



WEST VIRGINIA
FORWARD

October 17, 2017

West Virginia Forward:

Joint Committee on Economic Development

WV's inflection point - momentum to work together to revitalize our economy

“ My top priority is to turn around West Virginia. We need to think big [...] make big economic development ideas a reality. ”

– Secretary Woody Thrasher

“ We are excited about this collaboration with WVU and Commerce, and about the opportunity to bring university and state resources to the table... ”

–Marshall President Jerome Gilbert

“ We want to help West Virginians thrive by changing our state's economy — forever. We know we have the power to nurture resiliency and reposition our state for broad-based prosperity. ”

– WVU President Gordon Gee

We can improve fragmented support resources across the State that don't always talk together or leverage well.

— Multiple State stakeholders



CONTEXT

Address economic transition, loss of traditional jobs

Ongoing community efforts support economic revival

Key stakeholders support statewide plan for robust economy

OBJECTIVES

Support economic diversification

Identify ways to improve our enabling environment

Create an implementation plan

**Not tax payer funded*

DIMENSIONS OF ECONOMIC DEVELOPMENT

Economic Sectors

- Target sectors for retention, expansion & attraction
- Based on WV assets
- Diversified mix



Economic Enablers

Business Climate

Innovation Business Development

Infrastructure

Human Capital



Cost of doing business

Regulatory environment

Quality of life

External business attraction

Existing business support

New business development

Transportation

Communications/IT

Utilities

Health, education, skills, labor pool

WV FORWARD RECOMENDATIONS

DIVERSIFY SECTORS

Maintain current industries

- Aerospace
- Auto parts manufacturing
- Metals manufacturing
- Fulfillment, distrib
- Building products

Differentiate growth sectors in WV

- Carbon fiber reinforced plastics
- Fine chemicals

Capture new sectors w/ high growth prospects

- High end tourism
- Cyber security, cloud services

Keep eye on new opportunities

- Life sciences
- Vehicle assembly plants

Business climate

- Ease of doing business
- Cost of doing business
- Quality life

Innovation, business development

- Attract businesses
- Support small-businesses
- Foster new businesses

Infrastructure

- Transportation
- Broadband
- Sites

Human capital

- Talent pool
- Workforce participation
- Talent attraction

WV ECONOMIC DEVELOPMENT

IMPROVE ENABLERS

ECONOMIC ENABLERS

Enablers	Dimensions	Diagnostic	Opportunity
Business Climate	Cost of doing business	<ul style="list-style-type: none"> • Top 15 states for cost of doing business, but energy costs are rising • 18th on Business Tax Climate • Took measures To improve legal climate • Ranks last in quality of life 	<ul style="list-style-type: none"> • Rebrand WV's strengths in business climate • Establish plan utility costs • Ease administration of TPP
	Regulatory environment		
	Quality of life		
Innovation & Business Development	Starting new businesses	<ul style="list-style-type: none"> • Business exits higher than startups, #49 on business birth rate & #47 patent creation • Fewer small business innovation research awards, less seed funding & limited discretionary funds available for closing deals 	<ul style="list-style-type: none"> • Convene innovation actors, ↑ support to startups • small business support • Change mix of incentive types • Expand development office attraction capabilities
	Growing existing businesses		
	Attracting businesses		
Infrastructure	Transport	<ul style="list-style-type: none"> • #43 on bridge quality, #37 on road quality • Bottom ten access to broadband, • internet backbone missing WV entirely • Opportunity to certify sites 	<ul style="list-style-type: none"> • Expand broadband • Create financing mechanisms to fund capital projects • Launch site certification program
	IT		
	Sites		
Human Capital	Foster talent pipeline	<ul style="list-style-type: none"> • Fewer STEM and college grads than all peers (14% and 20% respectively) • Net population loss of ~5K/year • Declining labor force participation, (ranks worse in women and disabled people participation vs. peers) 	<ul style="list-style-type: none"> • Create concerted State-wide human capital effort • Expand STEM talent pool • Encourage returning/relocating to WV • Combat opioid crisis • Train workforce for jobs in high demand
	Improve health and skills of the workforce		
	Attract talent from outside WV		

