



working
FUTURES¹ GROUP

GREATER PHILADELPHIA

Dialogue. Collaboration. Knowledge-sharing.

Future Forces 2050 Working Group Meeting 1

Agenda

- Welcome and Intro
- Background on Scenario Planning
- Review of *Connections 2045* Future Forces
- How DVRPC Will Use this Scenario Plan
- How Other Entities can use this Scenario Plan
- Define the Decision Focus
- Brainstorm Future Forces
- Each Breakout Group Presents Top ~5 Forces
- Participant Voting on the Forces to They Want to Learn More About

Types of Scenario Planning

- **Normative** – identifies community aspirations and values to develop alternative visions for the future.

- **Exploratory** – starts in the present and projects into the future using anticipated trends and driving forces.

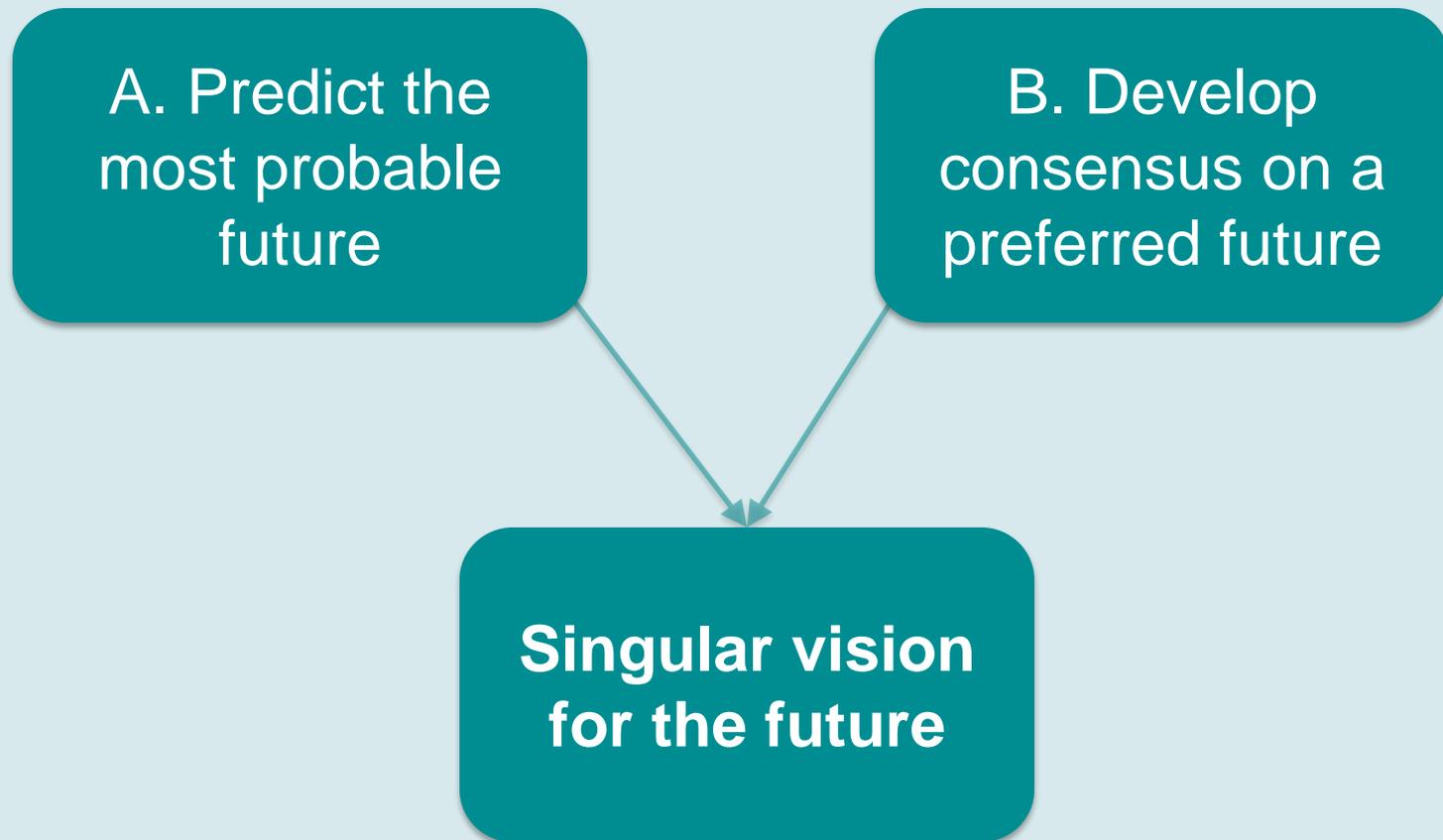
What is Exploratory Scenario Planning?

A strategy that generates multiple views of the future by:

- Assessing **uncertainty** within a changing environment.
- Understanding what **conditions or events may emerge**.
 - Along with their **likely consequences**.
- Identifying potential **actions to respond to or benefit from uncertainties**.

What's Different About Scenario Planning?

Traditional Planning Approaches:



Plausible Futures

Singular Vision



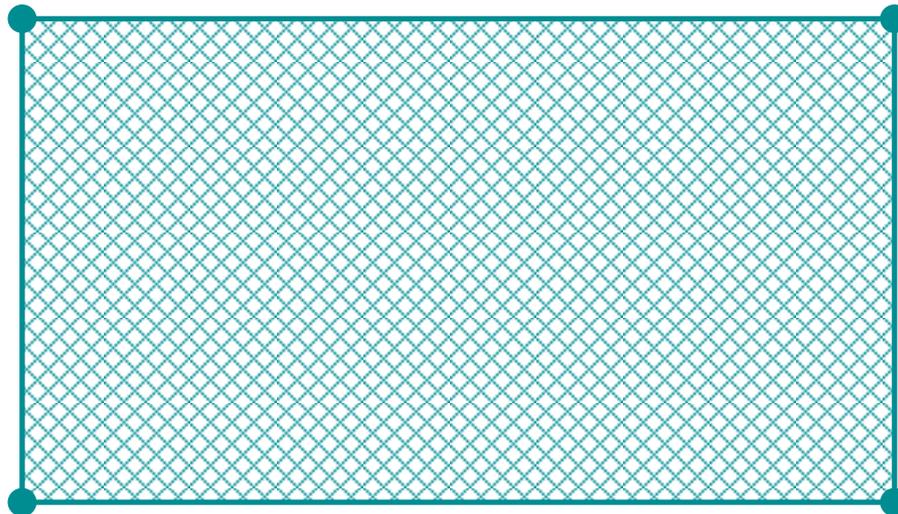
Plausible Futures

Scenario 1

Scenario 2

Scenario 3

Scenario 4

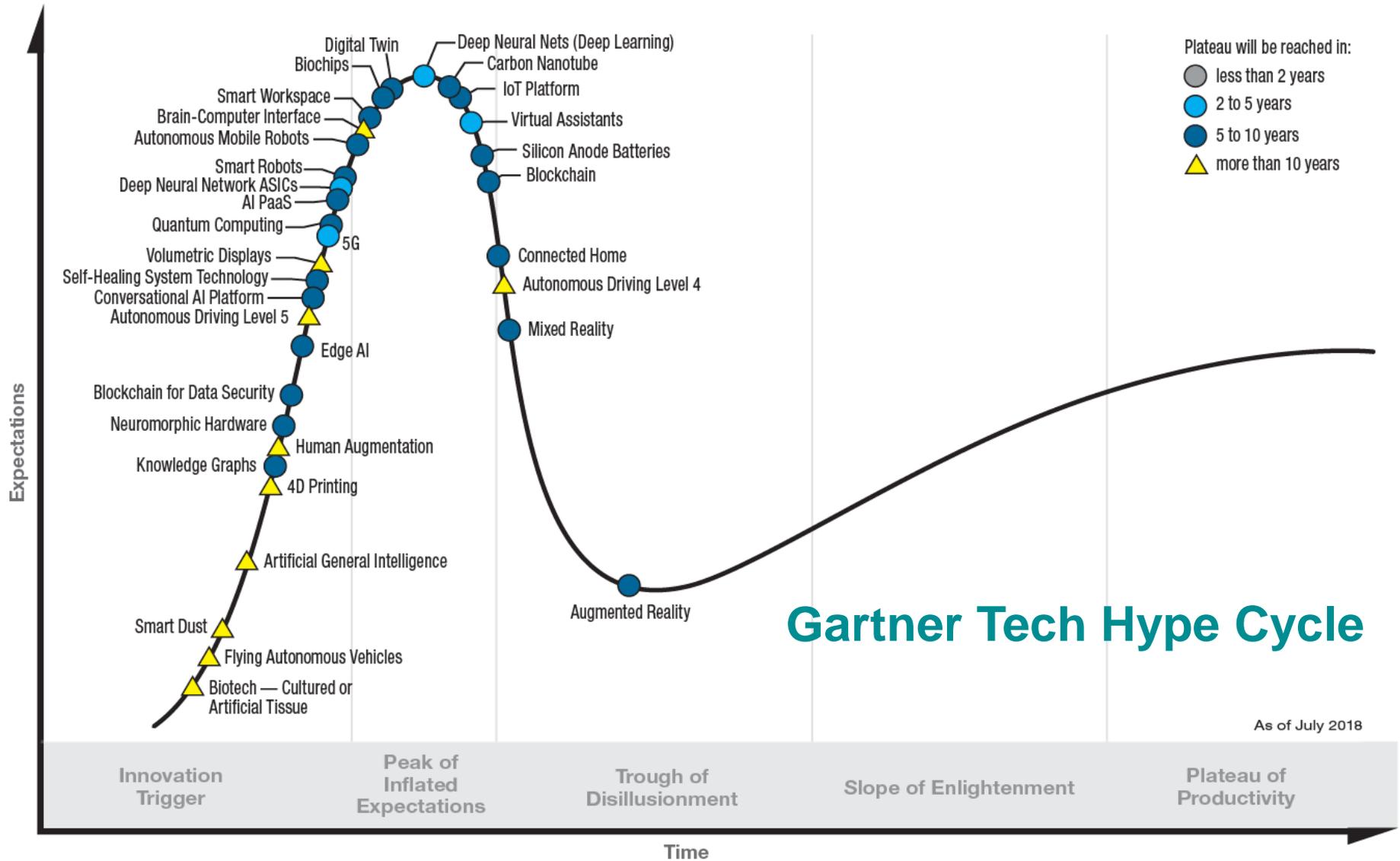


What is a Future (or Driving) Force?

