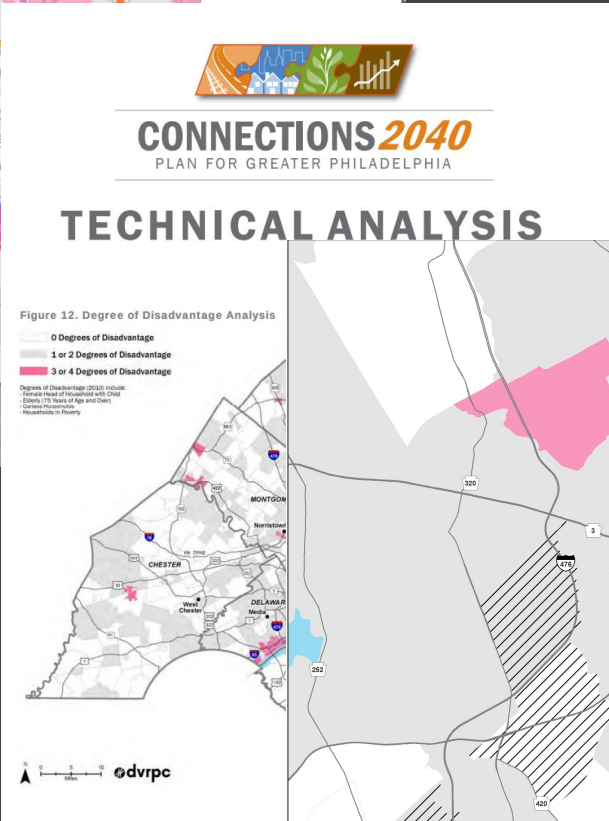
**Federally designated MPO for
nine-county Philadelphia region**

**Must comply with Title VI
requirements and Environmental
Justice (EJ) recommendations**

IPD 1.0: OVERVIEW

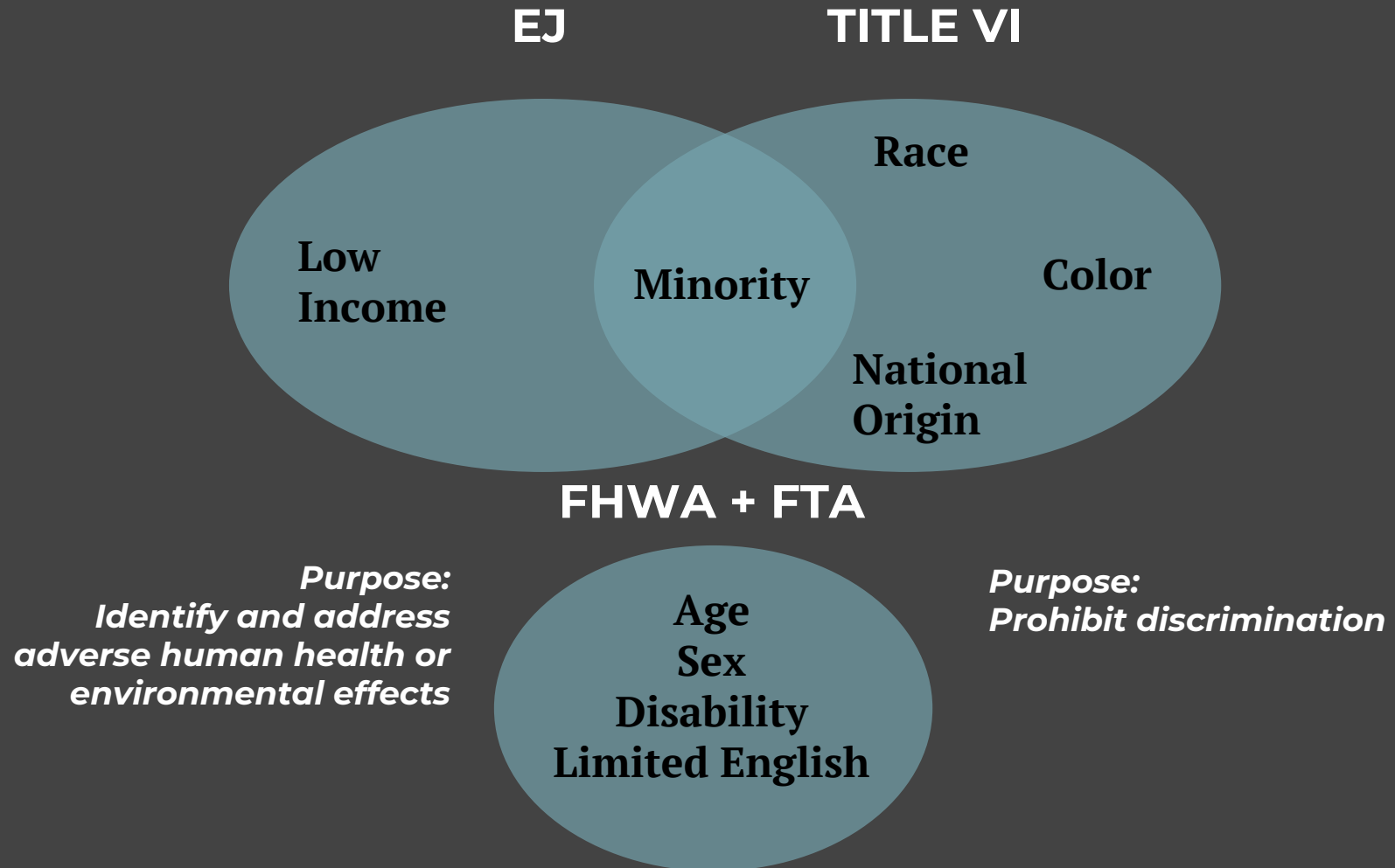
INDICATORS OF POTENTIAL DISADVANTAGE 1.0





IPD 2.0: UNDERSTANDING EQUITY REGULATIONS

UNDERSTANDING EQUITY REGULATIONS



ALIGNING INDICATORS WITH LEGISLATION



Current indicators	Title VI and EJ populations
<ul style="list-style-type: none">• Elderly (75 and Older)• Female Head of Household with Child• Non-Hispanic Minority• Hispanic Minority• Limited English Proficiency• Persons with Disabilities• Households in Poverty• Carless Households	<ul style="list-style-type: none">• Age• Sex• Minority• Race• Ethnicity• National origin• Limited English Proficiency• Disability• Low-Income

ALIGNING INDICATORS WITH LEGISLATION



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ALIGNING INDICATORS WITH LEGISLATION

Current indicators	Title VI and EJ populations
<ul style="list-style-type: none">• Elderly (75+) (65+)• Female Head of Household with Child• Non-Hispanic Minority• Hispanic Minority• Limited English Proficiency• Persons with Disabilities• Households in Poverty• Carless Households	<ul style="list-style-type: none">• Age• Sex• Minority• Race• Ethnicity• National origin• Limited English Proficiency• Disability• Low-Income

ALIGNING INDICATORS WITH LEGISLATION

Indicator (ACS 5-year estimates)	Executive Order 12898	Title VI of the Civil Rights Act of 1964	FHWA's Title VI and EJ documents	FTA's Title VI and EJ documents
Youth			✓	
Older Adults			✓	
Female			✓	
Racial Minority	✓	✓	✓	✓
Ethnic Minority	✓	✓	✓	✓
Foreign Born		✓	✓	✓
Limited English Proficiency		✓	✓	✓
Disabled			✓	
Low-income	✓		✓	✓

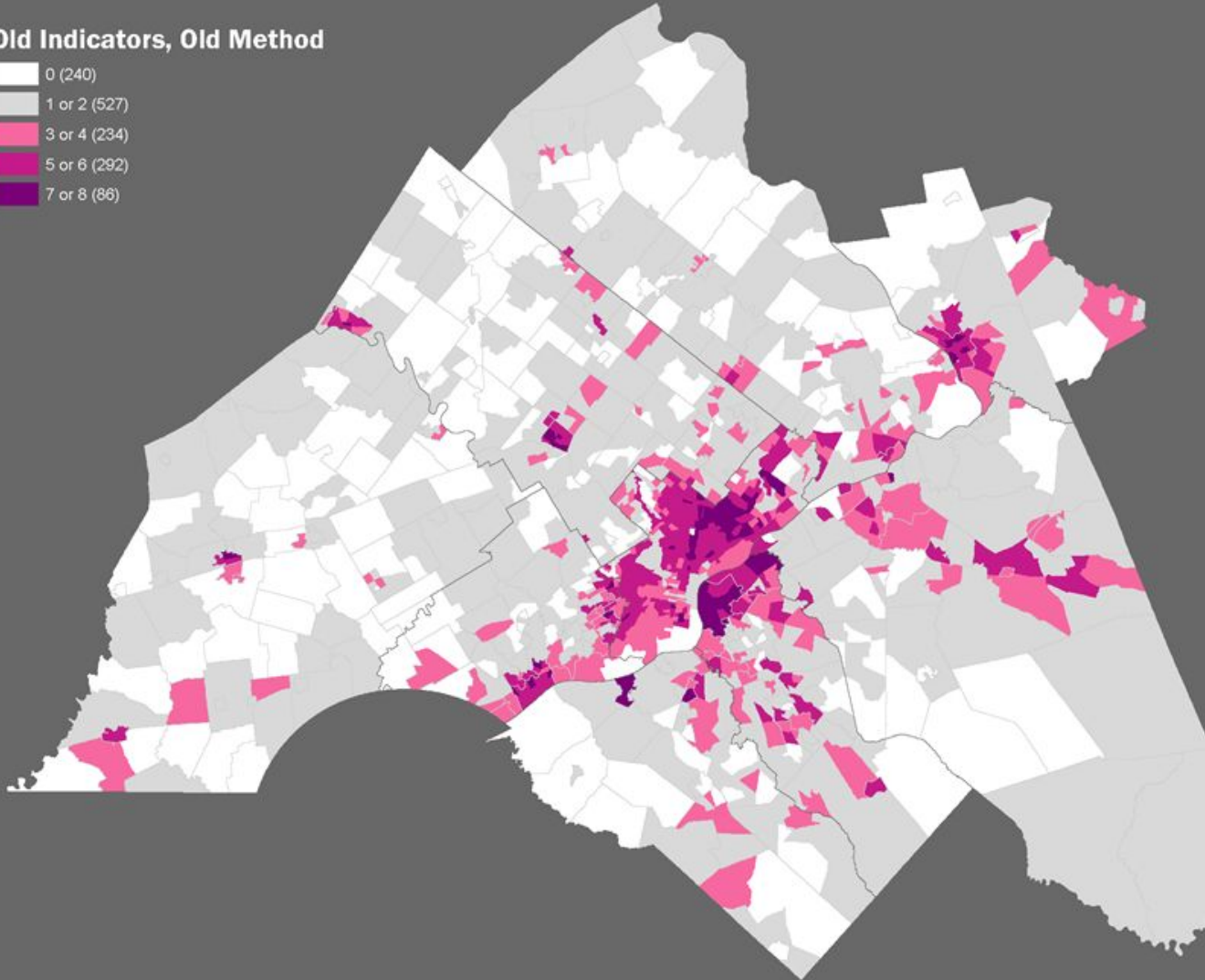
ALIGNING INDICATORS WITH LEGISLATION

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Youth			✓	
Older			✓	
Female			✓	
Racial Minority	✓	✓	✓	✓
Ethnic Minority	✓	✓	✓	✓
Foreign-Born		✓	✓	✓
Limited English Proficiency		✓	✓	✓
Disabled			✓	
Low-income	✓		✓	✓
Carless Households	✗	✗	✗	✗
Female Head of Household	?	✗	?	✗