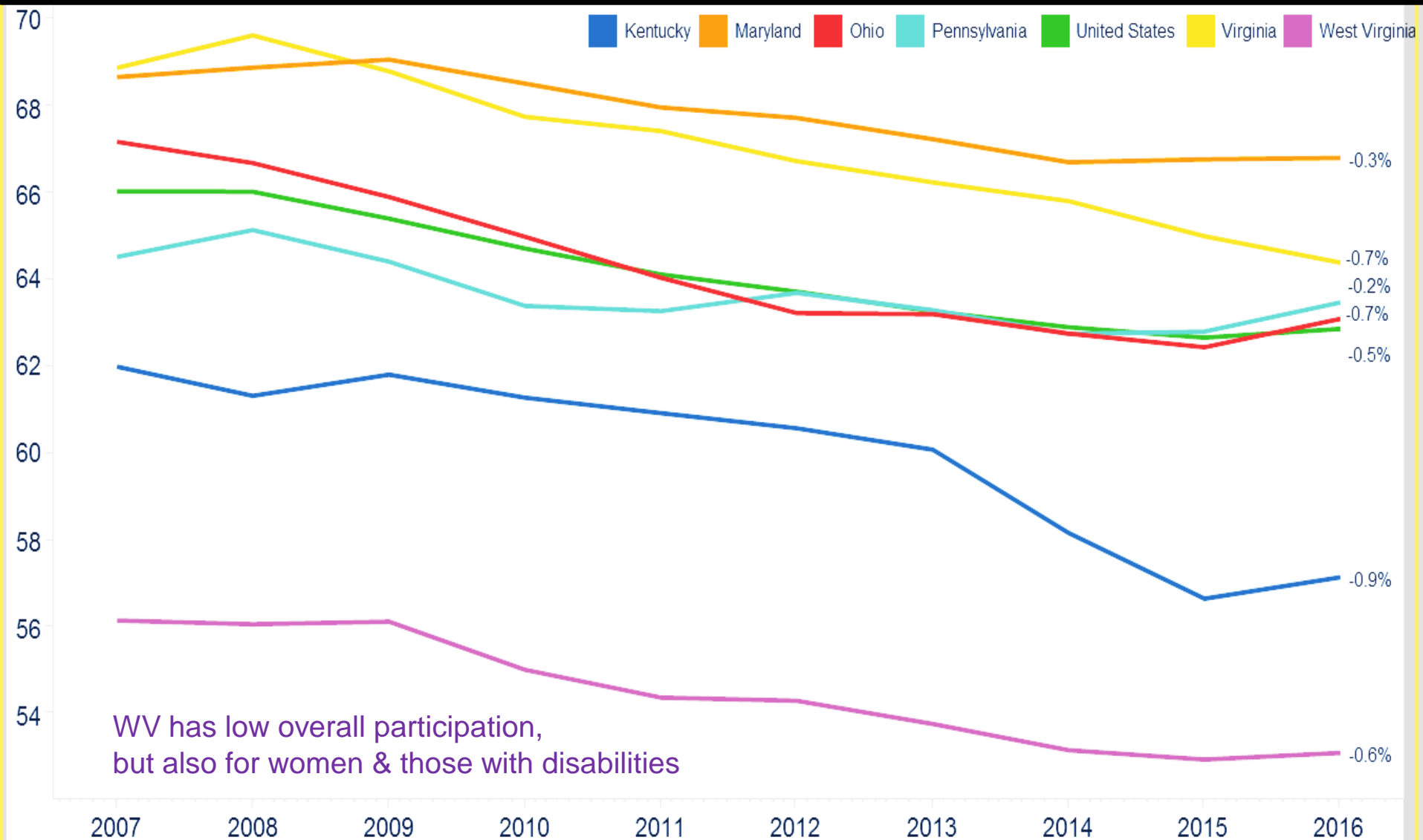
Outperform peers

On par with peers

WV's VALUE PROPOSITIONS

	WV	OH	PA	MD	VA	KY
Employee turnover	<u>8.8%</u>	9.3%	9.5%	9.5%	10.8%	9.9%
Home ownership	<u>74.2%</u>	66.4%	67.7%	65.6%	66.4%	69.6%
Earnings per hour	<u>\$21</u>	\$23	\$24	\$27	\$26	<u>\$21</u>
Cost of living % of US avg	95.7%	<u>93%</u>	102.8%	125%	100.2%	95.7%
Cost of doing business % US avg	<u>93%</u>	97%	101%	105%	101%	94%
Business tax climate	<u>18</u>	45	24	42	33	34

