



TIP ACTIONS

Transportation Improvement Program

New Jersey TIP (FY2020-2023)

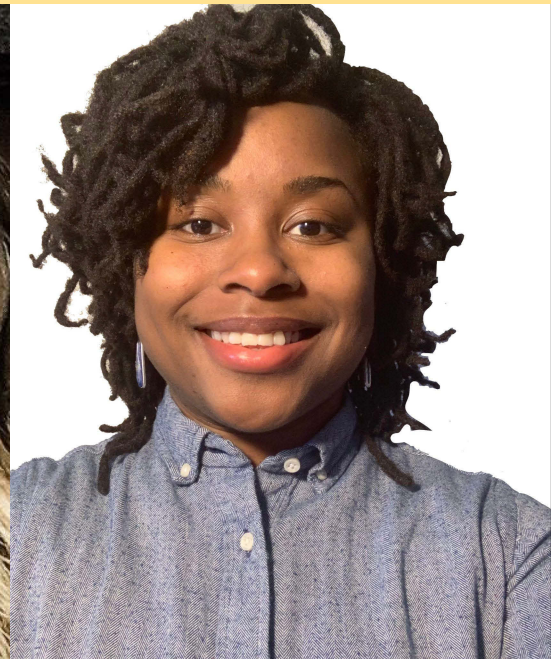
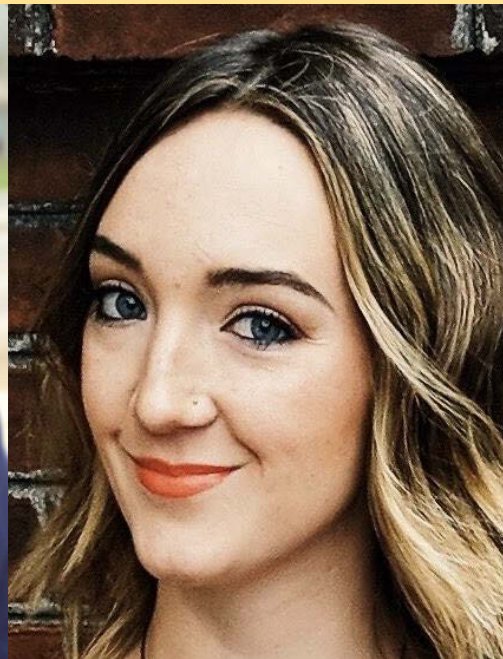
Pennsylvania TIP (FY2021-2024)

PHOTO CREDIT: PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

DVRPC Board | June 2021



Office of Capital Programs Staff



**Jesse
Buerk**

Manager of
Office of Capital Programs

**Rick
Murphy**

Manager of
PA Capital Programs

**Kwan
Hui**

Manager of
NJ Capital Programs

**Kathrine
Nash**

Transportation Planner

**Amani
Bey**

Intern

Other Offices Moved to Other Director

Office of Project Implementation (non-traditional bike/ped/trail type projects)

John Coscia, Jr.
Ryan Gallagher
Joe Banks
Dan Snyder
Joe Natale
Maria Meraz

Office of Transportation Operations Management (TSMO)

Chris King
Justin Neff
Kathrine Nash

ADA Ramps - Bucks, MontCo, and Philadelphia

Various Counties in PA | Remove Funding (Delete Project Record)

- **TIP Amendment**
- **Action:** Remove CON phases in amount of \$15,382,000 STU/Toll Credit from the TIP for 2 ADA projects (delete projects)
- **Reason:** Projects were Let for construction, fully funded, and regularly authorized under previous FY2019 TIP. The funding programmed in the FY2021 TIP is no longer needed and will return to the region
- **Background:**
 - *ADA Ramps 2020 Bucks and Montgomery Counties - reduce from \$7,956,000 STU/Toll Credit to \$0*
 - *2019 Philadelphia ADA Ramps - reduce from \$7,426,000 STU/Toll Credit to \$0*

TIP ACTION | Proposed - PA

Request Board Approval of TIP Amendment

- **Delete ADA Ramps Projects**
Remove CON phases in amount of \$15,382,000 STU/Toll Credit from the TIP for 2 ADA projects:
 - ADA Ramps 2020 Bucks and Montgomery Counties -
reduce from \$7,956,000 STU/Toll Credit to \$0
 - 2019 Philadelphia ADA Ramps -
reduce from \$7,426,000 STU/Toll Credit to \$0



PA 309 Connector: Allentown Road to Souderton Pike (HT2)

Montgomery County | Increase/Advance CON Funding in 1st Four Years

- **TIP Amendment**

- **Actions:**

- Increase cost of CON phase overall by \$6,250,000 for items
- Advance \$9,357,000 STU/STP/State into 1st Four Years of TIP
- Remove NHPP funds (ineligible) and replace with STU/STP/State

- **Reasons:** Cost increase, ready to be let, not NHPP eligible

- **Background:** Total project construction cost increase from \$34,959,000 to \$41,209,000 for improved connection between PA 63 and Route 309

- Project is ready to be let for construction this summer and costs increased for various elements;
swap NHPP for STU/STP/State match

TIP ACTION | Proposed - PA

Request Board approval of TIP Amendment PA 309 Connector: Allentown Road to Souderton Pike (HT2)

1) Increase overall CON phase by \$6,250,000 from \$34,959,000 to \$41,209,000

2) Advance \$9,357,000 into the first 4 years and adjust the first 4 year programming from:

STU -	\$2,551,000
NHPP -	\$9,428,000
State 581 -	\$2,994,000

to:

STU -	\$14,686,000
STP -	\$4,779,000
State 581 -	\$4,865,000

3) Remove all NHPP funding



Montgomery Avenue Bridge over Amtrak at 30th Street (CB)

City of Philadelphia | Increase CON Funding in 1st Four Years

- **TIP Amendment**

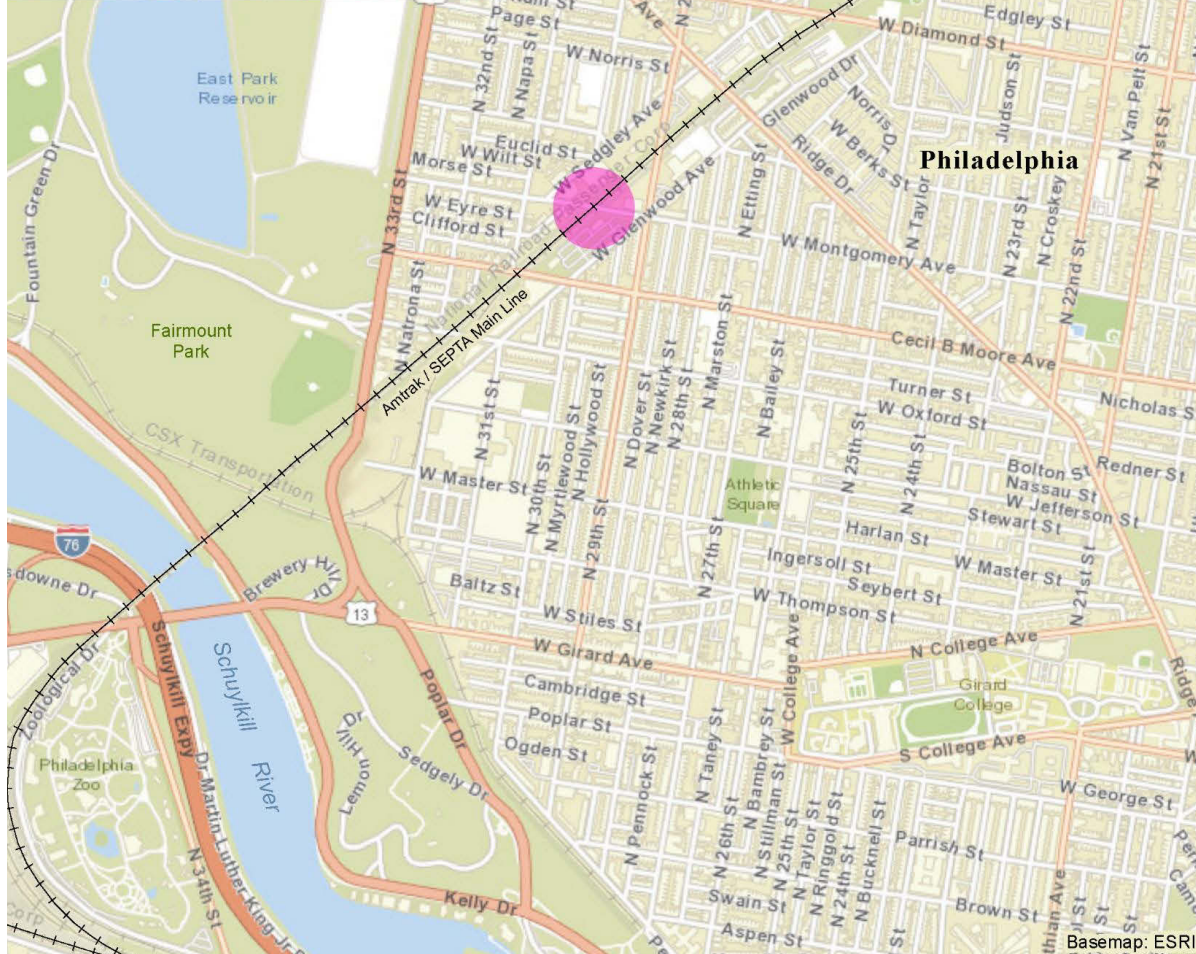
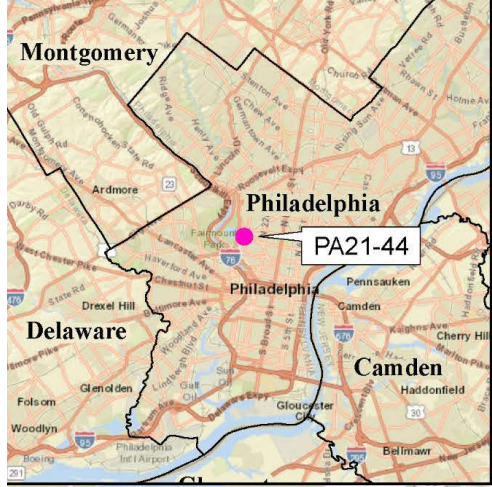
- **Action:**