IPD 2.0: UPDATING METHODOLOGY

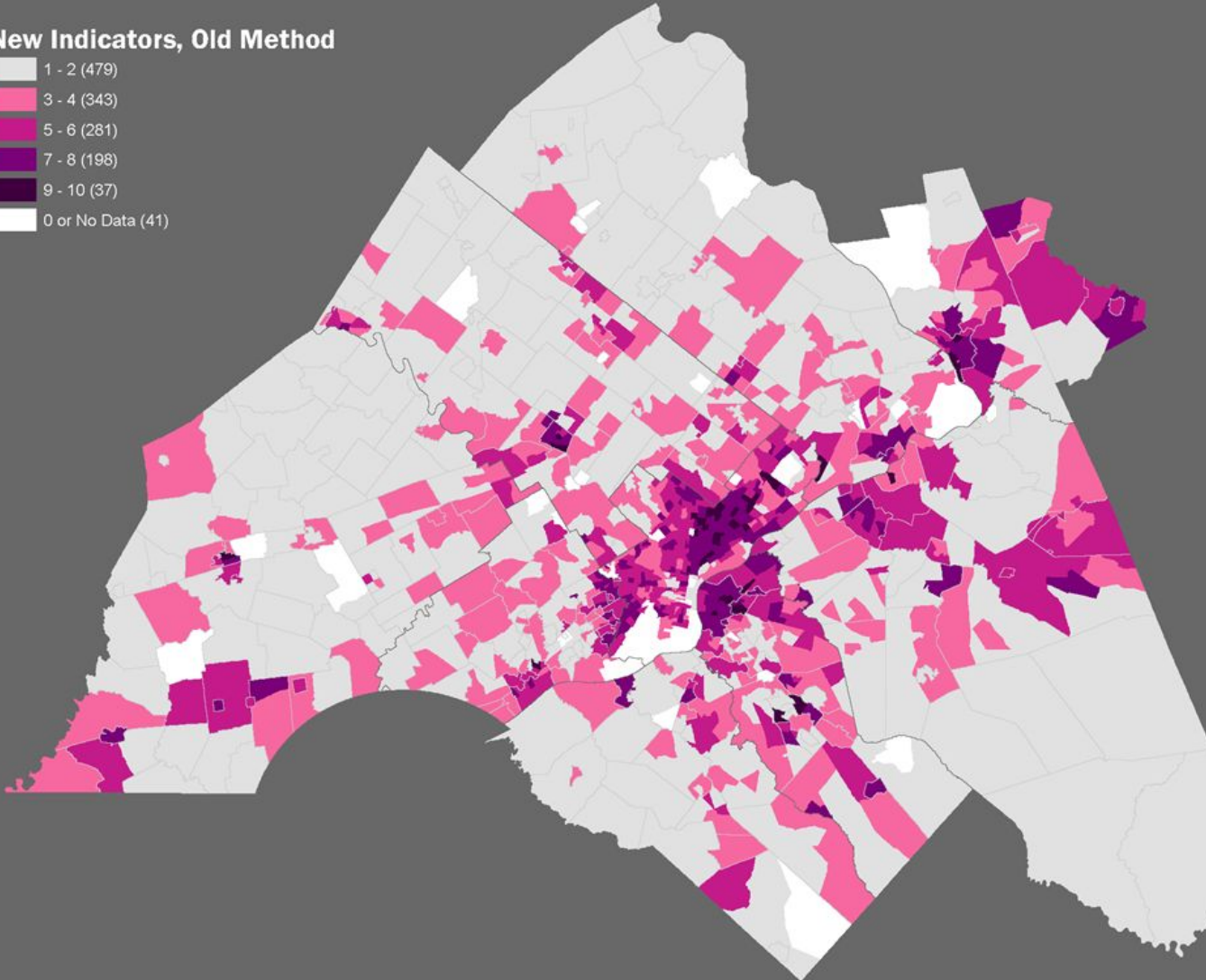
IPD 1.0 METHODOLOGY

Old Indicators, Old Method

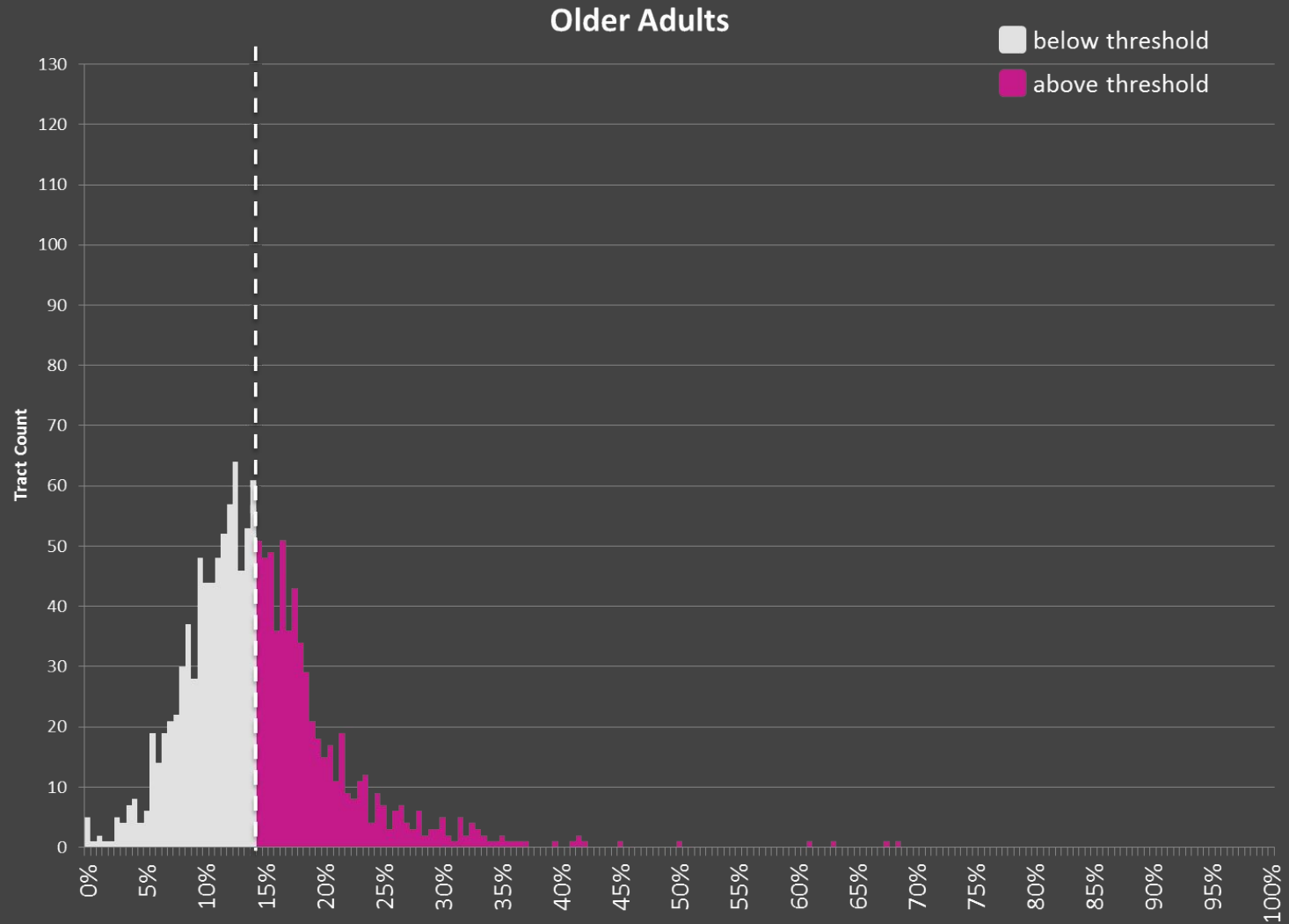


2.0 INDICATORS WITH 1.0 METHODOLOGY

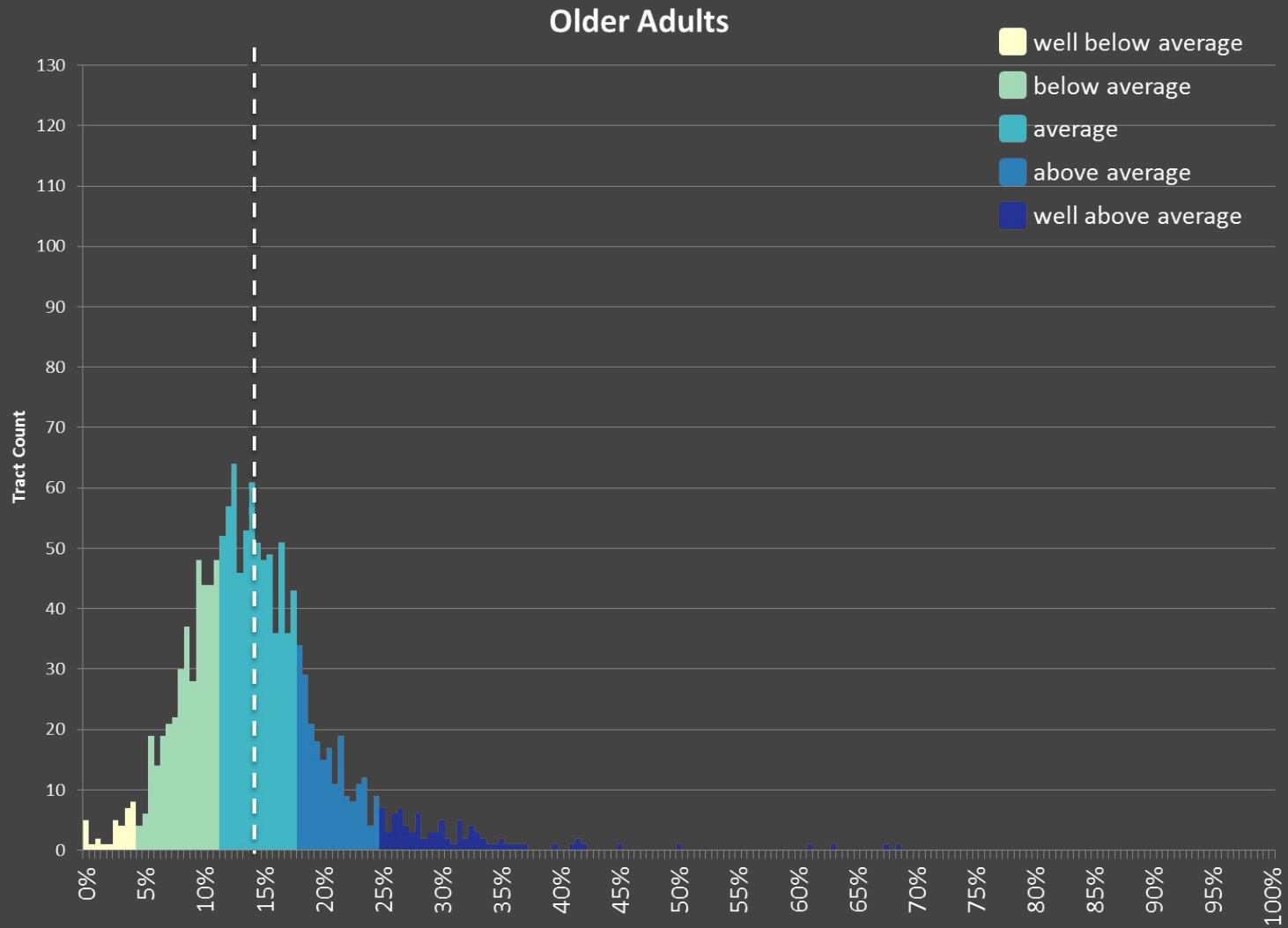
New Indicators, Old Method



1.0 METHODOLOGY

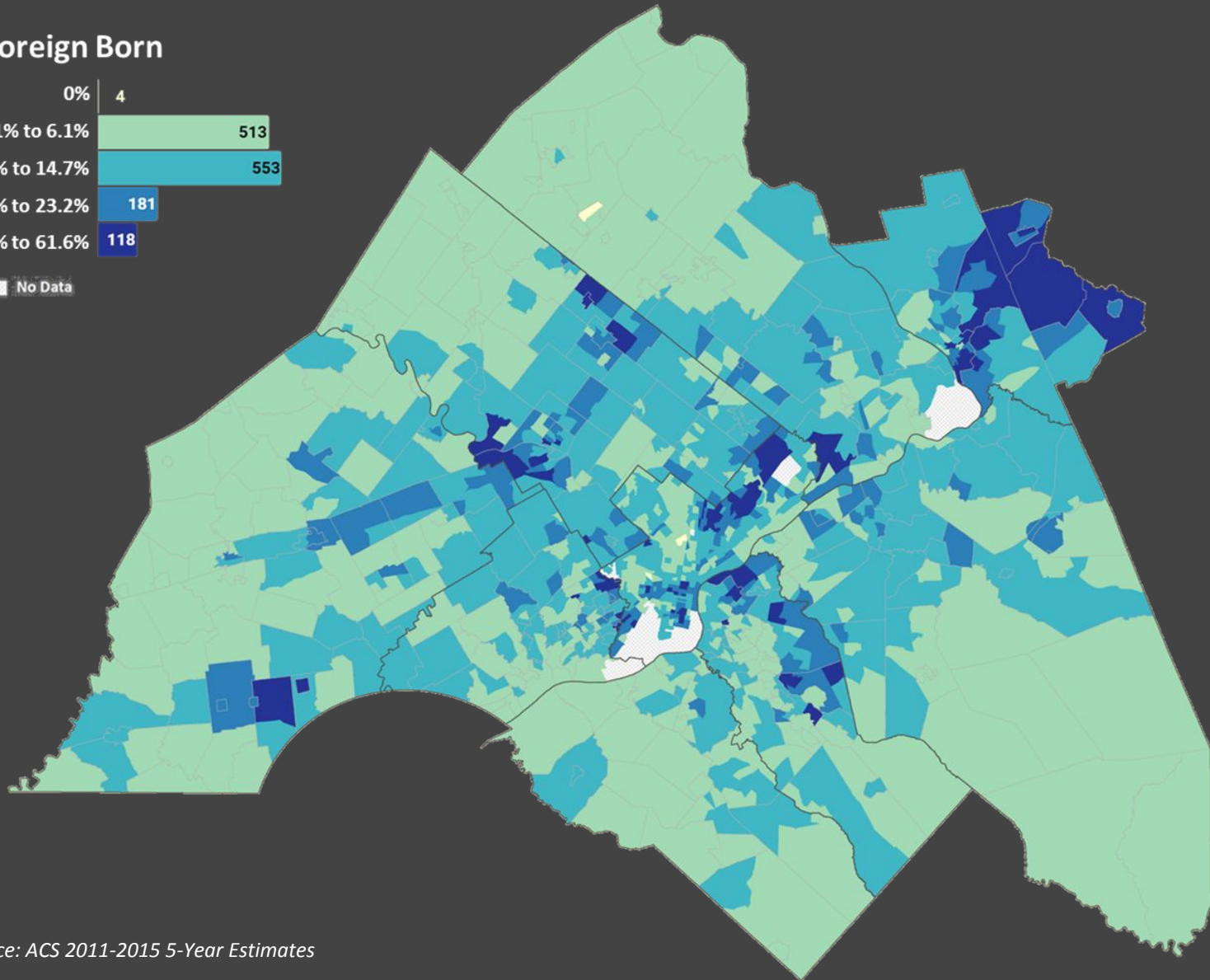
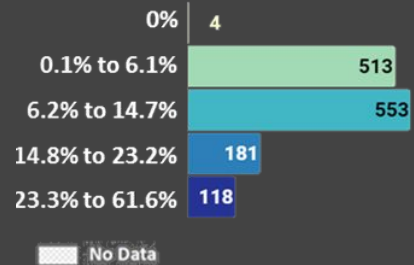