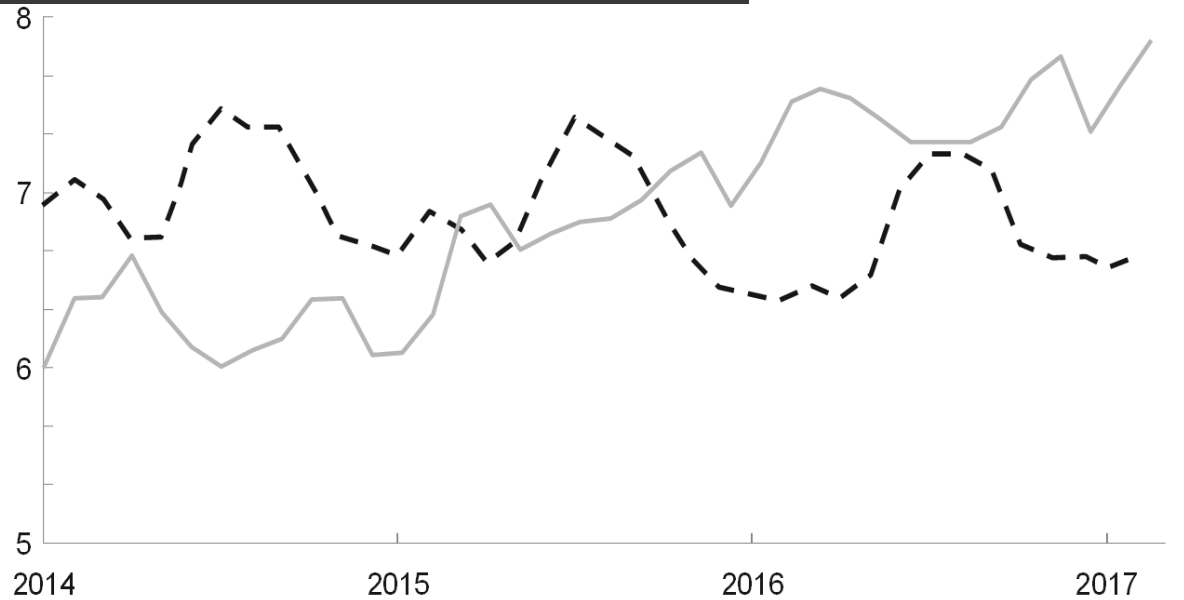
LABOR FORCE PARTICIPATION



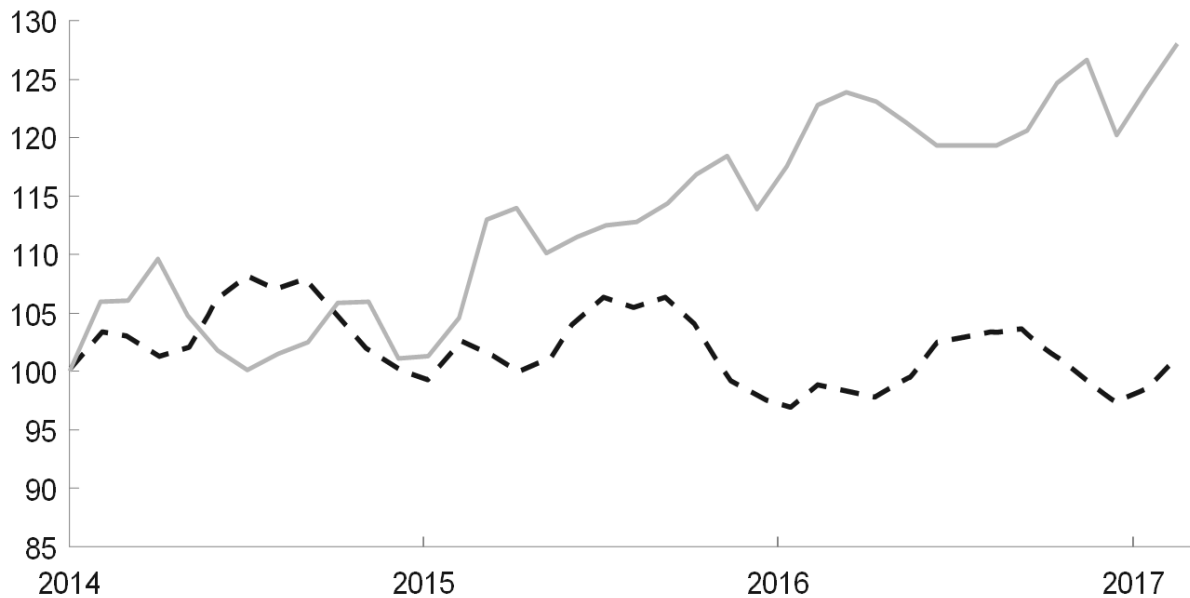
WV ELECTRICITY COSTS

- **7% annual growth in the last two years**
- **WV's average price is near US avg after historically being lower**