- *Increase CON phase in 1st Four Years of TIP by advancing CON funding in FY21 and FY22 by \$4,900,000, and reducing CON phase by \$4,900,000 in LFY25*
- *add a previously obligated UTL phase back into TIP in amount of \$980,000.*

- **Reason:** The project is scheduled to Let for construction in July 2021

- **Background:**

- *Overall cost increase is \$980,000 for a \$19 million structure*



PA21-44: Montgomery Avenue Bridge over Amtrak at 30th Street (CB)

For complete
reconstruction of
five-span bridge over
Amtrak's Northeast
Corridor to a
single-span bridge

TIP ACTION | Proposed - PA

Request Board approval of TIP Amendment

- **Montgomery Avenue Bridge over Amtrak at 30th Street (County Bridge in Philadelphia)**

Increase CON phase by \$4,900,000 in 1st 4 years:

FY21: Add \$1,098,000 STU/\$862,000 BOF/
\$368,000 State 183/\$122,000 Local;
FY22: Add \$1,075,000 STU/\$885,000 BOF/
\$368,000 State 183/\$122,000 LOC;

Add previously obligated UTL phase back into TIP in the amount of \$980,000 (\$784,000 BOF/\$147,000 State 183/\$49,000 LOC) in FY21; and

Reduce CON phase by \$4,900,000 (\$3,887,000 STU/ \$33,000 BOF/ \$735,000 State 183/\$245,000 LOC) in LFY25.

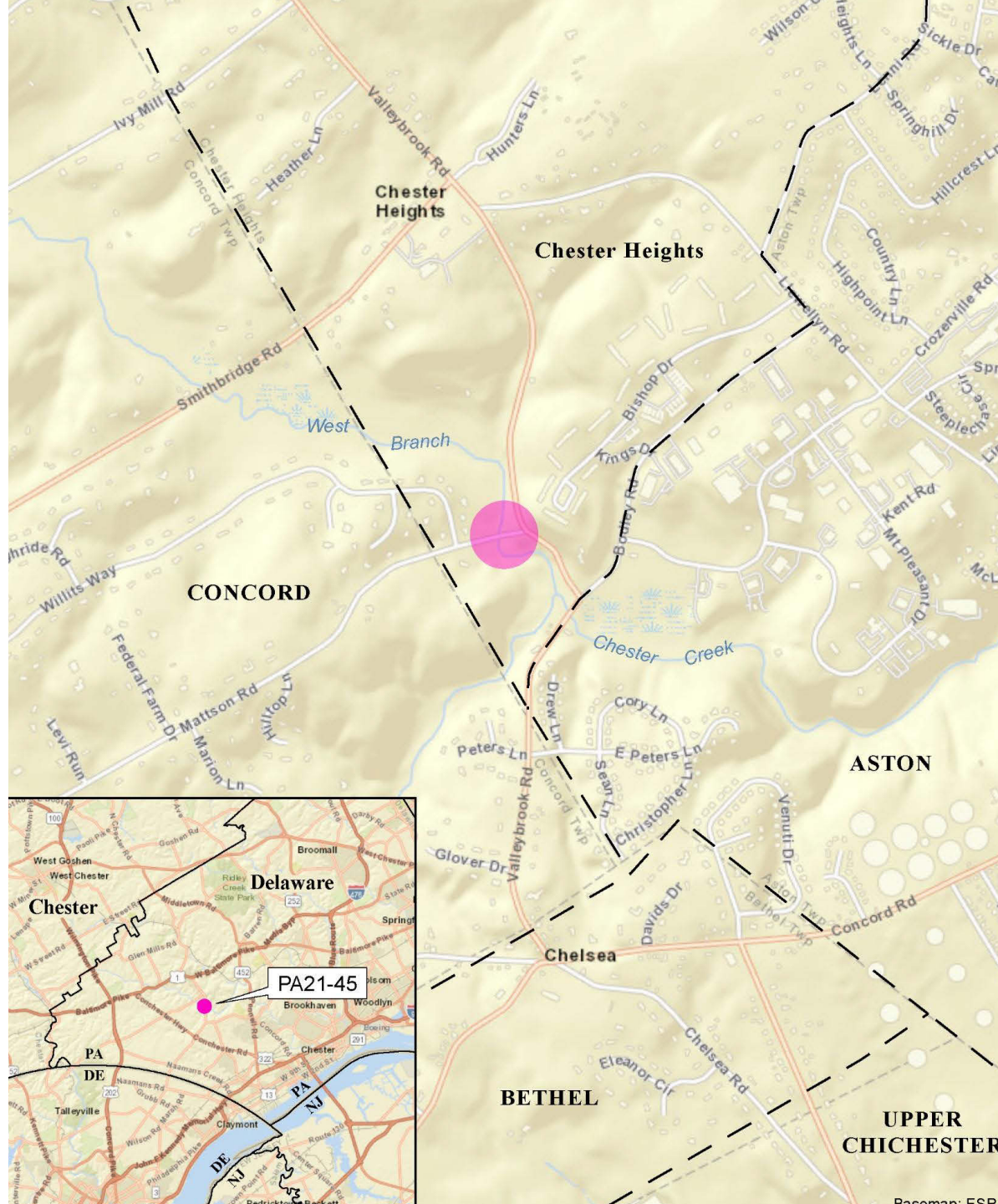
Note - overall cost increase to TIP is only \$980,000 for utility phase



Mattson Road over West Branch of Chester Creek (Bridge)

Delaware County | Accept New Project into TIP

- **TIP Amendment**
- **Action:** Accept new \$2,000,000 sSTP discretionary funded bridge project into TIP:
PE (\$350,000 sSTP) in FY21;
FD (\$300,000 sSTP) in FY22;
ROW (\$20,000 sSTP) in FY22;
UTL (\$15,000 sSTP) in FY22; and
CON (\$1,112,000 sSTP) in FY22 and (\$203,000 sSTP) in FY23.
- **Reason:** Replace Mattson Road over the West Branch of the Chester Creek bridge using discretionary sSTP funds from \$5 registration fee revenues
- **Background:**
 - *These are add'l funds to region made available by PennDOT to PA Counties that implemented \$5 registration fee that was a component of the PA Act 89 funding structure - **for local infrastructure***
 - *This funding opportunity is no longer available due to funds now being spent out on this program*



PA21-45: Mattson Road over the West Branch of the Chester Creek

Bridge rehabilitation or replacement of Mattson Road bridge over West Branch of the Chester Creek in Chester Heights Borough, Delaware County

TIP ACTION | Proposed - PA

Request Board approval of TIP Amendment

- **Mattson Road over the West Branch of the Chester Creek (Bridge) in Delaware County**
Accept new \$2,000,000 sSTP project into TIP:
 - PE (\$350,000 sSTP) in FY21;
FD (\$300,000 sSTP) in FY22;
ROW (\$20,000 sSTP) in FY22;
UTL (\$15,000 sSTP) in FY22; and
CON (\$1,112,000 sSTP) in FY22 and (\$203,000 sSTP) in FY23.



Moredon Road Bridge (County Bridge #44) (Act 13)

Montgomery County | Add New Project to TIP

- **TIP Amendment**

- **Action:** Add new \$3,870,000 Act 13 project to TIP, using county's remaining Act 13 balance from previous years' allocations and using county's \$5 vehicle registration fee revenue to fully fund project, and by programming the following phases:

PE (\$200,000 Act 13) in FY21;

FD (\$200,000 Act 13) in FY22;

ROW (\$20,000 Act 13) in FY23;