- Dictionary.com: “the impetus behind something in motion.”
- Cambridge English Dictionary: “someone or something that has the power to make things happen.”
- Collins English Dictionary: “the main factor that causes something to happen.”

Basically, whatever is creating the change we see in the world around us.

Some Technology Examples...



Scenario Planning Benefits

- Calls attention to a range of plausible futures.
 - highlights questions that could otherwise be ignored.
 - explores the interaction between forces of change and system dynamics.
 - identifies critical choices.
 - considers potential outcomes from real crises.
- A tool for collaboration, collective learning, and involving stakeholders in identifying a more desirable future.
 - Can change perceptions, deal with uncertainty, and improve strategic decision-making.

Future Forces 2050

- Step 1. Define Research Statement
- Step 2. Brainstorm Future Forces
- Step 3. Short Presentations on Future Forces with Highest Knowledge Gaps
- Step 4. Vote for top 20 Forces Most Probable and Relevant to Research Statement
- Step 5. Vote on Impact and Uncertainty for Top 20 forces in Step 4.
- *Step 6. Use Impact-Uncertainty vote to form axes of uncertainty.**

Future Forces 2050

- *Step 7. Use axes of uncertainty to form scenarios.**
- Step 8. Facilitated discussion of scenario implications.
- Step 9. Facilitated discussion on scenario recommendations.
- *Step 10. Model and develop scenario narratives.*
- Step 11. Review draft report.
- Step 12. Publish final report and communicate key findings.

FUTURE

Greater Philadelphia

**FUTURE
FORCES**

FORCES

 DELAWARE VALLEY
dvrpc
REGIONAL
PLANNING COMMISSION

CONNECTIONS
2045

Future Forces 2045: Impact & Likelihood



Future Forces 2045



People and jobs moving to walkable communities is the start of a long-term trend.



Increased outsourcing and automation means individuals must create their own economic opportunities.



Continued rise in atmospheric carbon levels lead to significant disruptions from climate change.



Smartphones, apps, and real-time info help people get around using new and existing transportation modes.

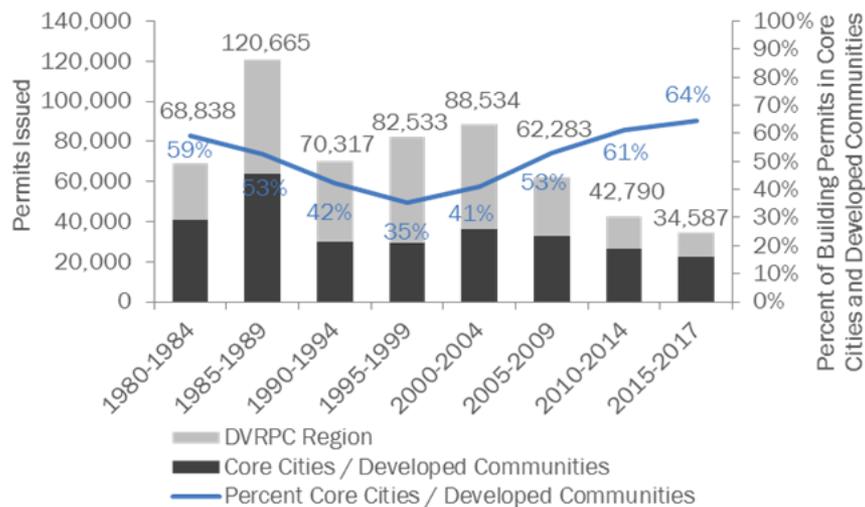


An abundance of domestically produced oil and natural gas keeps the cost of energy low.

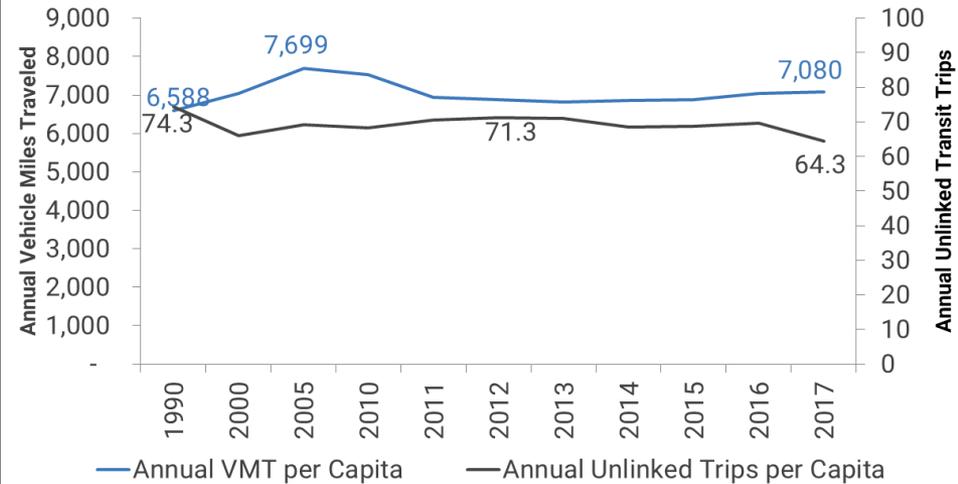


Leading Indicators

Percentage of Residential Building Permits in Core Cities & Developed Communities



Annual Vehicle Miles Traveled & Transit Trips Per Capita



Sources LEFT: U.S. Census, Construction Statistics Division, 2000–2017.

RIGHT: Pennsylvania Department of Transportation, 1990–2017; New Jersey Department of Transportation, 1990–2017; National Transit Database, 1990–2017; U.S. Census, 1990 - 2000; American Community Survey, 2005–2017 (1-year estimates).

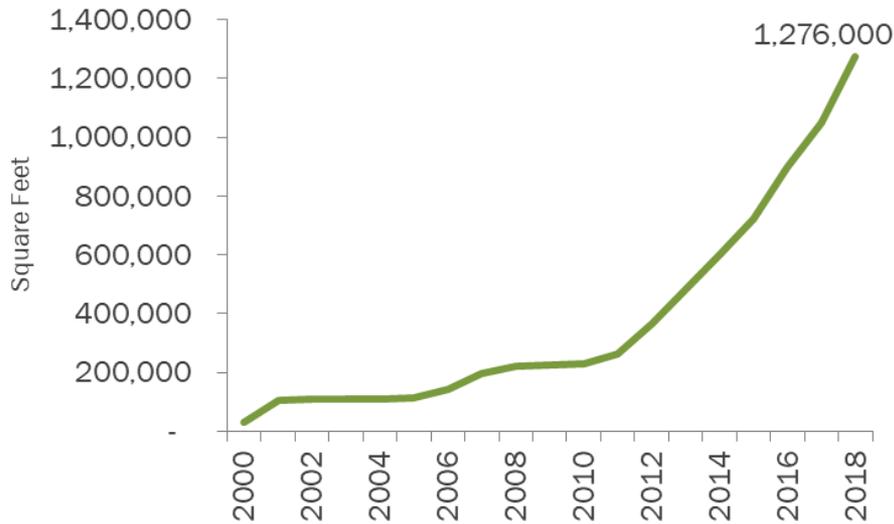


FOR HIRE

THE FREE AGENT ECONOMY

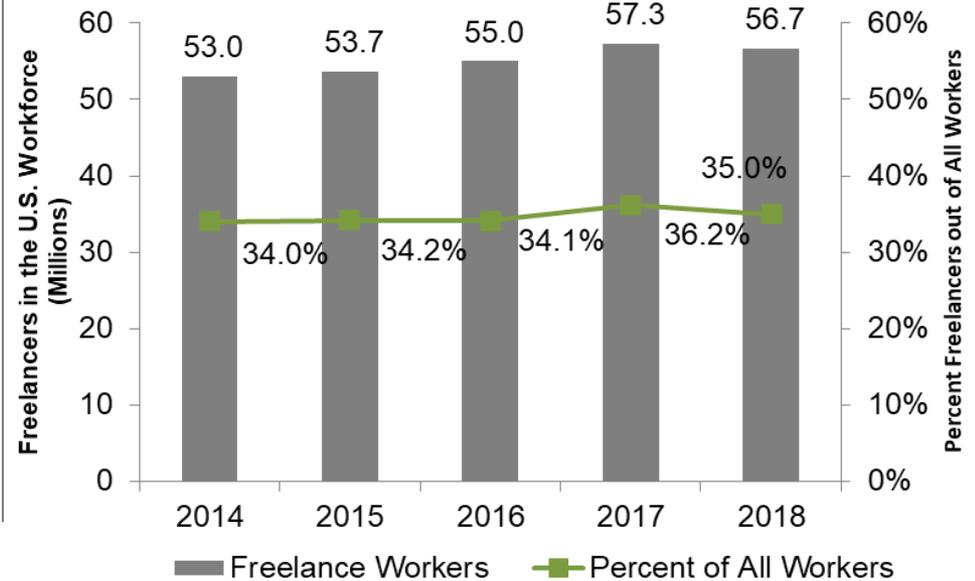
Leading Indicators

Shared and Co-Working Office Space



+ >50,000 Sq. Ft. Early 2019

U.S. Freelance Workers



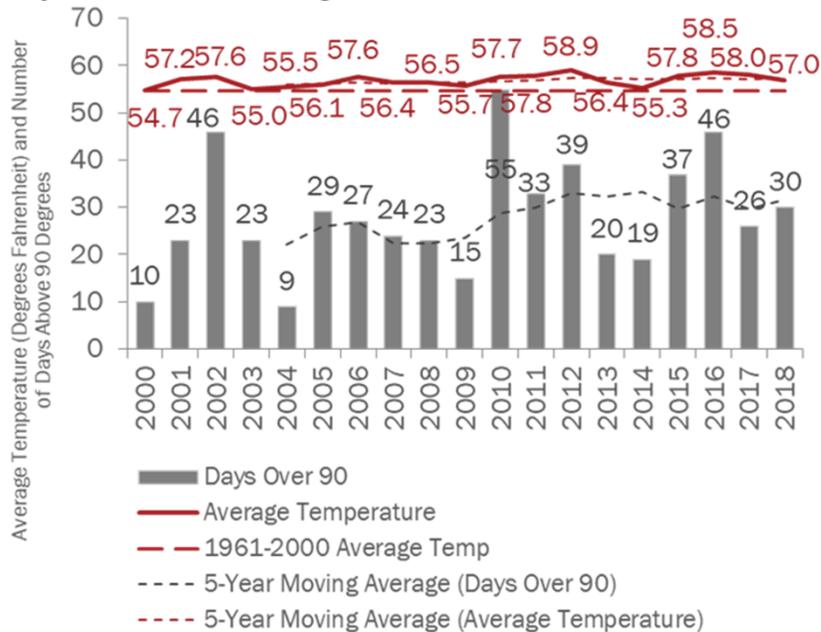
Sources LEFT: Jones Lang LaSalle and Costar, 2000-2018.