- **WV surpassed US avg. in some months of 2017**

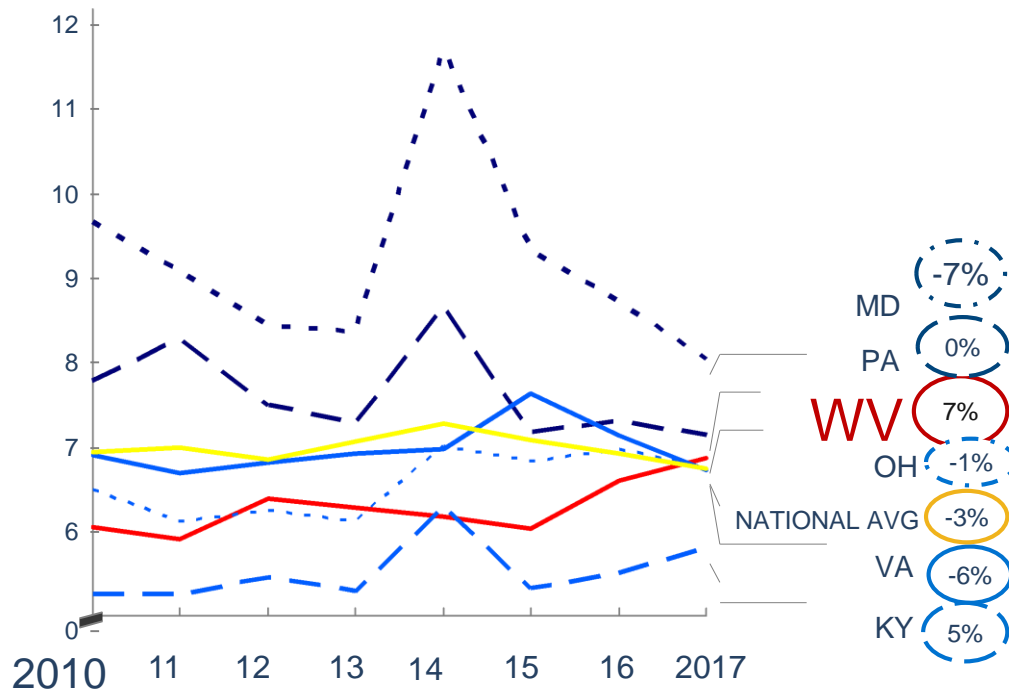
Monthly Trend in Energy Costs



Monthly trend in indexed industrial energy costs, Indexed to each State's costs on January 2014