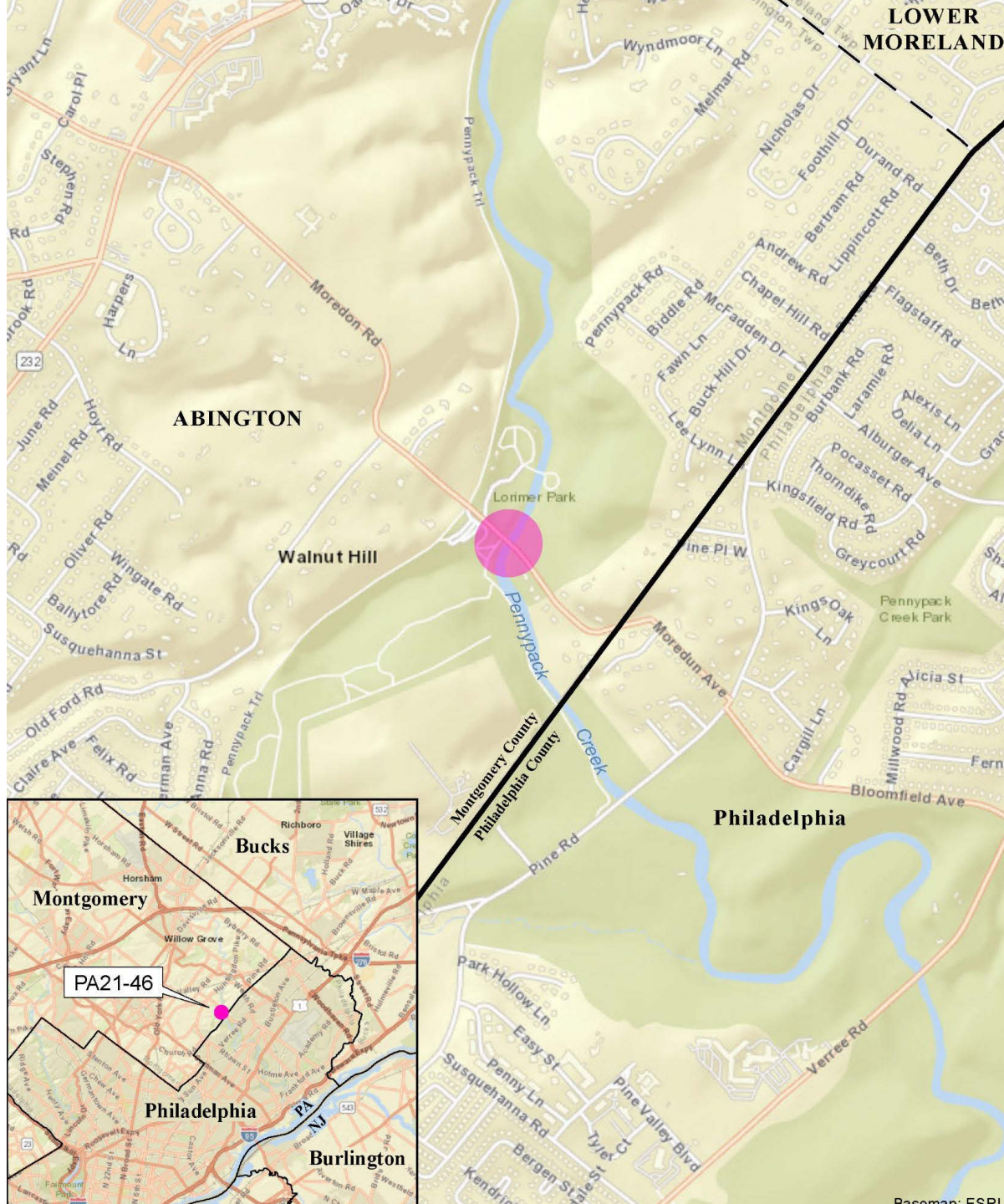
UTL (\$50,000 Act 13) in FY24; and

CON (\$1,030,000 Act 13) in FY24 and (\$2,370,000 LOC (\$5 Fee)) in FY23.

- **Reason:** Use remaining Act 13 balance from previous years' allocations and using \$5 vehicle registration fee to fully fund project

- **Background:**

- *These are additional funds to the region*



PS21-46: Moredon Road Bridge (CB #44) (Act 13)

- Moredon Road Bridge in Abington Township, Montgomery County
- Built in 1932
- “Structurally Deficient”
- Superstructure, substructure, and deck given “4 - Poor” condition rating

SEPTA Regional Rail RRX (Grade Crossing)

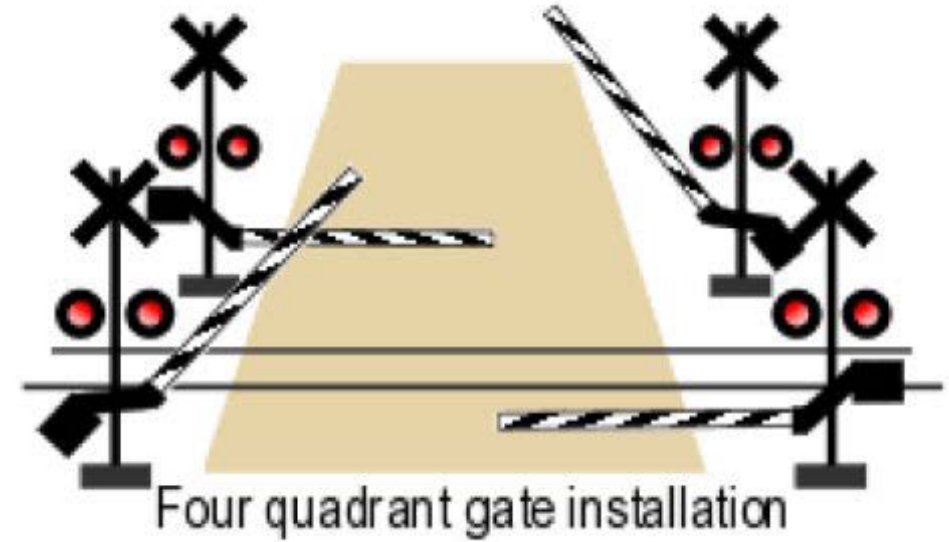
Safety Enhancements Program

Various Counties | Add New Project to TIP

- **TIP Amendment**
- **Action:** Add new project to TIP in amount of \$5,000,000 (\$3,335,000 CARSI/\$1,611,000 State 1514/\$54,000 LOC) for FY21 CON
- **Reason:** Adding new rail safety improvement project/program to TIP
- **Background:**
 - *CARSI funds - FHWA Commuter Authority Rail Safety Improvement - are additional to the region*
 - *Note that the CARSI funds will show in the highway TIP*
 - *SEPTA match will appear in SEPTA's transit "Safety and Security" program*

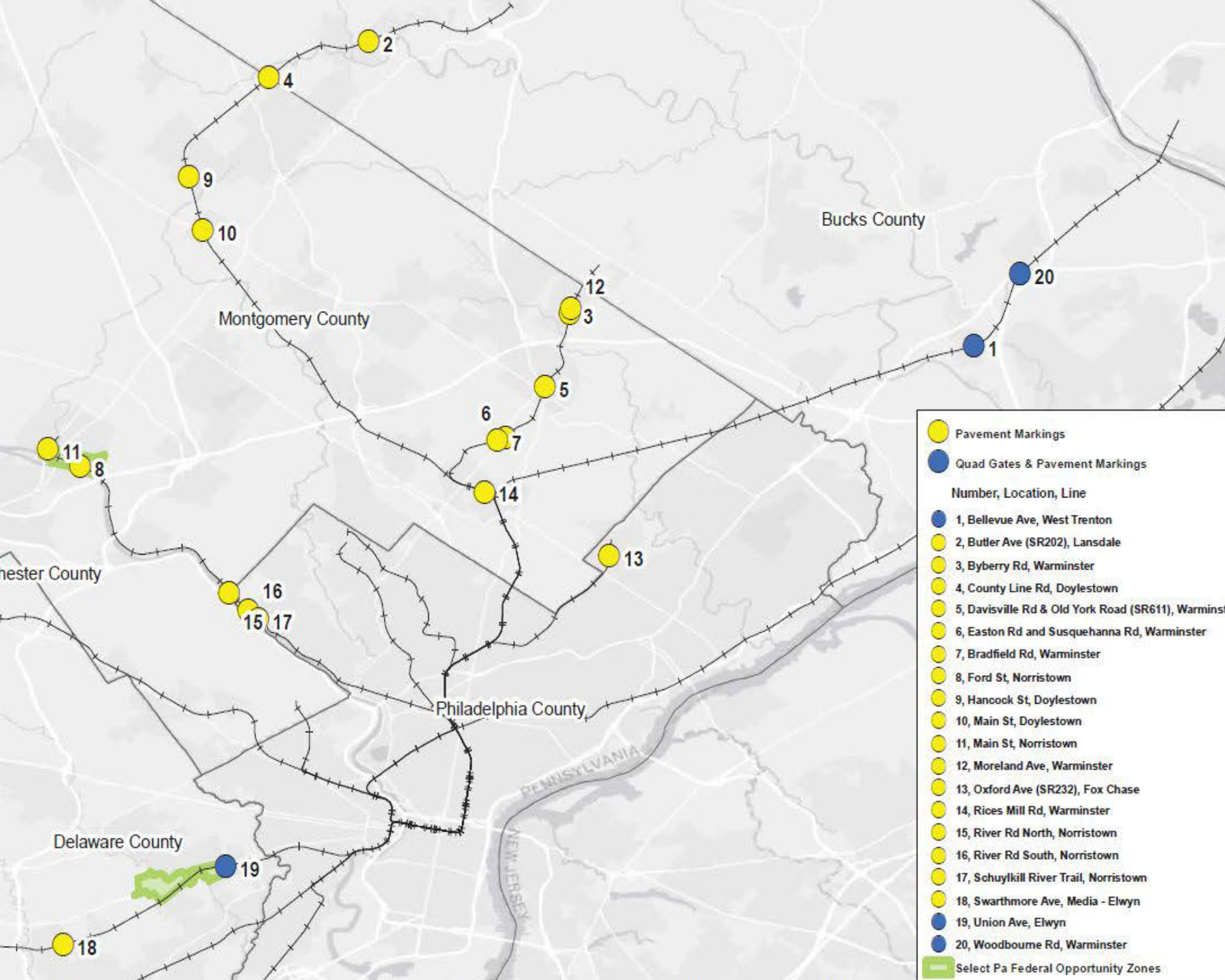


IMAGE 2-SEPTA DYNAMIC ENVELOPE PAVEMENT MARKINGS – CHERRY STREET CONSHOHOCKEN, PA



Project includes

- Dynamic Envelope Marking at 20 grade crossings
- Four quadrant gates at 3 locations



- Pavement Markings
 - Quad Gates & Pavement Markings
- Number, Location, Line**
- 1, Bellevue Ave, West Trenton
 - 2, Butler Ave (SR202), Lansdale
 - 3, Byberry Rd, Warminster
 - 4, County Line Rd, Doylestown
 - 5, Davisville Rd & Old York Road (SR611), Warminster
 - 6, Easton Rd and Susquehanna Rd, Warminster
 - 7, Bradfield Rd, Warminster
 - 8, Ford St, Norristown
 - 9, Hancock St, Doylestown
 - 10, Main St, Doylestown
 - 11, Main St, Norristown
 - 12, Moreland Ave, Warminster
 - 13, Oxford Ave (SR232), Fox Chase
 - 14, Rices Mill Rd, Warminster
 - 15, River Rd North, Norristown
 - 16, River Rd South, Norristown
 - 17, Schuylkill River Trail, Norristown
 - 18, Swarthmore Ave, Media - Elwyn
 - 19, Union Ave, Elwyn
 - 20, Woodbourne Rd, Warminster
- Select Pa Federal Opportunity Zones

Map of Project Locations

SEPTA Regional Rail Grade Crossing Safety Enhancements Program

Map Credit: SEPTA



TIP ACTION | Proposed - PA

Request Board approval of TIP Amendments

- **Moredon Road Bridge (CB #44) (Act 13)**
Add new \$3,870,000 Act 13/LOC project
- **Regional Rail RRX Safety Enhancements Program**
Add new \$5,000,000 CARSI/State 1514/LOC project



Vehicle Overhaul Program

SEPTA | Reduce Funding

- **TIP Amendment**
- **Action:** Reduce funding by \$21,777,000 from \$104,453,000 to **\$82,676,000**
- **Reason:** Due to COVID-19 pandemic, SEPTA realized decreased Vehicle Overhaul program costs in FY20 and FY21; therefore, less FY21 funding is needed to support program
- **Background:**
 - *The VOH program allows SEPTA to continue overhaul of rolling stock*
 - *Program includes \$6,000,000 (FY21-FY22) to support APCs*

TIP ACTION | Proposed - PA

Request Board approval of TIP Amendment

- **SEPTA Vehicle Overhaul Program**
Reduce funding by \$21,777,000 from \$104,453,000 to **\$82,676,000**





THANK YOU!