2.0 METHODOLOGY



IPD 2.0 INDICATORS + METHODOLOGY MAPPED

Foreign Born



Source: ACS 2011-2015 5-Year Estimates

IPD 2.0 METHODOLOGY: BINNING THE DATA

Youth

Older Adults

Female

Racial Minority

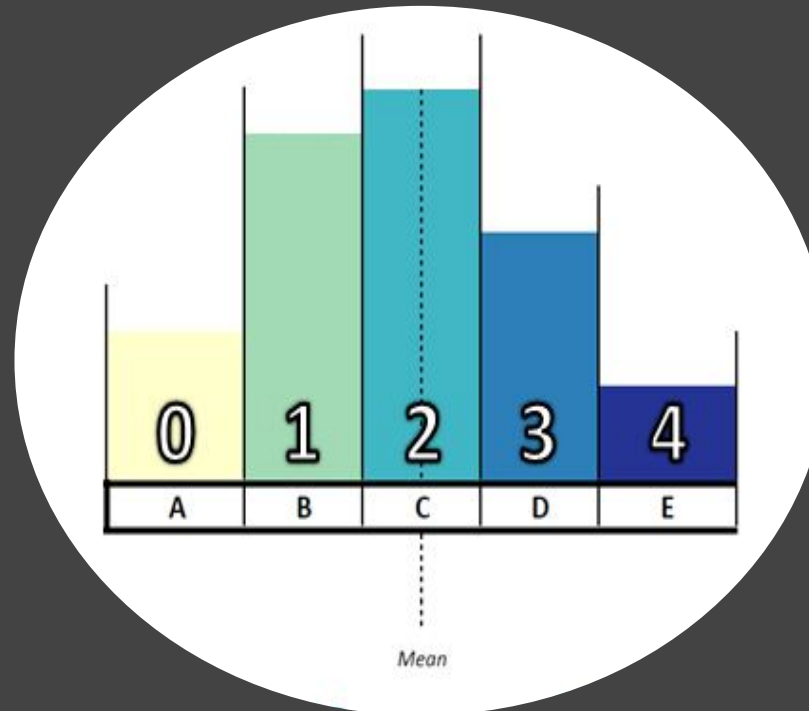
Ethnic Minority

Foreign Born

Limited English Proficiency

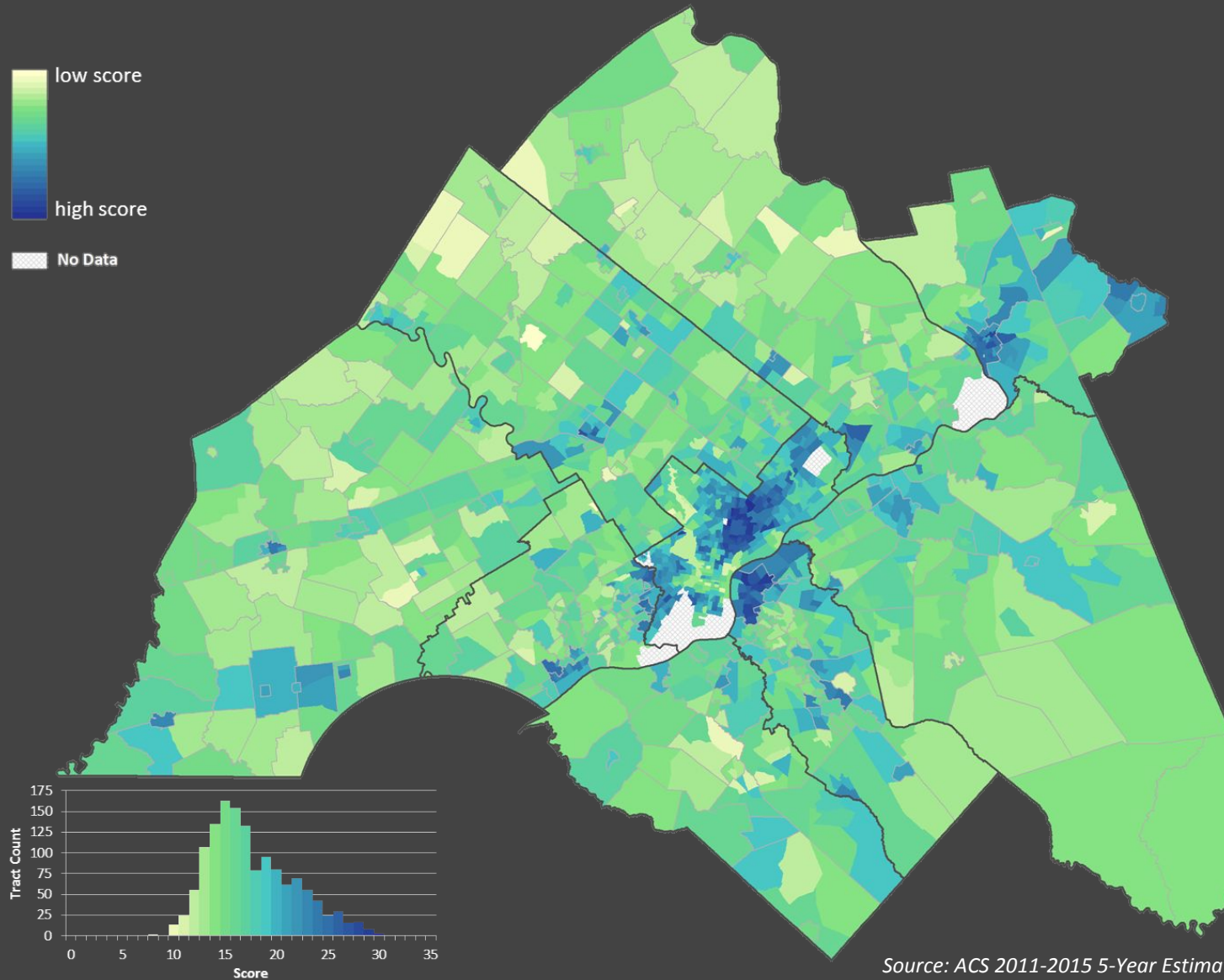
Disabled

Low-income

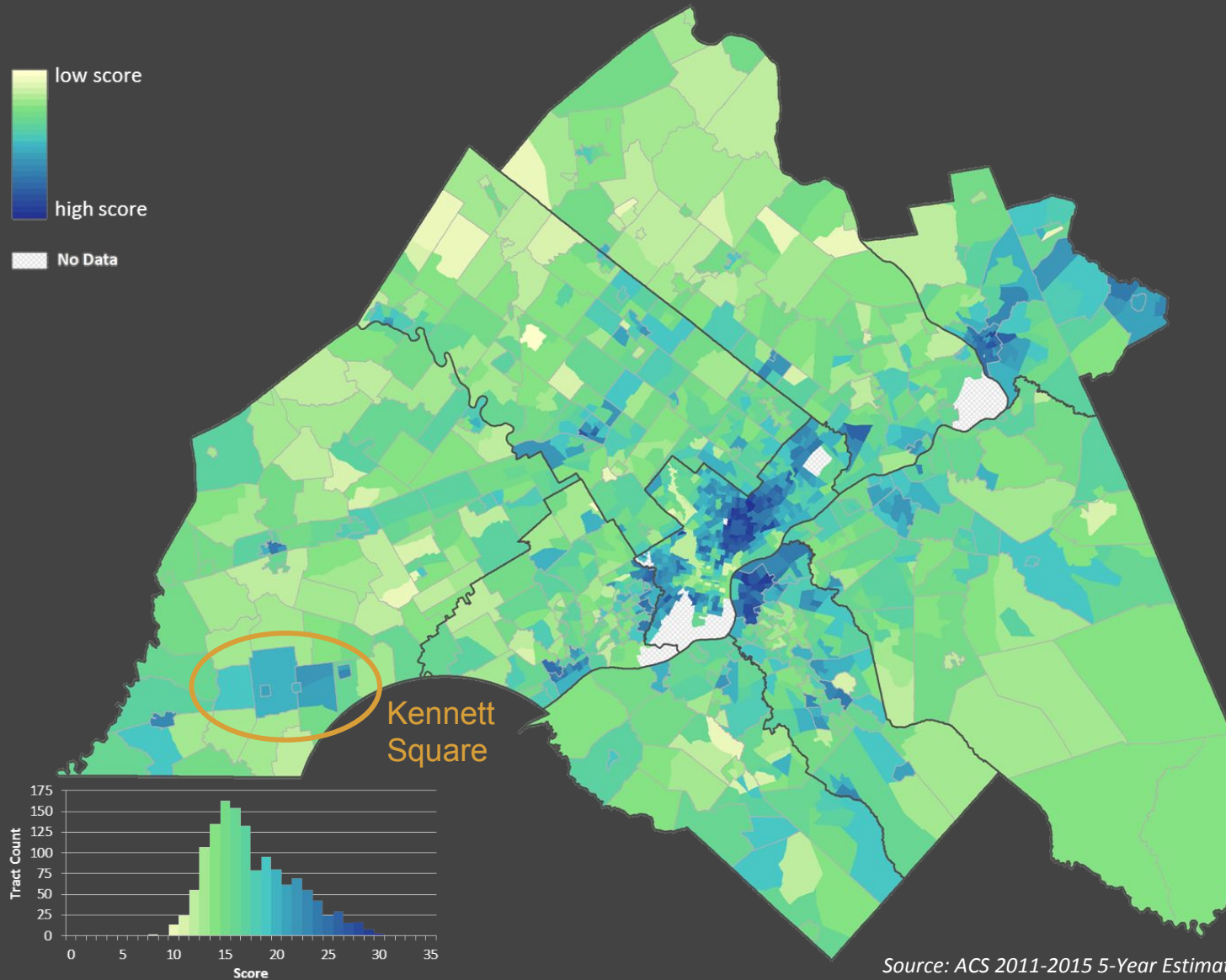


A - well below average
B - below average
C - average
D - above average
E - well above average

IPD 2.0 METHODOLOGY: THE END RESULT OF BINNING THE DATA



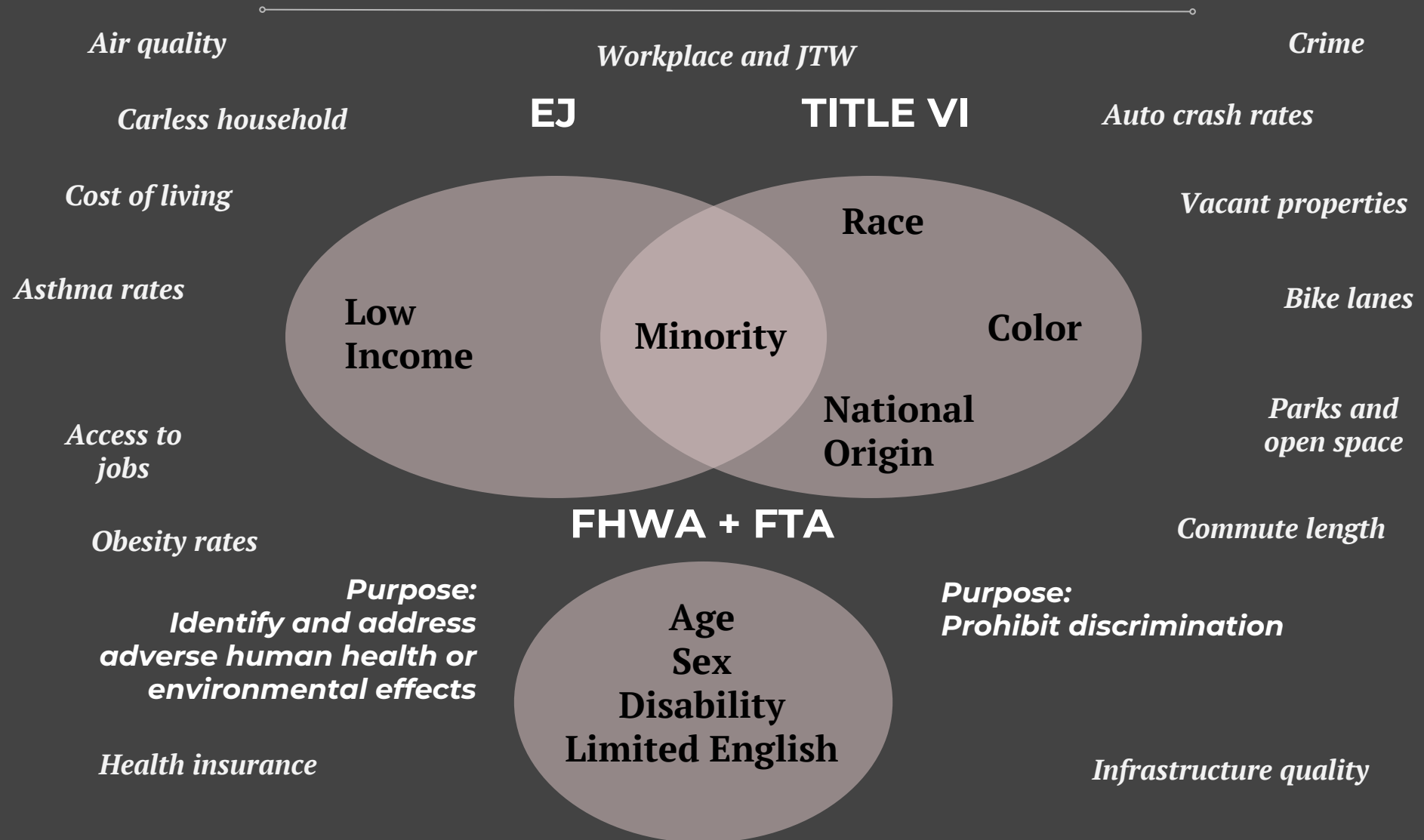
IPD 2.0 METHODOLOGY: THE END RESULT OF BINNING THE DATA