RIGHT: Freelancers Union and Uplift, Freelancing in America Annual Survey, 2014-2018.

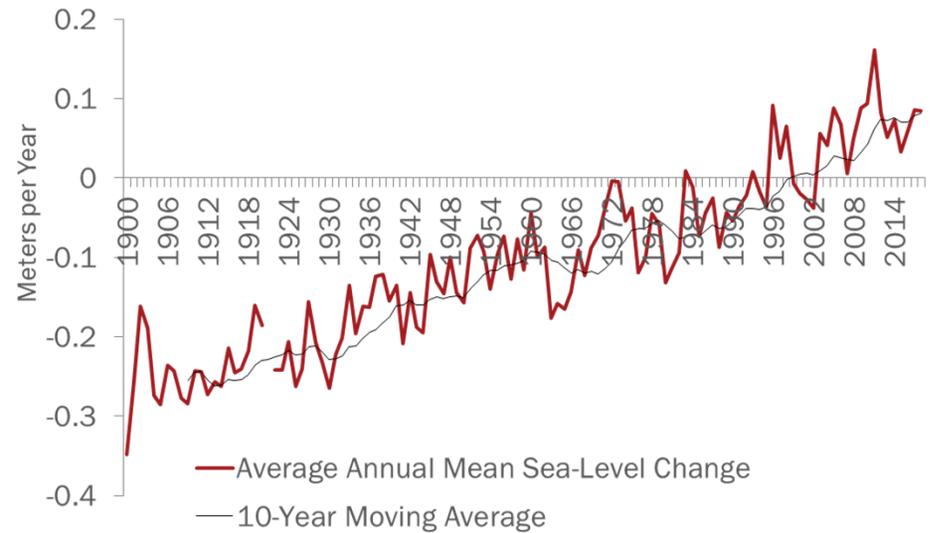


Leading Indicators

Average Regional Temperature & Days over 90 Degrees Fahrenheit



Annual Regional Sea Level Change

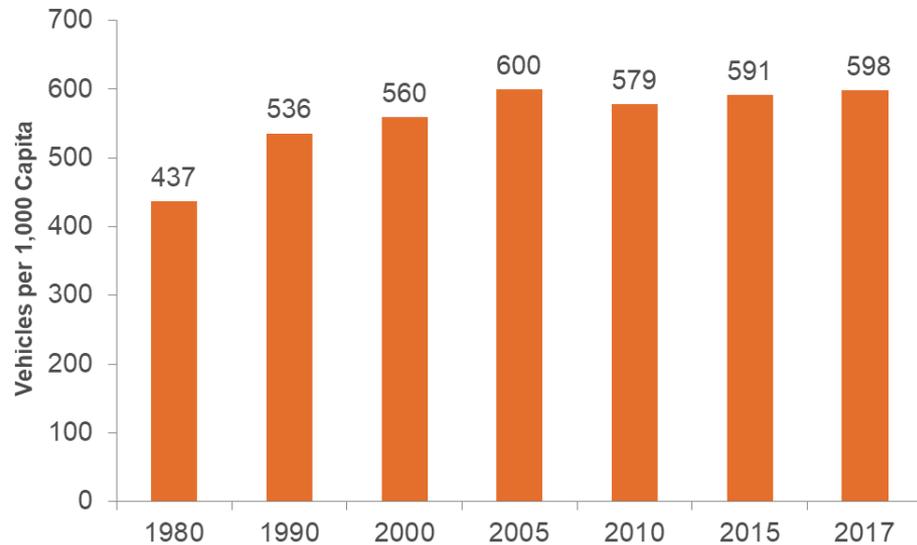


Sources LEFT: Source: U.S. Climate Data, 2000–2015 [www.usclimatedata.com/climate/philadelphia/pennsylvania/united-states/uspa1276].
RIGHT: National Ocean and Atmospheric Administration (NOAA) station 8545240, Philadelphia, PA [www.tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml].

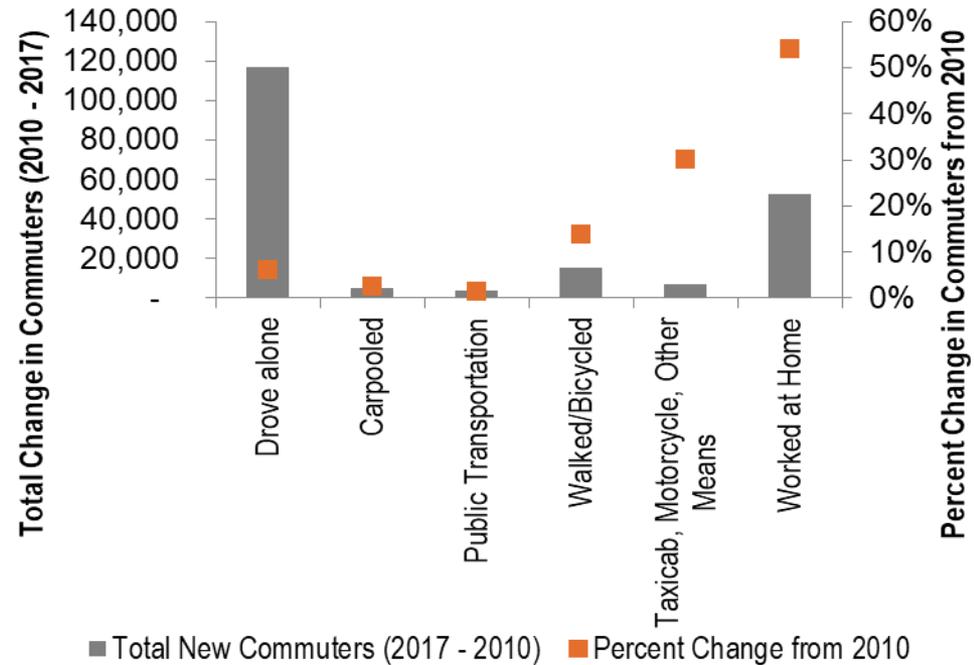


Leading Indicators

Regional Car Ownership per 1,000 Capita



2010-17 Change in Commute Mode Share



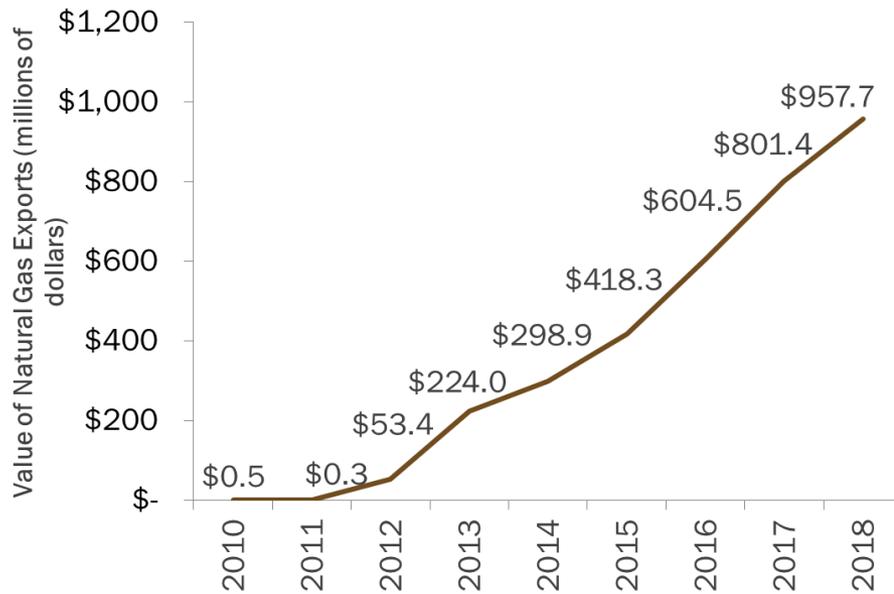
Sources LEFT: U.S. Census, 1980–2000, American Community Survey, 2005–2017 (1-year estimates).

RIGHT: American Community Survey, 2010-2017 (1-year estimates).