PHOTO CREDIT: PENNSYLVANIA DEPARTMENT OF TRANSPORTATION



June 24, 2021 DVRPC Board

Open Public Comment Period for

- Draft **DVRPC *Connections 2050* Long-Range Plan**
- Draft **DVRPC FY2022 TIP for NJ and the Draft STIP for NJDOT & NJ TRANSIT**
- Draft **DVRPC Conformity Determination** for the Draft *Connections 2050* Long-Range Plan, Draft FY2022 NJ TIP, and FY2021 PA TIP

Anticipated Public Comment Periods

- **Draft DVRPC *Connections 2050* Long-Range Plan**
July 28 - August 30
- **Draft DVRPC FY2020 NJ TIP and the
Draft Statewide TIP (STIP) for NJDOT & NJ TRANSIT**
July 21 - August 23
- **Draft DVRPC Conformity Determination**
August 6 - September 8

Two (2) *Virtual* Public Meetings

- Wed. August 11 at 2 pm
- Wed. August 18 at 7 pm

Action Proposed

That the Board approve staff request to open a public comment period for the purpose of gathering public and agency comments on the

- Draft DVRPC *Connections 2050* Long-Range Plan
- Draft DVRPC FY2022 TIP for NJ and the Draft STIP for NJDOT and NJ TRANSIT
- Draft DVRPC Conformity Determination for the
 - Draft *Connections 2050* Long-Range Plan;
 - Draft FY2022 TIP for NJ; and
 - FY2021 TIP for PA

with proper public notification, as well as to

- publish the draft documents;
- post them on the internet;
- make copies available at certain public libraries (as appropriate); and
- hold public meetings, which will likely be held online

Thank you!



Questions?

2050 Population & Employment Forecasts

Ben Gruswitz, AICP
Manager, Socioeconomic
& Land Use Analytics

June 24, 2021



2050 Population & Employment Forecasts

- Updated every four years with long-range plan (LRP)
- Required for two items due for Board review in September
 - *Connections 2050*
 - 2022 NJ TIP air quality conformity analysis

Presentation Overview

- Improvements to forecasting process & methods
- Forecast assumptions & results
- Proposed action



Improvements to Process & Methods

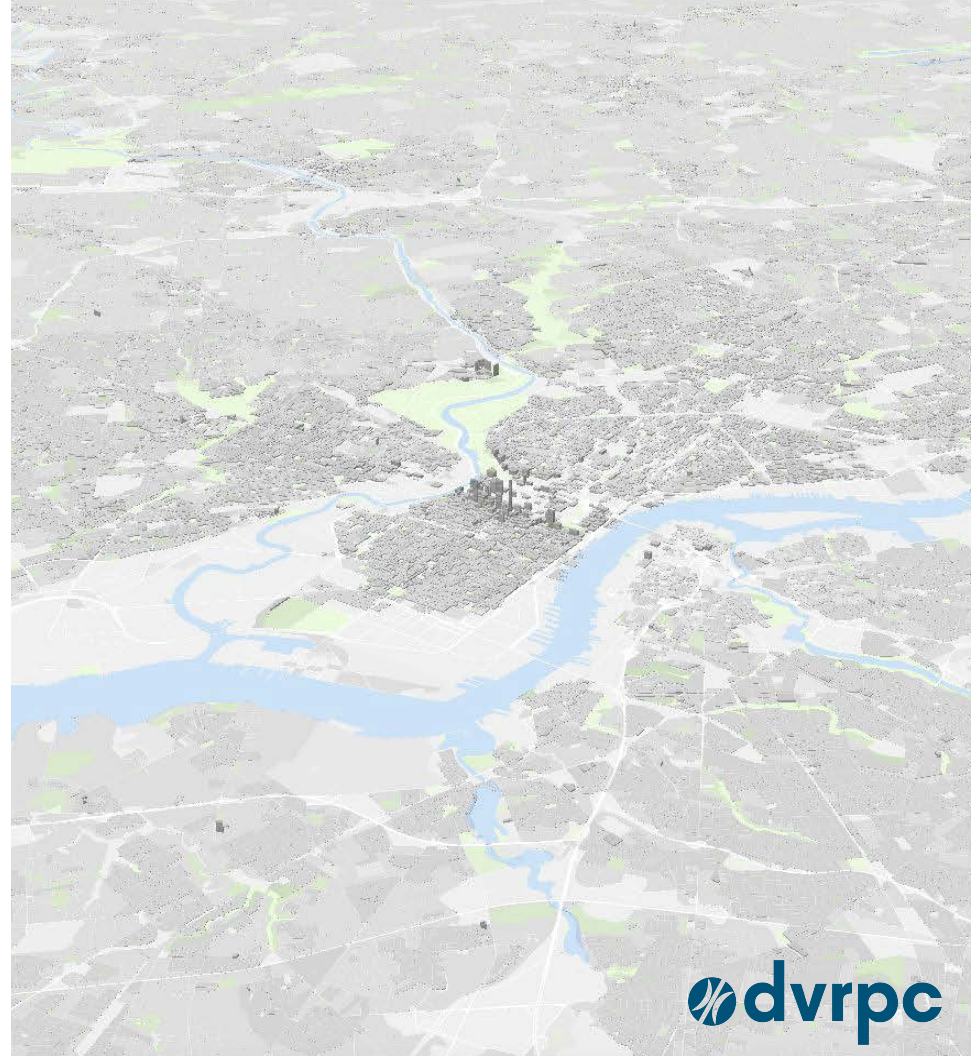
Socioeconomic & Land Use Analytics Committee (SLUAC)

- New group formed for collective tasks requiring local expertise & data review
- Comprised of county planning staff doing demographic, economic, and/or development analysis
- First project: 2050 forecasting collaboration
- More collaborations to come



UrbanSim

- Land use model
 - Simulates each year allocating from regional growth assumptions for households & employment
 - Allocates to the census block level
 - Informed by
 - development capacity
 - attractiveness
 - pipeline projects
 - partner feedback





UrbanSim - Platform for Data Sharing & Partner Feedback

The screenshot displays the UrbanSim Cloud Platform interface. The browser address bar shows the URL `cloud.urbansim.com/#/`. The page title is "UrbanCanvas Modeler". The user is logged in as "benjamin.gruswitz" under the "Delaware Valley Regional Planning Commission" organization. The interface includes a sidebar with navigation options: Layers, Layer attributes, Developments, Constraints, Adjustments, Scenarios, and Runs. The main map area shows a geographic region with numerous red and blue circular markers representing development points. A "Layers" panel is open, listing "Basemap", "OpenStreetMap Buildings", "residential development 2020-2050", and "commercial dev 2020-2050". A "741" data panel is selected, showing details for a specific development object.

Object ID	Details
741	commercial dev 2020-2050
address	1100 W Front St, Florence, NJ 08518
name	Florence Turnpike Crossings East
non_res_sf	528000
objectid	742
parcel_id	29801
project_id	134908
res_units	0
type	Light industrial / warehousing
year_built	2020

Object ID	Details
546	commercial dev 2020-2050



UrbanSim - Platform for Data Sharing & Partner Feedback

The screenshot displays the UrbanSim Cloud Platform interface. The browser address bar shows the URL `cloud.urbansim.com/#!`. The page title is "UrbanCanvas Modeler". The top navigation bar includes "Download Comments", "Uploads", "Delaware Valley Regional Planning Commission", and the user profile "benjamin.gruswitz".

The main interface is divided into a left sidebar and a main content area. The sidebar contains a "Layers" panel with the following items: "Layer attributes", "Developments", "Constraints", "Adjustments", "Scenarios", and "Runs". The main content area features a map with a search bar and a yellow callout box. The map shows streets including "W 9th Ave", "Moore Rd", "8th Ave", "Clark Ave", and "1st Ave".