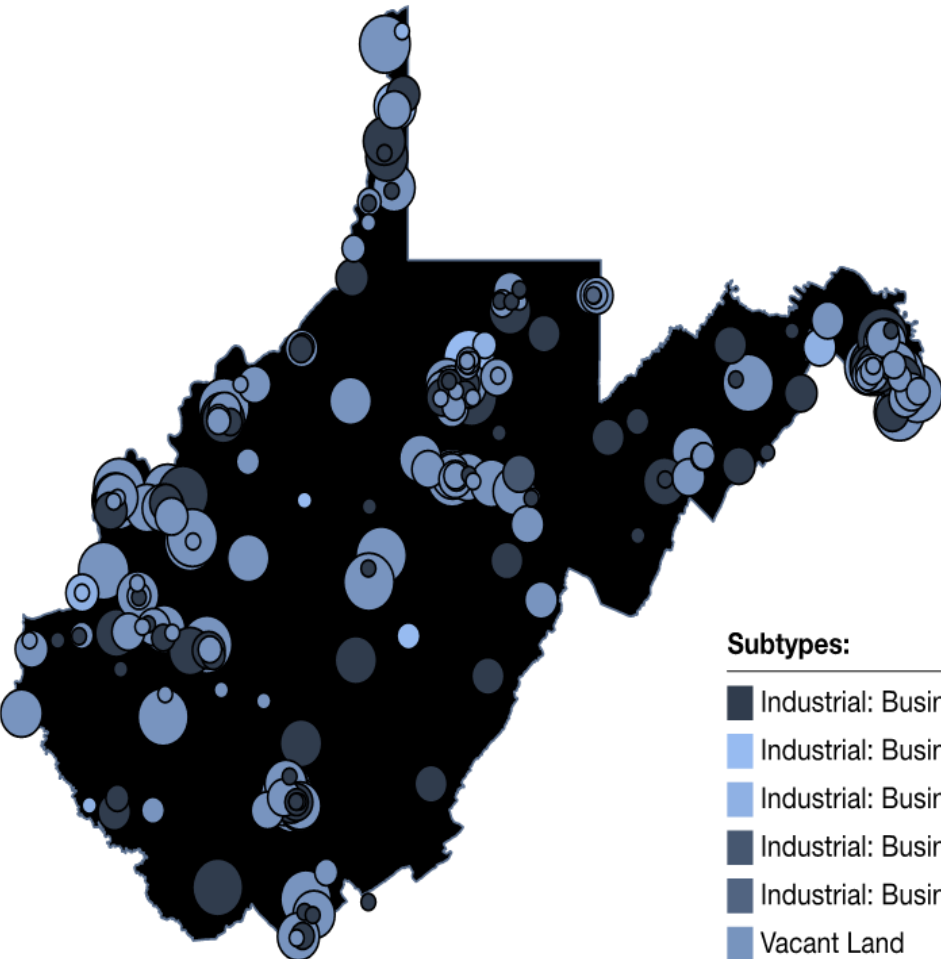


WV INDUSTRIAL ELECTRICITY COSTS A TREND WORTH STUDY



WV's industrial electricity = highest rate of increase in the region, but still relatively low

Topography Limits Availability of Large Sites



Subtypes:

- Industrial: Business Park
- Industrial: Business Park, Vacant Land
- Industrial: Business Park
- Industrial: Business Park, Industrial: Manufacturing
- Industrial: Business Park, Vacant Land
- Vacant Land

Max Size

- < 25
- 25-50
- 50-100
- 100-200
- >200

WV DOES NOT CERTIFY SITES, & COULD LEARN FROM PEER STATES

What is a certified site?

- A development-ready industrial site that has completed a rigorous review process by the state & an independent, third-party engineering firm
- Specific site details, such as zoning restrictions, title work, environmental studies, soil analysis and surveys, are assessed for compliance and authenticity



Best practice example - OH

- WV peer states have certified sites available
- SiteOhio helps companies find best locations
- SiteOhio puts properties through comprehensive analysis
- OH sites = ready for immediate development with utilities, due diligence studies
- OH sites = free of incompatible uses, with no limitations or insurance liability based on surrounding property

DISRUPTIVE GROWTH: GLOBAL TRENDS = OPPORTUNITIES

Cloud Technology

Computer hardware, software delivered via network or Internet, often as a service

Internet of Things

Networks of low-cost sensors & actuators for data collection, monitoring, decision making, process optimization

NextGen Genomics

Fast, low-cost gene sequencing, advanced big data analytics, and synthetic biology ("writing" DNA)

Autonomous Vehicles

Vehicles that navigate, operate with no human intervention subtle judgments

3-D printing

Additive manufacturing creating objects by printing layers of material from digital models

Advanced Robotics

Robots with enhanced senses, dexterity, & intelligence used to automate tasks

Automated knowledge

intelligent systems to perform knowledge work involving unstructured commands, judgments

Advanced materials

Materials designed w/ superior characteristics (strength, weight, conductivity) or functionality