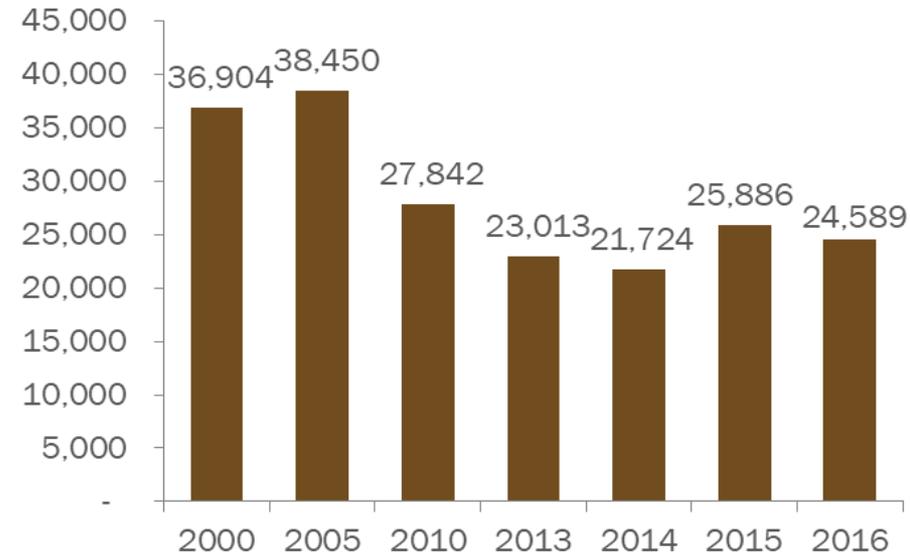


Leading Indicators

Annual Natural Gas Exports from the Region



Regional Petrochemical Jobs



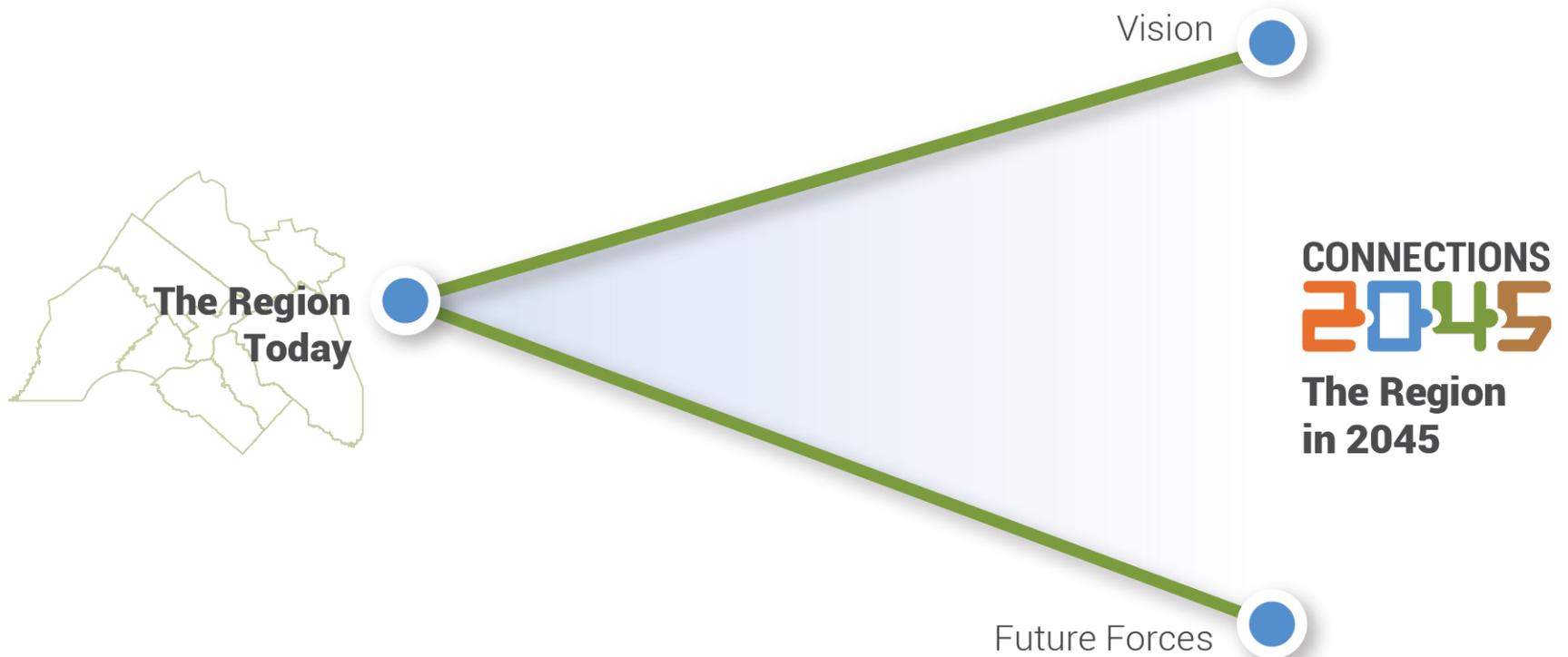
Sources LEFT: U.S. Census, Import and Export Merchandise Trade Statistics, 2003–2018.

RIGHT: U.S. Census, 2000–2016.

DVRPC Long-Range Planning



Future Forces vs. Vision



How Other Entities Can Use the Scenarios

- Use them to become a learning organization.
- Gain better understanding of key regional forces and trends to:
 - better prepare for the future.
 - guide strategic decision making.
- Strengthen regional cooperation.

Ground Rules

- Everyone will have a chance to speak.
- It's OK to disagree.
- Disagree with the idea, not the person.
- Do not interrupt each other.
- If you get stuck: park the issue so the process can keep moving.

(Draft) Research Statement

Test uncertainty from societal, technological, economic, environmental, and political trends and forces, which may:

- Present new opportunities and risks;
- Affect predictability in socio-economic, land use, and travel patterns; and
- Impact the region's ability to achieve its vision.

Breakout Group Discussion

Part 1.

- Brainstorm future forces.

Breakout Group Discussion

Part II.

- Build consensus on your top 5 forces to advance to the full working group.

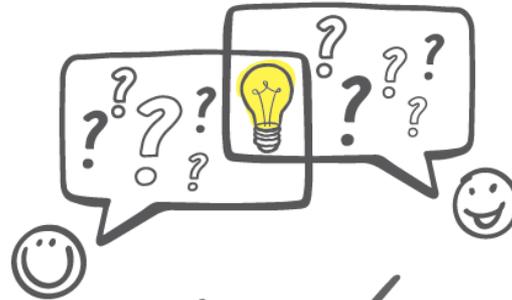
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Next Steps

- Meeting 2: Friday, March 11, 2019.
- Network and vote on the (3) full working group forces you'd like to hear more about.



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www.dvrpc.org/connections2045



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Dialogue. Collaboration. Knowledge-sharing.

Greater Philadelphia Future Forces 2045
Leading Indicators and
Digital Transportation Providers

Future Forces Leading Indicators

Greater Philadelphia Future Forces (DVRPC, 2015) was the region’s previous scenario planning effort conducted with the Futures Group. The resulting effort identified five key future force what-if alternative futures for the region:

- Enduring Urbanism—people and jobs moving to walkable communities is the start of a long-term trend.
- The Free Agent Economy—increased outsourcing and automation means individuals must create their own economic opportunities.
- Severe Climate—continued rise in atmospheric carbon levels lead to significant disruptions from climate change.
- Transportation on Demand—smartphones, apps, and real-time info help people get around using new and existing transportation modes.
- The U.S. Energy Boom—an abundance of domestically produced oil and natural gas keeps the cost of energy low.

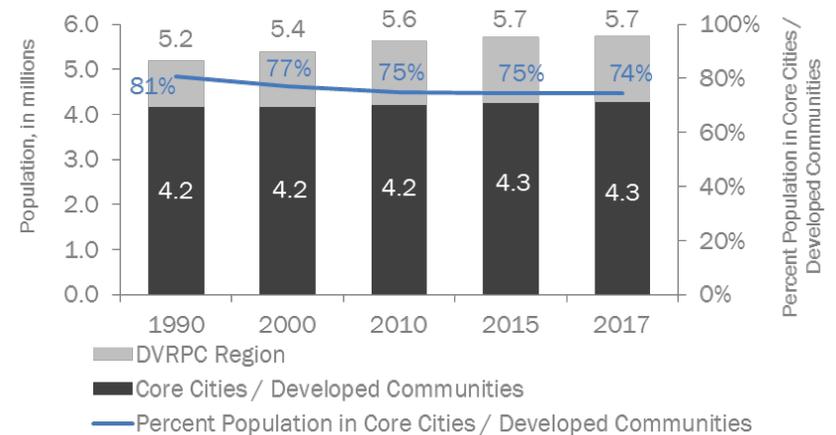
This effort identified a set of leading indicators to help tell whether each of these what-if scenarios is occurring. This is particularly relevant to determine which contingent actions and investments the region should pursue. The data for each of the leading indicators has been updated here as a way of starting off the Future Forces update by considering our previous analysis. In addition, a second scenario planning effort, *Networking Transportation*, provided a list of digital transportation services operating in Greater Philadelphia, which is also updated here.

In general, a lesson learned from the previous effort is to pay more attention to change at the edges, rather than regional averages (which are very slow to significantly change). Also, one-year U.S. Census estimates do a better job in showing short-term change than five-year estimates, which average all five years (and therefore have a larger sample size).

Enduring Urbanism

Under Enduring Urbanism, a larger percentage of jobs and population located in the region’s Core Cities and Developed Communities (as identified in the *Connections 2040* long-range plan), decreasing annual VMT per capita, increasing transit trips per capita, and increasing alternative transportation commute mode share would be expected.