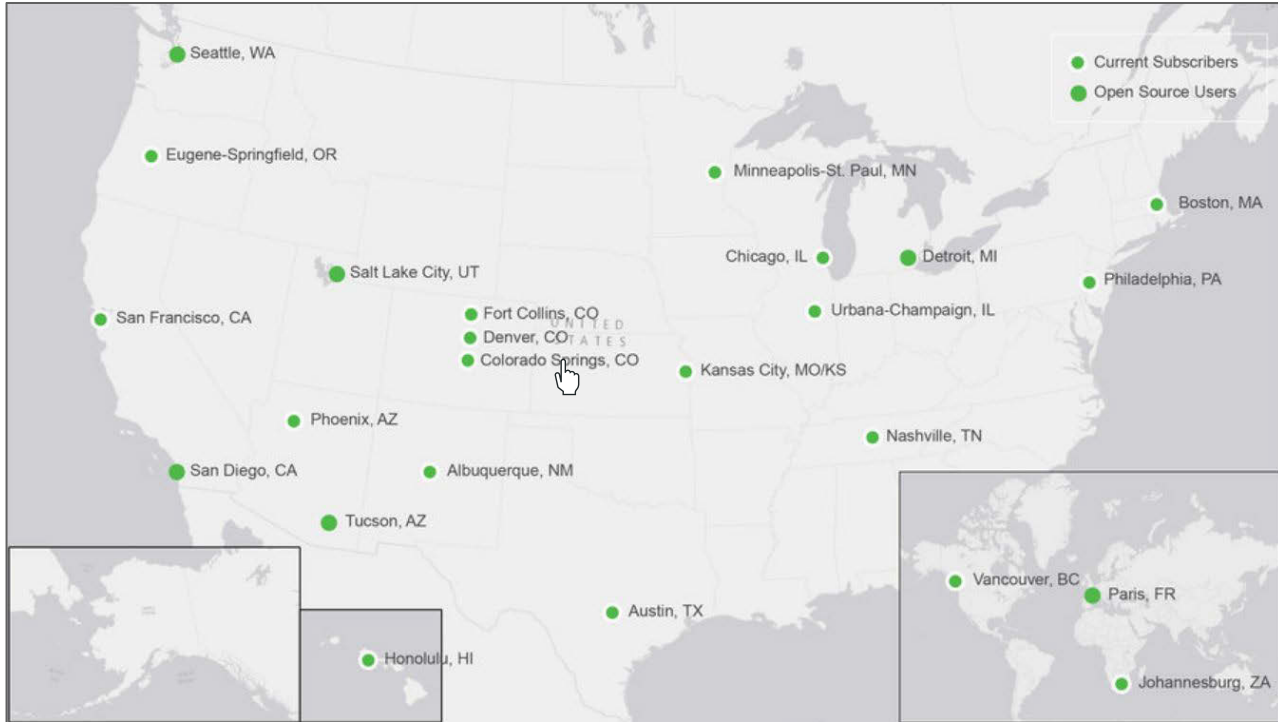
On the right side, a "Comment: 2" section is visible. The first comment is by "Dan Farina" (posted 242 days ago) with the following details:

- Name: Moore Park at KOP
- Description: Mixed-Use Zoning. Two Residential Projects already completed. +700 units of housing
- Timing: Immediate, Medium-Term
- Scale (unit types and unit count, commercial type and sqft)
- Extent (blocks involved):
- Zoning change?:

The second comment is by "Benjamin Gruswitz" (posted 242 days ago) with the text: "Is this just in block 420912058011043?".



UrbanSim - Widely Used





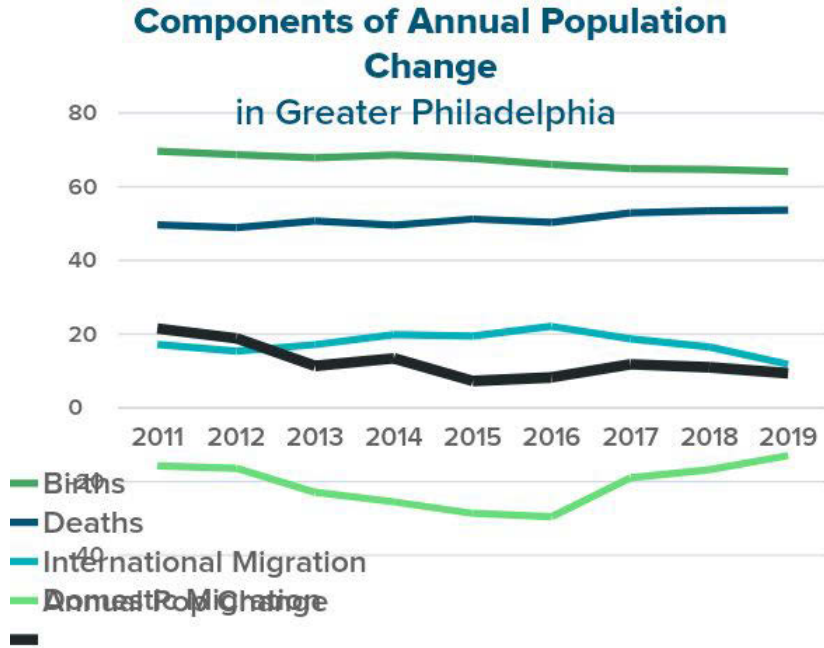
UrbanSim - Benefits

- Data integration
 - Makes use of a wealth of sources as inputs
 - Drove us to create a regional real estate development pipeline
- Travel Model Integration
 - UrbanSim provides detailed socioeconomic inputs for travel model at small geographies
 - Travel model provides accessibility gains from new infrastructure that induces pop/emp growth
- Baseline 2050 forecast scenario will be used for ongoing agency studies
 - Rerun with updates to new pipeline development
 - As the benchmark scenario to compare transportation impacts of alternate development outcomes

An aerial photograph of a river valley, overlaid with a semi-transparent blue filter. The river flows horizontally across the middle of the frame. The surrounding land is divided into a grid of fields and roads. In the center, there is a small cluster of buildings, possibly a farm or a small town. The overall scene is rural and agricultural.

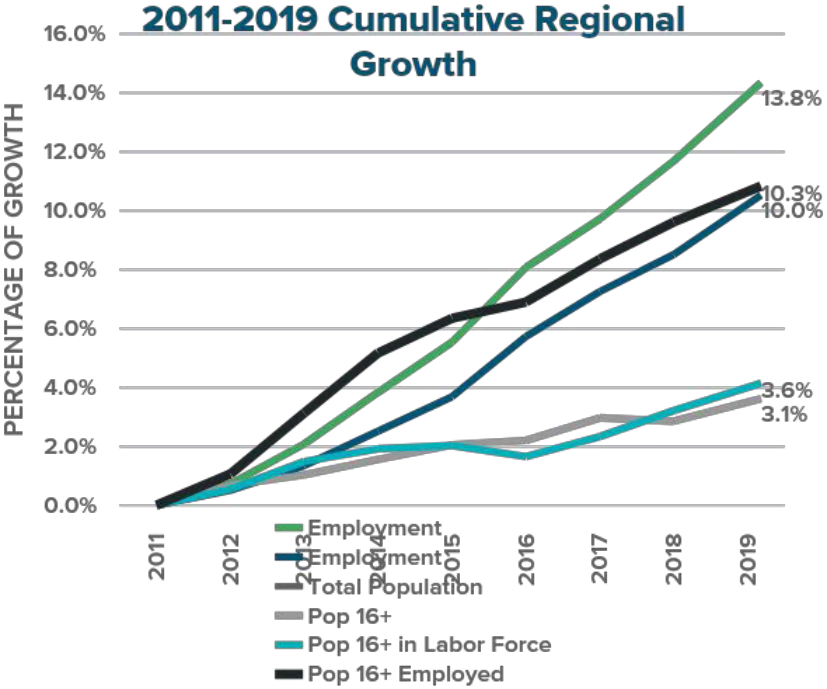
Assumptions & Results

Pre-Pandemic Trends - Population



- Aging population
- Declining birth-rates
- Slowing immigration
- Negative, but improving, net domestic migration
- Slowing population growth overall

Pre-Pandemic Trends - Employment



- Despite sluggish population, declining unemployment rate created explosion of employed population
- Record employment increase before pandemic decline

Pandemic Assumptions – Much Is Still Unknown

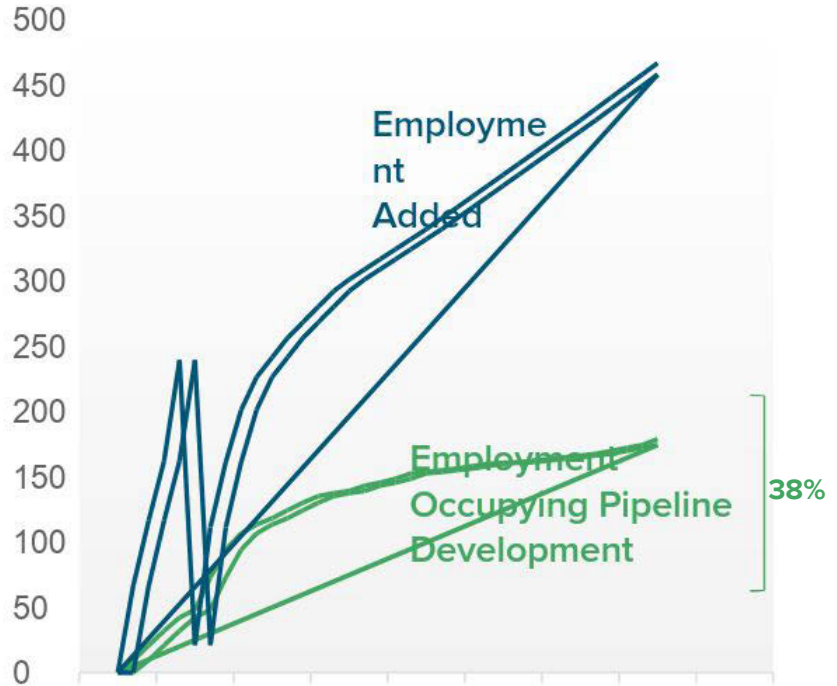
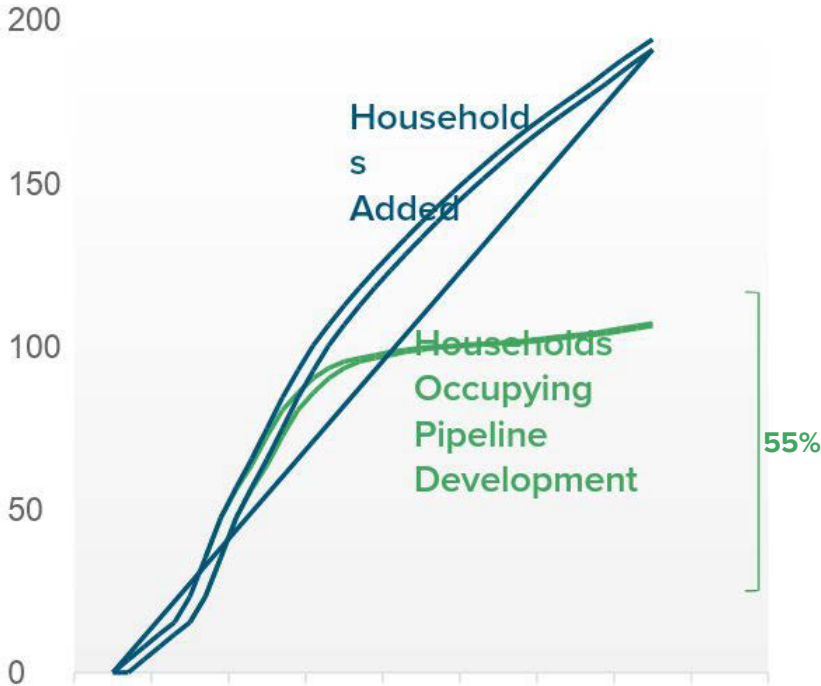
Population