Energy Storage

Devices or systems that store energy for later use, including batteries

Mobile internet

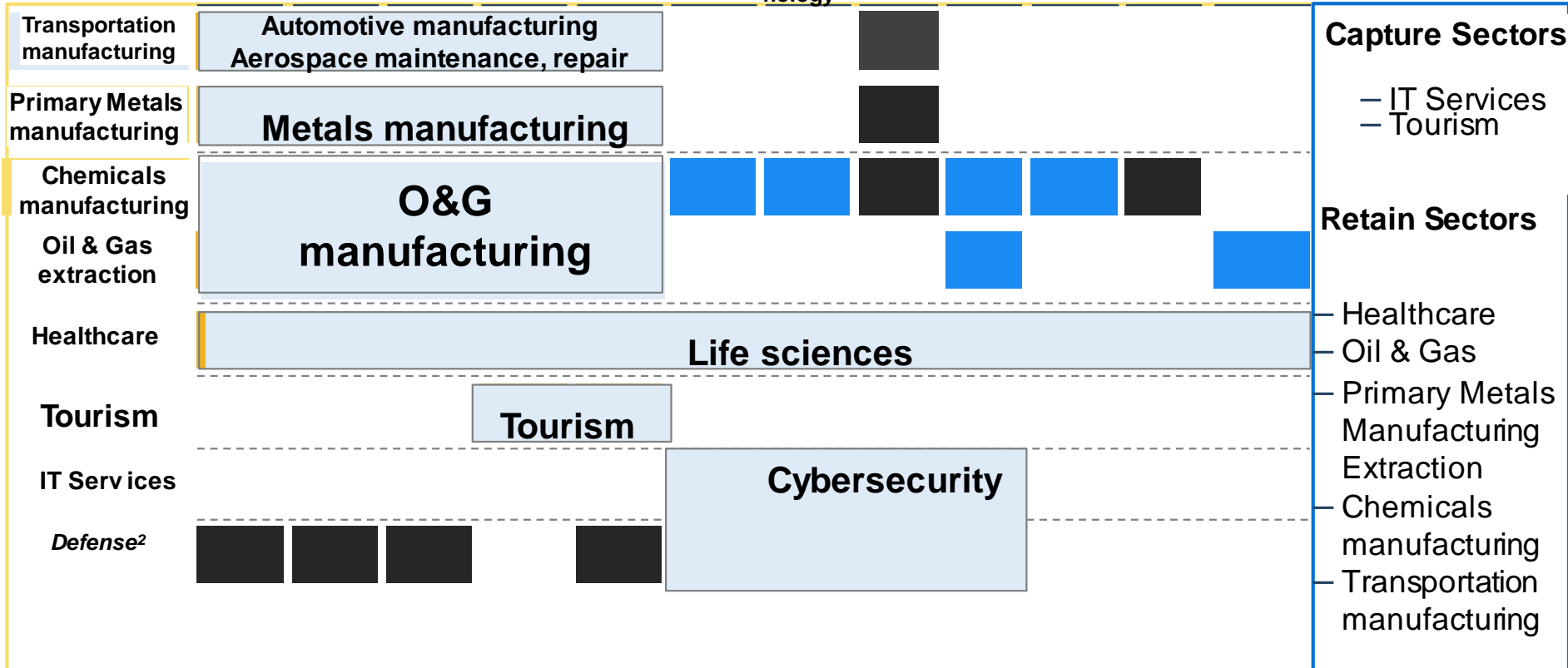
Increasingly inexpensive, capable mobile computing devices & Internet connectivity

Advanced oil and gas extraction

Exploration, recovery techniques making extraction of unconventional oil & gas economical

Disruptive Technologies

3D Adv. Printing Materials Autonom- Automated Mobile Cloud Energy Internet Adv. Oil Renewable
 robots Vehicles omous knowledge Internet Technology Storage of things Genomics & Gas energy



Mapped to sectors
 reveal opportunities

WV value proposition on IT services operations

Key WV Assets

Labor Force

- Cost advantages over most of US
- Low turnover rate (**8.8%** vs. **10.3%** average)
- ↑ rate of home ownership

Affordable

- Low cost of living (**14%** below average)
- Low cost of doing business (**7th** best in USA)
- Low operating costs

Location

- Easy access from DC & Pittsburgh
- Safe distance from key federal sites

Favorable policies

- Ranked > than any neighboring state (**21st**) on State Business Tax Climate Index
- Has decreased business tax burden > than **\$660 million in last 8 years**
- Provides **IT specific incentives** eliminating sales tax, reducing property tax