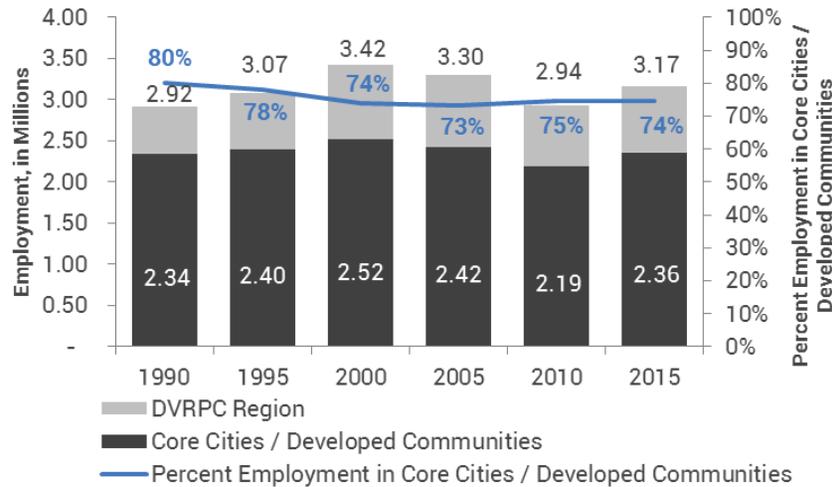
FIGURE 1: PERCENTAGE OF POPULATION IN CORE CITIES AND DEVELOPED COMMUNITIES



Source: U.S. Census Bureau, 1990-2000, American Community Survey Annual Population Estimates, 2010-2017.

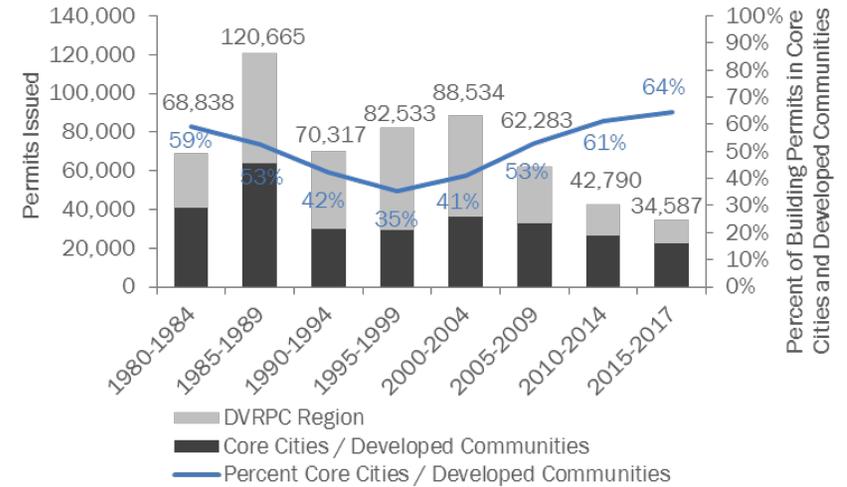
From 2010 to 2017, the region gained 112,400 residents, an increase of 2.0 percent. About 52,600 of those new residents located in the City of Philadelphia, representing about 47 percent of the region's growth. Over this same period, the Pennsylvania subregion gained 105,800 residents, while the commonwealth of Pennsylvania grew by 95,900. The five-county SE PA region represented 110 percent of the commonwealth's growth. The New Jersey subregion grew by 6,600, while the state of New Jersey grew by 204,000. The four-county southern New Jersey region represented 3 percent of the state's growth.

FIGURE 2: PERCENTAGE OF EMPLOYMENT IN CORE CITIES AND DEVELOPED COMMUNITIES



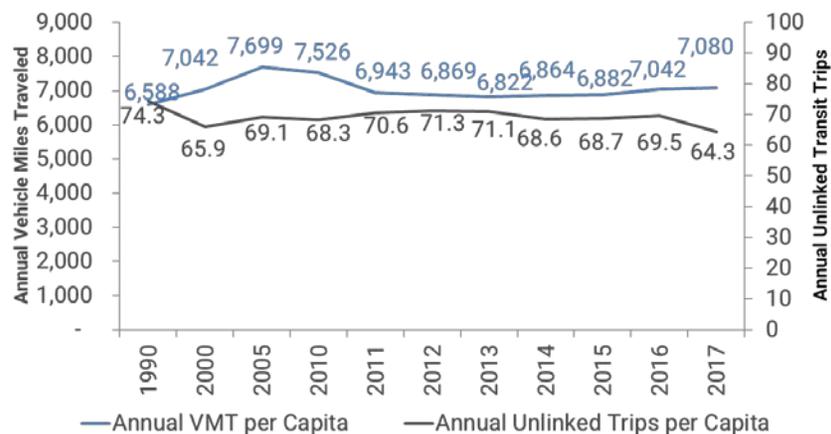
Sources: U.S. Census Bureau, 1990–2005; NETS database, as revised by DVRPC, 2010–2015.

FIGURE 3: PERCENTAGE OF RESIDENTIAL BUILDING PERMITS IN CORE CITIES AND DEVELOPED COMMUNITIES



Source: U.S. Census, Construction Statistics Division, 2000–2017.

FIGURE 4: ANNUAL VMT AND TRANSIT RIDERSHIP PER CAPITA

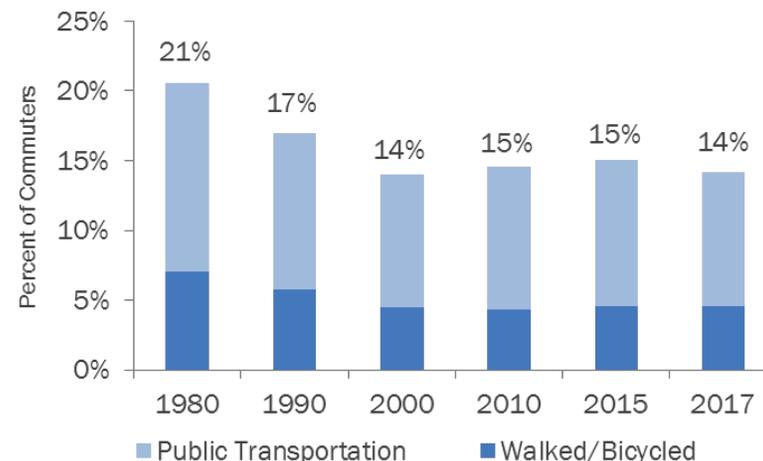


Sources: PennDOT, 1990–2017; NJ DOT, 1990–2017; U.S. Census, 1990–2000; American Community Survey, 2005–2017 (1-year estimates); National Transit Database, 1990–2017.

Total transit ridership decreased by 7.0 percent between 2016 and 2017. A variety of factors may be contributing to this rapid decrease, including rising congestion—which slowed buses—increased ridership on transportation networking company services, low fuel prices, and rising vehicle ownership rates. Transit ridership decline was most pronounced on bus routes.

From 2010 to 2017, the number of commuters in the region increased by 200,700, an increase of 8 percent over this period. Fifty-eight percent of those (116,800) are commuting by alone in their cars, representing a 6.3 increase in the total number of solo-driver commuters. Walking and biking has increased by 14 percent, with 15,400 additional commuters using these modes. Transit commuting has increased by 1.5 percent, with 3,800 additional commuters using this mode.

FIGURE 5: TRANSIT, WALKING, AND BIKING COMMUTE MODE SHARE



Sources: U.S. Census, 1980–2000; American Community Survey, 2010–2017 (1-year estimates).

TABLE 1: 2010-2017 MODESHARE CHANGE

Mode	New Commuters	Percent of New Commuters	Percent Change from 2010
Drove Alone	116,766	58.2%	6.3%
Carpooled	5,236	2.6%	2.6%
Public Transportation	3,796	1.5%	1.5%
Walked / Bicycled	15,384	7.7%	13.8%
Taxi, Motorcycle, or Other	6,733	3.4%	30.1%
Worked at Home	52,776	26.3%	54.0%
Total	200,691	100%	7.8%

Source: American Community Survey, 2010–2017 (1-year estimates).

Free Agent Economy

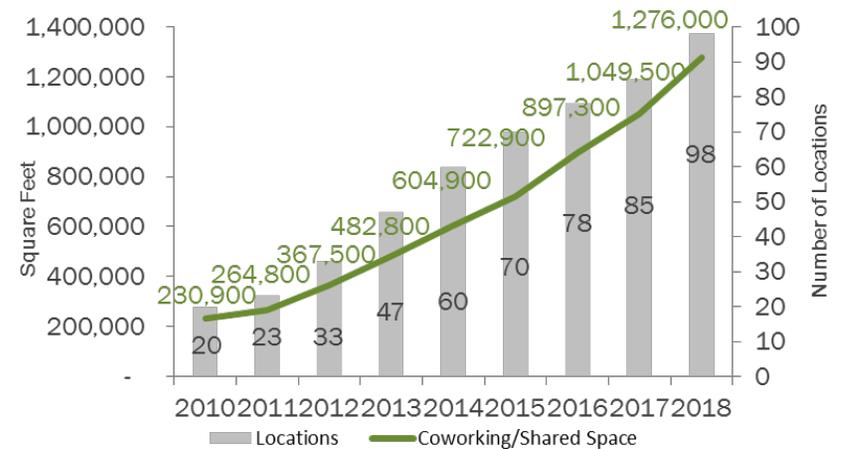
The Free Agent Economy anticipates increasing amounts of co-working and shared office space, more small businesses, and a higher percentage of self-employed individuals. A permanently high unemployment rate, which is a sign of a weak market for labor, may also point to the Free Agent Economy. This force suggests an increase in the number of renters, as a result of workers moving more often.

In 2016, DVRPC found 78 active co-working and shared office space facilities occupying nearly 900,000 square feet. There were eight net new operators and 175,000 square feet of space added in the previous year. New spaces tended to be larger, as the average space increased to 11,500 square feet, up from 10,300 square feet on average in 2015. IndyHall, a well-known local co-working space, moved into a larger facility. Major new national, venture capital-backed operators arrived, such as WeWork, which opened in three separate locations, and Make Offices. UPenn and 1776 (formerly Benjamin's Desk) opened the 58,000-square-foot Penovation Center. New locally owned spaces emerged as well, such as 1776's new location on Walnut Street, Rally Coffee, the Philadelphia Design Center, and Thrive Philly. A few smaller co-working facilities closed during the year as well, such as Philly Game Forge and South Philly Coop Workspace.