- Increased deaths largely reflected in group quarters: primarily nursing homes & correctional facilities
- Difficult to reduce household population while also filling increased units in development pipeline
- Potential for immigration & domestic migration rebound

Employment

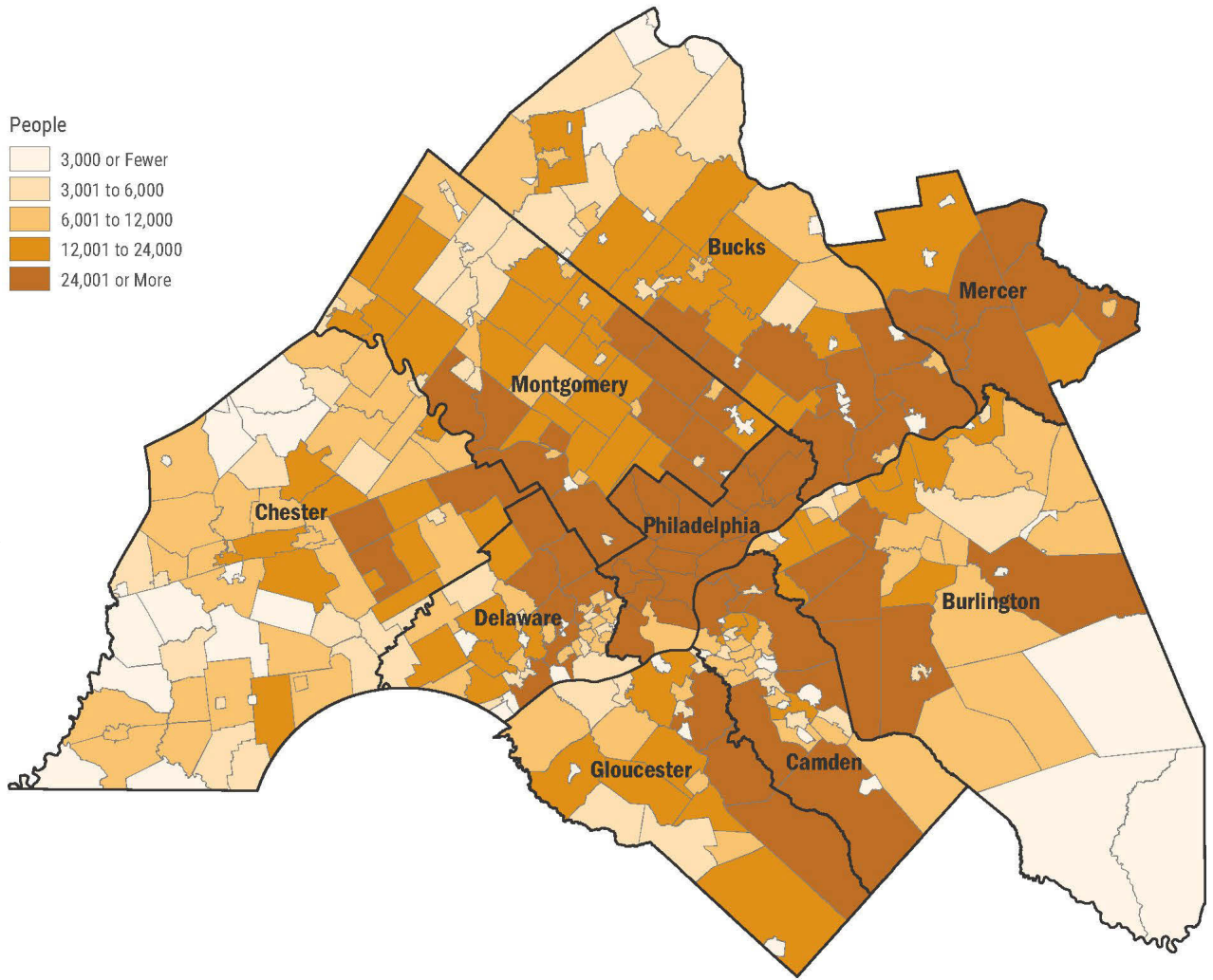
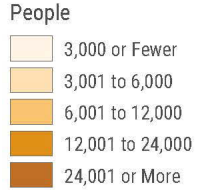
- Regionally, almost all 2015-2019 gains wiped out in 2020
- Total employment rebound expected by 2024
 - vaccine distribution
 - stimulus measures
 - high levels of household savings

Pipeline vs. Total Growth

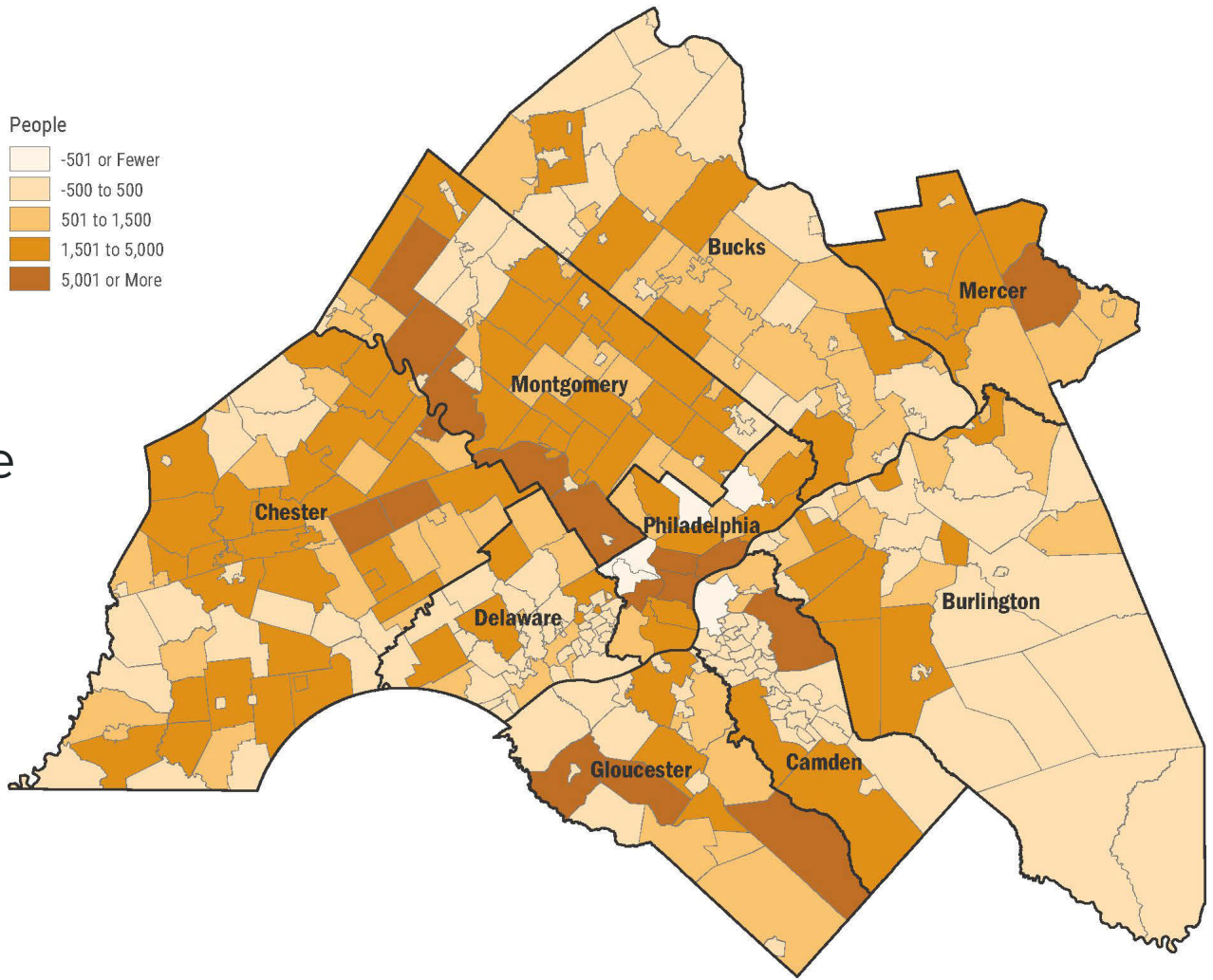
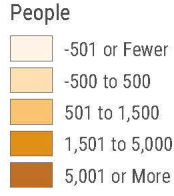