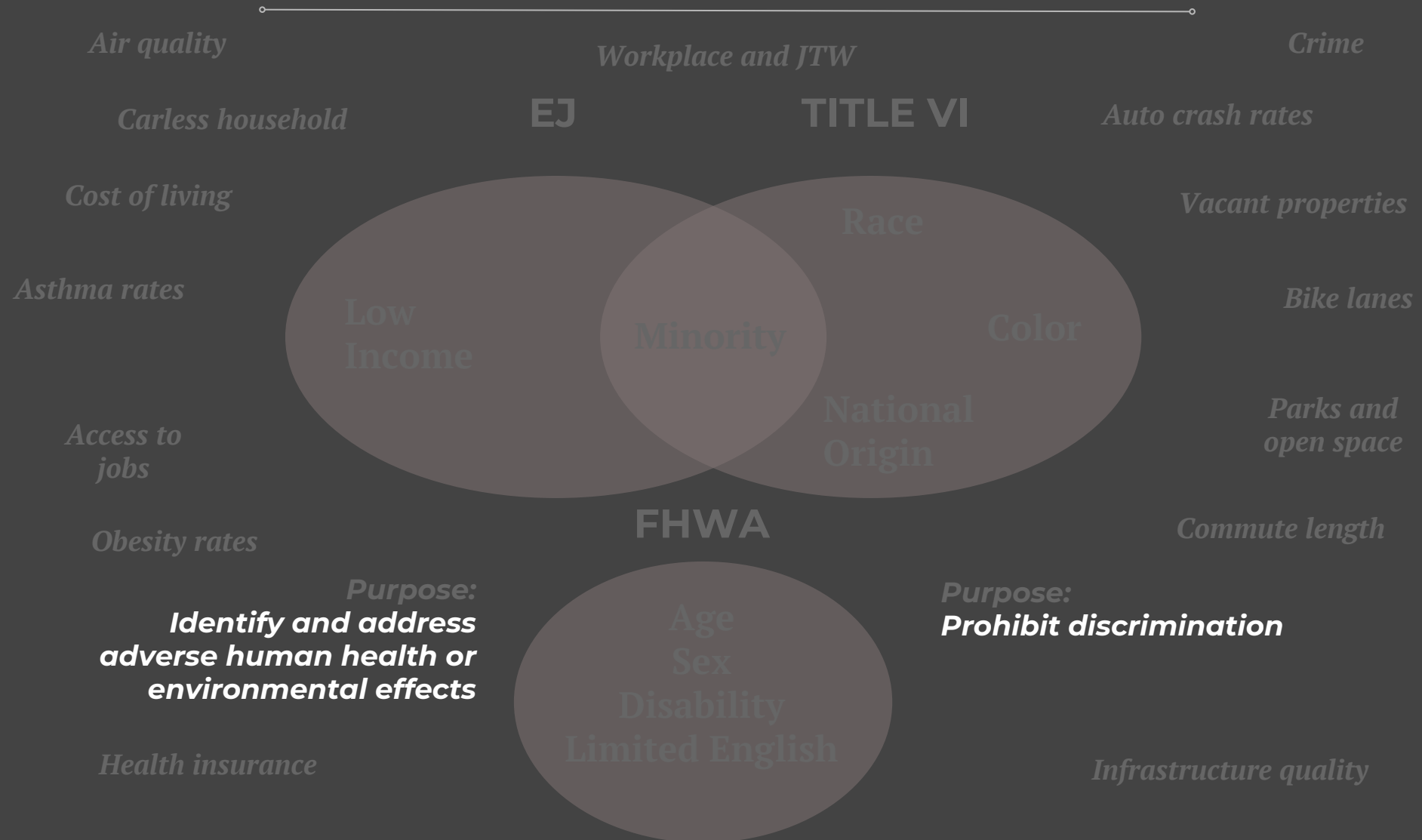
LESSONS LEARNED: BEYOND THE LEGISLATION



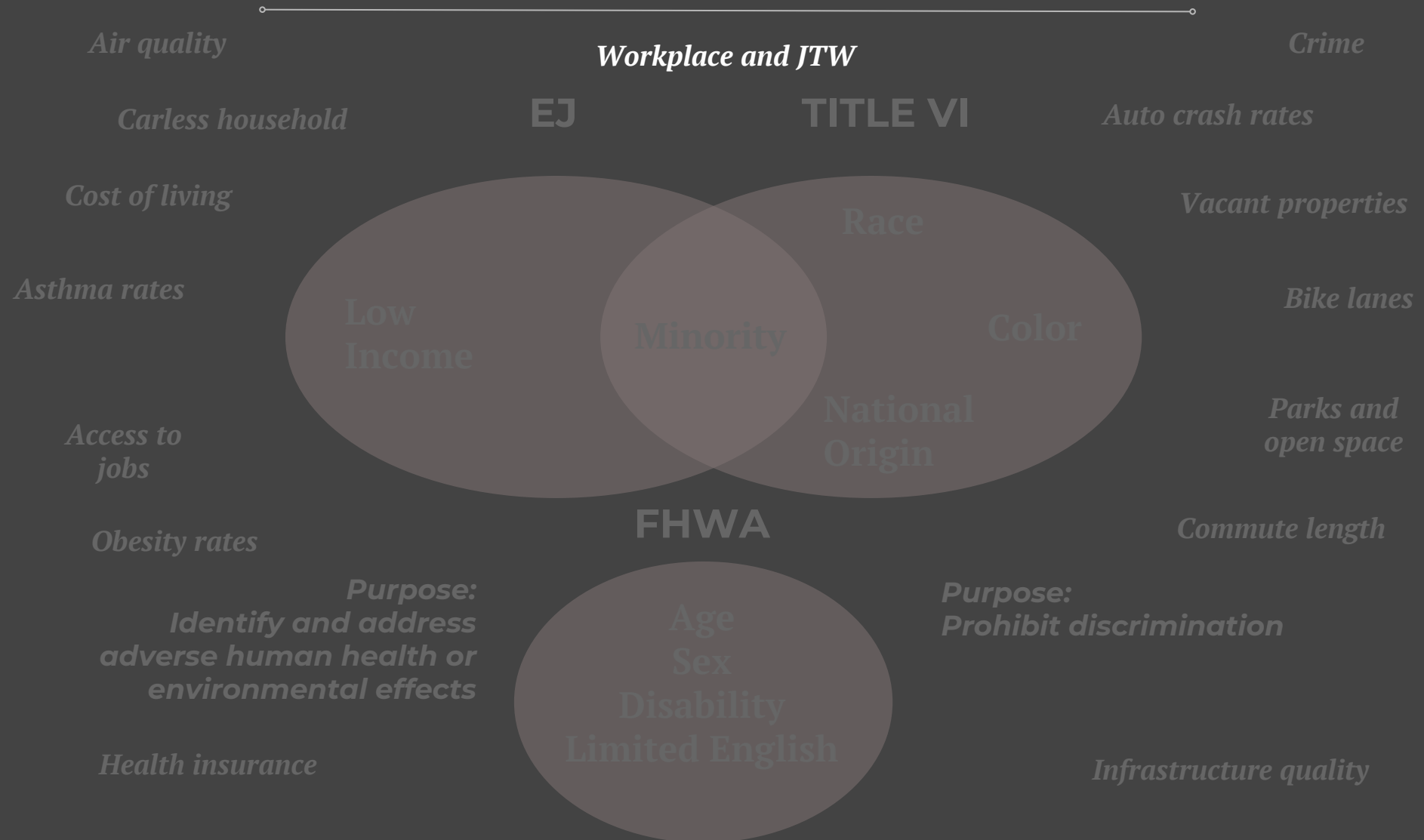
BEYOND THE LEGISLATION



BEYOND THE LEGISLATION



BEYOND THE LEGISLATION



IPD 2.1 EXPERIMENT #1

GO BEYOND RESIDENCE



CENSUS TRANSPORTATION PLANNING PRODUCTS (CTPP) EXPERIMENTATION

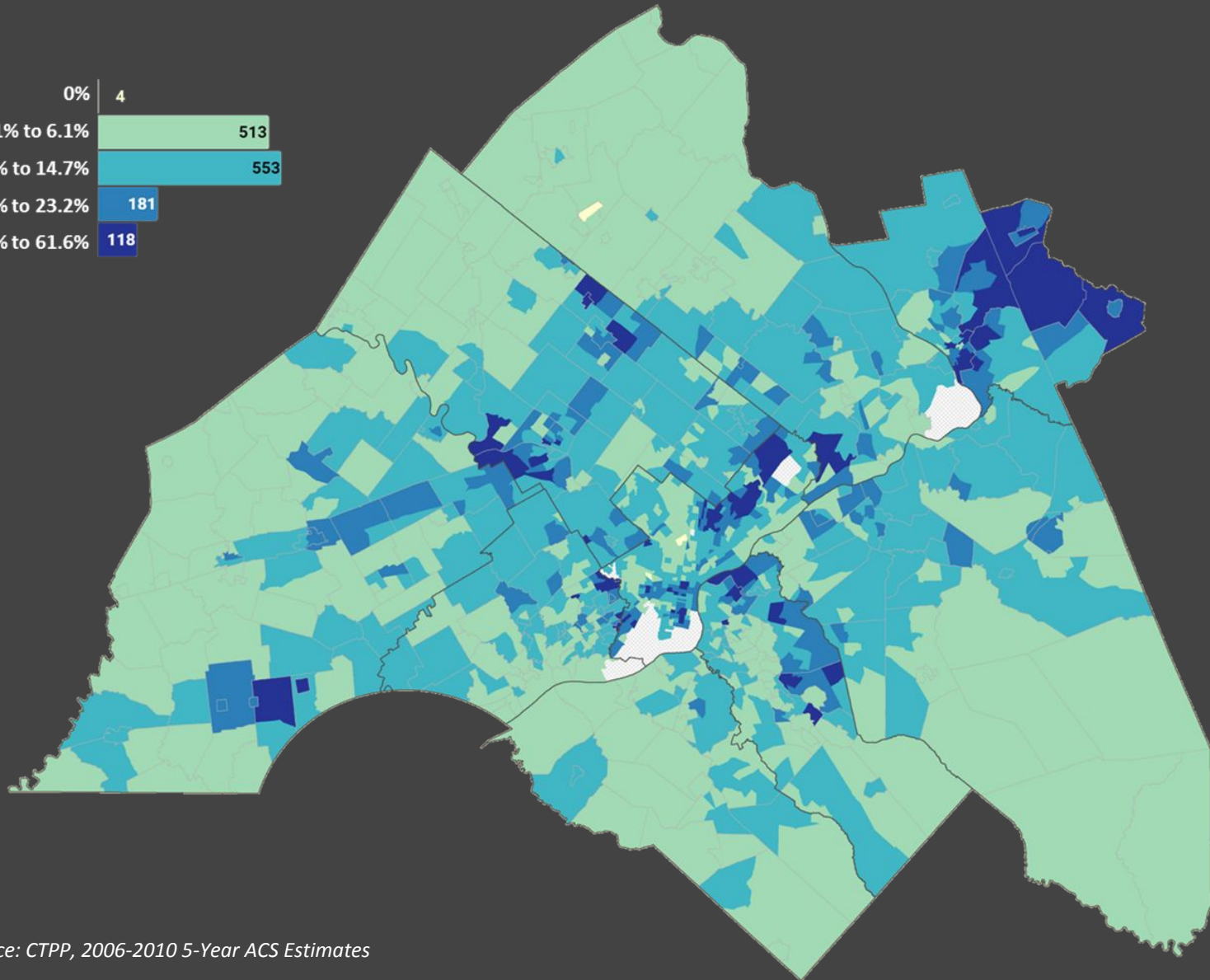
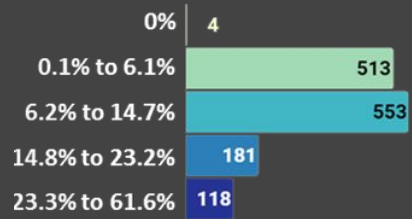
Workplace

- Minority (Race & Ethnicity)
- Foreign Born
- Limited English Proficiency
- Low Income (150% Poverty Rate)
- Carless Households