By 2017, 85 regional coworking and shared office spaces combined for just over 1 million square feet of space. These facilities continued to increase in size, with an average of more than 13,000 square feet each. This increase occurred despite Camden CoLab closing (with 25,000 square feet), and the smaller Waterfront Labs (9,500 square feet) opening in Camden City to replace it. Major new facilities opening in 2017 include We Work IV at 1900 Market Street, with 55,000 square feet, and the 42,000 square feet Make Offices II at

1635 Market St. Two 23,000 square foot facilities also opened: Joynture at 4th and South, and The Yard at 21 S. 11th St., both in Philadelphia.

FIGURE 6: CO-WORKING AND SHARED OFFICE SPACE



Source: Jones Lang LaSalle and Costar.

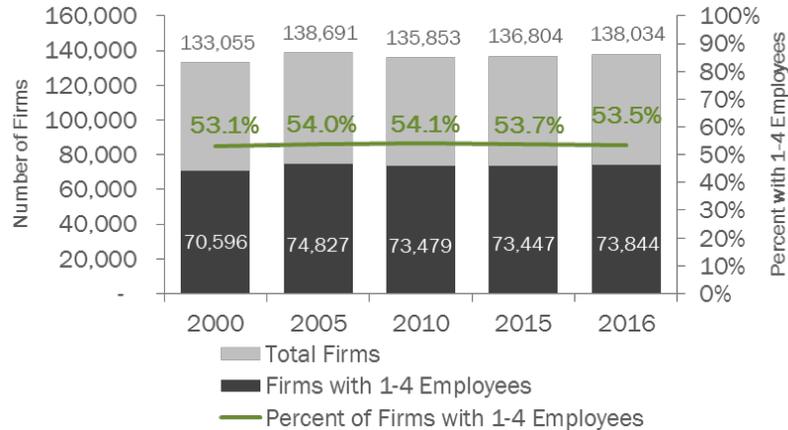
2018 added Lakes Workspace in Burlington County; Ambler Yards (powered by 1776) and Life Time Work in Montgomery County; Regus Radnor in Delaware County; and the 127,000 square foot Cambridge Innovation Center, Convene, Divine Works (powered by 1776), Kismet Spring Arts, and One Nickel Coworking in Philadelphia. Total coworking space is now nearly 1.3 million square feet, with 98 different facilities averaging 13,300 square feet. In addition, there are another five additional facilities for which DVRPC has not been able to determine the square footage:

- Cowork Street, Camden County.
- The Fish Tank, Camden County.
- Regus - Forrestal Villages, Mercer County.
- Align.Space, Chester County.

- Utility Works, Delaware County.
- Tribe Commons, Philadelphia.

In the self-employed indicator, single-person businesses that are incorporated as a limited liability corporation or Subchapter SW corporation are not considered self-employed. This is a known gap in measuring the size of the free agent workforce with official government data.

FIGURE 7: PERCENTAGE OF BUSINESSES WITH FOUR OR FEWER EMPLOYEES



Source: U.S. Census, 2000–2016.

FIGURE 8: SELF-EMPLOYED WORKERS AS A PERCENTAGE OF ALL POPULATION OVER 16 YEARS OLD

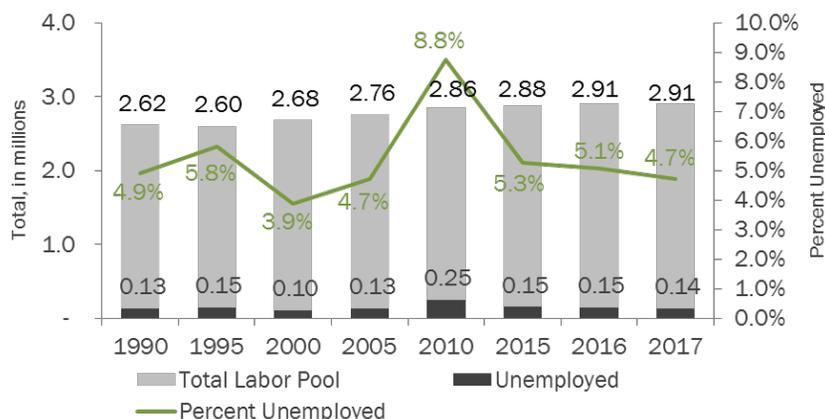


Sources: U.S. Census, 2000; American Community Survey, 2005-2017 (1-year estimates); Bureau of Labor Statistics, 2000–2017.

The Freelancers Union and Upwork conduct an annual survey, called *Freelancing in America*, of how many people are working in what is alternatively called the freelance economy, gig economy, sharing economy, on-demand economy, 1099 economy, or the contingent economy. The 2018 survey estimated that 56.7 million U.S. workers are working in the free agent economy, representing 35 percent of all workers. This is a seven percent increase from the first 2014 survey, which found 53 million workers or 34 percent of all workers. Some other key findings from the survey include:

- More people are choosing to freelance (61 percent of free agents indicated this in 2018 compared to 53 percent in 2014).
- 77 percent of freelancers feel like they have a better work/life balance; but 63 percent are anxious about all they have to manage.
- 64 percent of freelancers worked online in 2018, compared to 42 percent in 2014. 67 percent of freelancers indicate that they have found work online.

FIGURE 9: UNEMPLOYED WORKERS AS A PERCENTAGE OF TOTAL LABOR POOL



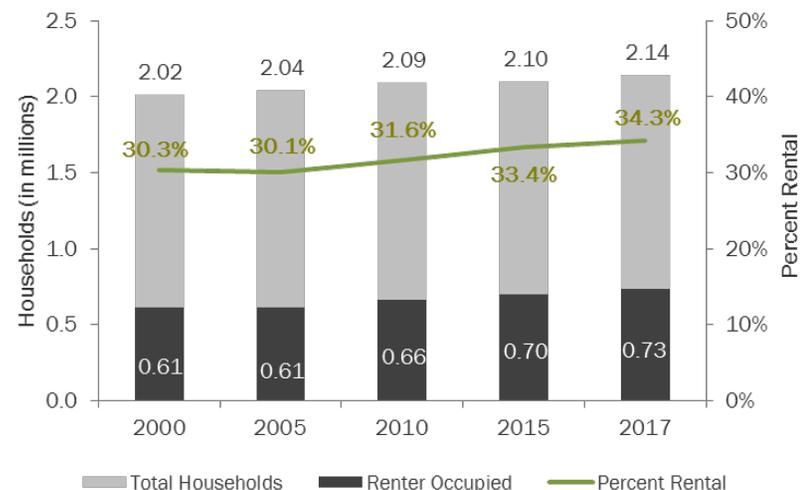
Sources: U.S. Census, 1990-2000; American Community Survey, 2005–2017 (1-year estimates); Bureau of Labor Statistics, 1900–2017.

- 48 percent of freelancers viewed their work as long-term in 2018, versus just 35 percent in 2014.
- 50 percent of freelancers describe their work as intermittent and irregular, while the other half describes it as consistent.
- 18 to 34 year olds are more likely to freelance than older individuals. 42 percent in this demographic viewed themselves as freelancers in 2018 compared to 38 percent in 2014. In 2018, 35 percent of those 35 to 44, 29 percent of those 45 to 54, and 30 percent of those over 55 considered themselves freelancers.
- Freelancers (70 percent) were more likely than non-freelancers (49 percent) to have participated in skill training in the past 6 months.

Richard Florida’s great reset theory suggests that the changing nature of the post-2007 recession economy will lead to an increase in renters, particularly in economically dynamic regions that attract creative class individuals. However, this may be more of a lagging indicator than a leading one. Between 2010 and 2017, the region gained an estimated 52,500 households. Over that same period, the

region lost 20,900 owner-occupied households, while the number of rental households increased by 73,500.

FIGURE 10: PERCENTAGE OF HOUSEHOLDS THAT RENT

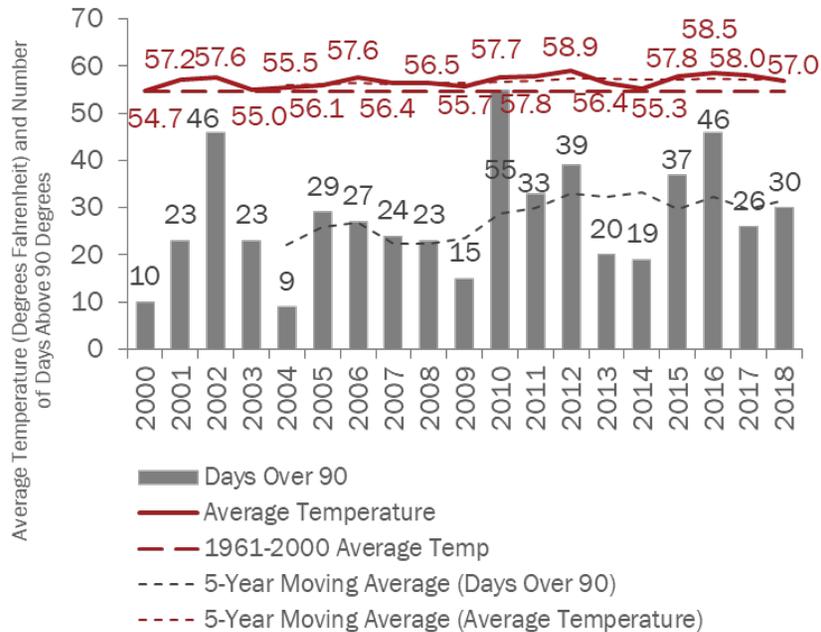


Sources: U.S. Census, 2000; American Community Survey, 2005–2017 (1-year estimates).

Severe Climate

Severe Climate anticipates a continued increase in global atmospheric CO₂. In March 2015, the planet reached 400 CO₂ parts per million, which has generally been seen as the threshold to remain under in order to stave off the worst effects of climate change. Average annual regional temperature and precipitation, and regional sea level change, are all forecasted to increase in this scenario.

FIGURE 11: AVERAGE REGIONAL TEMPERATURE AND DAYS OVER 90 DEGREES FAHRENHEIT



Source: U.S. Climate Data, 2000–2018, <http://www.usclimatedata.com/climate/philadelphia/pennsylvania/united-states/uspa1276>.