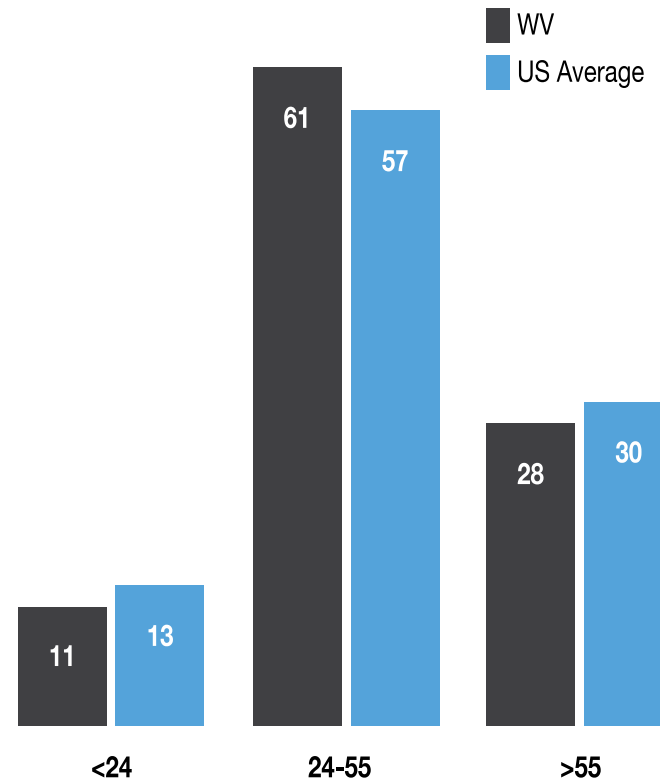
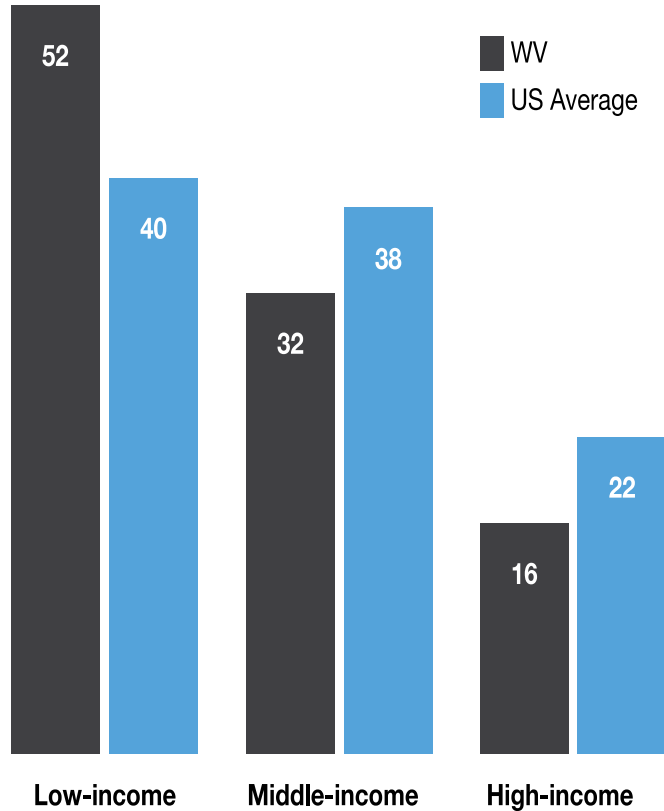
Value Prop

- Dedicated, skilled & low-cost workforce; Right to Work
- Near major IT hubs, & Fed. Gov't for COOP
- Ease & low cost of doing business

WV's tourist population is under-indexed on upper & middle class tourists & older tourists

There is an opportunity for West Virginia to capture higher-income tourists¹

West Virginia can also slightly increase visits from older tourists



THREE STRATEGIES FOR WV TOURISM

Capture more tourism spend:

Regional strategy keeps WV brand with diversified offerings.

- 1 Expand **adventure** options in the **southern region**
- 2 Attract **second home buyers** in the **eastern region**
- 3 Attract **higher-income retirees** in the **north**



WVForward.WVU.EDU

- McKinsey's team used data to spot issues, identify stakeholders, conduct interviews, & look at predictive modeling to craft a distilled summary of findings.

Find the summary at the website above.

IMPLEMENTATION STRUCTURE

- / MOU between WVU, the Commerce Department and Marshall University**
- / Will create a structure of accountability**
- / Engage stakeholders**
- / Steering committee**
- / Implementation working groups**



QUESTIONS?