Journey-to-Work Flows

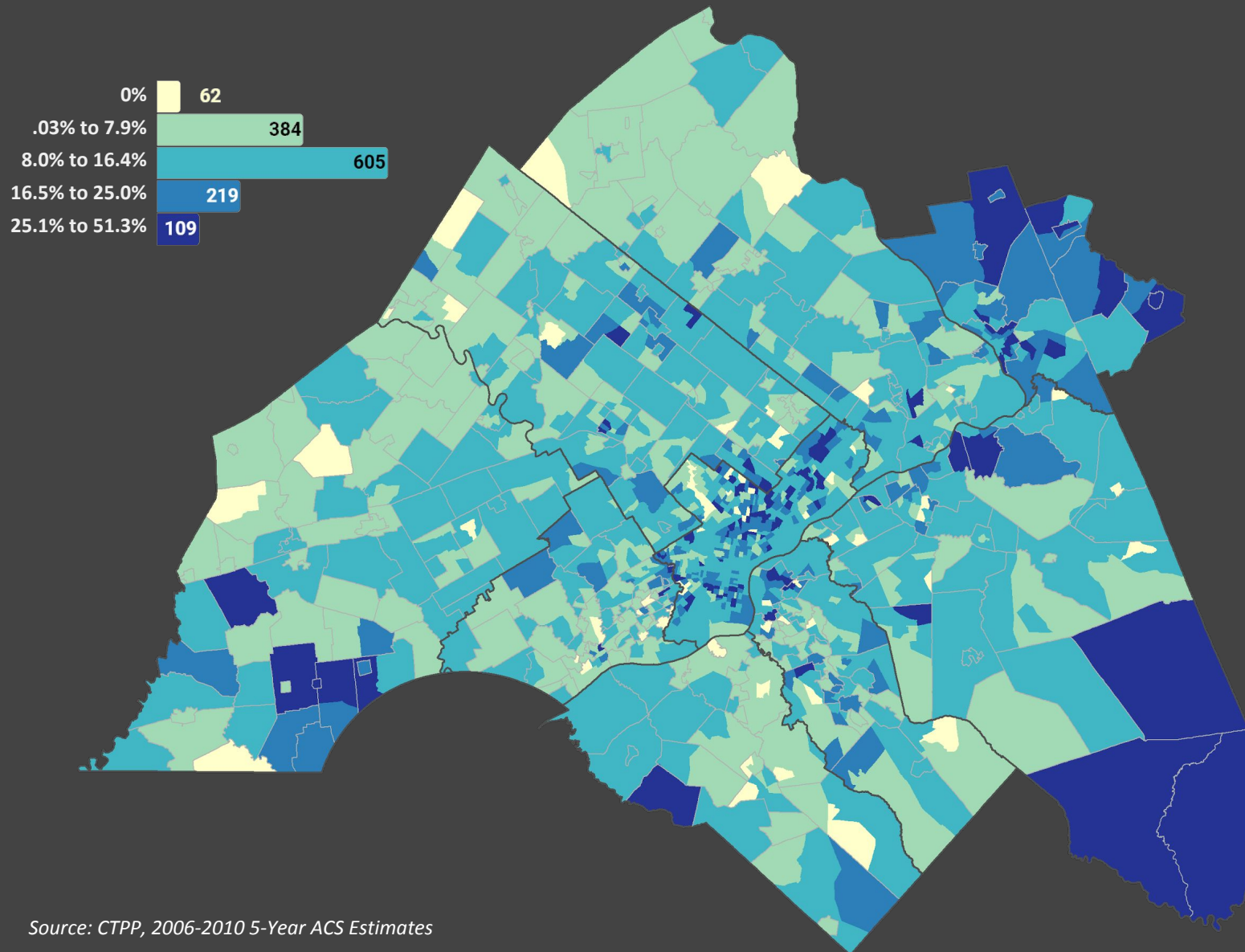
- Minority (Race & Ethnicity)
- Low Income (150% Poverty Rate)

FOREIGN BORN - RESIDENCE



Source: CTPP, 2006-2010 5-Year ACS Estimates

FOREIGN BORN - WORKPLACE



Source: CTPP, 2006-2010 5-Year ACS Estimates

THANK YOU!

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RESOURCES

DVRPC's IPD Interactive Map: www.dvrpc.org/webmaps/IPD/

FHWA Title VI guidance: <https://www.fhwa.dot.gov/civilrights/programs/tvi.cfm>

FTA EJ guidance:

<https://www.transit.dot.gov/regulations-and-guidance/fta-circulars/environmental-justice-policy-guidance-federal-transit>

CTPP Data: <http://ctpp.transportation.org/Pages/5-Year-Data.aspx>

List of CTPP EJ Tables: CTPP Status Report - April 2017

www.fhwa.dot.gov/planning/census_issues/ctpp/status_report/sr0417/index.cfm

EXTRA SLIDES



INDICATORS AND CENSUS TABLES

Indicator in IPD analysis update	ACS data table for indicator in IPD analysis	Protected class indicator represents
Youth	S0101: Age and Sex	Age
Older Adults	S0101: Age and Sex	Age
Female	S0101: Age and Sex	Sex
Racial Minority	B02001: Race	Race and Minority
Ethnic Minority	B03002: Hispanic or Latino Origin by Race	Minority and National Origin
Foreign Born	B05012: Nativity in the United States	National Origin
Limited English Proficiency	S1601: Language Spoken at Home	Limited English Proficiency, and National Origin
Disabled	S1810: Disability Characteristics	Disability
Low-Income	S1701: Poverty Status in the Past 12 Months	Low-Income

CTPP EXPERIMENTATION

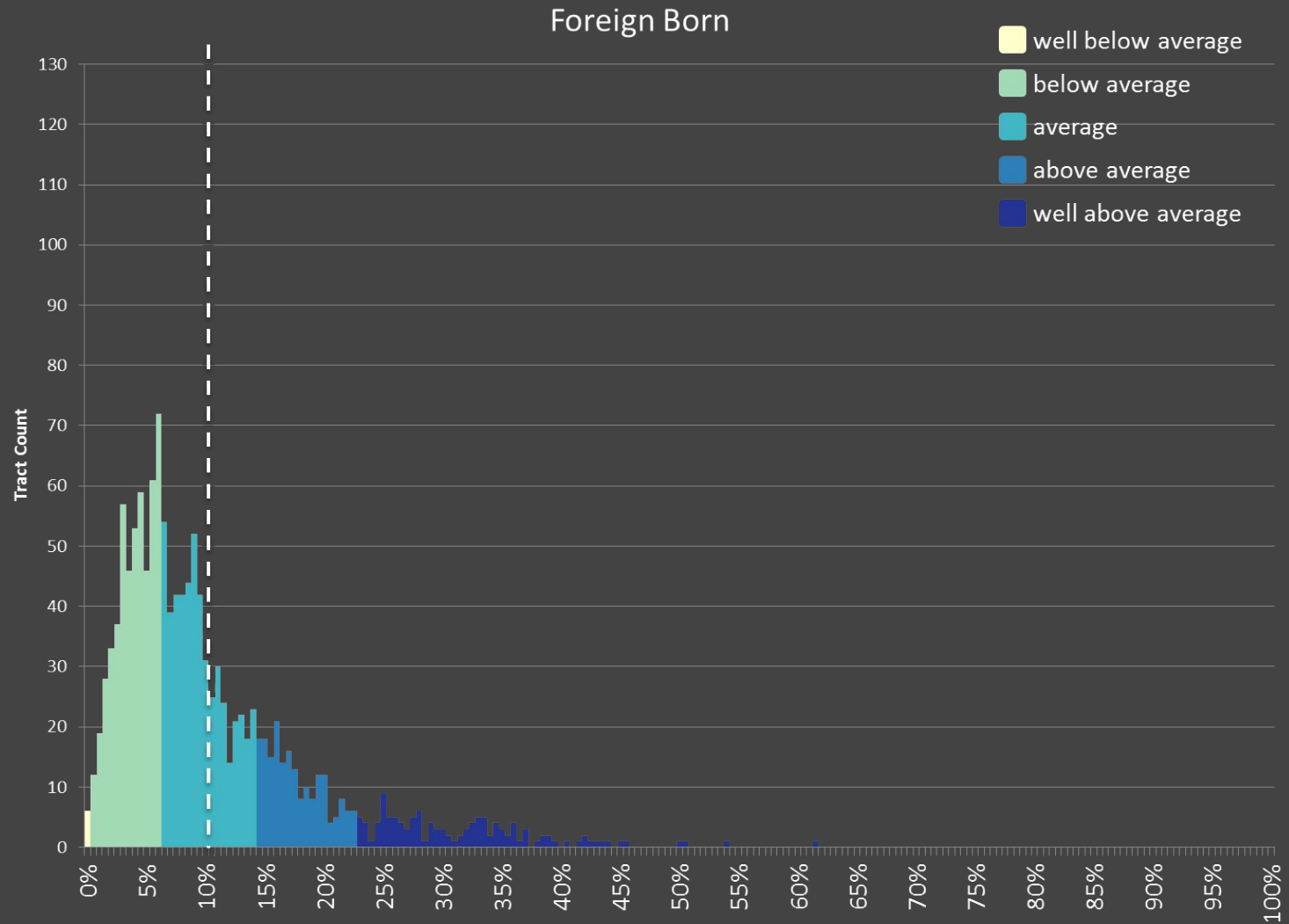
Workplace

- Minority (Race & Ethnicity)
- Foreign Born
- Limited English Proficiency
- Low Income (150% Poverty Rate)
- Carless Households

Journey-to-Work Flows

- Minority (Race & Ethnicity)
- Low Income (150% Poverty Rate)