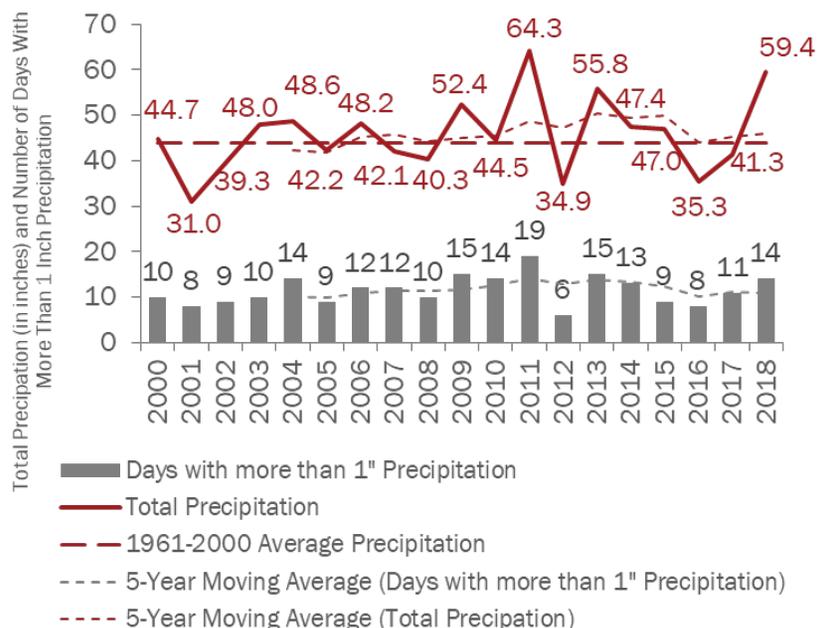
Available regional climate data does not go back far enough to show a distinct warming or cooling trend, but it is worth noting that globally, eight of the 10-warmest years on record all occurred within the last decade and all happened within the last 20 years. 2018 also represented the 42nd straight year where global land and ocean temperatures were higher than the 20th century average.

TABLE 2: 10 HOTTEST YEARS GLOBALLY SINCE 1880

Hottest Year Rank	Year	Temp Anomaly in °F
1	2016	1.71
2	2015	1.64
3	2017	1.53
4	2018	1.42
5	2014	1.35
6	2010	1.26
7	2005	1.21
8	2013	1.19
9	2009	1.15
9	1998	1.15

Source: National Ocean and Atmospheric Administration (NOAA), *Global Climate Report – Annual 2018*, <https://www.ncdc.noaa.gov/sotc/global/201813>.

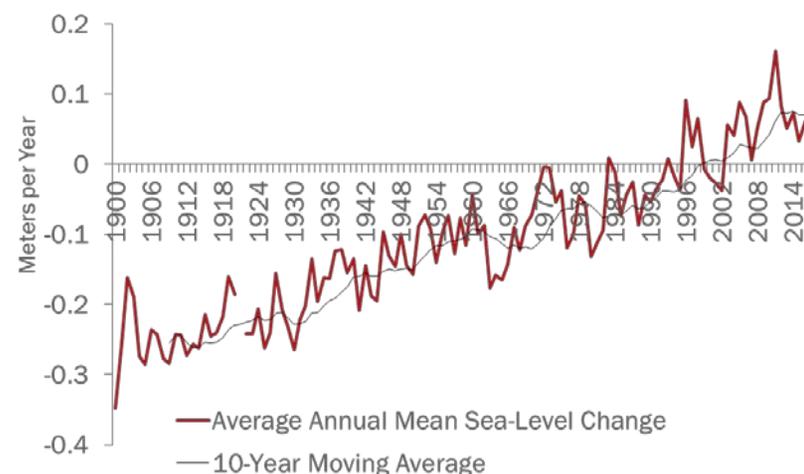
FIGURE 12: ANNUAL REGIONAL PRECIPITATION AND DAYS WITH MORE THAN ONE INCH OF PRECIPITATION



Source: U.S. Climate Data, 2000–2018, <http://www.usclimatedata.com/climate/philadelphia/pennsylvania/united-states/uspa1276>.

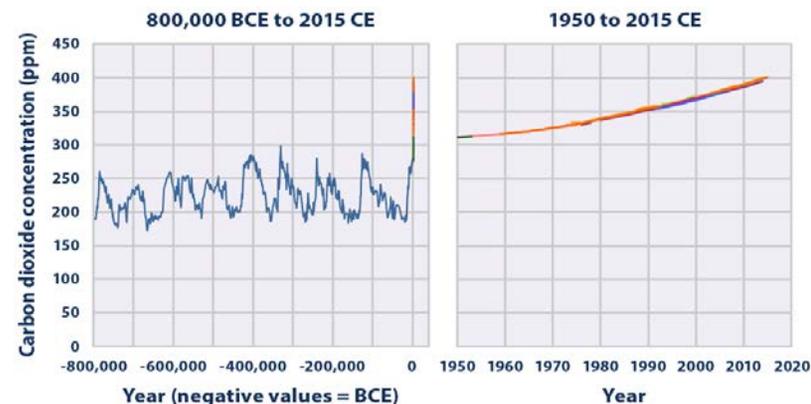
Since sea-level change started increasing the early 1990s at the NOAA’s measuring station in Philadelphia near the Walt Whitman Bridge, the region has seen an average of a 0.5 millimeter annual increase in sea levels (note the Delaware River is tidal).

FIGURE 13: ANNUAL REGIONAL SEA LEVEL CHANGE



Source: NOAA station 8545240, Philadelphia, PA, http://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml.

FIGURE 14: GLOBAL ATMOSPHERIC CO₂ (PARTS PER MILLION)



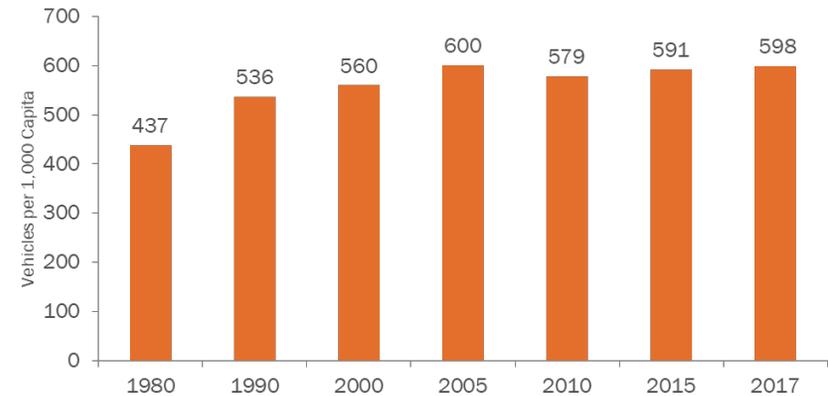
Source: U.S. Environmental Protection Agency, <http://www3.epa.gov/climatechange/science/indicators/ghg/ghg-concentrations.html>.

Transportation on Demand

Transportation on Demand predicts lower levels of car ownership, an increase in zero-car households, and a higher alternative commute mode share. Tracking of new modes, such as ridesourcing or microtransit, in U.S. Census data may be another signal that this future is coming. Transportation on Demand largely looks to more efficiently use the number of empty vehicle seats in each trip. An increased vehicle occupancy rate or more efficient vehicle sizing that reduces the number of unoccupied seats could also be a sign that this future is occurring. Yet another indicator could be the growth of carsharing and bikesharing members or available vehicles. Another indicator could be the continued emergence of new modes, such as e-scooters.

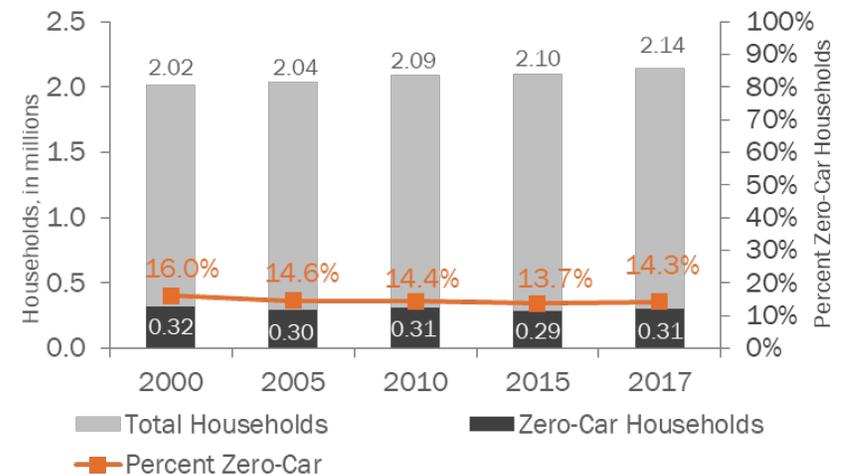
From 2010 to 2017, the region added 182,000 cars, an increase of 5.6 percent. The region has added 128,000 households over the last 17 years, but now has nearly 17,000 fewer carless households than it did in 2000. Between 2015 and 2017, however, the number of carless households increased by 18,500.

FIGURE 15: REGIONAL CAR OWNERSHIP PER 1,000 CAPITA



Sources: U.S. Census, 1980, 1990, and 2000; American Community Survey, 2005-2017 (1-year estimates).