Population Forecast by County, 2015–2050

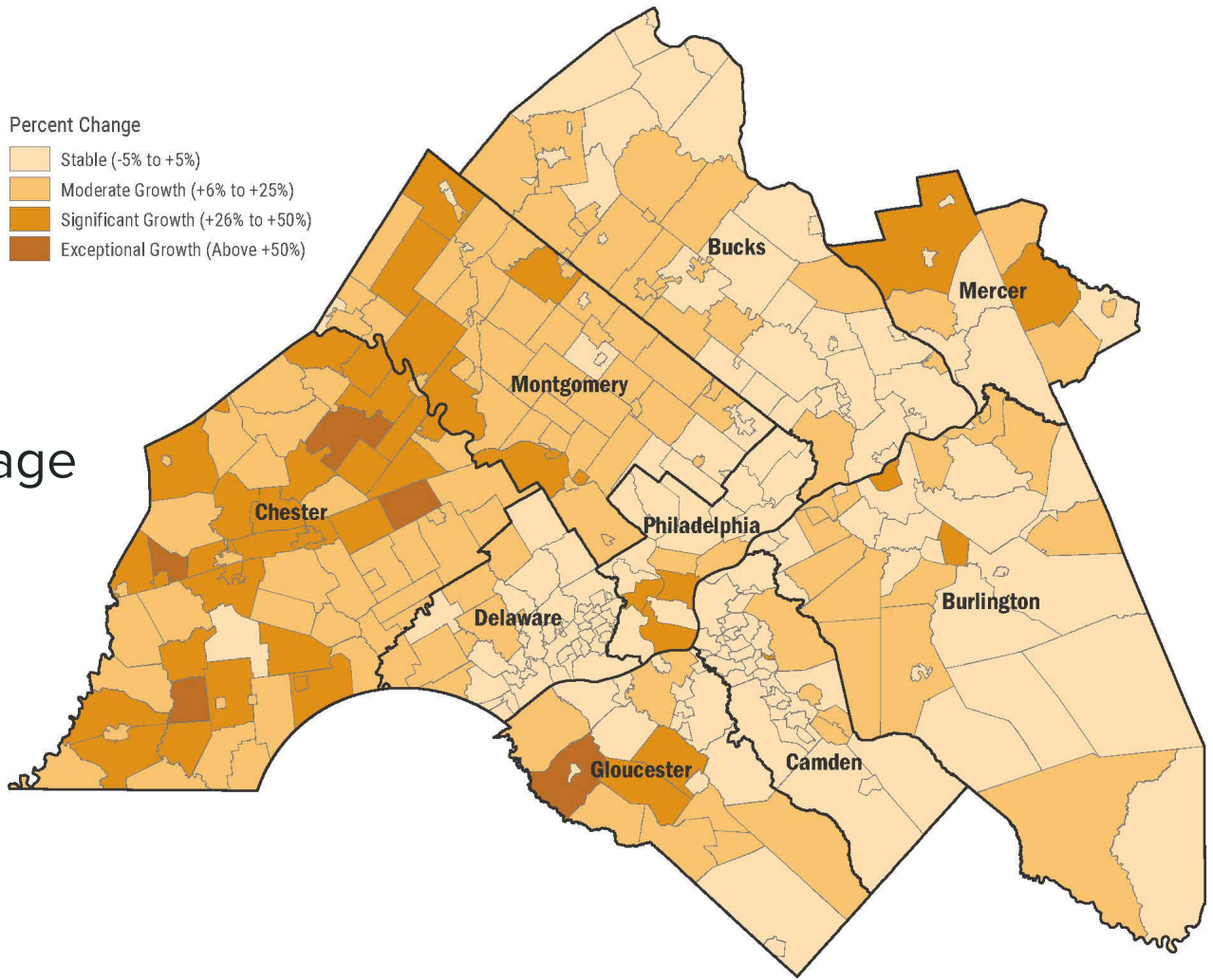
County	2015	2020	2025	2030	2035	2040	2045	2050	Absolute Change, 2015–2050	Percentage Change, 2015–2050
Burlington	446,863	448,166	463,830	471,001	474,401	476,962	477,540	477,884	31,021	6.9%
Camden	507,692	507,602	512,630	512,790	515,571	518,525	519,127	519,476	11,784	2.3%
Gloucester	291,091	291,794	295,192	298,495	307,003	312,710	321,140	327,608	36,517	12.5%
Mercer	368,200	368,191	378,112	392,070	394,244	395,881	396,202	396,462	28,262	7.7%
Four New Jersey Counties	1,615,861	1,617,773	1,651,789	1,676,386	1,693,254	1,706,118	1,716,054	1,723,480	107,619	6.7%
Bucks	625,225	629,389	635,768	641,786	646,930	651,113	654,442	657,131	31,906	5.1%
Chester	515,043	528,418	563,468	586,300	604,007	620,391	634,119	645,673	130,630	25.4%
Delaware	563,142	567,017	570,207	573,667	576,903	579,706	581,763	583,376	20,234	3.6%
Montgomery	817,199	834,411	852,415	868,662	883,800	896,576	907,942	917,924	100,725	12.3%
Philadelphia	1,571,440	1,591,156	1,627,244	1,650,559	1,658,977	1,665,398	1,670,261	1,680,798	109,358	7.0%
Five Pennsylvania Counties	4,092,049	4,150,391	4,249,102	4,320,974	4,370,617	4,413,184	4,448,527	4,484,902	392,853	9.6%
DVRPC Region	5,705,895	5,766,144	5,898,866	5,995,330	6,061,836	6,117,262	6,162,536	6,206,332	500,437	8.8%



2050 Municipal Population Forecast



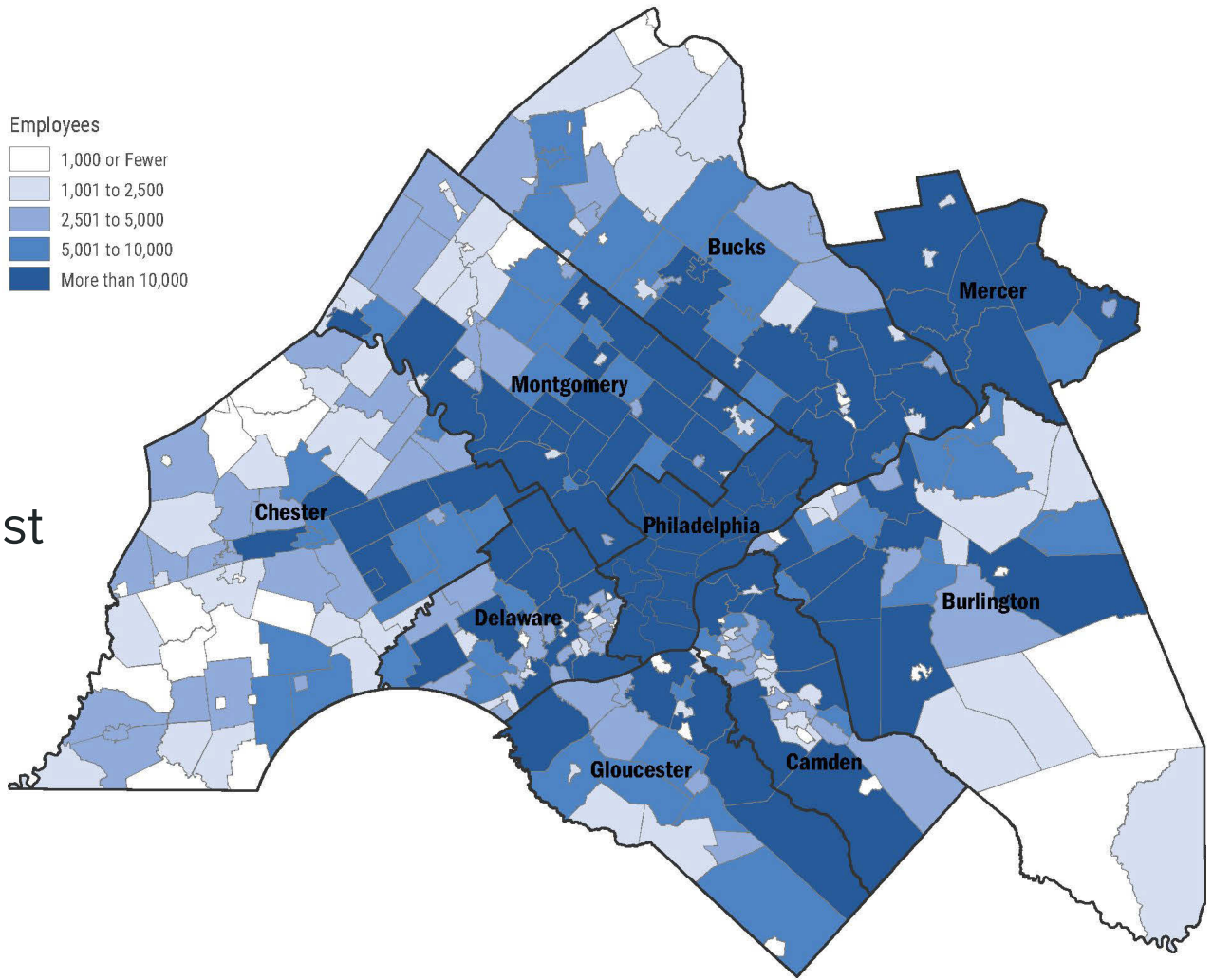
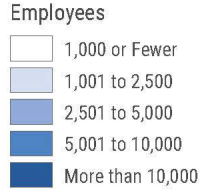
2015-2050 Absolute Population Change