FOREIGN BORN - RESIDENCE

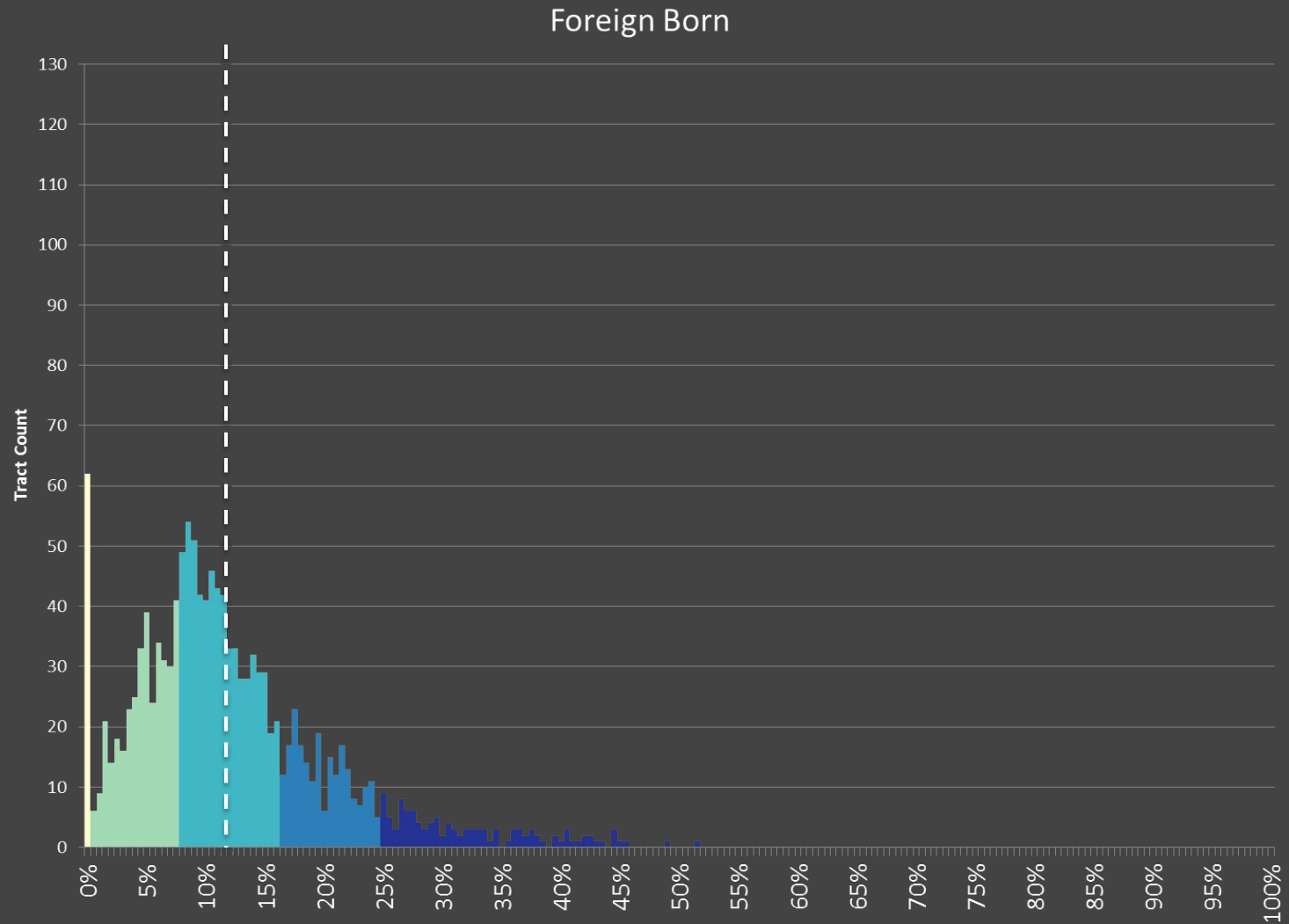


IPD 2.1 EXPERIMENT #1

GO BEYOND RESIDENCE



FOREIGN BORN - WORKPLACE

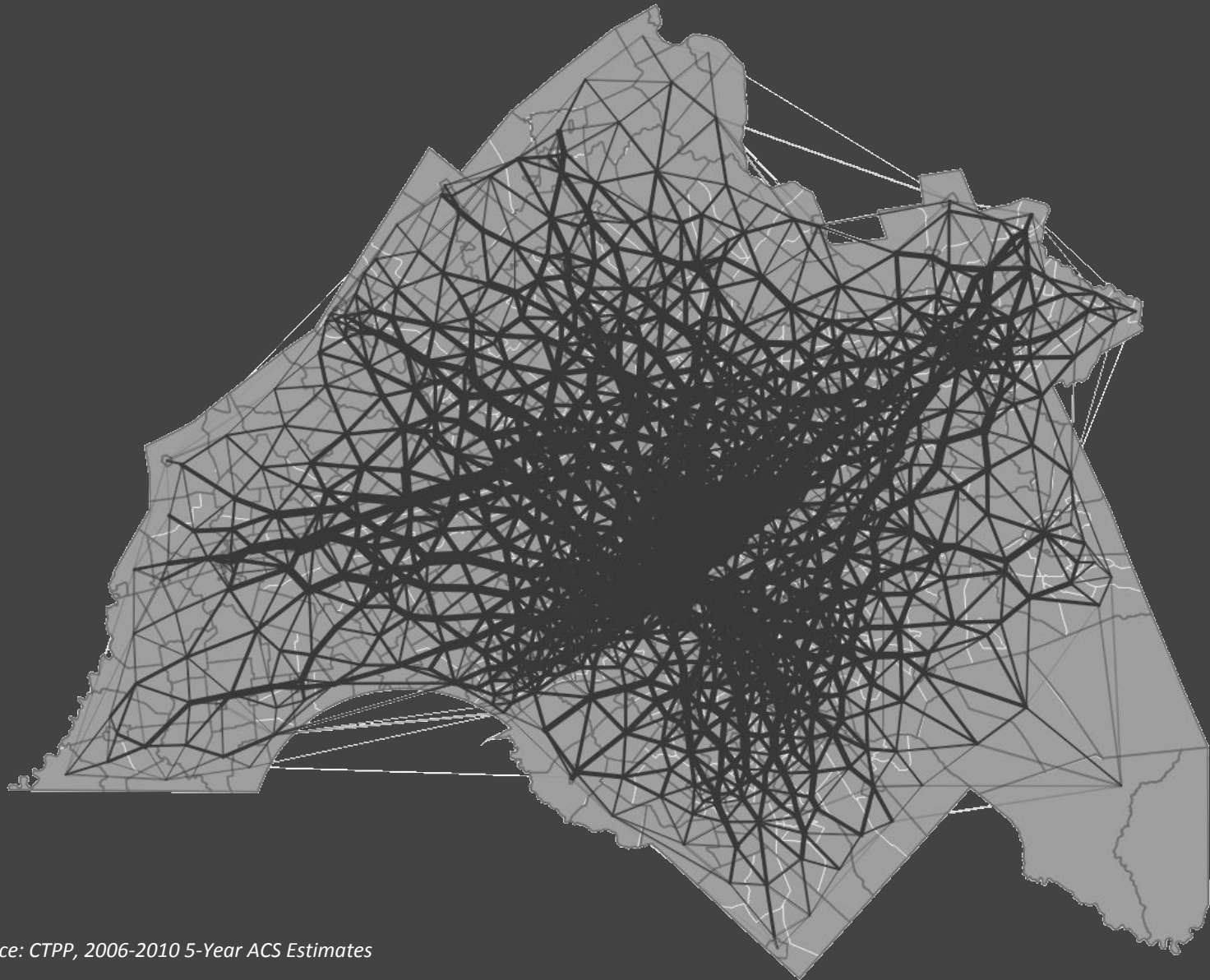


DESIRE LINES - TOTAL FLOW (20+ WORKERS)



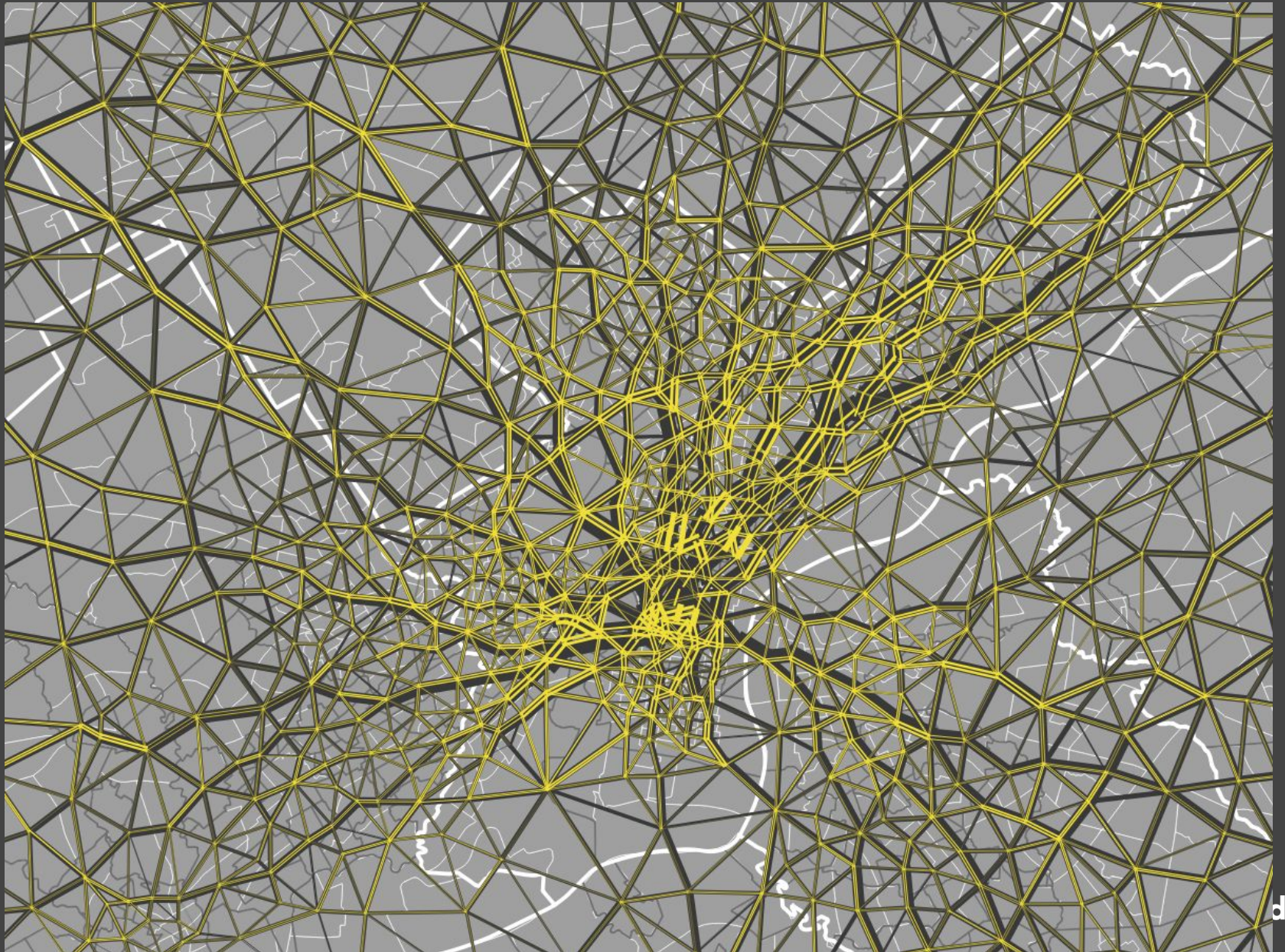
Source: CTPP, 2006-2010 5-Year ACS Estimates