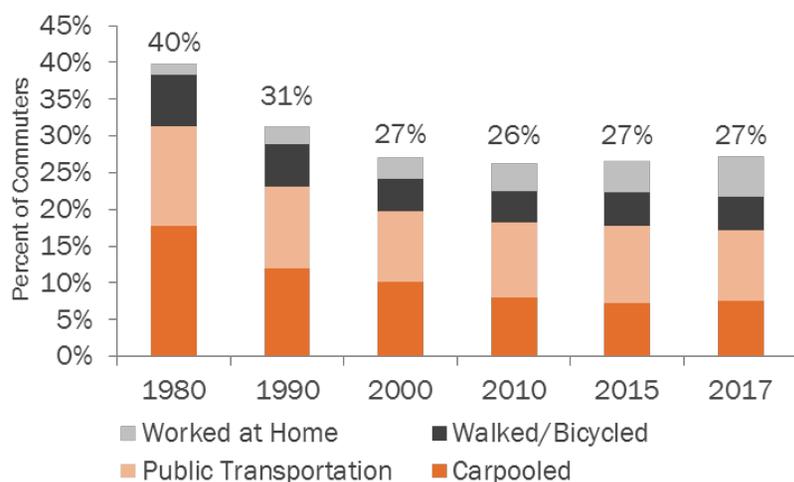
FIGURE 16: ZERO-CAR HOUSEHOLDS



Sources: U.S. Census, 2000; American Community Survey, 2005-2017 (1-year estimates).

The number of commuters in the region has increased by 200,700, between 2010 and 2017. Fifty-eight percent of those (116,800) are driving alone, an increase in the total number of solo driver commuters of 6.3 percent. Carpooling has increased by 5 percent, with 5,200 additional commuters teaming up each day. Working from home has increased by 54 percent, with 52,800 additional workers ditching the commute altogether each day. 6,700 new commuters getting to work by taxi, motorcycle, or other means, representing just 3 percent of new commuters from this period, but a 30 percent increase from the base year.

FIGURE 17: NON-SOV COMMUTE MODE SHARE



Sources: U.S. Census, 1980–2000; American Community Survey, 2010–2017 (1-year estimates)

Table 3 has an updated list of various new tech-enabled, shared, on-demand and/or real-time services believed to be operating in Greater Philadelphia.

U.S. Energy Boom

Depending on how the energy boom plays out, it is likely there will be increasing natural gas exports from the region and more petrochemical jobs located in the region. Natural gas exports data comes from the U.S. Census’s Import and Export Merchandise Trade Statistics for the following products:

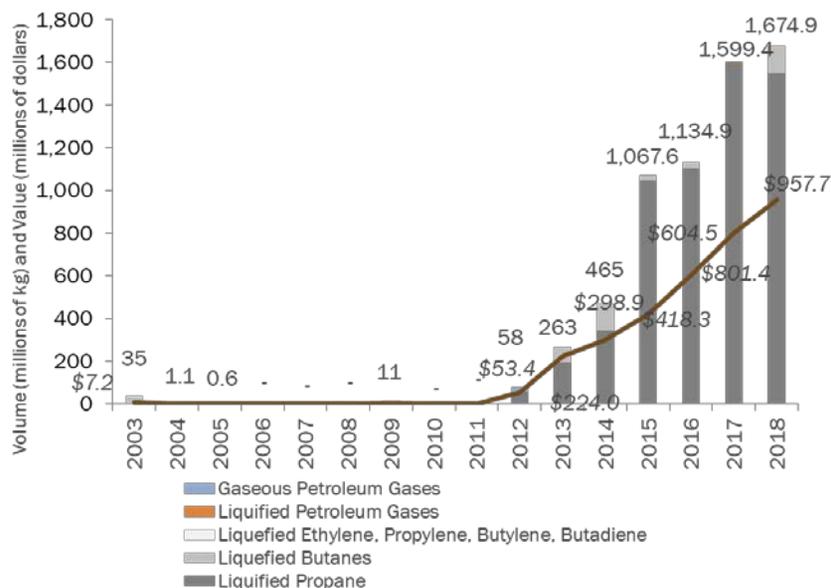
- 271111 Natural Gas, Liquefied;
- 271112 Propane, Liquefied;
- 271113 Butanes, Liquefied; and
- 271114 Ethylene, Propylene, Butylene, Butadiene Liquefied.

Export value is determined on a free-alongside-ship basis, which reflects transaction price, including inland freight, insurance, and other charges incurred in placing the merchandise alongside the ship at the port of export.

Shipping weight represents the gross weight in kilograms of shipments, including the weight of moisture content, wrappings, crates, boxes, and containers (other than cargo vans and similar substantial outer containers). Shipping weight information is available for non-low-value shipments by air and vessel only.

Another indicator that the Futures Group considered worth tracking is renewable energy generation as a percentage of total energy generation. This measure may test the disruptive nature of these energy sources to the natural-gas-reliant U.S. Energy Boom. This data is highly complex and is not currently available. Total energy generation is tracked and may show how demand for energy is changing due to increasing energy efficiency or economic growth (expanding demand), etc.

FIGURE 18: ANNUAL NATURAL GAS EXPORTS FROM THE REGION



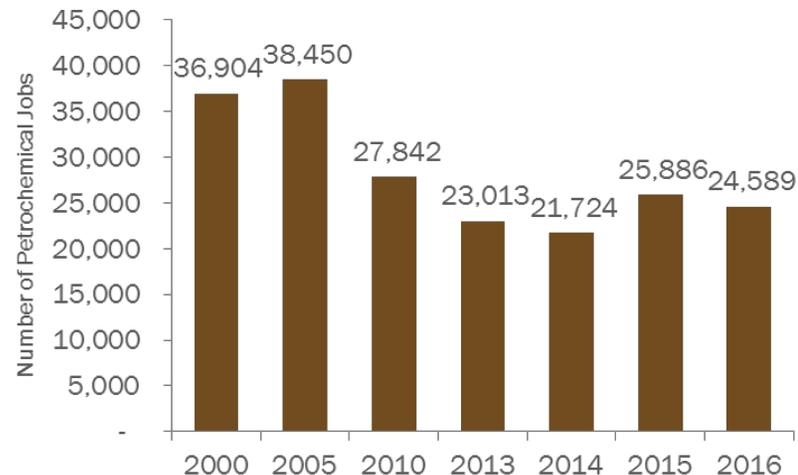
Note: 2018 Values through November only, data unavailable for 2017 Liquefied Butane volume.
 Source: U.S. Census, Import and Export Merchandise Trade Statistics, 2003–2018.

Though annual natural gas exports increased 15-fold between 2012 and 2017, their \$801 million dollar value represents just 0.2 percent of Greater Philadelphia’s approximately \$410 billion gross regional product.

The petrochemical indicator tracks jobs corresponding with the following three- and four-digit 2012 North American Industry Classification System codes:

- 2212. Natural Gas Distribution;
- 324. Petroleum and Coal Products Manufacturing;
- 325. Chemical Manufacturing;
- 326. Plastics and Rubber Products Manufacturing;
- 4861. Pipeline Transportation of Crude Oil;
- 4862. Pipeline Transportation of Natural Gas; and
- 4869. Other Pipeline Transportation.

FIGURE 19: REGIONAL PETROCHEMICAL JOBS



Source: U.S. Census, 2000–2016

TABLE 3. GREATER PHILADELPHIA DIGITAL TRANSPORTATION PROVIDERS

Type	Company	Service Provided
Bikesharing	Bike Share for Montgomery County	One-Way Trips
	Indego	One-Way Trips
	Princeton Bikeshare	One-Way Trips
	Spinlister	Peer-to-Peer Rentals
	Bike Share for West Chester University	One-Way Trips
Carsharing	Clem	Carsharing, Carpooling, and EV Charging
	Getaround	Peer-to-Peer Rentals
	Enterprise Carsharing	Round-Trip Rental
	Zipcar	Round-Trip Rental
	Turo	Peer-to-Peer Rentals
Courier Network Services	Caviar/Trycaviar	On-Demand Restaurant Delivery
	Go Puff	On-Demand Cigarette Delivery
	Grubhub	On-Demand Restaurant Delivery
	Instacart	On-Demand Grocery Delivery
	Peapod	On-Demand Grocery Delivery
	Postmates	On-Demand Retail and Restaurant Delivery
	Seamless	On-Demand Restaurant Delivery
	Shipt	On-Demand Grocery Delivery
	UberEATS	On-Demand Restaurant Delivery
Freight	Cargo Chief	Regional On-Demand Goods Movement
	Convoy	Regional On-Demand Goods Movement
	Roadie	On-Demand Passenger Vehicle Long-Distance Shipping
	Transfix	Long-Haul and Regional On-Demand Goods Movement
Parking Apps	ParkMe	e-Payment and Parking Space Reservation
	Parkopedia Parking	e-Payment and Parking Space Reservation
	ParkWhiz	e-Payment and Parking Space Reservation
	BestParking	e-Payment and Parking Space Reservation
	MeterUp	On-Street Parking e-Payment

Type	Company	Service Provided
	SpotHero	e-Payment and Parking Space Reservation
Real-Time Ridesharing	RideAmigos	Transportation Demand Management Software
	Waze Carpool	Real-Time Carpooling
Roadside-as-a Service	Honk	On-Demand Roadside Assistance
	Urgent.ly	On-Demand Roadside Assistance
Taxi Apps	215 GetACab	On-Demand Taxi Rides
	Blacklane	On-Demand Limo Service
	Carmel	On-Demand Limo Service
	Curb	On-Demand Taxi Rides
	Jayride	On-Demand 1-20 Person Airport Transfers
	Limos.com	On-Demand 1-50 Person Luxury Vehicle Reservations
	Talixo	On-Demand Limo and Taxi Service
TNCs	Circulation	On-Demand Nonemergency Medical Transportation
	Go Go Grandparent	Phone-Call-Based On-Demand Rides for Seniors
	Lyft, Lyft Line, Lyft SUV, Lyft Plus, Lyft Premier	On-Demand Ride Hailing
	Lyft Line	Shared On-Demand Ridesplitting
	RideGuru	Ride-Hailing Search Engine
	RoundTrip	On-Demand Nonemergency Medical Transportation
	Skedaddle	Group On-Demand Long Distance Trips
	UberPool	Shared On-Demand Ridesplitting
	UberX, UberBLACK, UberSUV, UberXL, UberWAV	On-Demand Ridesourcing
Transit Apps	Moovit	Real-Time Transit Information
	SEPTA App	Real-Time Transit Information
	New Jersey Transit Mobile App	Real-Time Transit Information and Virtual Ticketing

Source: DVRPC, 2019.