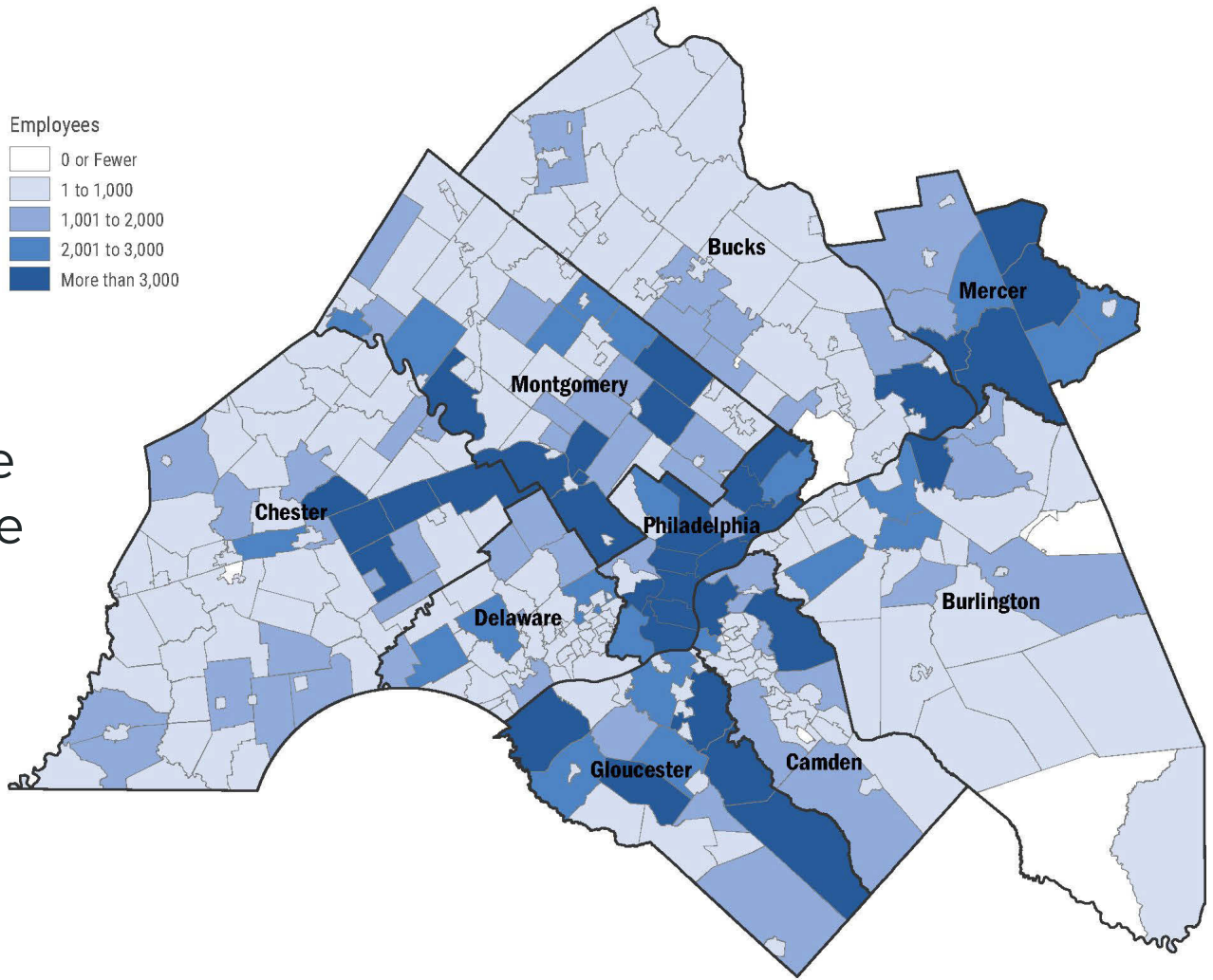
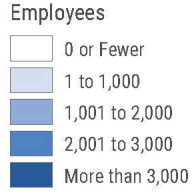
2015-2050 Percentage Population Change

Employment Forecast by County, 2015–2050

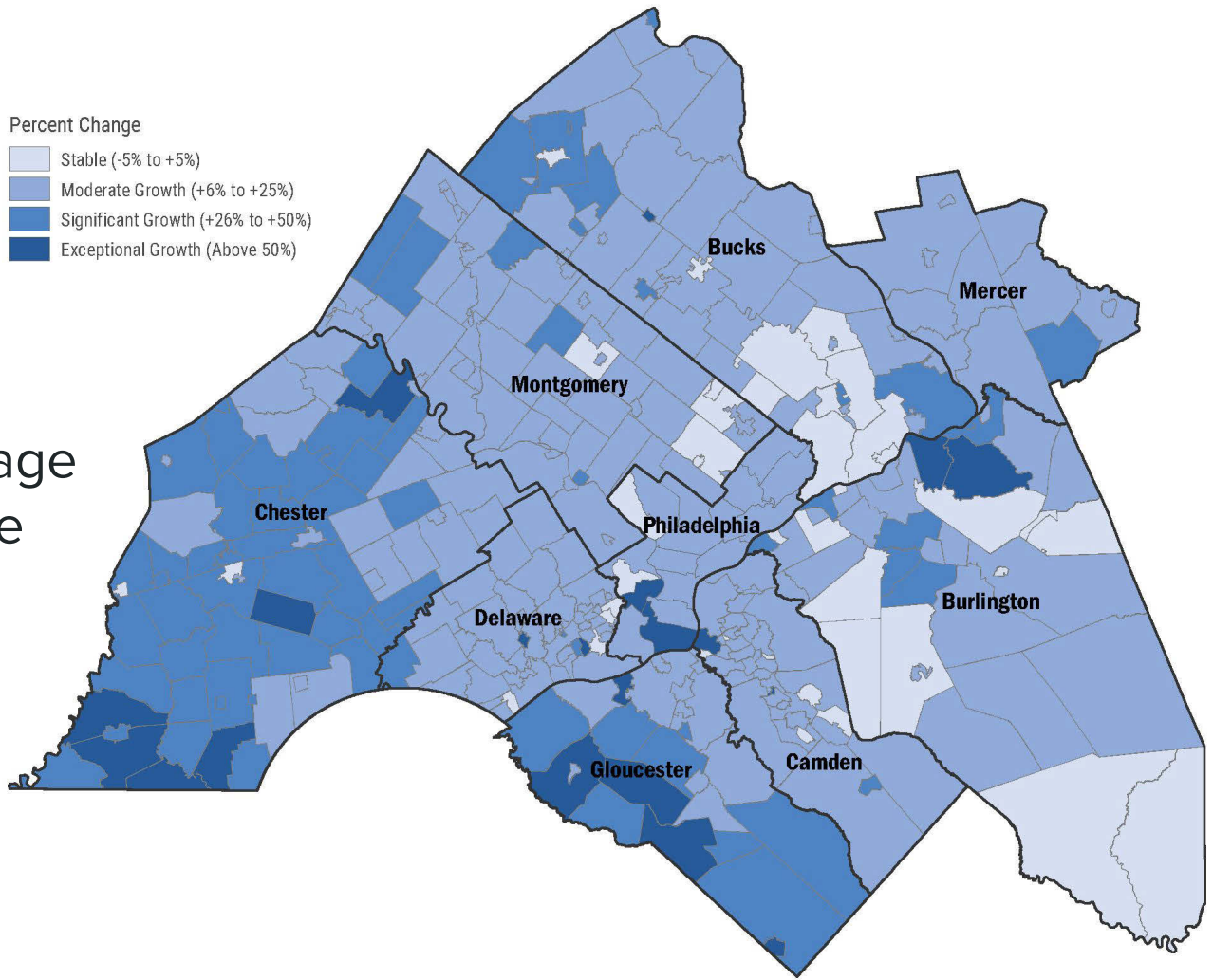
County	2015	2020	2025	2030	2035	2040	2045	2050	Absolute Change, 2015–2050	Percentage Change, 2015–2050
Burlington	243,773	241,044	259,622	263,784	265,316	267,490	269,911	272,016	28,243	11.6%
Camden	235,055	231,475	251,236	254,730	256,495	258,893	261,276	263,284	28,229	12.0%
Gloucester	116,906	123,027	138,978	142,306	144,046	146,652	149,362	151,891	34,985	29.9%
Mercer	229,501	230,526	246,875	249,634	251,430	254,122	256,973	259,402	29,901	13.0%
Four New Jersey Counties	827,250	828,092	898,736	912,484	919,322	929,197	939,567	948,643	121,393	14.7%
Bucks	315,665	308,713	326,700	332,639	335,324	338,108	341,149	343,632	27,967	8.9%
Chester	302,656	298,305	336,321	345,083	351,403	358,837	366,724	373,664	71,008	23.5%
Delaware	261,417	262,851	279,772	283,398	285,407	288,280	291,175	293,526	32,109	12.3%
Montgomery	567,585	559,413	601,014	610,266	616,333	625,549	635,373	643,790	76,205	13.4%
Philadelphia	766,163	804,345	839,480	857,981	872,566	882,135	889,907	904,311	138,148	18.0%
Five Pennsylvania Counties	2,213,486	2,233,627	2,383,287	2,429,367	2,461,033	2,492,909	2,524,328	2,558,923	345,437	15.6%
DVRPC Region	3,038,721	3,059,699	3,279,998	3,339,821	3,378,320	3,420,066	3,461,850	3,505,516	466,795	15.4%



2050 Municipal Employment Forecast



2015-2050 Absolute Employment Change



2015-2050 Percentage Employment Change

An aerial photograph of a landscape, likely a rural or semi-rural area, featuring a prominent river winding through the center. The terrain is a mix of green fields and brownish patches, possibly indicating different types of vegetation or land use. A small cluster of buildings, possibly a town or village, is visible in the middle ground. The entire image is overlaid with a semi-transparent blue filter. A thin, light green horizontal line is positioned below the text.

Action Proposed

Action Proposed

That the Board adopts the 2050 Population and Employment Forecasts.