DELAUNAY LINES - TOTAL FLOW



Source: CTPP, 2006-2010 5-Year ACS Estimates

DELAUNAY LINES - LOW INCOME FLOW

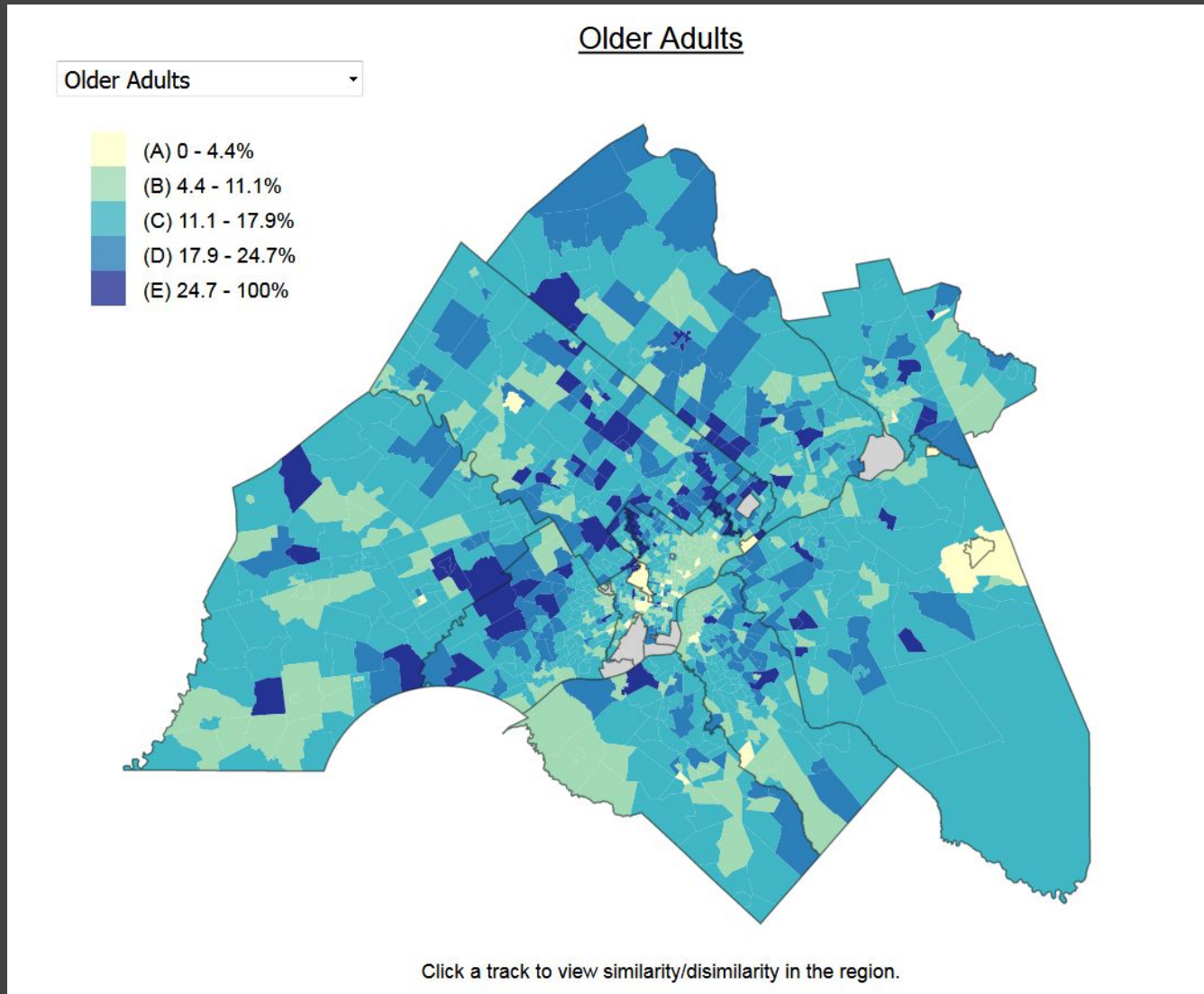


IPD 2.1 EXPERIMENT #2

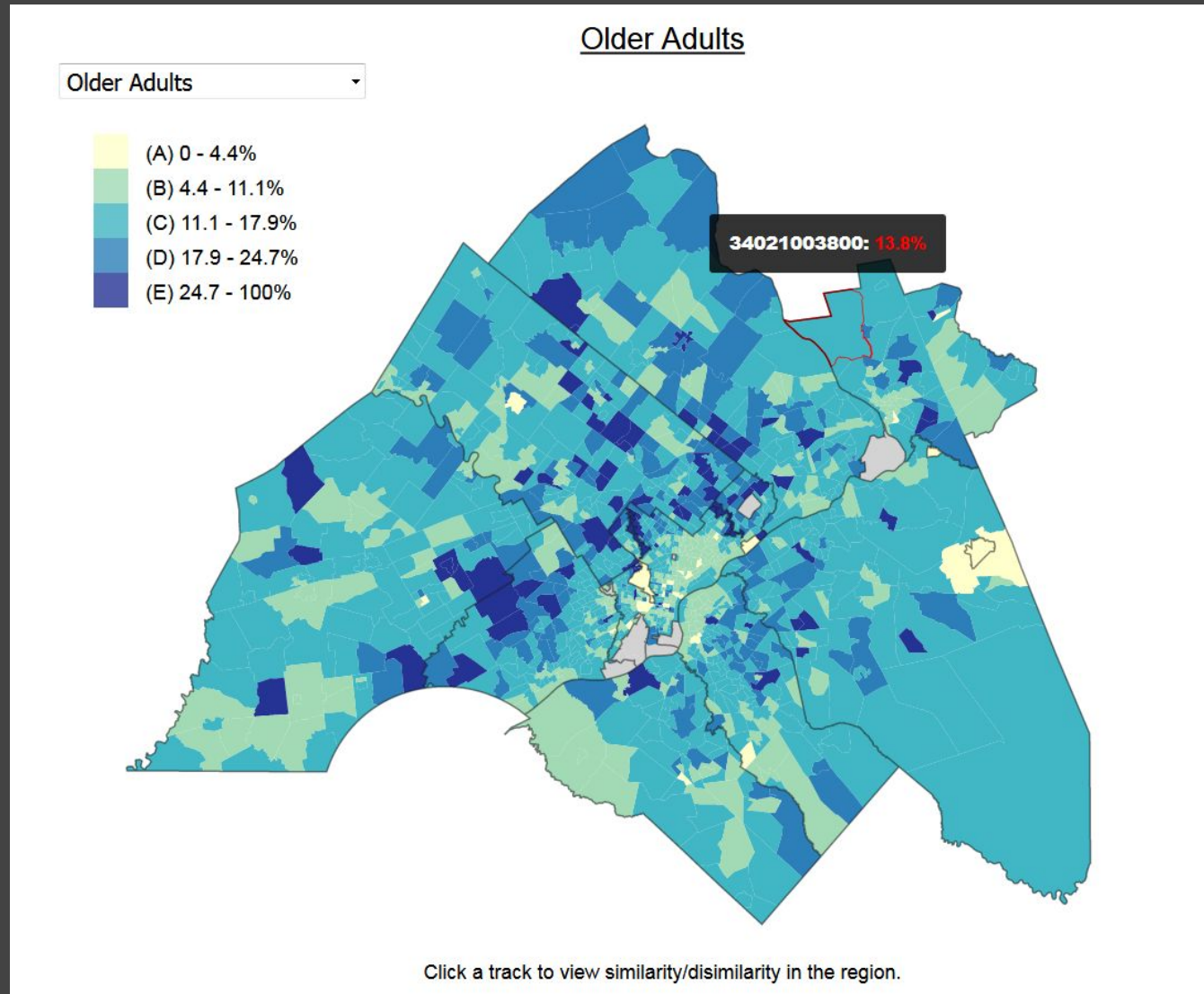
COMMUNICATE STATISTICAL SIGNIFICANCE



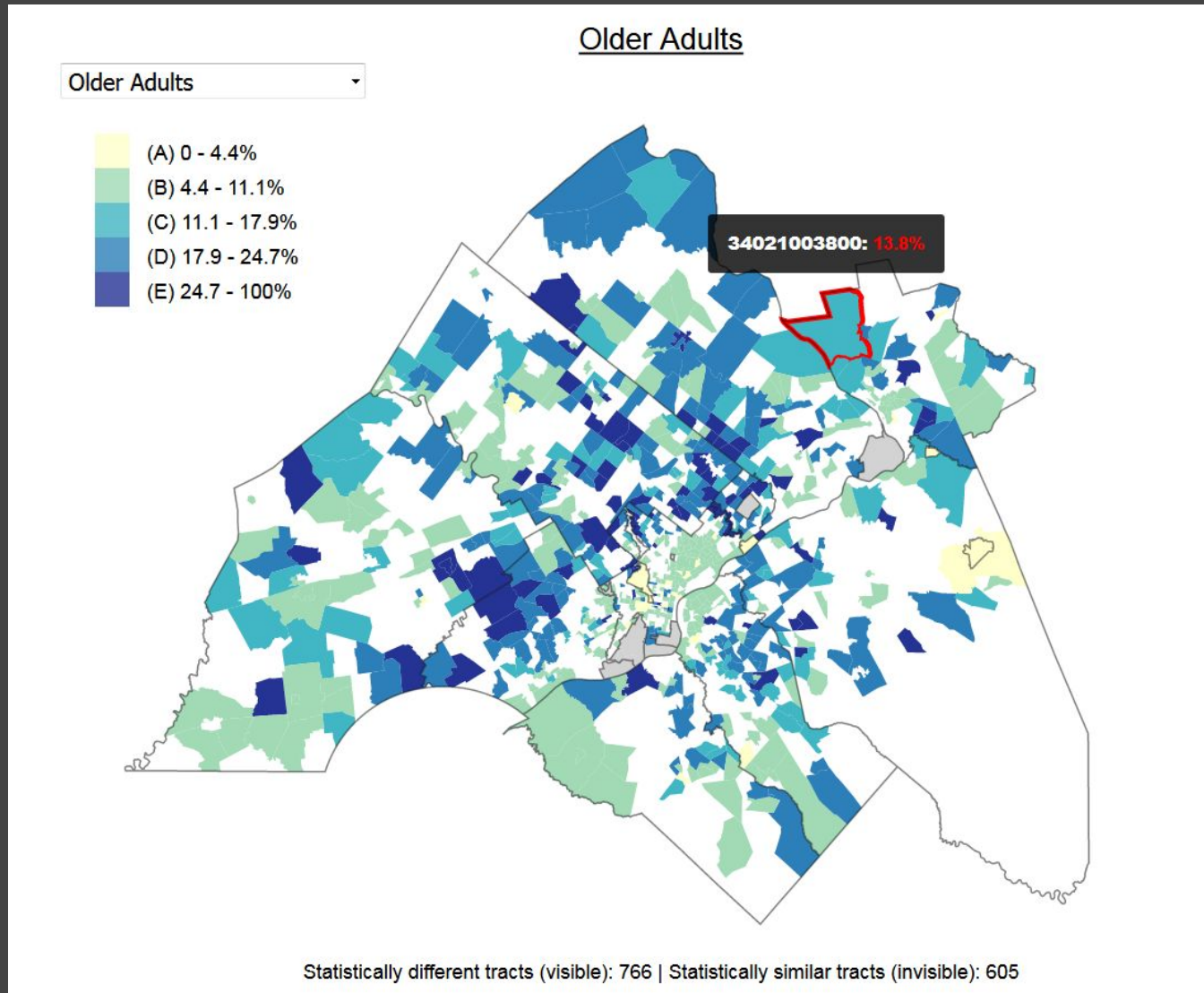
COMMUNICATE STATISTICAL SIGNIFICANCE



COMMUNICATE STATISTICAL SIGNIFICANCE

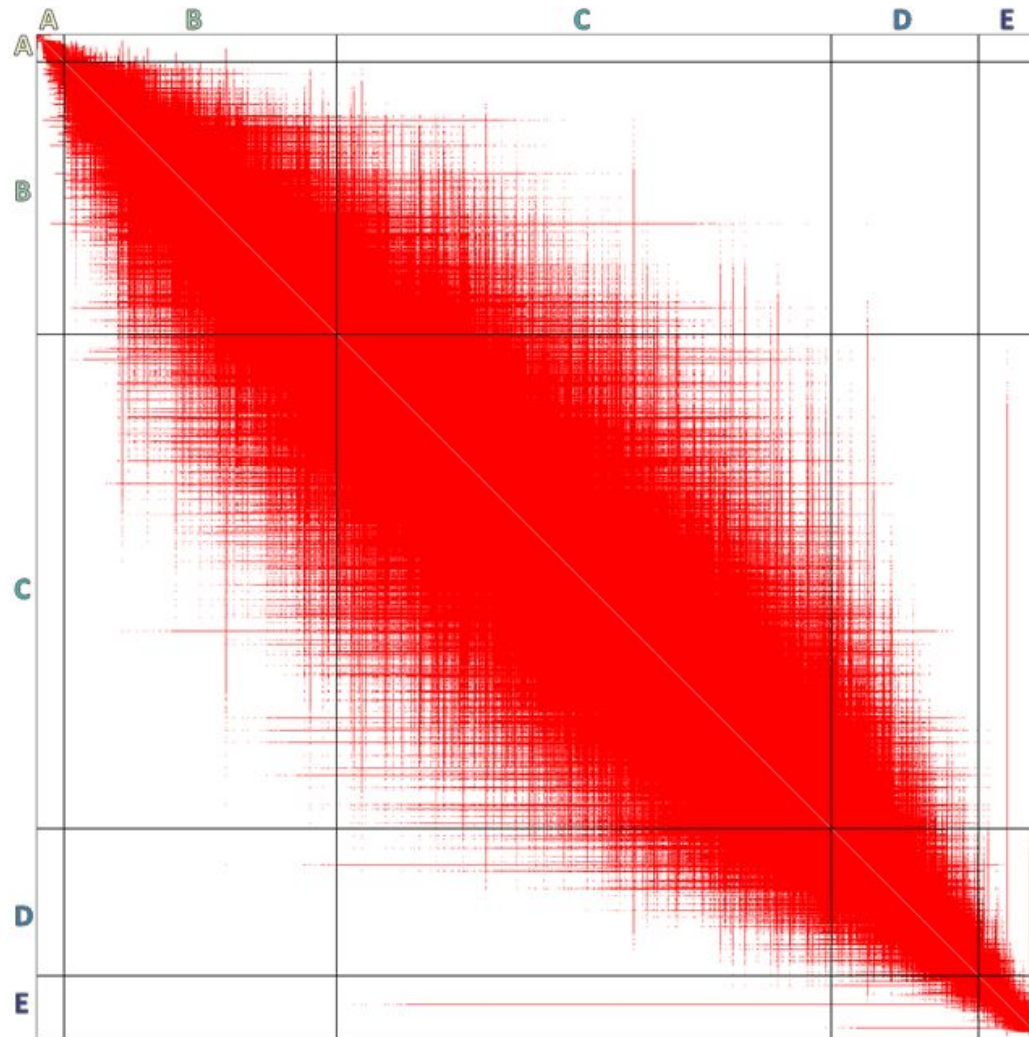


COMMUNICATE STATISTICAL SIGNIFICANCE



COMMUNICATE STATISTICAL SIGNIFICANCE

Older Adults



Percent Not Distinct

	A	B	C	D	E
A	65%	7%	0%	0%	0%
B	7%	76%	22%	0%	0%
C	0%	22%	78%	23%	1%
D	0%	0%	23%	88%	18%
E	0%	0%	1%	18%	61%

A – well below average

B – below average

C – average

D – above average

E – well above average





Kentucky Division Office

Columbus-Beimont State Park

Newtown Pike Extension

Presentation to:
AASHTO Environmental Justice
Community of Practice Webinar
January 30, 2018

David Whitworth, FHWA-KY



U.S. Department of Transportation
Federal Highway Administration

Project Purpose & Need

Kentucky Division Office

Columbus-Belmont State Park

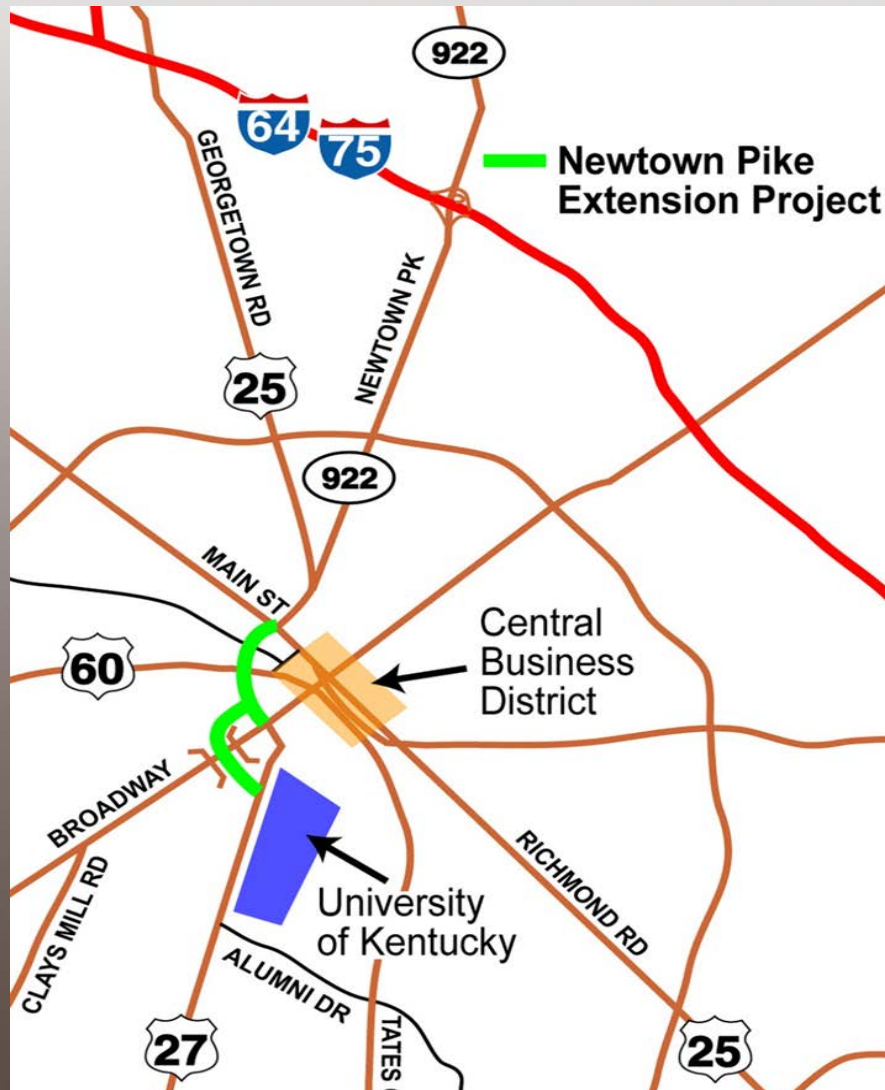
- Reduce automobile congestion
- Improve traffic flow
- Vehicle routing to University of KY
- Improve bike/ped. access
- Improve safety
- Improve downtown area



Project Area

Columbus-Beimont State Park

Kentucky Division Office



U.S. Department of Transportation
Federal Highway Administration

Davis Bottoms

Kentucky Division Office

Columbus-Beimont State Park

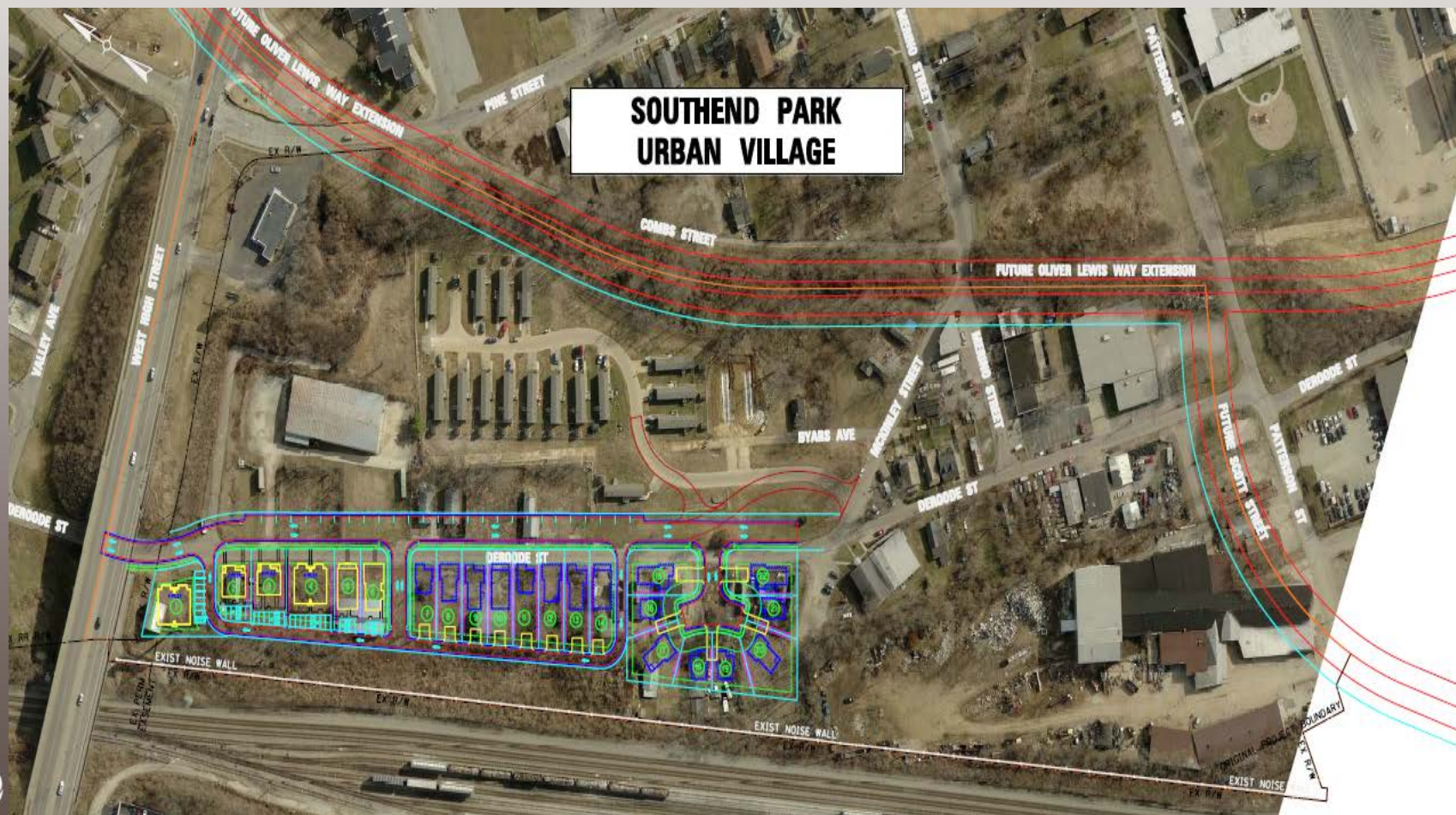


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Federal Highway Administration

Davis Bottoms (SPUV)

Columbus-Beumont State Park

Kentucky Division Office



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Davis Bottoms

Columbus-Beimont State Park

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EJ Concerns

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Columbus-Belmont State Park

- **Disproportionate Impact**
- **Lowest income area of Lexington**
- **Consisted of Elderly, Handicapped, Minorities, & Low Income**
- **Community Cohesion**
- **Lack of Affordable Housing**
- **Public Involvement & Agency Coordination**



Guiding Principles

Columbus-Belmont State Park

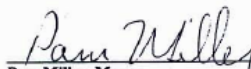
Kentucky Division Office

GUIDING PRINCIPLES NEWTOWN PIKE EXTENSION AUGUST 12, 2002

The below principles create the foundation for implementing the Newtown Extension Project through a partnership of the Lexington Fayette Urban County Government (LFUCG), University of Kentucky (UK), Federal Highway Administration (FHWA) and Kentucky Transportation Cabinet (KYTC). The Newtown Pike Extension Project is an important local and state transportation need that has the ability to improve the quality of life of all persons using or living within the transportation corridor by:

- Reducing traffic congestion both in the downtown and in neighborhoods within the project corridor by providing alternative routes and lessening traffic diverting through neighborhoods,
- Improving pedestrian safety downtown, along neighborhood streets, and on the north end of the University of Kentucky campus,
- Encouraging greater use of alternative modes of transportation by providing an increase in infrastructure that supports walking, cycling and public transit,
- Recognizing the potential impacts of the proposed Newtown Pike Extension on the surrounding communities through the use of extensive public involvement,
- Mitigating the proposed project impacts through implementation of LFUCG's Small Area Plans,
- Cooperating and committing to actions that address the transportation needs, environmental justice issues, and affordable housing within the low-income neighborhoods of Davistown, Irishtown, and Pralltown while providing compatible development and cultural / aesthetic enhancements,
- Providing an opportunity for redefining and improving the attractiveness of the downtown
- And, accomplishing the above without imposing an unfair burden on other areas.

We concur with these principles for the continuation of the extension of Newtown Pike as signed on August 12, 2002.



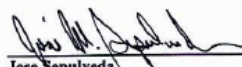
Pam Miller, Mayor
Lexington-Fayette Urban County Government



Lee T. Todd, Jr., President
University of Kentucky



James C. Codell, III
Secretary
Kentucky Transportation Cabinet



Jose Sepulveda
Kentucky Division Administrator
Federal Highway Administration



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Federal Highway Administration



Project Team Obstacles

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Columbus-Belmont State Park

- Keeping community together & nearby
- Building trust with community members (Residents and Nathaniel Mission)
- Multiple agency coordination and regulations (HUD, LFUCG, FHWA, and KYTC)
- ROW issues with generations of unknown owners
- Inventing a process to redevelop area
- Extremely difficult phased construction





Major Unique Solutions

Kentucky Division Office

Columbus-Belmont State Park

1. **Developed Community Land Trust (CLT)**
2. **Constructed temporary on-site housing**
3. **Hired neighborhood liaison**
4. **Significant public involvement**
5. **Documented history and stories**
6. **Hired social workers and funded classes**





Community Land Trust

Kentucky Division Office

Columbus-Beckmont State Park

- **Non-profit membership organization that owns and stewards land for the benefit of the community to preserve the affordability permanently.**
- **Separates ownership of buildings from ownership of the land.**
- **Provides land and housing to people who are otherwise denied access and increases long-term community control of neighborhood resources. Preserves permanent affordability of housing.**



Built Temporary Housing

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Hired Neighborhood Liaison

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Rapid Assessment Completed

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Extensive Public Involvement

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Social Workers/Classes

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Where Are We Now



Kentucky Division Office

Columbus-Beimont State Park

- Built 14 new affordable units in late 2014 (2 single family, 2 quadplex, 4 duplexes)
- Built 5 single family homes in 2015
- More homes under construction
- Completed road construction
- Rebuild Park Area (4f resources) in 2018-19



Davis Park Envisioned

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Construction Progress

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Columbus-Beimont State Park



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Finished Homes

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And then there were more

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Current Area

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Costs

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Road Construction Cost= \$49 Million

Mitigation Cost=\$49 Million



Awards

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Office of Planning, Environment, & Realty (HEP)

Planning Environment Real Estate HEP Events Guidance Publications Glossary Awards

EHEI

Exemplary Human Environment Initiatives

Award Categories

Award Criteria

Annual Award Recipients

- ▶ 2012
- ▶ 2011
- ▶ 2010
- ▶ 2009
- ▶ 2008
- ▶ 2007

FHWA → Environment → EHEI → Awards → 2008

EHEI Award: Enhancing Environment for Human Activities

Preserving Affordable Housing

Kentucky

The transportation planning process for the Newtown Pike Extension in Lexington, Kentucky, incorporated a Community Land Trust (CLT) to preserve affordable housing and community cohesion in the Davistown neighborhood.

Since the 1960s, local and Federal transportation authorities discussed extending the Newtown Pike from I-64 into downtown Lexington. The original plans for the extension

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Publication Number: FHWA-HRT-12-003
Issue No: Vol. 75 No. 5
Date: March/April 2012

ARTICLES

DEPARTMENTS

Editor's Notes

Along the Road

Best of The Best: America's Transportation Awards!

by Maggie Perrigo

Check out these extraordinary success stories: AASHTO announces its top 2011 honorees for design and delivery of highway innovations.

Eight Other Honorees

In addition to the grand prize and people's choice awards, AASHTO recognized eight other projects for outstanding work. "Each of these 10 projects truly exemplifies all that is right with our national transportation system," says AASHTO Executive Director John Horsley. "The America's Transportation Awards competition allows us to honor and recognize projects that save taxpayers money, offer new and innovative ideas to the industry..., and make our commutes easier and safer."

Kentucky. To accommodate the influx of thousands of visitors for the 2010 World Equestrian Games, the Kentucky Transportation Cabinet had to complete the Newtown Pike extension in a very short period. An already tight construction timetable had to be amended to include unanticipated work. Even so, the agency finished the project 2 weeks before the event, allowing for smooth traffic flow to the games. Ultimately, the new road has led to a reduction in congestion and a more pedestrian- and bicycle-friendly area.

"The teams working on this project set a new standard for cooperation and coordination in our community that will serve as a model for future transportation projects," says Lexington Mayor Jim Gray.



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Articles & Press

Columbus-Belmont State Park

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Environmental Justice

History
Legislation
EJ, Title VI, & Equity
EJ at DOT
EJ at FHWA
Case Studies
Training
Resources
Key References
Publications
Related Links

FHWA → Environment → Environmental Justice → Resources → Case Studies

Preserving community Cohesion Through Southend Pa Neighborhood Redevelopment

Newtown Pike extension Project, Lexington, Kentucky



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Date: March/April 2016

ARTICLES

DEPARTMENTS

Editor's Notes

Along the Road

Internet Watch

Communication Product Updates

Training Update

Environmental Justice: The New Normal for Transportation

by Brenda C. Kragh, Carolyn Nelson, and Candace Groudine

FHWA underscores the importance of EJ within the decisionmaking process.



Shantae

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Livability Initiative

Fact Sheets
Case Studies
Livability Newsletter
Human Environment
Digest
Livability Resources
Livability Tools
Livability Webinars
Livability Videos
Community Impact
Assessment
Sustainable Communities
Partnership
Related Links

FHWA → Livability → Resources

The Road that Rebuilt a Neighborhood

The Newtown Pike Extension Project

Enhancing Quality of Life for the Davis Park Community in Lexington, Kentucky

Watch the 9 minute <https://youtu.be/B4ke-jSP6yY> or 30 minute https://youtu.be/zGAbX_rFR5Y video o
Newtown Pike Extension Project.

The videos show how effective transportation planning, project development, and design preserved and enhanced the quality of life in the Davis Park Community. The project illustrates the effective implemen
of the community impact assessment (CIA) process; collaboration among federal, state, and local agenc
working with affected communities to understand their needs; the use of a Community Land Trust; and
creative integration of quality of life considerations in transportation projects.

Also available as [Adobe PDF](#) (4 MB)

PDF files can be viewed with the [Acrobat® Reader®](#)

Kentucky Incorporates Environmental Justice

The Commonwealth of Kentucky, through the Kentucky Transportation Cabinet (KYTC), has developed an environmental policy that could serve as a benchmark for future projects and mitigation efforts nationwide. The Newtown Pike Extension project, located in Lexington, KY, in Fayette County, is an example of implementing that policy. The project is a new 2.4-kilometer (1.5-mile) boulevard connecting West Main Street at Newtown Pike and South Limestone Street at Scott Street, plus a 10-hectare (25-acre) neighborhood redevelopment to mitigate environmental justice impacts.

The Newtown Pike Extension has been part of Lexington's planning as far back as the late 1930s. Previous attempts were opposed because they did not adequately address impacts to the communities along the route. With the completion of the environmental study in June 2000, the creation of a citizens advisory committee, and an intense public involvement process, the project began to pick up momentum.



Eugene Cleckley, director of FHWA's Resource Center-Atlanta, addresses the importance of the guiding principles document for Kentucky's Newtown Pike Extension project.

Links

Kentucky Division Office

Columbus-Beimont State Park

http://www.fhwa.dot.gov/livability/resources/newtown_pike/index.cfm

https://www.fhwa.dot.gov/environment/environmental_justice/resources/ej_and_nepa/case_studies/case08.cfm

<http://www.fhwa.dot.gov/publications/publicroads/16marapr/02.cfm>

http://www.fhwa.dot.gov/environment/environmental_justice/publications/reference_guide_2015/section13.cfm

https://www.youtube.com/watch?v=zGAbX_rFR5Y&feature=youtu.be

<http://www.fhwa.dot.gov/environment/ehei/awards/2008/kentucky.cfm>

<http://www.fhwa.dot.gov/publications/publicroads/12marapr/03.cfm>

http://www.fhwa.dot.gov/livability/newsletter/october_2014/

<http://www.fhwa.dot.gov/livability/cia/index.cfm>

<http://www.fhwa.dot.gov/publications/publicroads/04mar/06.cfm>



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